The Relationship Between Polyvictimization and Perceptions of Police Moderated by Race in Survivors of Sex Trafficking

by

Michael Kent Schiferl

A thesis submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Master of Science

Auburn, Alabama
August 8, 2020

Keywords: sex trafficking, commercial sexual exploitation, race, polyvictimization, police

Approved by

Lauren Ruhlmann, Chair, Assistant Professor of Human Development and Family Studies
Adrienne Duke, Associate Professor and Extension Specialist of Human Development and Family Studies
Scott A. Ketring, Associate Professor and Director of Marriage and Family Therapy Program

Abstract

Sex trafficking is a violent crime that affects millions of survivors every year (International Labor Organization [ILO], 2017). Law enforcement officers frequently interact with victims of sex trafficking, putting them in a strategic position to offer aid (Footer et al., 2019; U.S. Department of State, 2014). However, research has suggested that survivors of sex trafficking and law enforcement officers often share negative perceptions of each other (Farrell & Pfeffer, 2014; Mapp et al., 2016), views that may be especially common among survivors of color (Davies, Block, & Campbell, 2007). This study used cross-sectional data from a sample of 135 survivors of sex trafficking to explore this phenomenon. First, this study explored if meaningful differences in trauma exposure and perceptions of police existed based on survivor race. Additionally, this study tested if trauma exposure predicted survivors' perceptions of police, as well as if survivor race moderated this relationship. Results indicated that participants who reported higher levels of polyvictimization and who identified as a racial minority had the least favorable perceptions of the police. Additionally, results showed that survivor trauma exposure predicted their perceptions of police and that race moderated this relationship. These results provide support for continued law enforcement education/training about sex trafficking and racial marginalization. Implications for service providers and law enforcement are discussed, as are suggestions for future study directions.

Acknowledgments

I would first like to thank my major professor Dr. Lauren Ruhlmann for her guidance and support over the past four years. You have invested a great deal of time and energy into helping me develop as a person, therapist, and scholar, and I am incredibly thankful. Thank you for encouraging me to finish my degree during my most discouraging moments and for helping me see the difference a therapist can make. Your righteous anger in the face of injustice is contagious and I know that the world of sex trafficking is retreating because your research and clinical work.

I would also wish to thank the other Auburn University marriage and family therapy program faculty, Dr. Scott A. Ketring, Dr. Josh Novak, and Dr. Tommy Smith. You all have provided some of the best clinical training available and I will be forever grateful for your encouragement and guidance.

Additionally, a special thanks to Dr. Adrienne Duke for serving on my thesis committee. I appreciate your support, guidance, and flexibility, especially since much of my thesis work took place during a global pandemic.

To the world's most amazing cohort, thank you all for your friendship over the past two years. I could not have imagined a more diverse yet supportive group of people to journey through grad school with me. I will miss our Sonic runs, Chick-fil-A lunches, and trips to the beach. I wish each of you all the best.

To my family – the past two years have been a roller coaster for us, but I am thankful to have a family comprised of such strong, faithful people. Thank you for supporting me throughout grad school even when you were busy and for answering my Facetime calls when I needed to

talk. Your support is what got me here, kept me here, and will keep me going through the rest of my life.

I also need to thank the numerous friends who gave me a life outside of graduate school. I would choose Auburn all over again just for the chance to learn, grow, and struggle alongside you all. Thank you for helping me grow into a godlier man, taking me on trips, and teaching me how to struggle through life well. Most of all, thank you for making me laugh through it all. You guys mean more to me than you will ever know.

God, thank you for all the opportunities you have given me and people you have placed in my life over the past two years. This season of life has been a refining one but seeing your faithfulness gives me courage to enter confidently into whatever you have planned for me next.

Lastly, I wish to thank all the survivors who gave their time and energy to participate in *One Size Does Not Fit All*. This research is your story and the courage you displayed to tell it is inspiring. I wish you all the best wherever you are at in your recovery and hope that you find strength knowing that you are making a difference.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

In 2016, an estimated 24.9 million people worldwide were victims of human trafficking (International Labor Organization [ILO], 2017). This form of modern-day slavery is defined as involuntary labor or sexual exploitation through force, fraud, or coercion (The Trafficking Victims Protection Act of 2000 [TVPA], 22 U.S.C. § 7102). Human trafficking can manifest as numerous types of exploitation, including forced/bonded labor, involuntary domestic servitude, sex trafficking, forced child labor, organ trafficking, and the conscription of children.

Research suggests that commercial sexual exploitation (hereafter referred to as sex trafficking) is the most prevalent form of human trafficking (United Nations Office on Drugs and Crime [UNODC], 2016). The Trafficking Victims Protection Act (TVPA) defines sex trafficking as "the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act" (2000; 22 U.S.C. § 7102). Sex trafficking exists in numerous forms and conditions, including but not limited to, forced street prostitution, brothels, massage parlors, familial trafficking, stripping/exotic dancing, pornography, debt bondage, and survival sex (Countryman-Roswurm & Bolin, 2014; Estes & Neil, 2001; Polaris, 2017).

Sex trafficking survivors consistently report enduring numerous types of traumatic experiences (i.e., polyvictimization; Finkelhor, Ormrod, Turner, & Hamby, 2005) prior to and throughout their trafficking exploitation (Lederer & Wetzel, 2014). Polyvictimization is associated with numerous adverse physical (e.g., diabetes, heart disease), psychological (e.g., substance abuse, PTSD, depression, anxiety), and interpersonal (e.g., risk of re-victimization, mistrust of others) health outcomes (Huges et al., 2017; Ottisova et al., 2016). Survivors often rely on assistance from specialized service providers to help address these complex needs, the most immediate of which is establishing personal safety.

Given the resources, power, and influence they possess, local police officers are in a strategic position to help survivors get out of their sex trafficking situation and establish safety (U.S. Department of State, 2014). They do so, in part, by identifying potential victims, carrying out investigations, arresting traffickers, gathering evidence, and connecting survivors to service organizations. Despite being critically important partners in the fight against sex trafficking, research suggests that survivors and police officers often have distinctly negative perceptions of each other (Farrell & Pfeffer, 2014; Mapp et al., 2016). There is also evidence to suggest that these negative perceptions may be stronger among survivors of color (Kahn & Martin, 2016) and that, due to various reasons (e.g., embarrassment, fear), survivors may avoid seeking assistance from law enforcement (Farrell & Pfeffer, 2014).

Crenshaw's (1996) intersectionality framework provides a useful foundation for understanding this phenomenon. In an intersectional perspective, one must consider the multiplicative effect of survivors' overlapping identities when studying their relationship with law enforcement. Historically, intersectionality has been applied as a framework for explaining disparate treatment toward women of color within the justice system (Crenshaw, 1986). In the context of trafficking survivors' perceptions of police, applying intersectionality means recognizing disparate treatment from law enforcement officers toward different racial groups (Kahn & Martin, 2016), and that persons of color – irrespective of trauma exposure – report less favorable attitudes toward police (Lai & Zhao, 2010). Additionally, one must also recognize the history of law enforcement using their position of power to oppress people of color (see Butler, 2017). Furthermore, studies have found that individuals from racial/ethnic minority groups experience higher rates of polyvictimization (Felitti et al., 1998; Finkelhor, Shattuck, Turner, Ormrod, & Hamby, 2011; López et al., 2017) and are target recruited by traffickers (Bryant-

Davis & Tummala-Narra, 2017) at higher rates than their White counterparts. Research also shows that individuals who experience polyvictimization may be predisposed to developing negative perceptions of the police as part of their posttraumatic response (see Dudley, 2015).

These overlapping identities (i.e., racial/ethnic minority, polyvictim, sex trafficking survivor) may make it difficult for sex trafficking survivors to utilize the resources law enforcement can offer to the highest extent possible. Additionally, the biopsychosocial stressors associated with being a survivor of color may pose even greater challenges when utilizing resources provided by law enforcement. Understanding how race and polyvictimization influence sex trafficking survivors' perceptions of the police can help develop interventions to improve the relationship between law enforcement and sex trafficking survivors. The intersection between race, polyvictimization, and perceptions of police have been analyzed in numerous studies, though never with survivors of sex trafficking. As such, to fill this gap in the literature, this study aims to examine 1.) if sex trafficking survivors' perceptions of police differ based on survivor race; 2.) if survivors' perceptions of police vary based on level of polyvictimization; 3.) if polyvictimization predicts survivors' perceptions of the police; and 4.) if race moderates the relationship between polyvictimization and perceptions of police.

Chapter 2: Literature Review

Sex trafficking is a violent crime that involves the torture, degradation, and commercial exploitation of humans. Survivors of sex trafficking frequently report recurrent instances of physical abuse during their exploitation, including rape, beatings, and sexual assault, among others (Hopper, 2017). Survivors report encountering numerous types of psychological violence as well, including harassment, manipulation, and threats toward themselves and their loved ones (Hopper, 2017). Some traffickers even force survivors to witness violence against their loved ones or will force survivors to perpetrate violence themselves (Ottisova et al., 2016). In addition to their trafficking victimization, many sex trafficking survivors experienced numerous traumatic life events prior to being trafficked (Hopper, 2017).

Finkhelhor et al. (2005) proposed the term "polyvictimization" as a paradigm for understanding the cumulative effects of repeated exposure to traumatic life events. These researchers focus on the collective results of experiencing multiple types of trauma (e.g., sexual violence, physical abuse, automobile accidents, etc.) rather than repeated episodes of the same kind of trauma; a pivotal distinction consistent with lifespan theories of cumulative trauma exposure (e.g., Scott-Storey, 2011). Survivors of sex trafficking often experience polyvictimization, encountering numerous types of trauma (e.g., physical, psychological, and sexual violence) before and during their trafficking victimization. For example, studies show that approximately 48.9% to 66% of sex trafficking survivors will experience physical violence and 30.7% to 33% will experience sexual violence before they are trafficked (Abas, Ostrovschi, Prince, Gorceag, Trigub, & Oram, 2013; Hossain, Zimmerman, Abas, Light, & Watts, 2010; Zimmerman et al., 2008). In comparison, epidemiological studies assessing the prevalence of trauma in the general population indicate that between 70-90% of people experience trauma at

some point in their life (Benjet et al., 2016; Kilkpatrick et al., 2013). Furthermore, Ruhlmann and Nelson-Goff (under review) found that a sample of sex trafficking survivors ($N = 135$) in the United States experienced an average of 10.79 traumas during their lifetime, a rate more than five times that of the general population (see Kessler et al., 2017).

Numerous studies link polyvictimization with an increased likelihood of experiencing adverse health outcomes, such as heart disease, diabetes, obesity, depression, substance abuse, and early death. (e.g., Hughes et al., 2017; Scott et al., 2013; Sowder, Knight, & Fishalow, 2018). The results of chronic exposure to traumatic stress and the subsequent impact on survivors' biopsychosocial systems is known as allostatic load (McEwen, 1998). In an attempt to maintain homeostasis, the body begins showing signs of deleterious wear-and-tear as it becomes increasingly overwhelmed (McEwen, 1998). This means that, rather than becoming accustomed to trauma, individuals exposed to an increasing number of traumatic events experience increasing biopsychosocial strain (Cloitre et al., 2009; Green et al., 2000; Suliman et al., 2009). Moreover, findings from numerous studies indicate that there is a dose-response relationship between cumulative adversity and health problems, such that the exposure to multiple traumas predicts more health conditions than exposure to a single traumatic event (Hughes et al., 2017; Scott et al., 2013; Sowder et al., 2018). For example, in a cross-national study, Scott et al. (2013) assessed survivors for 11 physical health conditions. Their results showed that, when controlling for mental health disorders, experiencing one lifetime traumatic event (LTE) increased the likelihood of being diagnosed with seven of the 11 physical health conditions, whereas experiencing five or more LTEs increased the likelihood of being diagnosed with nine of the 11 conditions. Moreover, research has shown that individuals who experience polyvictimization often exhibit psycho-social symptoms beyond those observed in acute trauma survivors, such as

psychosomatic complaints, difficulties regulating affect, increased prevalence of revictimization and self-harm, and problems navigating interpersonal relationships (Cloitre, Garvert, Brewin, Bryant, & Maercker, 2013; Herman, 1992; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005).

The exceptionally intense nature of polyvictimization experienced by trafficking survivors is associated with a particularly complex cluster of comorbid health problems (Ottisova et al., 2016). Survivors have exhibited compromised neurological, cardiovascular, and respiratory functioning, as well as increased vulnerability to sexually transmitted infections and substance abuse. Furthermore, survivors have an increased likelihood of suffering from anxiety, depression, PTSD, suicidality, chronic fatigue, and physical injuries due to violence (Ottisova et al., 2016). Findings from Ruhlmann and Nelson-Goff (under review) indicate that the dose-response relationship between trauma exposure and poor health is likely present among trafficking survivors, as well. Using a latent profile analysis, they identified three distinct polyvictimization and biopsychosocial health profiles in their sample. Group membership was determined by level of distress (i.e., mild, moderate, severe), with participants in the mild distress group reporting the lowest levels of polyvictimization. In contrast, survivors in the severe distress group reported the highest rates of polyvictimization, nearly 1.5 times the number of traumatic events as the mild distress group. Furthermore, participants in the mild distress group reported no clinically significant mental health disorders; in contrast, participants in the severe distress group reported several clinically significant symptoms of numerous mental health disorders (e.g., depression, anxiety, symptoms of PTSD).

Polyvictimization and Race

Research shows that polyvictimization occurs at higher rates among racial minority groups (Felitti et al., 1998; Finkelhor et al., 2011; López et al., 2017). Specifically, Hispanic and Black research participants have reported greater rates of polyvictimization than White or Asian participants (Felitti et al., 1998; López et al., 2017), and one study found that poly-victims were more likely to identify as Black than any other racial group (Finkelhor, Ormord, & Turner, 2007). Similarly, studies indicate that people of color have more than twice the odds of being trafficked relative to their White counterparts (Bryant-Davis & Tummala-Narra, 2017; Clayton, Krugman, & Simon, 2013; Fedina, Williamson, & Perdue, 2019; Hopper, 2017). This disproportionate rate of victimization is attributed to traffickers capitalizing on existing socio-contextual risk factors, such as economic inequality and high levels of trauma exposure.

For example, research suggests that joblessness and poverty are especially prevalent among trafficked women (Omelanjuk, 2005) and that there is a considerable gap between the average income of White citizens and people who identify as a racial minority. Specifically, in 2015, Black and Latino households earned an average of only 59% and 71% of the annual income of the average White household, respectively (DeNavas-Walt & Proctor, 2015). Sex traffickers often try to exploit this disparity by targeting and recruiting women of color using false advertisements of employment opportunities. The strategy underlying this approach is that due to the disproportionate rates of poverty among racial minorities, individuals within these groups may be more likely to respond for a chance at economic stability (Omelanjuk, 2005).

