THE ROLE OF PARENTAL ATTACHMENT IN THE RELATION BETWEEN TRAUMA EXPOSURE AND POSTTRAUMATIC GROWTH AMONG JUSTICE INVOLVED YOUTH

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by

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ABSTRACT

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It is estimated that by the time individuals reach adolescence, they will have likely experienced at least one traumatic event. Early traumatic experiences are widespread; indeed, approximately 60% of adolescents under eighteen experience an event that would qualify as traumatic. Further, adolescents involved in the juvenile justice system experience higher rates of trauma exposure and related symptoms of psychopathology (e.g., PTSD) compared to their non-justice involved peers. However, not all adolescents exposed to trauma develop PTSD or other related symptoms of psychopathology, and preliminary research suggests some may experience positive psychological change in the form of posttraumatic growth (PTG). One factor which may affect the development of PTG among adolescents is parental attachment security. The aim of this study was to examine, for the first time, the role of parental attachment in the relation between trauma exposure and posttraumatic growth among a sample of justice-involved adolescents to test the hypothesis that the relation between trauma exposure and the occurrence of posttraumatic growth would be moderated by parental attachment security. Results did not provide evidence of parental attachment security as a significant moderator of the relation between trauma exposure and posttraumatic growth. Limitations and future directions are discussed.

KEY WORDS*:* Adolescence; Posttraumatic growth; Trauma exposure; Juvenile offenders

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CHAPTER I

Introduction

Adolescent Trauma Exposure

A traumatic experience is defined as an encounter with serious injury, actual or threatened death, or sexual violence and may occur through direct exposure, witnessing the event, or learning of a loved one's experience of such event (APA, 2013). Such traumatic experiences have been associated with a range of negative mental health outcomes such as depression, behavioral problems, and Posttraumatic Stress Disorder (Sareen, 2014). Additionally, adolescent trauma exposure can lead to aggression and contact with the juvenile justice system (Stimmel, Cruise, Ford, & Weiss, 2014). It is important to note that most children and adolescents who have experienced a traumatic event do not necessarily develop pathological outcomes (Self-Brown, Lai, Thompson, McGill, & Kelley, 2013). In fact, the 2008 APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents found that the majority of children and adolescents exposed to traumatic events demonstrate resilience, particularly in cases of single-incident exposure. Specifically, it was found that youth typically return to their prior level of psychological functioning and do not develop symptoms of posttraumatic stress. However, research indicates that children and adolescents exposed to traumatic events are at increased risk of mental health consequences than trauma exposed adults, particularly females (Buckner, Beardslee, & Bassuk, 2004; Kilpatrick et al., 2003). The psychological, behavioral, and developmental effects of trauma exposure are particularly concerning given the significant prevalence rates of such exposure among

youth. Of note, prevalence rates of youth exposure to trauma vary by type of trauma across studies.

In regards to sexual victimization, the 2008 American Psychological Association (APA) Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents estimated that 25-43% of youth will experience some form of sexual assault in their lifetime. The National Survey of Children's Exposure to Violence (NatSCEV) study found that 6% of youth in the United States experienced at least one episode of sexual victimization (sexual assault, statutory sex offenses, sexual exposure by an adult) within the past year (Finkelhor, 2013). Further, it was found that females were 1.5 times more likely to report a history of sexual victimization than males, and adolescents aged 14-17 had higher past-year (16%) and lifetime (28%) prevalence rates than the full sample of children surveyed. These findings are similar to those of The National Survey of Adolescents (NSA), which found an estimated 8% of adolescents reported at least one sexual assault in their lifetimes, with females reporting higher rates of sexual victimization than males (Kilpatrick, 1997). However, 46% of adolescents who endorsed a history of sexual assault reported they were younger than 13 years of age at the time of their first assault.

In regards to physical victimization, the NatSCEV study found the prevalence rate of physical abuse among adolescents surveyed to be around 19%, while the NSA study estimated a physical abuse prevalence of 9% and the National Comorbidity Survey-Adolescents (NCS-A) estimated prevalence of 6% (Finkelhor, 2013; Kilpatrick, 1997; McLaughlin, 2012). It should be noted that prevalence rates vary primarily due to varying definitions of physical abuse. For example, the NSA defined abuse as "incidents that

required youth to see a doctor, spanking that resulted in noticeable marks, bruises, or welts, or punishments that included burning or cutting a youth" while NatSCEV defined physical abuse as "any incidents whereby an adult hit, beat, kicked, or physically hurt a child in any way, aside from spanking on the bottom." More broadly, physical assault estimates vary from 17-71% lifetime prevalence rates among adolescents, with varying definitions of physical assault ranging from assaults with or without weapons to threats of injury or death (Kilpatrick, 2003; Finkelhor, Turner, Ormrod, & Hamby 2009; Finkelhor, 2013).

Not only may adolescents directly experience violent acts, they may also witness violence perpetrated against others in the home and community. The NatSCEV study reported that 70% of adolescents endorsed witnessing violence, one third of which was violence that occurred in the home (Finkelhor, Turner, Ormrod, & Hamby 2009). The 2008 APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents found that 39-85% of youth have witnessed community violence. Another study reported approximately 38% of adolescents reported witnessing one or more serious incidents of community violence, while 9% reported witnessing domestic violence between parents or caregivers (Zinzow et al., 2009). Of adolescents who endorsed witnessing violence, males were more likely to have witnessed physical violence (e.g., witnessing someone shot with a firearm, stabbed, mugged, etc.) while females were more likely to report witnessing sexual assault. Further, older adolescents were more likely to report past-year witnessed violence than younger children sampled, indicating that teenagers may be particularly vulnerable to trauma exposure.

Additionally, adolescents may experience trauma associated with natural disasters. While rates vary by region, nearly 2.5 billion individuals have experienced natural disasters across the world within the past decade, with youth comprising a significant proportion of those affected. A 2000 study by Briere and Elliott found that of the 935 adults sampled, 22% endorsed experiencing at least one national disaster in their lifetime. Similarly, the NSA found that approximately 25% of adolescents had experienced a natural disaster in their lifetime, and one third endorsed perceived threat of injury or death while experiencing these events (Kilpatrick, 1995).

Adolescents may also experience trauma in the form of unintentional injury. The 2008 APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents found that in 2006, 7.9 million children received emergency medical care for unintentional injuries (fires, animal attacks, near-drowning, vehicle accidents, etc.) in the United States alone. According to a 2013 report by the National Electronic Injury Surveillance System All Injury Program (NEISS-AIP), the most common type of injuries treated in emergency departments for children under 15 years of age was unintentional falls, secondary to being unintentionally struck by or against another person or object (U.S Consumer Product Safety Commission, 2013). Additionally, the NEISS-AIP reported that adolescent involvement in motor vehicle accidents is another common experience of a potentially traumatic event; specifically, it was estimated that 310,568 individuals younger than 18 years were treated in emergency departments within the United States for motor vehicle accident-related injuries in 2011. It should be noted that these figures represent children and adolescents who have

presented for medical care and therefore likely underestimates rates of psychological trauma.

Further, adolescents may experience trauma in the form of threats or harassment. The NatSCEV study reported that 29% of youth endorsed experiences of teasing or emotional bullying. Given recent technological advances and increasing prevalence of internet use, adolescents may be exposed to emotional trauma both in-vivo and online. The NatSCEV study reported that 6% of youth experienced online victimization in the past year, with 9% endorsing a lifetime history of online victimization, including incidents such as sexual solicitation (5%) and sexual harassment (6%; Mitchell, Finkelhor, Wolak, Ybarra, & Turner 2011). Additionally, a 2015 study found that 20%-40% of children and adolescents reported experiences of cyberbullying, with particular risk noted among females and minorities (Aboujaoude, Savage, Starcevic, & Salame, 2015). While all youth may be exposed to the aforementioned forms of trauma, youth involved in the juvenile justice system are at an additional increased risk.