Another risk factor common among survivors of sex trafficking is child abuse (Clayton et al., 2013), specifically childhood sexual abuse (CSA; De Vries & Goggin, 2018). In a 2016 study, African American participants reported nearly twice the rate of CSA as their White counterparts; 20.5% to 11%, respectively (Sartor et al., 2016). Research suggests that CSA is

associated with a nearly 2.5-fold increase in vulnerability for trafficking victimization. The

higher rates of child abuse experienced by women of color can thereby further heighten this

vulnerability of being exploited in sex trafficking (De Vries & Goggin, 2018).

Sex Trafficking Survivors' Perceptions of Police

Due to the impact of polyvictimization on their well-being and ongoing threats to their

safety, many survivors of sex trafficking benefit from supplemental resources and support from

professional service providers (e.g., healthcare, therapy, housing, legal aid, etc.). Law

enforcement officers are often a first and potentially recurrent point of contact outside their

trafficking situation. In fact, nearly 50% of women involved in sex work reported that they had

daily or weekly interactions with law enforcement officers (Footer et al., 2019). Because of the

resources and power they possess, law enforcement officers have a unique opportunity to help

survivors establish safety and access critical resources.

However, officers often fail to identify trafficking situations and facilitate appropriate

interventions (Bales & Lize, 2005). Recent studies show that law enforcement officers are

generally unable to define human trafficking, and that they struggle to correctly spot and respond

to survivors (Dandurand, 2017; Mapp et al., 2016). This could be due, in part, to a lack of

training. In one study, almost 17% of law enforcement officers in the sample said that they had

never been trained on how to identify or interact with survivors of sex trafficking and nearly two-

thirds said that the media (e.g., the movie "Taken") was their only source of exposure to

trafficking victimization (Mapp et al., 2016). Consequently, many officers reported not knowing

how to identify signs of human trafficking or how to interact with a suspected victim (Mapp et

al., 2016). However, even officers who did receive training were frequently unable to offer an

accurate definition of human trafficking (Mapp et al., 2016). This is a significant problem

because law enforcement officers are likely encountering sex trafficking victims unknowingly and missing a critical intervention opportunity. For example, one study found that officers sometimes mistook sex trafficking victims in forced prostitution for voluntary sex workers (Farrell, Pfeffer, & Bright, 2015). This misidentification may have ramifications for how these officers interact with survivors, possibly leading to violence.

Although there is significantly less research on sex trafficking survivors' perceptions of law enforcement, emerging evidence suggests that survivors have negative views of the police and that they avoid seeking assistance from officers for several reasons (Farrell & Pfeffer, 2014). These include, but are not limited to, fear of retaliation by their trafficker, anxiety about deportation or family separation by government agencies, fear of being prosecuted for crimes committed while being trafficked, embarrassment, language barriers, and dependence on their trafficker, among others (Farrell & Pfeffer, 2014). Other research indicates that sex trafficking survivors may fear law enforcement. In one study, a group of women reported being frequently arrested, often when they were doing nothing wrong (Dewey & St. Germain, 2014). These same women even reported that officers offered to forgo arresting them in exchange for sex (Dewey & St. Germain, 2014). These various factors may contribute to the low percentage of survivors who self-identify or report themselves as victims (Farrell, Dank, de Vries, Kafafian, Hughes, & Lockwood, 2019). One group of law enforcement officers reported that only 8% of cases identified as human trafficking came from victim self-identification, while another group reported that no cases of exploitation identified as trafficking came from victim self-identification (Farrell et al., 2019).

Polyvictimization and Perceptions of Police Moderated by Race

Sex trafficking survivors' perceptions of police are shaped by all facets of their identity

and social location (e.g., age, gender, race, ethnicity, sexual orientation, disability status, etc.)

which intersect with but transcend polyvictimization (e.g., Fehrenbacher et al., 2020). These

aspects of self must be taken into consideration when analyzing the relationship between

survivors of sex trafficking and law enforcement. For example, research has shown that

interactions between race and polyvictimization can influence trauma survivors' perceptions of

the police (e.g., Davies, Block, & Campbell, 2007). Crenshaw's (1989) theory of

intersectionality is helpful framework for understanding the nexus between race and

polyvictimization relative to sex trafficking survivors' perceptions of police. Historical and

current differences in power and privilege between trauma survivors – sex trafficking survivors,

in particular – and the police, as well as those between people of color and the police, raise

important questions about the role of law enforcement in responding to human trafficking. For

example, when considering why a sex trafficking survivor who identifies as a racial minority

may be hesitant to contact law enforcement for assistance, one must account for cultural, social,

and political contexts, both historical and current, which influence their decision. The

intersection of these positionalities offer information as to how these groups may perceive each

other and is therefore a useful perspective for analyzing relationships between polyvictimization,

perceptions of police, and race among sex trafficking survivors.

  Intersectionality suggests that multiple facets of a person's identity (e.g., ethnicity, race,

SES, gender) intersect to inform their "positionalities (e.g., social locations) [which] classify,

categorize, and construct the social value that is assigned to [them] according to various

components (e.g., beliefs, concepts, and structures that define social practice)" (Harley, Jolivette,

McCormick, & Tice, 2002, p. 216). For example, Crenshaw (1989) proposed that possessing

multiple minority identities has a compounding affect that can result in an increased likelihood of experiencing discrimination and victimization. Furthermore, Crenshaw (1989) originally used intersectionality to suggest that the overlapping identities of women of color leave them disproportionately affected by not only exploitation, but also unfair treatment within the justice system. In the same way, the compounding effect of being a sex trafficking survivor who identifies as a racial minority and who has experienced high polyvictimization, could influence a person's experience with and perception of law enforcement.

Intersections between polyvictimization and law enforcement likely begin early in life for sex trafficking survivors of color. For example, Gray and Rarick (2018) found that CSA within many racial minority communities may be underreported. This underreporting may be due to the fact that historically, police brutality and racial profiling have been used to control and repress communities of color. This history of racial discrimination can sow seeds of fear and/distrust and often forces trauma survivors (and those in their family/community) into silence. Additionally, a historical perspective of Black women as promiscuous may also contribute to this underreporting, as well as to instances of discrimination, sexual violence, and unjust sentencing of sexual violence perpetrated toward women of color (Amuchie, 2016; Handek, Dewey, & Martinez, 2016; Nash, 2009).

Moreover, research has found disparate treatment from law enforcement officers across racial groups (Kahn & Martin, 2016). Butler (2017) wrote that, "There has never, not for one minute in American history, been peace between Black people and the police" (p. 2). For example, involuntary interactions with police officers occur more frequently in neighborhoods heavily populated by racial minorities. Black youth in these neighborhoods have reported that officers are often hostile or aggressive, leading to negative perceptions of the police (Brunson,

2007). Furthermore, Ridgeway (2006) found that racial bias affected police officers' decisions to stop and search drivers, with Black and Hispanic participants being stopped and searched at a higher rate than White participants. White officers have also been shown to use more force against Black suspects than Black officers (Paoline, Gau, & Terrill, 2018).

Additionally, death by means of police force disproportionately affects people of color. Black people are 2.8 times more likely to be killed by a law enforcement officer than someone who identifies as White (DeGue et al., 2016), and despite being a racial/ethnic minority, 32% of people killed by a law enforcement officer between 2009-2012 identified as Black (DeGue, Fowler, & Calkins, 2016). Additionally, Black and Latino men and women are incarcerated at a disproportionate rate compared to White men and women (Hinton et al., 2016), attributed to the inequalities and structural racism which they experience on a daily basis that expose them to more risk factors for incarceration (Chaney & Robertson, 2014).

Additionally, Lai and Zhao (2010) found that race had an impact on predicting participants' attitudes towards law enforcement, with participants who identified as a racial minority reporting less favorable attitudes towards police officers than White participants. Black participants reported the least favorable attitudes towards police (Lai & Zhao, 2010). Several researchers (Nadal, Davidoff, Allicock, Serpe, & Frazo, 2017; Weitzer & Tuch, 2005) have found that Black participants perceive police bias more frequently than White and Latinx participants; Weitzer and Tuch (2005) found the same pattern when comparing Hispanic participants and White participants.

Research suggests that factors ranging from the micro- to the macro-level may contribute to people of color's perceptions of police. For example, Graham et al. (2020) noted that many Black parents educate their children at a young age about police brutality, often teaching them

ways to stay safe during interactions with the police and expectations surrounding injustice (i.e.,

"the talk). On a more macro-level, Gau, Carsaro, Stewart, and Brunson (2012) found that

concentrated and structural disadvantage, such as widespread poverty, negatively affected

respondents' perceptions of police.

Polyvictimization and Perceptions of Police

In addition to the contextual factors which influence perceptions of police, trauma theory

and research suggests that the neurophysiological and psychological symptoms associated with

cumulative adversity prevalent among trafficking survivors and other individuals exposed to

polyvictimization may prime them to develop negative perceptions of the police by the (see

Dudley, 2015). For example, during traumatic events, the brain's fear response system (i.e.,

amygdala) floods the body with stress hormones and alerts the nervous system to fight, flee,

freeze, or feign death (van der Kolk, 2014). When this stress response system is activated over

and over again – as in the case of polyvictimization – the brain can become conditioned to expect

threats and may interpret neutral stimuli as dangerous, an adaptive, biological response to trauma

(van der Kolk, 2014). This can cause an increase in stress hormones and an overactive amygdala,

leading survivors to become hypervigilant and on-edge (van der Kolk, 2014). Law enforcement

officers may exacerbate this hypervigilance by displaying behaviors intended to maintain control

(e.g., yelling), but perceived by survivors' amygdalas as threatening (Dudley, 2015). In response

to this perceived danger, survivors' brains automatically trigger preservation techniques such as

numbing, dissociation, and avoidance, among others. Likewise, law enforcement officers may

interpret survivors' trauma responses as threatening or disrespectful, which may prompt them to

reciprocate with more aggressive action; thus, establishing an escalating cycle of threat-

perception and self-protection. As a result, these interactions reinforce each group's negative perceptions of the other (Dudley, 2015).

Several factors may further accentuate the negative perceptions polyvictimization survivors hold of law enforcement officers. First, given the high rates of trauma exposure among law enforcement, the posttraumatic symptoms of polyvictimized individuals can trigger officers' trauma responses (Maguen et al., 2014). Moreover, for various reasons, law enforcement officers patrol areas populated by persons most vulnerable to polyvictimization more frequently than neighborhoods where trauma is less prevalent. Thus, these groups are more likely to interact on a regular basis (Dudley, 2015). Repeated negative interactions between trauma survivors and law enforcement serve to reinforce negative stereotypes and affect both groups' perceptions of the other (Dudley, 2015).

The Present Study

Evidence of intersecting vulnerabilities that may lead to strained relations between survivors of sex trafficking and law enforcement is particularly concerning because police officers are in a strategic position to interact with and aid survivors in escaping their trafficking situation. Understanding the effects of polyvictimization and race on survivors' perceptions of police is an important first step toward developing interventions that could help law enforcement better serve survivors and empower survivors to utilize law enforcement as a resource when needed. Although associations between polyvictimization, race, and perceptions of police have been examined with other populations, these analyses have not been replicated with survivors of sex trafficking. This study aims to address this gap in the literature by answering the following research questions:

RQ1: Do sex trafficking survivors in different racial groups report significantly different levels of polyvictimization?

Based on research (e.g., Felitti et al., 1998; Finkelhor et al., 2011; López et al., 2017) showing that people of color report higher levels of polyvictimization and higher rates of childhood sexual abuse (e.g., Sartor et al., 2016), I hypothesize that sex trafficking survivors who identify as a racial minority will report significantly higher levels of polyvictimization than participants who identify as White.

RQ2: Do sex trafficking survivors in different racial groups report significantly different perceptions of police?

Previous research (e.g., Lai & Zhao, 2010) suggests that individuals in racial minority groups report less favorable attitudes towards police officers than people who identify as White. Moreover, in some studies, law enforcement has been found to use disparate treatment across racial groups (Kahn & Martin, 2016). Based on these findings, I hypothesize that sex trafficking survivors who identify as a racial minority will report less favorable perceptions of police than participants who identify as White. Specifically, based on findings by Lai and Zhao (2010), I hypothesize that Black participants will report the least favorable views of police among all participants in the sample.

RQ3: Does polyvictimization predict less favorable perceptions of police among survivors of sex trafficking?

Dudley (2015) suggests that the biopsychosocial impacts of trauma can influence survivors' perceptions of police in a negative way. Furthermore, research indicates that survivors of polyvictimization interact with police officers more frequently than those less affected by

trauma (Dudley, 2015). As such, I hypothesize that higher polyvictimization reports will predict decreases in favorable views of police.

RQ4: Does race moderate the association between polyvictimization and perceptions of police among survivors of sex trafficking?

According to the intersectionality framework (Crenshaw, 1996), sex trafficking survivors' perceptions of police are shaped by all facets of their identity and social location which intersect with but ultimately go beyond polyvictimization. Thus, I hypothesize that race will moderate the association between polyvictimization and perceptions of police, and that sex trafficking survivors who identify as a racial/ethnic minority will report less favorable views of the police than participants who identify as White.

Chapter 3: Method

This study utilized secondary data from RESTORE's (*Research and Education with Sex Trafficking Survivors on Resilience and Empowerment*) *One Size Does Not Fit All* (OSNDFA) study. RESTORE is a multi-disciplinary Community-Based Participatory Research team (CBPR; Wallerstein, Duran, Oetzel, & Minkler, 2017) comprised of various members in the anti-trafficking movement (e.g., researchers, medical professionals, law enforcement agents, service providers) from diverse geographic locations in the United States. In line with the CBPR framework, the RESTORE team collaborates to determine research methods and goals for each of its studies.

Participants

This study used secondary cross-sectional data from 135 survivors of sex trafficking who took part in the OSDNFA study. This is an ongoing nationwide study aimed at understanding the diverse experiences and health outcomes of sex trafficking survivors in the United States. To participate in OSDNFA, survivors had to meet the following inclusion criteria: (1) 18 years of age or older; (2) be a survivor of sex trafficking; and, (3) either (a) be currently receiving professional support services, or (b) have received professional support services in the past from an organization that specializes in providing care for survivors of sex trafficking. Researchers in the field of sex trafficking (e.g., Hossain et al., 2010) have set inclusion criteria #3 as a precedent for safe and ethical research protocols, leading to its inclusion in OSDNFA.

OSDNFA operationalized sex trafficking using the definition set forth in the TVPA (2000; 22 U.S.C. § 7102). The TVPA defines sex trafficking as "the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act." A commercial sex act is defined as "any sex act on account of which anything of value is given to

or received by any person." The TVPA goes on to say that "sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age" is a "severe form" of human trafficking. OSDNFA used this definition when developing inclusion criteria #2.