Increased Trauma Exposure and Impact Among Justice-Involved Youth

It has been estimated that approximately 90% of justice-involved youth have experienced a traumatic event (Dierkhising et al., 2013). Studies of detained youth have found lifetime rates of trauma exposure to range from 58 to 90% (Ford, Grasso, Hawke, & Chapman, 2013; Ford et al., 2004). Similarly, other studies have found that justice-involved youth are disproportionately exposed to stressors known to increase their risk for delinquency and violence (Duke, Pettingell, McMorris, & Borowsky, 2011). These stressors include poverty, parental incarceration, and exposure to violence and victimization (Snyder & Sickmund, 2006; Phillips et al, 2002; Hawkins et al., 2000;

Simons, Simons, Chen, Brody, & Lin, 2007). Specifically, justice-involved male youth report higher rates of witnessing violence while female youth report higher rates of interpersonal victimization and sexual assault (Cauffman, Feldman, Waterman, & Steiner, 1998; Ford et al, 2007; Foy et al., 2012). These stressors have been linked to increased risk for a variety of mental health problems, including personality disorders and conduct disorders. Indeed, while approximately 20% of adolescents in the United States have a diagnosable mental health disorder, rates of psychopathology are significantly higher among adolescent offenders, with more than 60% having a diagnosable psychiatric disorder (Kessler et al., 2005; Croysdale, Drerup, Bewsey, & Hoffman, 2008). Specifically, youth involved in the juvenile justice system report greater prevalence of trauma exposure and symptoms of depression, anxiety, and PTSD compared to their non-justice involved peers (Wolpaw & Ford, 2004; Schufelt & Cocozza, 2006; Wood, Foy, Layne, Pynoos, & James, 2002). Similarly, Dierkhising and colleagues (2013) found that 70% of justice-involved youth met criteria for a mental health disorder, and 30% met criteria for PTSD. Further, youth involved in the justice system are more likely to experience multiple types of trauma prior to their engagement in criminal activity (Abram et al., 2004).

While most delinquent youth do not continue to engage in criminal activity as adults, the aforementioned rates and effects of trauma exposure among justice-involved youth are of particular societal importance given that an estimated 2.1 million adolescents under the age of 18 are arrested each year in the United States (Robins, 1978; Puzzanchera & Adams, 2011). Specifically, behavioral and mental health problems among adolescents are concerning because they may lead to poor academic performance,

school attrition, engaging in risky behaviors, substance abuse, and further involvement with the juvenile justice system (Skowyra & Cocozza, 2006). Should youth become involved in the juvenile justice system as a result of behavioral and mental health problems, they may face collateral consequences such as difficulty obtaining employment, serving in the military, or receiving financial aid for college. Justice-involved youth are also at increased risk for child welfare involvement (Dierkhising et al., 2013).

Not only does increased exposure to trauma pose a detriment to adolescent mental health and well-being, it may also contribute to the financial burden of incarcerating adolescents and managing long-term justice involvement. Approximately 60,000 adolescents are incarcerated on any given day in the United States, with a rate of 177 per 100,000 youth incarcerated in Texas alone (ACLU.org, 2019). While rates of juvenile incarceration have decreased over recent years, these statistics remain alarming when considering the financial ramifications that such detainment rates have on taxpayers and communities (Justice Policy Institute (JPI), 2014). Specifically, the JPI found that confining a single juvenile in the most expensive confinement setting costs $407.58 per day, which amounts to $148,767 annually. Further, the cost of youth incarceration is not limited to the cost of detainment alone; the JPI estimated that the long-term costs of youth incarceration may add up to an additional $8 billion to $21 billion each year when accounting for the impact of confinement on continuing recidivism, the cost of youth assault while confined, and lost educational and employment opportunities. The aforementioned ramifications of youth trauma exposure create an immense need to examine variables which may mitigate these negative effects.

Research has suggested that particular personality traits or individual qualities may buffer negative mental health outcomes after experiences of trauma through maximizing internal and external resources to overcome such adverse experiences (Hampson & Friedman, 2008). This suggests that some adolescents may not only be capable of enduring trauma, but may actually experience positive psychological change following such experiences.