Most participants in the present study identified as female (95.6%) with a small subset identifying as male (3.3%) or transgender (1.1%). Participants ranged from ages 18-64, with the mean age being 34.78 (*SD* = 9.86). Most participants identified their primary racial identity as White (55.1%), followed by Black (28.1%), other (7.9%), Hispanic (3.4%), American Indian/Alaska Native (2.2%), Native Hawaiian/Pacific Islander (2.2%), and Asian (1.1%). Regarding education, over one quarter of participants reported earning their high school diploma or GED (27%) and another quarter reported earning some college credit but no degree (23.6%). Around 12% reported attending high school without receiving a diploma, followed by those who had a bachelor's degree (10.1%), technical or vocational training degree (7.9%), an associate degree (7.9%), no schooling (6.7%), and a master's or professional degree or higher (4.5%). Most participants reported either being unemployed – looking for work (23.6%) or employed full time (22.5%). The remaining participants reported being employed full time (13.5%), unable to work (13.5%), students (9%), unemployed and not looking for work (5.6%), homemakers (3.4%), self-employed (3.4%), and other (5.6%). Most participants endorsed annual incomes below $9,999 (51.2%), followed by $10,000 - $19,999 (16.3%), $20,000 - $29,999 (16.3%), and over $30,000 (16.2%). Approximately one third of participants (31.1%) lived in the southern United States (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Caroline, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas); 23% lived in the West (Arizona, Colorado, Idaho, New

Mexico, Montana, Utah, Nevada, Wyoming, Alaska, California, Hawaii, Oregon, and Washington), 5.2% in the Midwest (Indiana, Illinois, Michigan, Ohia, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota), and 3% in the northeast (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania). State groupings were based on the census regions and divisions used in the 2010 United States Census (United States Census Bureau, 2010).

Participants reported surviving an average of 10.79 ($SD = 6.50$) distinct types of traumatic life events (i.e., polyvictimization) and 11.54 ($SD = 8.83$) years of sex trafficking victimization. In terms of type of sex trafficking they endured, survivors typically experienced more than one form with the most common being prostitution (63.7%), followed by escorting (37%), pornography (25.9%), stripping/exotic dancing (24.4%), familial trafficking or CSE as a child (23%), "other" (10.4%), and illicit massage parlors (6.7%).

Sampling Procedures

The original OSDNFA study was approved by the Kansas State University Institutional Review Board (IRB). Data collection occurred between December 2017 – March 2018. To collect data for OSDNFA, RESTORE partnered with 29 community organizations who provide recovery services to survivors of sex trafficking across 19 states. RESTORE utilized professional referral sampling (i.e., recruiting through service providers) to recruit potential participants. These professional organizations distributed fliers, social media graphics, and scripted emails/text messages to inform survivors utilizing their services about the opportunity to participate in OSDNFA and receive $30 remuneration for their participation. These recruitment materials directed survivors to RESTORE's website where they could learn more about the study, find answers to frequently asked questions, and read the study's informed consent.

Participants could also find information about the $30 remuneration they could receive for taking part in this study. Remuneration information was detailed in the informed consent and debriefing statement.

To protect participants' anonymity, RESTORE did not collect any identifying information, nor did it track how many survivors were approached to take this survey; thus, it is impossible to determine how many survivors forewent participating. Survivors who decided to participate had the option of taking the survey at the location of their choice. Some community partners provided survivors with computers, laptops, or WiFi to help provide access to the survey, though they were not involved in data collection.

Measures

OSDNFA included 30 scales and a demographic questionnaire to answer its research questions. The proposed study will use data from three of these measures to analyze associations between polyvictimization, perceptions of police and race. See Appendix A for the full measures utilized in this study.

Polyvictimization

Finkelhor et al. (2005) defined polyvictimization as the total number of different traumatic events someone experiences throughout their lifetime. Polyvictimization was measured using the Trauma History Questionnaire (THQ; Hooper, Stockton, Krupnick, & Green, 2011) and was used as the predictor variable in the proposed analyses. The THQ is a 24-item self-report measure assessing lifetime trauma exposure. Each item asks participants about their exposure to distinct types of potentially traumatic experiences (PTE; e.g., crime, natural disasters, physical/sexual assault, etc.). Participants answered "Yes" or "No" according to their exposure to each traumatic life event (TLE). If a participant responded affirmatively, they then

provided the number of times and ages when the TLE occurred. OSDNFA used a modified version of the THQ which asked participants to identify if the trauma they experienced occurred during their time in the sex trafficking industry.

A total score for polyvictimization was used in the analyses; this score was calculated by summing each TLE endorsed, thus identifying the number of types of TLEs participants experienced. Research comparing the THQ to the Stressful Life Events Screening Questionnaire (SLESQ; Goodman, Corcoran, Turner, Yuan, & Green, 1998) found good reliability with Cohen's kappa coefficients ranging from .61-1.00 (Hooper et al., 2011).

Perceptions of Police

Participants' perceptions of police, the outcome variable in the analyses, was assessed using the Perceptions of Police Scale (POPS; Nadal & Davidoff, 2015). This self-report scale includes 12 statements about participants' views of law enforcement and police bias. Sample statements include "Police officers are friendly" and "Police officers are unbiased". Participants rated the degree to which they agreed with each statement using a 5-point Likert scale (1 = *I strongly disagree*, 2 = *I somewhat disagree*, 3 = *I neither agree nor disagree*, 4 = *I somewhat agree*, 5 = *I strongly agree*). Nine items comprise the General Attitudes toward Police sub-scale, while the remaining three create the Perceptions of Police Bias sub-scale. Responses were summed to create a total score, with higher scores reflecting more favorable views of law enforcement.

Race

Race was the moderating variable in the present analysis. Participants were asked to identify their primary racial identity – e.g., American Indian or Alaska Native, Asian, Black, Hispanic or Latino, Native Hawaiian or Pacific Islander, Other, and White. Those who selected

"Other" as their primary racial identity were asked to write a description of their racial identity. Responses were dummy coded into dichotomous variables (0 = *Not endorsed*, 1 = *Endorsed*) for analyses.

Covariates

I controlled for several covariates when conducting these analyses. First, Dudley (2015) asserted that the neurophysiological effects of trauma can impact the ways trauma survivors perceive and interact with the police. As such, I controlled for participants' levels of PTSD. Furthermore, based on research suggesting that prolonged trauma can lead to an overactive stress response system which can become vulnerable to misinterpreting benign stimuli as harmful (van der Kolk, 2014) I controlled for participants' length of trafficking victimization. Lastly, Wu (2012) reported that income, gender, and age are all demographic characteristics which can affect perceptions of the police. As such, I controlled for these three variables in my analyses.

Posttraumatic Stress Disorder. Posttraumatic stress disorder symptoms were measured using the Posttraumatic Stress Disorder Checklist (PCL-5; Blevins et al., 2015), a 20-item self-report scale which assesses PTSD symptoms (e.g., "repeated, disturbing, unwanted memories of the stressful event") within the past 30 days using a 5-point Likert scale (0 = *Not at all*, 1 = *A little bit*, 2 = *Moderately*, 3 = *Quite a bit*, 4 = *Extremely*). Participants' total scores were determined by summing each response. Possible total scores range from 0 to 80, and a score of 33 or higher indicates probable PTSD.

Length of Trafficking Victimization. Sex trafficking duration was assessed by asking, *"Using your best guess, what is the total amount of time you experienced commercial sexual exploitation?"* Responses were measured (or calculated, if needed) in years.

Demographics. The present analyses included participants' age, gender, and income as covariates. To assess participants' age, participants entered their date of birth at the beginning of the survey. Pre-tax income was assessed using the following ranges: below $9,999, $10,000-19,000, $20,000-29,999, $30,000-39,999, $40,000-49,999, $50,000-59,999, $60,000-69,999, $70,000-79,999, $80,000-89,999, $90,000-99,999, and $100,000-above.

Data Collection

All survey and data collection materials were available in English and Spanish. To identify areas of participant fatigue, receive feedback, and modify the survey before making it accessible to survivors, a sample of 10 survivors pilot tested the survey. Details regarding pilot testing are provided by the principal investigator, (Ruhlmann & Nelson Goff, under review).

Most participants accessed the survey via Qualtrics, a highly secure web-based platform; two participants completed the survey via phone interviews. On average, survivors took between 60-90 minutes complete the survey. Before accessing the survey, survivors had to provide their date of birth and answer screening questions to determine their eligibility to participate. Individuals were required to be at least 18 years of age and answer "yes" to one of the following questions: (1) Has anyone ever tricked or pressured you into engaging in a commercial sex act that you did not want to do? (e.g., prostitution, stripping, escorting, familial trafficking, pornography, etc.?); (2) Has anyone ever threatened you or someone you care about to cause you to perform a commercial sex act? (3) Have you ever engaged in a sex act for things of value (e.g., money, housing, food, gifts, or favors) either because (a) you were pressured or forced to do this, or (b) it was essential for your survival?

Survey data collection was completely anonymous, as RESTORE did not collect any identifying information and disabled mechanisms recording IP addresses. At the end of the

survey, survivors had the option of providing a physical address for remuneration, which came in the form of a $30 Visa gift card. Participants who chose to receive remuneration were directed to a separate page which made it impossible to link their survey responses to their contact information. Gift cards were mailed in blank thank you cards which had no information linking the survivor to the study. These measures were taken as a precaution to the real and perceived threats survivors faced by participating in this study.

Quality and Accessibility Enhancements

To help accommodate for factors which may have interfered with completing a written survey (e.g., dyslexia), audio recordings were embedded in each question, allowing participants to listen to, rather than read, each question and its corresponding response options. Despite a large body of research which indicates that trauma research is unlikely to retraumatize participants (see Jaffe, DiLillo, Hoffman, Haikalis, & Dykstra, 2015), RESTORE took measures to reduce the risk of physiological/psychological distress. First, participants were informed of the topics about which they would be asked before the survey began. Instructions also told participants that they could skip any question they did not wish to answer. Structured breaks (e.g., chair yoga, mindful breathing) were included at four points throughout the survey to help reduce potential participant distress and survey fatigue. Lastly, survivors were provided psychoeducation about the potential risks of participating in trauma research, as well as a referral list of nationwide resources they could access at the end of the survey, if needed. Participants who were initially screened out of the survey were provided this referral list as well.

Analytic Strategy

I began data analysis by running descriptive statistics and checking data normality. I handled missing data using the guidelines set forth by Newman (2014). First, I included all

available data when running the proposed analyses to avoid a reduction in sample size and statistical power. I did not use single imputation to estimate what missing data would be, as single imputation techniques are often biased, even if the missing data is random (Newman, 2014). Rather, I investigated missing data patterns by performing a Missing Values Analysis (MVA) using the expectation maximization (EM) technique in SPSS (version 21.0).

To answer research questions 1 and 2 (i.e., Do sex trafficking survivors in different racial groups report significantly different levels of polyvictimization and perceptions of police?), I ran a One-Way Analysis of Variance (ANOVA) to explore meaningful group differences. To answer research question 3 (i.e., Does polyvictimization predict less favorable perceptions of police among survivors of sex trafficking?), I fit a series of linear regression models, progressively adjusting for control variables (i.e., income, PTSD, age, gender, and length of trafficking victimization) to test whether polyvictimization predicts perceptions of police. Finally, to answer research question 4, (i.e., Does race moderate the association between polyvictimization and perceptions of police among survivors of sex trafficking?) I created interaction terms between polyvictimization (i.e., predictor variable) and race (i.e., moderator variable) and ran a multicategorical linear regression in SPSS using PROCESS macro (Hayes & Montoya, 2017). This moderation analysis uses mean centering on the predictor variable. Mean centering involves subtracting the mean from the raw scores on the predictor (i.e., polyvictimization). Additionally, PROCESS macro provides results of the interaction effects at -1 SD below the mean, the mean, and $+1$ SD above the mean to help with visual comparisons (i.e., graphs) of moderation effects.

Chapter 4: Results

Missing Values Analysis

I used a Missing Value Analysis with the expectation maximization (EM) technique to identify and describe missing data patterns within this sample. All missing data patterns are listed in Table 1. Participants who reported that their last experience of trafficking was 1 – 6 months, 7 – 12 months, or 1 – 5 years ago displayed several patterns of missing data which approached significance. For example, between 7.4% - 20% of participants in these groups did not complete the POPS, with 20% of participants who were trafficked in the past 7 – 12 months having the highest rate of missingness for this measure. Additionally, 16.7% of participants who were trafficked in the past 1 – 6 months did not complete the PCL-5 measure, nor did 11.1% of participants trafficked in the past 1 – 5 years. In comparison, no data for the POPS or the PCL-5 was missing from participants trafficked within the last month or more than five years ago.

A similar pattern of missingness which approached significance was present related to participants' demographic information. Between 7.4% - 20% of participants who reported their last experience of trafficking was 1 – 6 months, 7 – 12 months, or 1 – 5 years ago did not report their race, gender identity, education level, or income. In comparison, participants trafficked within the past month or more than five years ago did not have significant patterns of demographic missingness, with the exception of 7.7% of participants trafficked more than five years ago who did not report their income, a rate which approached significance.

Despite patterns of missingness, Little's MCAR test yielded a non-significant chi-square, indicating that the data were missing completely at random (MCAR) [$\chi^2(41) = 44.468$, $p = .328$]. Data are MCAR when patterns of missingness are randomly distributed and not dependent on any other values. Separate variance t-tests (see Table 2) were also used to investigate variables

with patterns of missing values that may influence study analyses. Results suggested that participants' POPS scores may influence reports of polyvictimization, ($t(25.3) = 2.6$, $p < .05$). Participants who completed the POPS reported an average of 11.34 types of traumatic events; in contrast, those with missing data on the POPS reported an average of 7.69. Additionally, participants who completed the PCL-5 had higher POPS scores ($M = 29.18$) than participants with missing data on this measure ($M = 20.33$), $t(2.1) = 1.1$, $p = .38$. Tabulated patterns showed five missing data patterns, all of which included missingness on demographic data that approached significance. Given the length of the study survey, these missing data patterns were unsurprising and are comparatively small in the context of research with sex trafficking survivors.