Adolescent Posttraumatic Growth

Posttraumatic growth refers to positive psychological change after adverse experiences (Calhoun & Tedeschi, 2006). This psychological change may include positive changes in an individual's relationships, positive changes in an individual's perception of self, and an overall positive change in an individual's philosophy of life (Tedeschi & Calhoun, 1998). Though the specific mechanism through which the process of posttraumatic growth occurs is largely unknown, previous posttraumatic growth research has postulated that life-threatening or traumatic life events may prompt an individual to better oneself (Affleck & Tennen, 1996). Specifically, individuals may accept that an adverse event has occurred and view their subsequent response as an opportunity to readjust their priorities, reevaluate people in their lives, and improve their life circumstances.

While posttraumatic growth has been well-documented in adults (Calhoun & Tedeschi, 1998, Linley & Joseph, 2004), research has only recently begun to investigate posttraumatic growth among adolescents. Using a sample of 513 adolescents exposed to the September 11th, 2001 terrorist attacks, one study found that a third of participants reported experiencing positive changes in spirituality, relationships, self-reliance,

appreciation of life, and life priorities (Milam, Ritt-Olson, Tan, Unger, & Nezami, 2005). Additionally, another study examined posttraumatic growth, coping, and symptomatology among 31 adolescent cancer patients who completed cancer treatment and found evidence for the occurrence of posttraumatic growth (Turner-Sack, Menna, & Setchell, 2012). Specifically, it was found that increased use of acceptance coping strategies regarding adolescent beliefs about relapse predicted higher levels of posttraumatic growth than those who did not employ such strategies. Another study examining 435 adolescents who experienced a traumatic event within the previous 3 years found evidence of posttraumatic growth as well. Specifically, age and religiosity were positively associated with posttraumatic growth while substance use was negatively associated with posttraumatic growth (Milam, Ritt-Olson, & Unger, 2004). In regards to longitudinal studies, one study of 328 adolescents examining posttraumatic growth and emotional distress over an 18-month period found that posttraumatic growth was associated with subsequent reductions in short and long-term emotional distress when baseline emotional distress was controlled for (Ickovics et al., 2014). However, the scarce longitudinal literature is mixed, as a 2014 study by Vloet and colleagues examined the long-term symptoms and posttraumatic growth among 42 adolescents who were referred to an outpatient clinic/specialized health service following exposure to a traumatic event; these participants were reassessed 2 to 5 years after experiencing the traumatic event. On average, low levels of posttraumatic growth were reported by the adolescents at follow-up, with sexual abuse resulting in the highest levels of posttraumatic growth.

Taken together, these studies exhibit an occurrence of some form of psychological growth among adolescents following an adverse or traumatic event. This raises the

question as to whether there are specific factors that may underlie adolescents' ability to experience such growth, particularly justice involved adolescents who experience higher than average rates of trauma exposure. However, to our knowledge, no studies have yet examined posttraumatic growth within this population.

The Possible Role of Parental Attachment

Attachment theory posits that whether or not the emotional and physical needs of a child are met in early development influences internal working models of the self and others (Bowlby, 1969). These models then influence emotion regulation and one's ability to cope with stressors across the lifespan (Sroufe & Waters, 1977). Additionally, working models of the self – developed through early attachment experiences – are generally stable throughout adolescence and adulthood (Fraley, 2002). Given that the experience of posttraumatic growth entails accepting that an adverse event has occurred and viewing one's subsequent response as an opportunity to readjust priorities and improve social relationships and life circumstances, it is possible that one factor underlying the experience of adolescent posttraumatic growth is the existence of a healthy working model of self that is built within a parental attachment relationship. Indeed, the adult literature provides support for the positive relation between parental attachment and the occurrence of posttraumatic growth.

One study of 275 Palestinian political prisoners found that attachment style moderated the relation between experiences of torture and the occurrence of posttraumatic growth, such that men with secure attachment experienced a high level of posttraumatic growth while men with insecure-avoidant attachment experienced a relatively higher level of negative emotions following severe mistreatment (Salo, Qouta,

& Punamaki, 2005). Another study found that secure attachment was significantly associated with active coping, positive reframing, and religiosity, all of which were associated with the occurrence of posttraumatic growth among 54 cancer survivors (Schmidt, Blank, Bellizzi, & Park 2012).