Testing Regression Assumptions

Table 3 lists descriptive statistics for variables used in the present analyses, and Table 4 lists correlations relevant to the present analyses. To begin my analyses, I first checked to see if the data met all assumptions for running a one-way ANOVA. Perceptions of police (i.e., the outcome variable) is continuous, and race (i.e., the predictor variable) consists of six categorical, independent groups; thus, the first two assumptions were fulfilled. Data also displayed independence of observations, fulfilling the third assumption. However, there were several outliers in terms of polyvictimization, perceptions of police, general attitudes towards police, and perceptions of police bias reported by Black participants, as assessed by inspection of the boxplots; due to the small sample size and the risk of losing statistical power, outliers were not removed. Thus, the fourth assumption was violated. Data also violated the fifth assumption such that it was significantly skewed and/or kurtotic in several ways. First, polyvictimization for Black participants was positively skewed (1.916, $SE = 0.472$, z-score = 4.059), as well as

positively kurtosed (4.696, *SE* = 0.918, z-score = 5.115). Additionally, perceptions of police bias

for White participants was negatively skewed (-0.968, *SE* = 0.337, z-score = -2.872).

Polyvictimization scores were normally distributed for the White, Hispanic/Latino, and Other

participant groups, but not the Black participants group, as assessed by Shapiro-Wilk's test (*p* <

.05). Furthermore, perceptions of police total scores were normally distributed for

Hispanic/Latino and Other participants groups, but not for White or Black participants groups, as

assessed by Shapiro-Wilk's test (*p* < .05). The same pattern of distribution occurred for the

general attitudes toward police sub-scale, and only the Other participant group was normally

distributed for the perception of police bias sub-scale. Lastly, there was homogeneity of

variances, as assessed by Levene's test of homogeneity of variances (polyvictimization, *p* = .434;

perceptions of police total, *p* = .407; general attitudes toward police, *p* = .579; perceptions of

police bias, *p* = .109). Thus, the sixth assumption was fulfilled.

Despite the above listed violations, I did not conduct the non-parametric Kruskal-Wallis

H test for several reasons. First, non-parametric tests do not test the same null hypothesis as a

one-way ANOVA. Therefore, conducting the Kruskal-Wallis H test would not answer my first

two research questions. Furthermore, an ANOVA is generally considered safe regardless of data

non-normality because of its robustness towards deviations from normality (see Maxwell, 2004).

It is also important to keep in mind that the "robust" aspect is with respect to a Type I error and

not the power (Type II error) of the test (Wilcox, 2012). Moreover, current literature is

contradictory on the issue of robustness, a fact already highlighted by some (e.g., Rutherford,

2011). Lastly, because there was only one participant who identified as Asian (*n* = 1), this

individual was grouped into the "Other" racial group to enable post-hoc testing.

Exploring Group Differences in Polyvictimization and Perceptions of Police

To test my first hypothesis, I ran a one-way ANOVA to determine whether there were significant group differences in polyvictimization based on survivor race. Results indicated that there were differences between racial groups in reports of polyvictimization, and that these differences approached statistical significance, $F(5, 83) = 2.008$, $p = .09$, $\omega^2 = .05$. Polyvictimization scores increased from the Hispanic/Latino ($M = 8$, $SD = 2$; $n = 3$), to the Black ($M = 8.15$, $SD = 5.79$; $n = 26$), Other ($M = 11$, $SD = 5.29$; $n = 6$), White ($M = 12.62$, $SD = 6.69$; $n = 50$), American Indian or Alaska Native ($M = 13$, $SD = 8.49$; $n = 2$), and Native Hawaiian/Pacific Islander ($M = 14.5$, $SD = 7.78$; $n = 2$) racial groups, respectively. Tukey post hoc analyses revealed that the mean difference between White participants' and Black participants' levels of polyvictimization (4.47, 95% CI [0.01, 8.92], $p = .049$) was statistically significant. No other group differences were statistically significant.

To test my second hypothesis, I ran a one-way ANOVA to determine if there were significantly different levels of perceptions of police based on survivor race. Differences in perceptions of police approached statistical significance in this sample, $F(5, 81) = 1.99$, $p = .09$, $\omega^2 = .05$. Consistent with Brunson (2007), who reported that people of color have the least favorable perceptions towards police, Black participants in this sample also reported the lowest average favorable perceptions of the police ($M = 37.92$, $SD = 10.37$; $n = 24$). Perceptions of police scores continued to increase from the Native Hawaiian/Pacific Islander ($M = 38$, $SD = 16.97$; $n = 2$), to the White ($M = 44.38$, $SD = 11.43$; $n = 50$), Other ($M = 48.83$, $SD = 10.34$; $n = 6$), American Indian or Alaska Native ($M = 49.5$, $SD = 14.85$; $n = 2$), and Hispanic or Latino ($M = 51.33$, $SD = 13.32$; $n = 3$) racial groups, respectively. Tukey post hoc analysis revealed that the mean difference between White participants' and Black participants' perceptions of the police

(6.46, 95% CI [-1.70, 14.63], p = .20) approached, but ultimately did not attain statistical

significance; post hoc analyses revealed no other statistically significant group differences.

Additionally, I conducted a one-way ANOVA to determine whether sex trafficking

survivors in different racial groups reported significantly different perceptions of police bias.

Perceptions of police bias were statistically significantly different between racial groups in this

sample, $F(5, 81)$ = 3.963, p = .003, ω^2 = 0.145. Perceptions of police bias scores increased from

the Native Hawaiian/Pacific Islander (M = 9.00, SD = 0.00; n = 2), to the Black (M = 9.75, SD =

2.85; n = 24), White (M = 12.28, SD = 2.80; n = 50), Other (M = 12.67, SD = 2.73; n = 6),

Hispanic or Latino (M = 13.00, SD = 3.46; n = 3), and American Indian or Alaska Native (M =

15.00, SD = 0.00; n = 2) racial groups, respectively. These results are in contrast with past

research (e.g., Nadal et al., 2017) identifying high perceptions of police bias among Black

research participants; however, they are consistent with research (Weitzer & Tuch, 2005)

suggesting that Hispanic/Latino individuals report high levels of perceived police bias compared

to White individuals. Tukey post hoc analysis revealed that the mean increase between Black

participants' and White participants' perceptions of police bias (2.53, 95% CI [0.51, 4.55], p =

.006) was statistically significant, a finding supported by several researchers. No other group

differences were statistically significant. A final one-way ANOVA revealed no statistically

significant differences in terms of general attitudes towards police based on survivor race.

Results from each ANOVA are listed in Table 5.

Polyvictimization Predicting Perceptions of Police

To test my third hypothesis, I ran a series of linear regressions to determine if

polyvictimization predicted survivors' perceptions of the police. Results from these regressions

are listed in Table 6. First, I centered polyvictimization by subtracting all values from the mean. I

then ran a linear regression with polyvictimization as the predictor and perceptions of police as the outcome. This regression did not contain any covariates. Results revealed a nearly significant regression equation [$F(6, 80) = 2.16$, $p = .056$, $R^2 = .139$]. Positive perceptions of police decreased 2.11 points for each type of traumatic event experienced by participants.

Next, based on extant research which suggests that various factors (e.g., age, income, PTSD, length of trafficking victimization; see Dudley, 2015; van der Kolk, 2014; Wu, 2012) could act as covariates, I progressively added these variables to the regression analysis as controls. After running several models, I found that the model which best fit the data included only PTSD as a covariate. Insignificant control variables, along with those that did not improve the regression equation were removed to make the model more parsimonious. The regression model with PTSD as a covariate was statistically significant [$F(7, 76) = 2.50$, $p < .05$)], with an R^2 of .187. In other words, this model explained 18.7% of the variance in perceptions of police. Positive perceptions of police decreased 1.95 points for each type of traumatic event participants experienced when controlling for PTSD.

I also ran a linear regression model using the perceptions of police bias sub-scale of the POPS. This model included polyvictimization as the predictor, perceptions of police bias as the outcome, and PTSD as a control variable. This model produced a significant regression equation [$F(7, 76) = 4.70$, $p < .01$], with an R^2 of .302. This suggests that the model explains 30.2% of the variance in perceptions of police bias. Perceptions of police bias increased .72 points for each type of traumatic event participants experienced when controlling for PTSD. Finally, linear regressions assessing the association between polyvictimization and the general attitudes towards police scale revealed non-significant results, even when controlling for PTSD.

Survivor Race Moderating Polyvictimization and Perceptions of Police

To test my final research question, I ran a hierarchical linear regression with survivor race as a moderator of the association between polyvictimization and perceptions of police. Results from this regression are listed in Table 7. I created an interaction term between polyvictimization (centered) and survivor race for the moderation analyses. In the first model, polyvictimization and race were included as predictors, perceptions of police (total) was the outcome variable, and an interaction term between polyvictimization and race was included to test the moderation effect. Results yielded an interaction (polyvictimization*race) effect that approached, but ultimately did not attain significance ($b = 2.88$, $p = .058$).

Next, I replicated this analysis using general attitudes toward police as the outcome variable, with PTSD included as a control variable. Results showed that the effect of polyvictimization on general attitudes toward police was conditional on survivors' racial identity as evidenced by one significant interaction effect (polyvictimization*Native Hawaiian/Pacific Islander) ($b = 2.849$, $p = .012$) and one interaction effect that approached significance (polyvictimization*American Indian/Alaska Native) ($b = 1.955$, $p = 0.056$). The presence of a significant interaction effect indicates that racial identity is a significant moderator of the effect of polyvictimization on general attitudes toward police within this sample. Moreover, adding race as a moderator of the association between polyvictimization and general attitudes toward police accounted for 11.78% added variation in general attitudes toward police officers ($\Delta R^2 = .1178$). The effect of polyvictimization on general attitudes toward police was negative and approaching significance ($b = -0.312$, $p = .104$). Moreover, a decrease of .31 traumatic life events was associated with a 2.85-point increase ($p = .012$) in general (positive) attitudes toward police for participants who identified as Native Hawaiian/Pacific Islander and a 1.96-point

increase ($p = .056$) in general (positive) attitudes toward police for participants who identified as American Indian/Alaska Native (see Figure 1).

Chapter 5: Discussion

As sex trafficking continues to generate attention nationwide, local law enforcement officers have been identified as holding a position of power and possessing resources which put them in a strategic position to aid survivors (U.S. Department of State, 2014). However, survivors and law enforcement alike have reported negative views of each other, making it difficult for survivors to take advantage the resources officers can offer (Farrell & Pfeffer, 2014; Mapp et al., 2016). Additionally, this relationship is often further complicated when considering survivor race. People of color in the United States experience disproportional violence at the hands of police (Butler, 2017) and thus often maintain especially negative perceptions of law enforcement (Brunson, 2007; Paoline et al., 2018; Ridgeway, 2006). Furthermore, traffickers target people of color at disproportionate rates compared to their White counterparts (Omelanjuk, 2005), making it especially important to understand how survivor race impacts their relations with the police.

This study adds to the literature regarding the intersection of sex trafficking, law enforcement, and race in several ways. First, results from a one-way ANOVA revealed statistically significant differences in polyvictimization between racial groups. Specifically, survivors who identified as Native Hawaiian/Pacific Islander or as American Indian/Alaska Native reported the first and second highest levels of polyvictimization, respectively. Furthermore, there were also statistically significant differences in perceptions of police based on survivor race. These findings supported the second hypothesis, as participants who reported the lowest positive perceptions of police identified as a racial minority. Additionally, consistent with hypothesis 3, a linear regression revealed a negative association between polyvictimization and perceptions of police. Finally, a hierarchical linear regression revealed that survivor race

moderated the relationship between poyvictimization and general attitudes toward police, thus supporting hypothesis 4.

Group Differences Based on Survivor Race

Participants who reported their primary racial identity as Native Hawaiian/Pacific Islander reported surviving an average of 14.5 unique types of trauma, the highest of any racial group. In comparison, participants who identified as Hispanic or Latino reported an average of eight types of trauma, the lowest of any racial group. Participants who identified as White reported an average of 12.6 types of trauma, the third highest of any racial group. Finally, Black participants reported the second lowest average types of trauma at 8.15. This finding is consistent with some past research showing that people who identify as a racial minority often experience polyvictimization at higher rates than people who identify as White (e.g., Felitti et al., 1998; Finkelhor et al., 2011; López et al., 2017). These differences in trauma exposure may be explained by the socio-ecological disparities (e.g., joblessness, poverty, income disparities) experienced by racial minorities (see Omelanjuk, 2005; DeNavas-Walt & Proctor, 2015). Additionally, past research has suggested that trauma exposure among American Indian populations is, on average, higher than non-American Indians (Beals et al., 2012, Perry, 2004). Two-thirds of one Native American population reported exposure to at least one lifetime trauma (Beals et al., 2012), while another sample self-reported twice the rates of violent trauma compared to the rest of the United States population (Perry, 2004). Similarly, participants in this study who identified as American Indian or Alaska Native reported the second highest rates of trauma exposure at 13.

In contrast to to reporting the lowest rates of polyvictimization, Hispanic or Latino participants in this sample reported the highest average favorable perceptions of the police.

These results possibly suggest that survivors' levels of polyvictimization have implications for influencing their perceptions of the police. Previous research has found that people who identify as Hispanic or Latino often report lower positive perceptions of the police than people who identify as White (Weitzer & Tuch, 2005). These findings suggest that this sample's lower rates of polyvictimization may have influenced their perceptions of police. However, Hispanic or Latino participants' positive perceptions of police may also be due to their small sample size.

Similar to previous research, Black participants in this sample reported the least favorable perceptions of police, results that are consistent with prior research (e.g., Lai & Zhao, 2010). These unfavorable perceptions of police may be attributable to the long history of police brutality and discriminatory law enforcement practices experienced by Black citizens and other people of color in the United States (DeGue et al., 2016). Overall, favorable perceptions of the police increased from Black participants to those who identified as Native Hawaiian or Pacific Islander, White, Other, American Indian or Alaska Native, and Hispanic or Latino.

Interestingly, even though American Indian/Alaska Native participants reported the second highest levels of polyvictimization, they also reported the second highest average positive perceptions of the police. These findings contrast with the Hispanic or Latino group, who reported the lowest levels of polyvictimization and highest positive perceptions of the police. One possible explanation for this contradicting finding may be due to different cultural messages surrounding law enforcement. Additionally, similar to the Hispanic or Latino group, these findings should be examined in the context of a small sample size.

Polyvictimization Predicting Perceptions of the Police

A series of linear regressions suggested that polyvictimization may predict survivors' perceptions of the police. First, a linear regression using polyvictimization as the predictor and

perceptions of police as the outcome yielded a nearly significant model. Several covariates (e.g., age, income, PTSD, length of trafficking victimization) were progressively added to this model based on existing research which suggests that these factors may influence the relationship between polyvictimization and perceptions of police (e.g., Dudley, 2015; van der Kolk, 2014; Wu, 2012). The model which best fit the data included only PTSD as a control variable, resulting in a statistically significant model. This model showed that, when controlling for PTSD, polyvictimization explained nearly 19% of the variance in survivors' perceptions of police. A similar model which used perceptions of police bias as the outcome produced another significant model. When controlling for PTSD, polyvictimization accounted for approximately 30% of the variance in survivors' perceptions of police bias.