Further, studies examining the role of attachment anxiety in the development of posttraumatic stress symptoms have found promising evidence of the importance of parental attachment prior to trauma exposure. For example, a 2006 study by Mikulincer and colleagues found that attachment anxiety prior to exposure to war predicted reports of future PTSD-related intrusions. Another study found that attachment anxiety assessed during the 2009 Israeli-Gaza war predicted symptoms of PTSD four months later (Besser & Neria, 2010). The theory underlying these studies' findings is that individuals with secure attachment likely develop positive models of the self and others, higher quality relationships, and personal resilience, all of which increases their capacity to recover from trauma and find meaning in their experiences.

While these findings are promising, adult studies examining the role of attachment in the development of posttraumatic growth are limited. Further, the role of parental attachment in the development of posttraumatic growth within the adolescent literature is, to our knowledge, non-existent and no studies to date have examined justice involved adolescents, despite their high rates of trauma exposure.

The Current Study

The broad aim of the current study was to examine the relation among trauma exposure and posttraumatic growth within the context of parental attachment. It was hypothesized that the relation between trauma exposure and the occurrence of

posttraumatic growth would be moderated by parental attachment security, such that the relation between trauma exposure and posttraumatic growth among adolescents with greater parental attachment security would be positive and significant. Conversely, when adolescents reported lower parental attachment security, there would be a non-significant relation between trauma exposure and posttraumatic growth. The proposed study aimed to test this interaction model; however, exploratory analyses also examined correlations between types of trauma exposure and posttraumatic growth, acknowledging the limited research base on posttraumatic growth in adolescents. The current study examined the aforementioned hypotheses in a sample of 58 adolescents between the ages of 12-17 years who were incarcerated at the Montgomery County Juvenile Detention Center (MCJD) in Conroe, Texas.

CHAPTER II

Methods

Participants

Sixty-four adolescents at Montgomery County Juvenile Detention Center (MCJD) in Conroe, Texas were recruited to participate in the current study. Prospective power analyses were conducted using GPower (Erdfelder, Faul, & Buchner, 1996) with power (1- β) set at 0.80, effect size $f^2 = 0.15$, and $\alpha = .05$. The recommended sample was fifty-five participants. MCJD is a 48-bed maximum security facility that provides a disciplined setting for male and female adolescents between the ages of 12 to 17 years for alleged criminal offenses ranging from Class 'B' Misdemeanors or greater. Adolescents incarcerated within MCJD are not sentenced to serve time in the facility, rather they are detained there while awaiting the disposition of the court. MCJD serves adolescents in Montgomery County, Texas as well as approximately twenty surrounding counties that do not have a detention facility.

Participant ages ranged from 12 to 17 years, and the average age of the participants was 15.2 years (*SD* = 1.12). 47 participants identified as male (73.4%) and 17 identified as female (26.6%). Of the participants who reported their race, 33 identified as White (51.6%), 13 identified as Black (20.3%), 9 identified as Mixed Race (14.1%), and 8 identified as Other Race individuals (12.5%). Of the participants who identified as Other Race and provided a written description, one identified as “Hispanic,” two identified as “Mexican,” one identified as “Pakistanian,” and one identified as “White; Pakistanian.” Regarding ethnicity, 20 participants identified as Hispanic and 44 identified as non-Hispanic.

It should be noted that the present study is a subset of a larger study ($N = 64$) that included a greater number of participants assessed with different measures. That study's inclusion criteria were as follows: adolescents between the ages of 12-17 years of age who were currently detained and spoke English as their primary language. The current study's sample of $N = 58$ was selected based solely on completion of the posttraumatic growth measure. Across these 58 participants, Little's MCAR test indicated that all data were missing completely at random. Five respondents (7%) were missing data regarding exposure to traumatic events, five respondents (7%) were missing data regarding maternal attachment, and 15 respondents (23%) were missing data regarding paternal attachment. Therefore, sample sizes varied by analyses such that moderation by maternal attachment with regard to posttraumatic growth was tested in $n = 52$, and moderation by paternal attachment with regard to posttraumatic growth was tested in $n = 43$.