Several researchers have suggested that, for various reasons, people at risk for higher trauma exposure may have more frequent interactions with the criminal justice system (Donley et al., 2013; Dudley 2015). One reason why polyvictimization predicted survivors' perceptions of police may be because of the frequency with which survivors of polyvictimization interact with police officers. Dudley (2015) asserted that, due to the biopsychosocial impacts of repeated trauma exposure, it is not uncommon for interactions between polyvictims and police officers to be triggering for survivors. Repeated negative interactions between these two groups could foster unfavorable perceptions of the police among survivors of polyvictimization.

Polyvictimization Predicting Perceptions of the Police, Moderated by Race

A moderated linear regression using survivor race as a multicategorical moderator suggested that survivors' race may influence the relationship between polyvictimization and perceptions of the police. First, a moderated linear regression using polyvictimization as the predictor, perceptions of the police as the outcome, and survivor race as the moderator resulted

in a nearly significant model. Because this model did not produce a statistically significant result,

no follow-up analyses were conducted. The next model replaced perceptions of police with

general attitudes toward police, resulting in a statistically significant interaction effect. This

model showed a positive and statistically significant effect for Native Hawaiian and Pacific

Islander participants, as well as a positive and nearly significant effect for American Indian and

Alaska Native participants. These results suggest that participants who identified with these

racial groups has the lowest favorable attitudes towards the police. Additionally, this model

showed that survivor race accounted for nearly 12% of the variation in participants' general

attitudes towards the police.

The present effect of race upon survivors' attitudes towards the police is similar to past

research which suggests that people of color have less favorable views of the police (Lai & Zhao,

2010; Nadal et al., 2017; Weitzer & Tuch, 2005). These unfavorable attitudes could be caused by

several factors. First, research has cited a disproportionate use of police violence perpetrated

against people of color, with people who identify as Black being nearly three times more likely

to be killed by a police officer compared to their White counterparts. (DeGue et al., 2016)

Additionally, incarceration disproportionately affects racial/ethnic minorities as well (Hinton et

al., 2016). The prolonged effect of these disparities, as well as recent increasing awareness of

policing inequalities, could culminate to affect survivors' attitudes towards the police.

Missing Values Analysis

A Missing Values Analysis was conducted to explore patterns of data missingness. It is

important to note that, despite several theoretically significant patterns of missingness, all data

was missing completely at random (MCAR). Results from the missing values analysis suggest

that time since survivors' last trafficking experience may have influenced missing patterns of

data. Participants who reported that their last trafficking experience was within the past 1 – 6 months, 7 – 12 months, or 1 – 5 years all had nearly-significant patterns of missingness on the POPS, while participants who reported that their last experience of trafficking was within the last month or longer than five year ago did not. This same pattern continued when examining missing data on the participants' PTSD scores and demographic data (i.e., race, gender identity, education level, income). Missing data also was nearly significant on several measures (POPS, PCL-5, length of sex trafficking victimization) when based on survivor education; survivors with the lowest levels of education had the highest levels of missing data.

Several possible factors could partially explain this pattern of missingness. First, past research (e.g., Banonno & Mancini, 2012; Shalev, 2009) suggests that symptoms of post-traumatic stress naturally decrease with the passage of time, sometimes taking months or years to subside. As survivors became increasingly removed from their trafficking situation, they may have found survey questions about their trauma less distressing. Additionally, one symptom of posttraumatic stress is difficulty concentrating (American Psychiatric Association [APA], 2013). Survivors who are still experiencing symptoms of posttraumatic stress may have found it more difficult to concentrate on the survey than survivors with more time since being trafficked. Additionally, it is not uncommon for symptoms of posttraumatic stress to first manifest several months after a traumatic event has passed (APA, 2013). It could be that survivors whose last trafficking experience was less than one month ago were yet to develop symptoms of posttraumatic stress, making it less difficult for them to concentrate.

Data missingness was also explored using variance *t*-tests. These results suggest that participants' POPS scores may have affected missing data related to polyvictimization, with participants who completed the POPS reporting an average of four more types of trauma than

participants who did not complete this measure. Furthermore, participants who completed the PCL-5 averaged nine points more on the POPS than participants who did not complete the PCL-5. This suggests that participants who completed the PCL-5 had higher average favorable perceptions of the police than those who did not. Lastly, participants who reported their rates of polyvictimization reported approximately two fewer years of sex trafficking victimization compared to those who did not report their polyvictimization.

Tabulated patterns showed nearly significant missingness on participant demographic data. These results are unsurprising for several reasons. First, even though great efforts were taken to explain and ensure their confidentiality, participants may have felt uneasy about providing their demographic information because of the sensitive nature of the survey. Furthermore, demographic information was collected near the end of the survey. *OSNDFA* took an average of 60 – 90 minutes for participants to complete, suggesting that survey fatigue may have affected this pattern of missingness.

Implications

Because of the frequent interactions between people involved in sex work and the police (Footer et al., 2019), it remains crucially important that officers receive proper training on how to identify and assist survivors of sex trafficking; results from this study support this assertion. Research shows that many officers lack training on how to do so properly (Mapp et al., 2016), thus losing the opportunity to offer a victim support. Research has offered numerous suggestions on how law enforcement can more successfully identify and serve survivors of sex trafficking. First, law enforcement officers must receive in-depth, comprehensive training on how to identify survivors (Farrell et al., 2015; Dandurand, 2017; Mapp et al., 2016). Additionally, interagency collaboration has been suggested as a necessary component of identifying and prosecuting

traffickers (Dandurand, 2017; Mapp et al., 2016). Furthermore, survivors of rape or sexual assault, both of which are frequent among sex trafficking survivors (Hopper, 2017), have reported helpful insight into how officers can interact with survivors in a trauma-informed manner. Behaviors perceived as supportive (e.g., being personable, getting to know the survivor, etc.) have been reported as helpful, while behaviors perceived as uncaring (e.g., criticizing the survivor) have been described as unhelpful (Greeson et al., 2014; Greeson et al., 2016). Therefore, training law enforcement agencies on how to interact with survivors of sexual violence may increase trust, survivor comfort, and positive perceptions of the police.

Another way of improving the perceptions of law enforcement officers among survivors of sex trafficking may be applying principles of procedural justice (Thibaut & Walker, 1975) to policing. When applied to policing, this theory suggests that citizens' satisfaction and perceptions of police competency is based more upon the interaction between themselves and the officer than the outcome, even when the outcome is undesirable (e.g., an arrest). Procedural justice is comprised of four aspects of treatment – voice, neutrality, respect, and trustworthiness (Goodman-Delahunty, 2010). Implementing procedural justice into policing practices has been shown to increase trust and confidence in the police (Murphy, Mazerolle, & Bennett, 2014), which means these factors may increase the rate at which survivors of sex trafficking utilize the resources law enforcement officers can offer. It has also been shown that implementing procedural justice can reduce citizen negative affect during an interaction with the police, possibly reducing polyvictims' trauma responses during a stop (Barkworth & Murphy, 2014).

In addition to improving trauma-informed policing, more efforts should be taken to ensure equitable policing practices across all people groups. In this study, the least favorable perceptions of the police were reported by people of color, suggesting that racially discriminate

police practices, such as the disproportionate use of force, may be a key factor in these survivors' views of law enforcement (DeGue et al., 2016; Hinton et al., 2016). In response to disproportionate policing practices, Obasogie & Newman (2017) have called for policy changes throughout entire police departments, noting that current policies for many precincts fail to define the appropriate use of officer force. Therefore, current policies may fail to protect citizens from unnecessary violent interventions from police (Obasogie & Newman, 2017). Police forces may also consider forming policies focused on preserving life and decreasing harm, such as including training on how to de-escalate emotionally charged situations. However, Obsaogie and Newman (2017) noted that policy change is unlikely to completely change policing practices. Kahn and Martin (2016) suggested implementing procedural policies such as educating officers about biased profiling practicing, racial bias, and their own implicit biases to combat their cultural and personal biases.

Limitation and Future Directions

The contributions of this study should be examined in the context of key limitations. First, based on advice from *RESTORE'*s community and research partners, participants were only presented with the option of selecting one primary racial identity during the demographics section of *OSDNFA*. However, Fernandez et al. (2016) noted that collecting race in this manner underrepresents participants who identify with more than one racial identity (e.g., bi-racial). In recognition of this limitation, future iterations of data collection from *OSNDFA* will allow participants to list several racial identities and will include a free response section with suggestions of races/ethnicities with which survivors may identify.

Additionally, due to the challenges inherent with studying sex trafficking, this study's sample size was somewhat small, and it cannot be assumed that it is representative of all

survivors of sex trafficking. Specifically, the sensitive nature of self-reporting experiences of trauma and perceptions of police likely contributed to the high amount of missing data. Given the length of the survey, survey fatigue may have contributed to data missingness as well.

Furthermore, the diverse experiences regarding polyvictimization and perceptions of police which survivors reported likely contributed to several assumption violations for running a one-way ANOVA and linear regression. The decision not to run non-parametric the Kruskal-Wallis H test was founded upon past research (e.g., Maxwell, 2004) which noted that the robustness of ANOVAs make them reliable despite data non-normality. Additionally, running a non-parametric test would not allow me to answer my first two research questions, contributing to the decision to run an ANOVA.

Future research should continue to measure trauma exposure based on frequency, duration, or variation instead of focusing on a single type of trauma. Previous research may be taking type of trauma (e.g., sexual assault) into account more so than polyvicitmization (Finkelhor et al., 2007) which is problematic because polyvictimization has been shown to account for posttraumatic symptoms more so than a specific type of trauma (Finkelhor et al., 2007).

Additionally, Kahn and Martin (2016) suggested that it is difficult to fully determine what causes biased policing practices and that it is likely a combination of intrapersonal, organizational, and contextual factors. As such, future research should continue exploring causes of inequitable policing practices, setting the foundation for creating interventions and policies to ensure just treatment across all minority groups. Kahn and Martin (2016) also suggested that research partnerships between police and researchers may promote evidence-based policing practices. Therefore, researchers may consider partnering with local law enforcement for both

research and education, thus promoting policing practices which foster safety and fairness for all citizens.

Lastly, future research should consider using data from survivors trafficked internationally. Law enforcement corruption from survivors' country of origin may shape their perceptions of the police, thus influencing how they interact with police officers during their exploitation. Research has suggested that immigrants may not always have favorable perceptions of law enforcement in the United States (Chu, Song, & Dombrink, 2005), while other research has suggested that people trafficked internationally may be hesitant to pursue help from law enforcement for fear of deportation (Farrell & Pfeffer, 2014). Thus, this remains an important area of study.

Conclusion

In conclusion, much remains to be learned about the intersection between sex trafficking, race, polyvictimization, and law enforcement. This study takes an important first step towards advancing the literature on this topic, showing that meaningful group differences of trauma exposure and perceptions of police exist based on survivor race. Furthermore, this study shows that participant trauma exposure and race may be important predictors of survivors' perceptions of the police. These results highlight opportunities for law enforcement to further their understanding of how to identify and respond to sex trafficking more effectively, helping to serve and empower survivors.

References

Abas, M., Ostrovschi, N. V., Prince, M., Gorceag, V. I., Trigub, C., & Oram, S. (2013). Risk factors for mental disorders in women survivors of human trafficking: A historical cohort study. *BMC Psychiatry, 13*(1), 204-215. https://doi.org/10.1186/1471-244X-13-204

American Psychiatric Association [APA]. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Amuchie, N. (2016). "The forgotten victims." How racialized gender stereotypes lead to police violence against Black women and girls: Incorporating an analysis of police violence into feminist jurisprudence and community activism. *Seattle Journal for Social Justice, 14*(3), 617-668. https://digitalcommons.law.seattleu.edu/sjsj

Bales, K., & Lize, S. (2005). *Trafficking in persons in the United States: A report to the National Institute of Justice.* Oxford, MS: Croft Institute for International Studies, University of Mississippi. Retrieved May 12, 2020 from http://www.ncjrs.gov/pdffiles1/nij/grants/211980.pdf

Barkworth, J. M., & Murphy, K. (2014). Procedural justice policing and citizen compliance behaviour: The importance of emotion. *Psychology, Crime, & Law, 21*(3), 254-273. https://doi.org/10.1080/1068316X.2014.951649

Beals, J., Belcourt-Dittloff, A., Garroutte, E. M., Croy, C., Jervis, L. L., Whitesell, N. R., Mitchell, C. M., Manson, S. M., & The AI-SUPERPFP Team. (2012). Trauma and conditional risk of posttraumatic stress disorder in two American Indian reservation communities. *Social Psychiatry and Psychiatric Epidemiology, 48*, 895-905. doi: 10.1007/s00127-012-0615-5

Benjet, C., Bromet, E., Karam, E. G., Kessler, R. C., McLaughlin, K. A., Ruscio, A. M., Shahly,

    V., Stein, D. J., Petukhova, M., Hill, E., Alonso, J., Atwoli, L., Bunting, B., Bruffaerts,

    R., Caldas-de-Almeida, J. M., de Girolamo, G., Florescu, S., Gureje, O., Huang,

    Y.,…Koenen, K. C. (2016). The epidemiology of traumatic event exposure worldwide:

    Results from the World Mental Health Survey Consortium. *Psychological Medicine*,

    46(2), 327-343. https://doi.org/10.1017/S0033291715001981

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The

    Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and initial

    psychometric evaluation. *Journal of Traumatic Stress, 28*(6), 489–498.

    https://doi.org/10.1002/jts.22059

Bonanno, G. A., & Mancini, A. D. (2012). Beyond resilience and PTSD: Mapping the

    heterogeneity of responses to potential trauma. Psychological Trauma: Theory, Research,

    Practice, and Policy, 4(1), 74-83. doi:10.1037/a0017829

Brunson, R. K. (2007). "Police don't like Black people": African American young men's

    accumulated police experiences. *Criminology and Public Policy, 6*(1), 71-102.

    https://doi.org/10.1111/j.1745-9133.2007.00423.x

Bryant-Davis, T., & Tummala-Narra, P. (2017). Cultural oppression and human trafficking:

    Exploring the role of racism and ethnic bias. *Women & Therapy, 40*(1-2), 152-169.

    https://doi.org/10.1080/02703149.2016.1210964

Butler, P. (2017). *Chokehold: Policing Black men.* New York: The New Press

Chaney, C., & Robertson, R. V. (2014). "Can we all get along?" Blacks' historical and

    contemporary (in) justice with law enforcement. *Western Journal of Black Studies, 38*(2),

    108-122.

Chu, D., Song, J. H., & Dombrink, J. (2005). Chines immigrants' perceptions of the police in New York City. *International Criminal Justice Review, 15*(2), 101-114. https://doi.org/10.1177/1057567705283894

Clayton, E. W., Krugman, R. D., & Simon, P. (Eds.). (2013). *Confronting commercial sexual exploitation and sex trafficking of minors in the United States*. Washington, D.C.: The National Academies Press.

Cloitre, M., Garvert, D. W., Brewin, C. R., Bryant, R. A., & Maercker, A. (2013). Evidence for proposed ICD-11 PTSD and complex PTSD: A latent profile analysis. *European Journal of Psychotraumatology, 4*(1), 1-12. https://doi.org/10.3402/ejpt.v4i0.20706

Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22*(5), 399-408. https://doi.org/10.1002/jts.20444

Countryman-Roswurm, K., & Bolin, B. L. (2014). Domestic minor sex trafficking: Assessing and reducing risk. *Child and Adolescent Social Work Journal*, *31*(6), 521-538. https://doi.org/10.1007/s10560-014-0336-6

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum,* 1989, 139-167.

Crenshaw, K. W. (1996). Mapping the margins: Intersectionality, identity politics, and violence against women. In M. A. Fineman & R. Mykitiuk (Eds.), *The public nature of private violence* (pp. 93–118). New York: Routledge. l

Dandurand, Y. (2017). Human trafficking and police governance. *Police Practice and Research,*

    18(3), 322-336. https://doi.org/10.1080/15614263.2017.1291599

Davies, K., Block, C. R., & Campbell, J. (2007). Seeking help from the police: Battered

    women's decisions and experiences. *Criminal Justice Studies*, *20*(1), 15-41.

    https://doi.org/10.1080/14786010701241317

DeGue, S., Fowler, K. A., & Calkins, C. (2016). Deaths due to use of lethal force by law

    enforcement: Findings from the National Violent Death Report System, 17 U.S. states,

    2009-2012. *American Journal of Preventative Medicine, 51*(5), S173-S187.

    https://doi.org/10.1016/j.amepre.2016.08.027

De Vries, I., & Goggin, K. E. (2018). The impact of childhood abuse on the commercial sexual

    exploitation of youth: A systematic review and meta-analysis. *Trauma, Violence, &*

    Abuse. Advanced online publication. https://doi.org/10.1177/1524838018801332

DeNavas-Walt, C., & Proctor, B. D. (2015). *Income and Poverty in the United States: 2014*.

    Retrieved from Washington, DC: https:// www.census.gov/content/dam/Census/library

    /publications/2015/ demo/p60-252.pdf

Dewey, S., & St. Germain, T. (2014). "It depends on the cop:" Street-based sex workers'

    perspectives on police patrol officers. *Sexuality Research and Social Policy, 11*(3), 256-

    270. https://doi.org/10.1007/s13178-014-0163-8

Donley, S., Habib, L., Jovanovic, T., Kamkwalala, A., Evces, M., Egan, G., Bradley, B., &

    Ressler, K. J. (2013). Civilian PTSD symptoms and risk for involvement in the criminal

    justice system. *Journal of the American Academy of Psychiatry and the Law, 40*(4), 522-

    529.

Dudley, R.G. (2015). *Childhood trauma and its effects: Implications for police*. New

    Perspectives in Policing Bulletin, Washington D.C: U.S. Department of Justice, National

    Institute of Justice, 2015. NCJ 248686. Retrieved May 12th, 2020 from

    https://www.ncjrs.gov/pdffiles1/nij/248686.pdf

Estes, R. J., & Neil, A. W. (2001). *The commercial sexual exploitation of children in the U.S.,*

    Canada, and Mexico. Philadelphia, PA: University of Pennsylvania, School of Social

    Work, Center for the Study of Youth Policy. http://www.ncjrs.gov/App/publications

    /abstract.aspx?ID=240162

Farrell, A., Dank, M., de Vries, I., Kafafian, M., Hughes, A., & Lockwood, S. (2019). Failing

    victims? Challenges of the police response to human trafficking. *Criminology & Public*

    Policy, 18(3), 649-683. https://doi.org/10.1111/1745-9133.12456

Farrell, A., & Pfeffer, R. (2014). Policing human trafficking: Cultural blinders and organization

    barriers. *The ANNALS of the American Academy of Political and Social Science, 653*, 46-

    64. https://doi.org/10.1177/0002716213515835

Farrell, A., Pfeffer, R., & Bright, K. (2015). Police perceptions of human trafficking. *Journal of*

    Crime and Justice, 38(3), 315-333. https://doi.org/10.1080/0735648X.2014.995412

Fedina, L., Williamson, C., & Perdue, T. (2019). Risk factors for domestic child sex trafficking

    in the United States. *Journal of Interpersonal Violence, 34*(13), 2653-2673.

    https://doi.org/10.1177/0886260516662306

Fehrenbacher, A. E., Musto, J., Hoefinger, H., Mai, N., Macioti, P. G., Giametta, C., &

    Bennachie, C. (2020) Transgender people and human trafficking: Intersectional exclusion

    of transgender migrants and people of color from antitrafficking protection in the United

States. *Journal of Human Trafficking*, *6*(2), 182-194, https://doi.org/10.1080/23322705 .2020.1690116

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventative Medicine, 14*(4), 245-258. https://doi.org/10.1016/s0749-3797(98)00017-8

Fernandez, T., Godwin, A., Doyle, J., Verdin, D., & Boone, H. (2016). More comprehensive and inclusive approaches to demographic data collection. *School of Engineering Education Graduate Student Series.* http://docs.lib.purdue.edu/enegs/60

Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect, 31*(1), 7-26. https://doi.org/10.1016/j.chiabu.2006.06.008

Finkelhor, D., Ormrod, R. K., Turner, H. A., & Hamby, S. L. (2005). Measuring poly-victimization using the Juvenile Victimization Questionnaire. *Child abuse & Neglect, 29*(11), 1297-1312. https://doi.org/10.1016/j.chiabu.2005.06.005

Finkelhor, D., Shattuck, A., Turner, H. A., Ormrod, R., & Hamby, S. L. (2011). Polyvictimization in developmental context. *Journal of Child & Adolescent Trauma, 4*(4), 291-300. https://doi.org/10.1080/19361521.2011.610432

Footer, K. H. A., Park, J. N., Allen, S. T., Decker, M. R., Silberzahn, B. E., Huettner, S., Galai, N., & Sherman, S. G. (2019). Police-related correlates of client-perpetrated violence among female sex workers in Baltimore City, Maryland. *American Public Health Associations, 109*(2), 289-295. https://doi.org/10.2105/AJPH.2018.304809

Gau, J. M., Corsaro, N., Stewart, E. A., & Brunson, R. K. (2012). Examining macro-level

impacts on procedural justice and police legitimacy. *Journal of Criminal Justice, 40*(4),

333-343. https://doi.org/10.1016/j.jcrimjus.2012.05.002

Goodman, L. A., Corcoran, C., Turner, K., Yuan, N., & Green, B. L. (1998). Assessing traumatic

event exposure: General issues and preliminary findings for the Stressful Life Events

Screening Questionnaire. *Journal of Traumatic Stress, 11*(3), 521-542.

https://doi.org/10.1023/A:1024456713321

Goodman-Delahunty, J. (2010). Four ingredients: New recipes for procedural justice in

Australian policing. *Policing, 4*(4), 403 – 410. doi: https://doi.org/10.1093/police/paq041

Graham, A., Haner, M., Sloan, M. M., Cullen, F. T., Kulig, T. C., & Jonson, C. L. (2020). Race

and worrying about police brutality: The hidden injuries of minority status in America.

Victims & Offenders, 1-25. https://doi.org/10.1080/15564886.2020.1767252

Gray, S., & Rarick, S. (2018). Exploring gender and racial difference in the effects of child

sexual abuse. *Journal of Child Sexual Abuse, 27*(5), 570-587.

https://doi.org/10.1080/10538712.2018.1484403

Green, B. L., Goodman, L. A., Krupnick, J. L., Corcoran, C. B., Petty, R. M., Stockton, P., &

Stern, N. M. (2000). Outcomes of single versus multiple trauma exposure in a screening

sample. *Journal of Traumatic Stress, 13*(2), 271-286. https://doi.org/10.1023/A

:1007758711939

Greeson, M. R., Campbell, R., & Fehler-Cabral, G. (2014). Cold or caring? Adolescent sexual

assault victims' perceptions of their interactions with the police. *Violence and Victims,*

29(4), 636-651. doi: 10.1891/0886-6708.VV-D-13-00039

Greeson, M. R., Campbell, R., & Fehler-Cabral, G. (2016). "Nobody deserves this": Adolescent

sexual assault perceptions of disbelief and victim blame from police. *Journal of*

    Community Psychology, 44(1), 90-110. doi: 10.1002/jcop.21744

Hankel, J., Dewey, S., & Martinez, N. (2016). Women exiting street-based sex work:

    Correlations between ethno-racial identity, number of children, and violent

    experiences. *Journal of Evidence-Based Social Work, 13*(4), 412-424.

    https://doi.org/10.1080/23761407.2015.1086718

Harley, D. A., Jolivette, K., McCormick, K., & Tice, K. (2002). Race, class, and gender: A

    constellation of positionalities with implications for counseling. *Journal of Multicultural*

    Counseling and Development, *30*(4), 216–238. https://doi.org/10.1002/j.2161-

    1912.2002.tb00521.x

Hayes, A. F., & Montoya, A. K. (2017). A tutorial on testing, visualizing, and probing an

    interaction involving a multicategorical variable in linear regression analysis.

    Communication Methods and Measures, (1), 1-30. https://doi.org/10.1080/19312

    458.2016.1271116

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated

    trauma. *Journal of Traumatic Stress, 5*(3), 37-391. https://doi.org/10.1002/jts

    .2490050305

Hinton, E., Henderson, L., & Reed, C. (2018). An unjust burden: The disparate treatment of

    Black Americans in the criminal justice system. *Vera Institute of Justice.*

Hooper, L., Stockton, P., Krupnick, J., & Green, B., (2011). Development, use, and psychometric

    properties of the Trauma History Questionnaire. *Journal of Loss and Trauma, 16*(3), 258-

    283. https://doi.org/10.1080/15325024.2011.572035

Hopper, E. K. (2017). Polyvictimization and developmental trauma adaptations in sex trafficked

  youth. *Journal of Child & Adolescent Trauma, 10*(2), 161-173.

  https://doi.org/10.1007/s40653-016-0114-z

Hossain, M., Zimmerman, C., Abas, M., Light, M., & Watts, C. (2010). The relationship of

  trauma to mental disorders among trafficked and sexually exploited girls and

  women. *American Journal of Public Health, 100*(12), 2442-2449. https://doi.org/10.2105/

  AJPH.2009.173229

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., &

  Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A

  systematic review and meta-analysis. *Lancet Public Health*, *2*(8), 356-366.

  https://doi.org/10.1016/S2468-2667(17)30118-4

International Labor Organization. (2017). *Forced labour, modern slavery and human trafficking*.

  Retrieved from http://www.ilo.org/global/topics/forced-labour/lang--en/index.htm

Jaffe, A. E., Dilillo, D., Hoffman, L., Haikalis, M., & Dykstra, R. E. (2015). Does it hurt to ask?

  A meta-analysis of participant reactions to trauma research. *Clinical Psychology Review*,

  40, 40-56. https://doi.org/10.1016/j.cpr.2015.05.004

Kahn, K. B., & Martin, K. D. (2016). Policing and race: Disparate treatment, perceptions, and

  policy responses. *Journal of Social Issues, 10*(1), 82-121. https://doi.org

  /10.1111/sipr.12019

Kessler, R., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E., Cardoso, G., Degenhardt, L.,

  de Girolamo, G., Dinolova, R. V., Ferry, F., Florescu, S., Gureje, O., Haro, J. M., Huang,

  Y., Karam, E. G., Kawakami, N., Lee, S., Lepine, J. P., Levinson, D.,…Koenen, K.

  (2017). Trauma and PTSD in the WHO World Mental Health Surveys. *European Journal*

of Psychotraumatology, *8*(sup5), 1353383. https://doi.org/10.1080/20008198
.2017.1353383

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using *DSM-IV* and *DSM-5* criteria. *Journal of Traumatic Stress, 26*(5), 537-547. https://doi.org/:10.1002/jts.21848

Lai, Y. L., & Zhao, J. S. (2010). The impact of race, neighborhood context, and police/citizen interaction on residents' attitudes toward the police. *Journal of Criminal Justice, 38*(4), 685-692. https://doi.org/10.1016/j.jcrimjus.2010.04.042

Lederer, L. J., & Wetzel, C. A. (2014). The health consequences of sex trafficking and their implications for identifying victims of healthcare facilities. *Annals of Health Law, 23*(1), 61-91. Retrieved from http://www.globalcenturion.org/wp-content/uploads/2014/08/The-Health-Consequences-of-Sex-Trafficking.pdf

López, C. M., Andrews III, A. R., Chisolm, A. M., de Arellano, M. A., Saunders, B., & Kilkpatrick, D. (2017). Racial differences in trauma exposure and mental health disorders in adolescents. *Cultural Diversity and Ethnic Minority Psychology, 23*(3), 382-387. https://doi.org/10.1037/cdp0000126

Maguen, S., Metzler, T. J., McCaslin, S. E., Inslicht, S. S., Henn-Haase, C., Neylan, T. C., & Marmar, C. R. (2014). Routine work environment stress and PTSD symptoms in police officers. *The Journal of Nervous and Mental Disease. 197*(10), 754-760. https://doi.org/10.1097/NMD.0b013e3181b975f8

Mapp, S., Hornung, E., D'Almeida, M., & Juhnke, J. (2016). Local law enforcement officers'

    knowledge of human trafficking: Ability to define, identify, and assist. *Journal of Human*

    Trafficking, 2(4), 329-342. https://doi.org/10.1080/23322705.2016.1143764

Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research:

    Causes, consequences, and remedies. *Psychological Methods, 9*(2), 147-163.

    https://doi.org/10.1037/1082-989X.9.2.147

McEwen, B. S. (1998). Stress, adaptation, and disease: Allostasis and allostatic load. *Annals of*

    the New York Academy of Sciences, 840, 33-44. https://doi.org/10.1111/j.1749-

    6632.1998.tb09546.x

Murphy, K., Mazerolle, L., & Bennett, S. (2014). Promoting trust in police: Findings from a

    randomized experimental field trial of procedural justice policing. *Policing and Society,*

    24(4), 405-424. https://doi.org/10.1080/10439463.2013.862246

Murphy, K., & Tyler, T. R. (2017). Experimenting with procedural justice policing. *Journal of*

    Experimental Criminology, 13, 287-292. https://doi.org/10.1007/s11292-017-9300-8

Nadal, K. L., & Davidoff, K. C. (2015). Perceptions of Police Scale (POPS): Measuring attitudes

    towards law enforcement and beliefs about police bias. *Journal of Psychology and*

    Behavioral Science, 3(2), 1-9. https://doi.org/10.15640/jpbs.v3n2a1

Nadal, K. L., Davidoff, K. C., Allicock, N., Serpe, C. R., & Erazo, T. (2017). Perceptions of

    police, racial profiling, and psychological outcomes: A mixed methodological study.