Procedure

Participants were recruited through consent forms that were distributed by members of the research team to juvenile probation officers. Juvenile probation officers then advertised the study to parents of incarcerated adolescents during an office visit regarding their children's detainment. Interested parents signed the consent form, and juvenile probation officers then placed the signed consent forms in a mailbox designated for members of the research team. Research team members then collected the signed consent forms, entered the detention facility, and provided information about the study to detained adolescents whose parents provided consent for their participation. Adolescents were asked to dedicate approximately two hours of their time in order to complete the study. They were informed that their participation was voluntary and anonymous, and

their decision whether to participate in the study would not affect the disposition of their pending case or their standing with the juvenile probation department. Additionally, adolescents were informed that should they decide to participate in the study, members of the research team would review their legal electronic records at 6 and 12 months following their completion of the survey, though that data was not included in the current study. Interested participants then signed an assent form and completed a paper survey. Survey responses were collected anonymously, stored in a locked filing cabinet in a secure room at Sam Houston State University, and responses were then entered into an anonymous electronic dataset. Participants did not receive compensation for their participation in the study at the detention facility's request.

Measures

Demographics

A demographic questionnaire was administered to gather information on participant background. Participants were asked to provide their age by writing their date of birth, and they selected their gender from one of four multiple choice options (male, female, transgender, other). Participants indicated their race by selecting one of five multiple choice options (White, Black, Asian, Mixed Race, Other); those who selected other were given an opportunity to write their identified race. Additionally, participants were asked (yes/no) whether they identified as Hispanic. Participants were also asked to provide additional information, such as their current grade, country of origin, height and weight, GPA, grades obtained in school, sexual orientation, religiosity, current relationship status, parents' relationship status, and self-reported popularity with peers.

This questionnaire was used to determine potential confounds that could be controlled for in subsequent analyses.

Exposure to Traumatic Events

The University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index for Children and Adolescents (UCLA PTSD Index) is a self-report questionnaire designed to screen for exposure to traumatic events and symptoms characteristic of Posttraumatic Stress Disorder among children and adolescents. Specifically, the UCLA PTSD Index assesses lifetime exposure to traumatic events and the frequency of occurrence of PTSD symptoms during the past month. The UCLA PTSD Index consists of a trauma exposure scale consisting of 14 items that ask respondents whether or not (yes/no responses) they have experienced various traumatic events and one item that asks respondents to describe a traumatic experience. Sample items include "Were you in a disaster, like an earthquake, wildfire, hurricane, tornado, or flood" and "Were you hit, punched, or kicked very hard at home?" The measure also consists of 31 items that map directly onto DSM-5 intrusion, avoidance, and arousal criteria while two additional items assess fear of recurrence and trauma-related guilt. Responses for these items are provided on a 0-4 rating scale (0 = none of the time to 4 = most of the time). The current study used the trauma exposure scale ($\alpha = .67$) which provides a count variable representation of respondents' trauma burden (i.e., sum of exposure to any type of trauma rated yes or no), with the number of trauma exposures ranging from 0 to 14. This count variable was treated as a continuous variable for subsequent analyses.

Posttraumatic Growth

The Posttraumatic Growth Inventory for Children Revised (PTGI-C-R) is a 21-item measure used to assess positive outcomes among children and adolescents after experiencing a traumatic event; it consists of five subscales: new possibilities, relating to others, personal strength, spiritual change, and appreciation of life. Responses are rated on a Likert scale ranging from 0 (I did not experience this change as a result of my crisis) to 5 (I experienced this change to a very great degree as a result of my crisis). Sample items include “I can better appreciate each day” and “I discovered that I’m stronger than I thought I was.” The scale provides a total score by summing of each of the 21 items. Higher scores indicate greater experience of posttraumatic growth. Because the instructions state, "The following are things that some people experience after a disaster or crisis. Please indicate how true each statement is for you since your crisis/disaster," respondents who have never been exposed to a traumatic event would not respond to any of the items on the measure and their total score will be zero. However, the criteria for a crisis or disaster is not defined, and the specific type of trauma exposure is not reported. Items on the PTGI-C-R were previously shown to be reliable when used with trauma survivors (e.g., $\alpha = .85$ in Sattler, Boyd, & Kirsch, 2014; $\alpha = .94$ in Taku, Cann, Tedeschi, & Calhoun, 2015), and the PTGI-C-R has been found to have good internal consistency (Tedeschi & Calhoun, 1996). In the current study, the PTGI-C-R was found to have high internal consistency ($\alpha = .93$).