    Journal of Social Issues, 73(4), 808-830. https://doi.org/10.1111/josi.12249

Newman, D. A. (2014). Missing data: Five practical guidelines. *Organizational Research*

    Methods, 17(4), 372-411. https://doi.org/10.1177/1094428114548590

Obasogie, O. K., & Newman, Z. (2017). Police violence, use of force policies, and public health. *American Journal of Law & Medicine, 43*, 279-295. https://doi.org/10.1177/0098 858817723665

Omelaniuk, I.(2005). *United Nations Expert Group Meeting on International Migration and Development*. Retrieved from https://www.un.org/en/development/desa /population/events/pdf/expert/8/P15_IOmelaniuk.pdf

Ottisova, L., Hemmings, S., Howard, L. M., Zimmerman, C., & Oram, S. (2016). Prevalence and risk of violence and the mental, physical and sexual health problems associated with human trafficking: An updated systematic review. *Epidemiology and Psychiatric Sciences*, *25*(4), 317-341. https://doi.org/10.1017/S2045796016000135

Paoline, E. A. III, Gau, J. M., & Terrill, W. (2018). Race and the police use of force encounter in the United States. *The British Journal of Criminology, 58*(1), 54-74. https://doi.org /10.1093/bjc/azw089

Perry, 2004. *American Indians and crime, 1992-2002.* Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Polaris. (2017). *The typology of modern slavery: Defining sex and labor trafficking in the United States*. Retrieved from https://polarisproject.org/sites/default/files/Polaris-Typology-of-Modern-Slavery.pdf

Ridgeway, G. (2006). Assessing the effect of race bias in post-traffic stop outcomes using propensity scores. *Journal of Quantitative Criminology, 22*(1), 1-29. https://doi.org/10.1007/s10940-005-9000-9

Ruhlman, L. M., & Nelson-Goff, B. (2020). *Polytrauma and biopsychosocial health profiles among sex trafficking survivors: Exploring differences in help-seeking attitudes and intentions.* Manuscript submitted for publication.

Rutherford, A. (2011). *ANOVA and ANCOVA: A GLM approach* (2nd edition). John Wiley & Sons, Inc.

Sartor, C. E., Grant, J. D., Duncan, A. E., McCutcheon, V. V., Nelson, E. C., Calvert, W. J., Madden, P. A. F., Heath, A. C., & Bucholz, K. K. (2016). Childhood sexual abuse and two stages of cigarette smoking in African-American and European-American young women. *Addictive Behaviors, 60*, 131-136. https://doi.org/10.1016/j.addbeh.2016.03.039 http://dx.doi.org.spot.lib.auburn.edu/10.1016/j.addbeh.2016.03.039

Scott-Storey, K. (2011). Cumulative abuse: Do things add up? An evaluation of the conceptualization, operationalization, and methodological approaches in the study of the phenomenon of cumulative abuse. *Trauma, Violence, and Abuse, 12*(3), 135-150. https://doi.org/10.1177/1524838011404253

Scott, K. M., Koenen, K. C., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M. C., Corina, B., Bruffaerts, R., Caldas-de-Almeida, J. M., de Girolamo, G., Florescu, S., Iwata, N., Levinson, D., Lim, C. C. W., Murphy, S., Ormel, J., Posada-Villa, J., & Kessler, R. C. (2013) Associations between lifetime traumatic events and subsequent chronic physical conditions: A cross-national, cross-sectional study. *PLoS ONE*, *8*(11), e80573. https://doi.org/10.1371/journal.pone.0080573

Shalev, A. Y. (2009). Posttraumatic Stress Disorder (PTSD) and stress related disorders. *The Psychiatric Clinics of North America, 32*(3), 687-704. doi:10.1016/j.psc.2009.06.001

Sowder, K. L., Knight, L. A., & Fishalow, J. (2018). Trauma exposure and health: A review of outcomes and pathways. *Journal of Aggression, Maltreatment, & Trauma*, *27*(10), 1041-1059. https://doi.org/10.1080/10926771.2017.1422841

Suliman, S., Mkabile, S. G., Fincham, D. S., Ahmed, R., Stein, D. J., & Seedat, S. (2009). Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry, 50*(2), 121-127. https://doi.org/10.1016/j.comppsych.2008.06.006

Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis.* New Jersey: Lawrence Erlbaum Associates, Inc.

Trafficking Victims Protection Act of 2000, 22 U.S.C. §§ 7101–7113 (2000).

United Nations Office on Drug and Crime [UNODC] (2016). *Global Report on Trafficking in Persons 2016*. Retrieved from https://www.unodc.org/documents/data-and-analysis/glotip/2016_Global_Report_on_Trafficking_in_Persons.pdf

United States Census Bureau (2010). *2010 Census Regions and Division of the United States*. Retrieved from https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-regions-and-divisions-of-the-united-states.html

U.S. Department of State (2014). *Trafficking in Persons Report 2014*. Retrieved from https://2009-2017.state.gov/j/tip/rls/tiprpt/2014//index.htm

van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Viking

van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress, 19*(5), 389-399. https://doi.org/10.1002/jts.20047

Wallerstein, N., Duran, B., Oetzel, J. G., & Minkler, M. (2018). *Community-based participatory research for health: Advancing social and health equity*. (3rd ed.). San Francisco: Jossey-Bass

Weitzer, R., & Tuch, S. A. (2005). Racially biased policing: Determinant of citizen perceptions. *Social Forces, 83*(3), 1009-1030. https://doi.org/10.1353/sof.2005.0050

Wilcox, R. (2012). *Introduction to robust estimation and hypothesis testing: A volume in statistical modeling and decision science* (3rd edition). Academic Press.

Wu, Y. (2014). Race and perceptions of the police: A comparison of White, Black, Asian and Hispanic Americans. *Policing and Society, 24*(2), 135-157. doi: 10.1080/10439463.2013.784288

Zimmerman, C., Hossain, M., Yun, K., Gajdadziev, V., Guzun, N., Tchomarova, M., Ciarrocchi, R. A., Johansson, A., Kefurtova, A., Scodanibbio, S., Motus, M. N., Roche, B., Morison, L., & Watts, C. (2008). The health of trafficked women: A survey of women entering posttrafficking services in Europe. *American Journal of Public Health, 98*(1), 55-59. https://doi.org/10.2105/AJPH.2006.108357

Table 1

Patterns of Missingness Based on Time Since Survivors' Last Experience of Sex Trafficking

			Total	Within the past month	In the past 1-6 months	In the past 7-12 months	In the past 1-5 years	More than 5 years ago	Missing
POPS Total	Present	Count	91	9	16	12	25	26	13
		Percent	67.4	100	88.9^	80^	92.6^	100	32.5
	Missing	% SysMis	32.6	0	11.1	20	7.4	0	67.5
PCL Total	Present	Count	94	9	15	14	24	26	6
		Percent	69.6	100	83.3^	93.3	88.9^	100	15
	Missing	% SysMis	30.4	0	16.7	6.7	11.1	0	92.5
Race	Present	Count	89	9	15	12	25	25	3
		Percent	65.9	100	83.3^	80^	92.6^	96.2	7.5
	Missing	% SysMis	34.1	0	16.7	20	7.4	3.8	92.5
Gender ID	Present	Count	91	9	15	13	25	25	4
		Percent	67.4	100	83.3^	86.7^	92.6^	96.2	10
	Missing	% SysMis	32.6	0	16.7	13.3	7.4	3.8	90
Education	Present	Count	89	9	15	12	25	25	3
		Percent	65.9	100	83.3^	80^	92.6^	96.2	7.5
	Missing	% SysMis	34.1	0	16.7	20	7.4	96.2	7.5
Income	Present	Count	86	7	15	12	25	24	3
		Percent	63.7	77.8	83.3^	80^	92.6^	92.3^	7.5
	Missing	% SysMis	36.3	22.2	16.7	20	7.4	7.7	92.5

Note: ^*p* < .10. *p < .05.

Table 2

Separate Variance t-Tests

		Polyvictimization	POPS Total	Length of ST Victimization
POPS Total	*t*	2.6	.	.2
	df	25.3	.	11.4
	P(2-tail)	.02*	.	.82
	# Present	91	91	77
	# Missing	16	0	9
	Mean(Present)	11.34	28.89	11.6
	Mean(Missing)	7.69	.	11
PCL-5 Total	*t*	1.9	1.1	-.8
	df	23.6	2.1	7.9
	P(2-tail)	.07	.38^	.46
	# Present	91	88	79
	# Missing	16	3	7
	Mean(Present)	11.22	29.18	11.36
	Mean(Missing)	8.38	20.33	13.57
Polyvictimization	*t*	.	.	-.5
	df	.	.	3.4
	P(2-tail)	.	.	.68^
	# Present	107	91	82
	# Missing	0	0	4
	Mean(Present)	10.79	28.89	11.45
	Mean(Missing)	.	.	13.25

Note: ^*p* < .10. **p* < .05.

Table 3

Participant Reports of Polyvictimization, Perceptions of Police, PTSD, Length of Time

Trafficked, and Age (N = 135)

Variables	*M*	*SD*	Range	α
Polyvictimization (THQ)	10.79	6.50	0 – 28	
Perceptions of Police (POPS)	43.11	11.44	12 – 60	.97
General Attitudes Toward Police	31.45	8.96	9 – 45	.96
Perception of Police Bias	11.65	2.98	3 – 15	.87
Posttraumatic Stress Disorder (PCL)	43.18	23.08	0 – 77	.97
Re-Experiencing Symptoms	11.47	6.64	0 – 20	.94
Avoidance Symptoms	4.61	2.63	0 – 8	.80
Neg. Alterations in Cog. and Mood	15.20	8.65	0 – 28	.93
Arousal Symptoms	12.41	6.70	0 – 24	.86
Total Time Trafficked (Years)	11.54	8.83	0 – 42	
Age	34.78	9.86	18 – 63	

Table 4

Correlations for Survivor Reports of Polyvictimization, Perceptions of Police, PTSD, Length of Trafficking Victimization, and Age (N = 135)

Variables	1	2	3	4	5	6	7	8	9	10
1. Polyvictimization	–									
2. Perceptions of Police	-.195	–								
3. POPS General Attitudes Toward Police	-.151	.986**	–							
4. POPS Perception of Police Bias	-.291**	.864*	.768**	–						
5. PCL-5 Total	.254*	.197	-.180	-.230*	–					
6. PCL-5 Re-experiencing Symptoms	.187	-.162	-.148	-.200	.937**	–				
7. PCL-5 Avoidance Symptoms	.169	-.161	-.135	-.244*	.837**	.830**	–			
8. PCL-5 Negative Alterations to Cog./Mood	.256*	-.176	-.159	-.214*	.944**	.819**	.749**	–		

Variables	1	2	3	4	5	6	7	8	9	10
9. PCL-5 Arousal Symptoms	.197	-.290**	-.279**	-.286**	.951**	.849**	.796**	.861**	–	
10. Total length of time trafficked	.345**	.019	.027	-.004	.420**	.140**	.329**	.345**	.401**	–
11. Age	.113	.041	.072	-.035	-.031	-.018	-.123	-.018	-.049	.279**

Note. *. Correlation is significant at the 0.05 level. **. Correlation is significant at the 0.01 level.

Table 5

One-Way Analysis of Variance of Polyvictimization and Perceptions of Police by Participant

Race (N = 135)

Variable	Source	df	SS	MS	F	p
Polyvictimization	Between Groups	5	400.43	80.09	2.01	.086
	Within Groups	83	3309.67	39.88		
	Total	88	3710.09			
Perceptions of Police Total	Between Groups	5	1261.24	252.25	1.99	.089
	Within Groups	81	10269.62	126.79		
	Total	86	11530.85			
POPS General Attitudes	Between Groups	5	604.58	120.92	1.52	.192
	Within Groups	82	6517.14	79.48		
	Total	87	7121.72			
POPS Perception of Police Bias	Between Groups	5	154.57	30.91	3.96	.003
	Within Groups	81	631.91	7.801		
	Total	86	786.48			

Table 6

Summary of Hierarchical Multiple Regression Analyses for Polyvictimization and Racial Identity of Adult Sex Trafficking Survivors

(N = 135) Predicting Perceptions of Police (Model 1), Controlling for Background Variables (Model 2)

| | Model 1 | | | | | | Model 2 | | | | | |
| | | | | | 95% CI | | | | | | 95% CI | |
Variable	*B*	*SE*	*t*	*p*	LL	UL	*B*	*SE*	*t*	*p*	LL	UL
Perception of Police (Total)												
Constant	28.43***	1.61	17.62	.000	25.22	31.64	31.63** *	2.89	10.94	.000	25.87	37.39
Polyvictimization	-0.35^	0.19	-1.80	.075	-0.73	0.04	-0.30	0.20	-1.54	.129	-0.69	0.09
Racial identity												
American Indian/Alaska Native	-5.16	7.84	-0.66	.512	-20.78	10.45	-4.36	7.83	-0.56	.579	-19.95	11.23
Black	5.73*	2.89	1.99	.051	-0.02	11.49	5.39^	2.89	1.87	.066	-0.36	11.13
Hispanic/Latino	-8.73	6.53	-1.34	.185	-21.74	4.27	-9.34	6.52	-1.43	.156	-22.32	3.63
Native Hawaiian/Pacific Islander	6.86	7.85	0.87	.385	-8.77	22.49	6.15	7.83	0.79	.435	-9.44	21.74

	B	SE	t	p	LL	UL	B	SE	t	p	LL	UL
Other	-5.19	4.72	-1.10	.275	-14.59	4.20	-5.29	4.70	-1.13	.264	-14.64	4.06
PTSD symptoms							-0.07	0.05	-1.33	.187	-0.18	0.04
R^2	0.17						0.19					
ΔR^2							0.02					
F	2.60*						2.50*					

General Attitudes toward

Police

	B	SE	t	p	LL	UL	B	SE	t	p	LL	UL
Constant	22.48	1.29	17.43	.000	19.92	25.05	24.89	2.30	10.84	.000	20.32	29.46
Polyvictimization	-0.23	0.15	-1.47	.146	-0.53	0.08	-0.19	0.16	-1.20	.233	-0.50	0.12
Racial identity												
American Indian/Alaska Native	-2.49	6.27	-0.40	.693	-14.97	10.00	-1.88	6.27	-0.30	.765	-14.36	10.60
Black	3.49	2.29	1.53	.131	-1.07	8.04	3.17	2.29	1.38	.171	-1.40	7.73
Hispanic/Latino	-7.45	5.22	-1.43	.158	-17.84	2.95	-7.90	5.21	-1.51	.134	-18.28	2.49
Native Hawaiian/Pacific Islander	3.35	6.28	0.53	.595	-9.14	15.85	2.82	6.27	0.45	.654	-9.66	15.30
Other	-4.60	3.77	-1.220	.226	-12.11	2.91	-4.67	3.76	-1.24	.218	-12.16	2.81

	B	SE	t	p	LL	UL	B	SE	t	p	LL	UL
PTSD symptoms							-0.05	0.04	-1.27	.209	-0.14	0.03
R^2	0.13						0.15					
ΔR^2							0.02					
F	1.91^						1.88^					

Perceptions of Police Bias

	B	SE	t	p	LL	UL	B	SE	t	p	LL	UL
Constant	6.06	0.42	14.59	.000	5.23	6.89	7.31	1.49	4.91	.000	4.34	10.29
Polyvictimization	-0.19	0.06	-3.33	.001	-0.30	-0.08	-0.20	0.06	-3.17	.002	-0.32	-0.07
Racial identity												
American Indian/Alaska Native	-2.65	1.90	-1.39	.168	-6.45	1.15	-2.23	1.94	-1.15	.256	-6.12	1.66
Black	1.59	0.80	1.99	.051	-0.01	3.20	1.00	0.88	1.14	.258	-0.76	2.76
Hispanic/Latino	-1.58	1.59	-1.00	.324	-4.76	1.60	-1.98	1.62	-1.22	.228	-5.22	1.27
Native Hawaiian/Pacific Islander	3.63	1.90	1.91	.061	-0.17	7.43	3.86	2.09	1.85	.070	-0.32	8.04
Other	-0.37	1.38	-0.27	.791	-3.12	2.39	-0.25	1.39	-0.18	.861	-3.03	2.54
PTSD symptoms							-0.02	0.02	-1.40	.167	-0.06	0.01
Total Time Trafficked							0.03	0.05	0.59	.557	-0.06	0.12

Age	0.01	0.04	0.32	.752	-0.06	0.09
Income	-0.31	0.20	-1.54	.129	-0.71	0.09

R^2	0.32	0.36
ΔR^2		0.04
F	5.04***	3.36**

Note: CI = confidence interval, LL = lower limit; UL = upper limit; $^\wedge p < .10$. $*p < .05$. $**p < .01$. $***p < .001$.

Table 7

Summary of Moderated Linear Regression Analyses for Polyvictimization and Racial Identity of Adult Sex Trafficking Survivors (N = 135)

Predicting Perceptions of Police (Model 1), and General Attitudes Toward Police (Model 2)

	Model 1						Model 2					
					95% CI						95% CI	
	B	*SE*	*t*	*p*	LL	UL	*B*	*SE*	*t*	*p*	LL	UL
Constant	31.73***	3.45	9.20	.000	24.83	38.64	25.14***	2.33	10.78	.000	20.49	29.79
Polyvictimization	-0.56*	0.28	-2.04	.046	-1.12	-0.01	-0.31	0.19	-1.65	.104	-0.69	0.07
Racial identity												
American Indian/Alaska Native	2.15	1.32	1.63	.108	-0.48	4.79	1.96^	1.01	1.94	.056	-0.05	3.96
Black	-0.93	0.96	-0.97	.337	-2.86	1.00	0.15	0.35	0.43	.670	-0.55	0.86
Hispanic/Latino	-4.45	4.02	-1.11	.273	-12.50	3.60	-2.78	3.02	-0.92	.360	-8.80	3.23
Native Hawaiian/Pacific Islander	2.88^	1.49	1.93	.058	-0.10	5.86	2.85*	1.11	2.57	.012	0.64	5.05
Other	0.36	1.09	0.33	.741	-1.83	2.55	-0.06	0.74	-0.09	.931	-1.54	1.41
PTSD symptoms	-0.08	0.07	-1.15	.255	-0.23	0.06	-0.06	0.04	-1.26	.210	-0.14	0.03
Length of ST Victimization	0.13	0.18	0.71	.480	-0.24	0.50	.	.	.	.	.	.

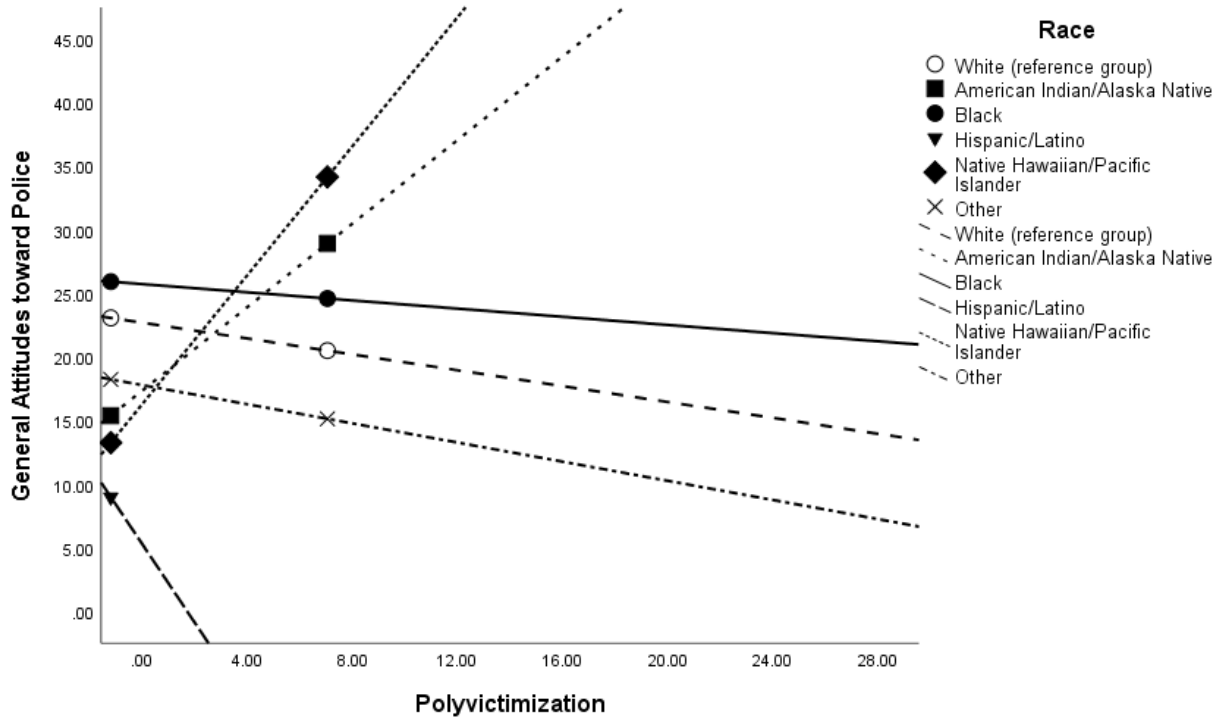|		
R^2	0.29	0.26
ΔR^2		0.03
F	1.85^	2.15*

Note: CI =confidence interval, LL =lower limit; UL =upper limit; ^$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$

Figures

Figure 1

Scatterplot of Moderated Linear Regression Analyses for Polyvictimization and Racial Identity of Adult

Sex Trafficking Survivors (N = 135) Predicting General Attitudes toward Police

Appendix A

Modified Trauma History Questionnaire (Hooper et al., 2011)
Instructions. The next questions ask whether you have experienced certain types of stressful or traumatic life events. We will not ask you to describe your exposure to these events in any way. Instead, we will ask you the following sequence of questions for each type of stressful or traumatic life event assessed in this survey:

1) Have you ever experienced the event (yes or no); if yes, we ask two follow-up questions,
2) Did this happen to you as part of your sex trafficking experience(s)?
3) Did this happen to you separate from your sex trafficking experience(s)?

There may be some cases where the answer to both follow-up questions is yes. There may also be cases where it is difficult to decide on an answer – that is okay. Just answer each question as best as you can.

When you answer "Yes" on one of the two follow-up questions, we ask how many times it happened and how old you were when it happened. Many people experience these events multiple times over a long period of time. In these cases, it is okay to estimate on the number of times you experienced the event and to enter multiple ages or age ranges, as needed.

1. **Has anyone ever tried to take something directly from you by using force or the threat of force, such as a stick-up or mugging?**

    ① Yes   ⓪ No → Skip to #2

    ↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

    How old were you? _____

    ↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

    How old were you? _____

2. **Has anyone ever attempted to or succeeded in breaking into your home?**

    ① Yes   ⓪ No → Skip to #3

    ↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

    How old were you? _____

    ↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

    How old were you? _____

3. **Have you ever had a life-threatening accident at work, in a car, or somewhere else?**

① Yes   ⓪ No → Skip to #4

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

4. **Have you ever experienced a natural disaster (e.g., tornado, hurricane, flood, major earthquake, etc.) where you felt you or your loved ones were in danger of death or injury?**

① Yes   ⓪ No → Skip to #5

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

5. **Have you ever seen someone seriously injured or killed?**

① Yes   ⓪ No → Skip to #6

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

6. **Have you ever received news of a serious injury, life-threatening illness, or unexpected death of someone close to you?**

① Yes   ⓪ No → Skip to #7

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

7. Have you ever had a spouse, romantic partner, or child die?

① Yes　⓪ No → Skip to #8

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

8. Have you ever had a serious or life-threatening illness?

① Yes　⓪ No → Skip to #9

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

9. Have you ever had to engage in combat while in military service in an official or unofficial war zone?

① Yes　⓪ No → Skip to #10

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? _____

How old were you? _____

10. Has anyone ever made you have intercourse or oral or anal sex against your will?

① Yes　⓪ No → Skip to #11

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

11. Has anyone ever touched private parts of your body, or made you touch theirs, under force or threat?

① Yes　　⓪ No → Skip to #12

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

12. Other than the incidents already mentioned, have there been any <u>other</u> situations in which another person tried to force you to have any unwanted sexual contact?

① Yes　　⓪ No → Skip to #13

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

13. Has anyone, including family members or friends, ever attacked you with a gun, knife, or some other weapon?

① Yes　　⓪ No → Skip to #14

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?　⓪ No　① Yes →　How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

14. Has anyone, including family members or friends, ever attacked you <u>without</u> a weapon and seriously injured you?

① Yes   ⓪ No → Skip to #15

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

15. Has anyone in your family ever beaten, spanked, or pushed you hard enough to cause injury?

① Yes   ⓪ No → Skip to #16

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

16. Have you ever been in any other situation in which you were or feared you might be seriously injured?

① Yes   ⓪ No → Skip to #17

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)? ⓪ No ① Yes → How many times did it happen? ____

How old were you? ____

17. Have you experienced any other extraordinarily stressful situations or events that were not already covered?

① Yes   ⓪ No → Skip to #18

↳ Did this happen to you <u>as part of</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

                                                        How old were you? _____

↳ Did this happen to you <u>separate from</u> your sex trafficking experience(s)?   ⓪ No   ① Yes →   How many times did it happen? _____

                                                        How old were you? _____

Perceptions of Police Scale (Nadal & Davidoff, 2015)
Instructions. Please indicate how much you agree or disagree with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Police officers are friendly.	①	②	③	④	⑤
2. Police officers protect me.	①	②	③	④	⑤
3. Police officers treat all people fairly.	①	②	③	④	⑤
4. I like the police.	①	②	③	④	⑤
5. The police are good people.	①	②	③	④	⑤
6. The police do not discriminate.	①	②	③	④	⑤
7. The police provide safety.	①	②	③	④	⑤
8. The police are helpful.	①	②	③	④	⑤
9. The police are trustworthy.	①	②	③	④	⑤
10. The police are reliable.	①	②	③	④	⑤

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
11. Police officers are unbiased.	①	②	③	④	⑤
12. Police officers care about my community.	①	②	③	④	⑤

Racial Identity

1. What is your primary racial identity? *(Please mark all that apply)*

   ① American Indian or Alaska Native
   ② Asian
   ③ Black or African American
   ④ Hispanic, Latino, or Spanish Origin
   ⑤ Native Hawaiian or Other Pacific Islander
   ⑥ White
   ⑦ Another race not listed *(please describe)*: _____

Sex Trafficking Experience and Demographic Covariates

1. Using your best guess, what is the total amount of time you were sex trafficked? *(Please specify whether your answer is in days, weeks, months, or years)*

   ☐ Days ☐ Weeks ☐ Months ☐ Years

2. What is your birthday? (mm/dd/yyyy)

3. How do you describe your gender identity?

   ① Cisgender Female
   ② Cisgender Male
   ③ Transgender Female
   ④ Transgender Male
   ⑤ Another gender not listed *(please describe)*: _____

4. What is your annual household income, from all sources, before taxes?

⓪ Below $9,999

① $10,000 - 19,999

② $20,000 - 29,999

③ $30,000 - 39,999

④ $40,000 - 49,999

⑤ $50,000 - 59,999

⑥ $60,000 - 69,999

⑦ $70,000 - 79,999

⑧ $80,000 - 89,999

⑨ $90,000 - 99,999

⑩ $100,000 - above

Posttraumatic Stress Disorder Checklist (Blevins et al., 2015)

Instructions. Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then indicate how much you have been bothered by that problem in the past month.

In the past **month**, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	⓪	①	②	③	④
2. Repeated, disturbing dreams of the stressful experience?	⓪	①	②	③	④
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	⓪	①	②	③	④
4. Feeling very upset when something reminded you of the stressful experience?	⓪	①	②	③	④
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	⓪	①	②	③	④
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	⓪	①	②	③	④

In the past <u>month</u>, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	⓪	①	②	③	④
8. Trouble remembering important parts of the stressful experience?	⓪	①	②	③	④
9. Having strong negative beliefs about yourself, other people, or the world e.g., having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	⓪	①	②	③	④
10. Blaming yourself or someone else for the stressful experience or what happened after it?	⓪	①	②	③	④
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	⓪	①	②	③	④
12. Loss of interest in activities that you used to enjoy?	⓪	①	②	③	④
13. Feeling distant or cut off from other people?	⓪	①	②	③	④
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	⓪	①	②	③	④
15. Irritable behavior, angry outbursts, or acting aggressively?	⓪	①	②	③	④

In the past **month**, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
16. Taking too many risks or doing things that could cause you harm?	⓪	①	②	③	④
17. Being "super alert" or watchful or on guard?	⓪	①	②	③	④
18. Feeling jumpy or easily startled?	⓪	①	②	③	④
19. Having difficulty concentrating?	⓪	①	②	③	④
20. Trouble falling or staying asleep?	⓪	①	②	③	④