Parental Attachment

Attachment to parents was measured using the Inventory of Parent and Peer Attachment- Revised (IPPA; Armsden & Greenberg, 1987). Specifically, the IPPA was

used to measure adolescents' perceptions of positive and negative aspects of their separate relationships with their mother and father. The IPPA is comprised of 25 items assessing trust, alienation, and communication, on which respondents reported using a 1 to 5 rating scale (1 = Almost never or never true, 2 = Not very often true, 3 = Sometimes true, 4 = Often true, 5 = Almost always or always true). An example of an item measuring trust is, 'My mother respects my feelings'; communication, 'My mother helps me to understand myself better'; and alienation, 'I get upset easily around my father.' In the current study, parental attachment was measured for mother and father separately using the total score for maternal attachment ($\alpha = .63$) and the total score for paternal attachment ($\alpha = .78$). Higher scores on the IPPA indicate greater attachment security.

Analytic Strategy

Before data analyses, survey results were entered into SPSS and cleaned. Preliminary analyses involved running frequencies and correlations between demographic variables, trauma exposure, posttraumatic growth, and parental attachment to determine potential confounds (e.g. race) that could be controlled for in subsequent analyses. Next, two separate moderation models (i.e., maternal and paternal attachment serving as moderators in two separate models) were used to examine parental attachment as a moderator of trauma exposure and the occurrence of posttraumatic growth. The independent variable was trauma exposure, the moderator variable was maternal or parental attachment security, and the dependent variable was posttraumatic growth. Moderation was indicated if there was evidence of a significant interaction between trauma exposure and maternal or parental attachment in relation to posttraumatic growth. Covariates were any demographic variables identified in preliminary analyses.

CHAPTER III

Results

Preliminary Analyses

Five participants were missing data regarding prior trauma exposure. Fifty-seven participants (89.1%) reported exposure to a prior traumatic event, and 2 participants (3.1%) reported no prior exposure. Specifically, 35 participants (54.7%) reported having experienced a natural disaster (such as a hurricane or flood), 17 (26.6%) reported being in a bad accident (such as a car accident or fall), and 4 (6.3%) reported having experienced being in or near a war zone. Additionally, 14 participants (21.9%) reported having experienced physical abuse, 20 (31.3%) reported witnessing a family member experience physical abuse, 9 (14.1%) reported having experienced sexual abuse (genital touching), and 6 (9.4%) reported being forced to have sex with someone against their will. Twenty-six (40.6%) reported having been beaten up, shot at, or threatened, while 38 (59.4%) reported witnessing someone else being beaten up, shot at, or threatened. Further, 16 participants (25%) reported seeing a dead body (not at a funeral), 28 (43.8%) reported having heard about the violent death or serious injury of a loved one or friend, 42 (65.6%) reported someone close to them had died, and 12 (18.8%) reported having experienced painful or scary medical treatment after an injury or illness.

The Shapiro-Wilk tests of normality were non-significant, indicating the data was normally distributed for trauma exposure, $W(55) = .97$, $p = .14$; paternal attachment security, $W(48) = .97$, $p = .19$; maternal attachment security, $W(48) = .96$, $p = .10$; and posttraumatic growth, $W(48) = .97$, $p = .17$. Independent samples t-tests were conducted to examine differences between gender and measures of trauma exposure, maternal

attachment, paternal attachment, and posttraumatic growth. There were no significant gender differences with regard to trauma exposure, $t(53) = .79$, $p=.43$, paternal attachment, $t(47) = .26$, $p = .80$, maternal attachment, $t(57) = -1.02$, $p = .31$, or posttraumatic growth $t(56) = -.64$, $p = .53$.

Independent samples t-tests were also conducted to examine differences between race (white v. non-white) and measures of trauma exposure, maternal attachment, paternal attachment, and posttraumatic growth. There were no significant differences for white v. non-white participants with regard to trauma exposure, $t(52) = 1.60$, $p=.12$, paternal attachment, $t(46) = -.06$, $p = .95$, maternal attachment, $t(56) = .05$, $p = .96$, or posttraumatic growth $t(55) = 1.37$, $p = .18$. Additionally, there was no evidence of significant relations between race and trauma exposure for Hispanic and non-Hispanic participants $t(53) = 1.20$, $p = .24$, paternal attachment, $t(47) = -.96$, $p = .34$, maternal attachment, $t(57) = .69$, $p = .50$, or posttraumatic growth $t(56) = -.16$, $p = .87$.

Finally, bivariate correlations among variables of interest were conducted. In the current sample of 12-17-year-old respondents, age was not significantly correlated with trauma exposure, maternal attachment, paternal attachment, or posttraumatic growth. However, posttraumatic growth was significantly positively correlated with both maternal and parental attachment. See *Table 1* for results.

Table 1

Bivariate Correlations Between Main Study Variables and Age

	UCLA	IPPA-M	IPPA-D	PTGI
UCLA	-	-	-	-
IPPA-M	.065	-	-	-
IPPA-D	-.168	.224	-	-
PTGI	-.092	.403**	.506**	-
Age	.067	.044	-.048	.033

Note. UCLA = UCLA PTSD Index, IPPA-M = Inventory of Parent and Peer Attachment – Mother, IPPA-D = Inventory of Parent and Peer Attachment- Father, PTGI = Posttraumatic Growth Inventory.

* = correlation significant at level of .05, ** = correlation significant at level of .01

In order to contribute to the limited research base on posttraumatic growth among adolescents, point-biserial correlations were conducted to examine relations between type of trauma exposure (yes/no exposed for each trauma type) and posttraumatic growth. Types of trauma included exposure to 1) a natural disaster, 2) a bad accident, 3) a war zone, 4) physical abuse at home, 5) witnessing physical abuse of others at home, 6) physical abuse outside of home, 7) witnessing physical abuse of others outside of home, 8) witnessing a dead body (funerals excluded), 9) sexual abuse (unwanted genital touching), 10) hearing about violent death or injury of a loved one or close friend, 11) painful or scary medical treatment, 12) sexual abuse (forced to have sex), 13) death of a close loved one, and 14) "other" trauma exposure. Exposure to sexual abuse (unwanted genital touching) was significantly negatively correlated with posttraumatic growth, r_{pb} =

-.31, p = .02. Additionally, exposure to sexual abuse (forced to have sex) was significantly negatively correlated with posttraumatic growth, r_{pb} = -.32, p = .02.

Moderation Analyses

Using Process SPSS Model 1 computational tool (Hayes, 2013), two moderation models were used to examine the relation between trauma exposure and posttraumatic growth. Across the models, possible main effects of trauma exposure, main effects of the moderator (maternal or parental attachment), and the hypothesized interaction effect were examined.

In the first model, posttraumatic growth was the dependent variable, and maternal attachment was examined as a moderator. The overall model was not significant, R^2= .17, $F(4, 47) = 2.47$, p = .06. No evidence of a main effect of trauma exposure b = -2.84, $t(47)$ = -.92, p = .36, main effect of maternal attachment, b = .12, $t(47)$ = .66, p = .51, or interaction effect, b = .03, $t(47)$= .76, p = .45, on posttraumatic growth was noted.

In the second model, posttraumatic growth was the dependent variable, and paternal attachment was examined as a moderator. The overall model was not significant, R^2 = .21, $F(4, 38) = 2.51$, p = .06. No evidence of a main effect of trauma exposure, b = .16, $t(38)$ = .06, p = .95, main effect of paternal attachment, b = .21, $t(38)$ = 1.28, p = .21, or interaction effect, $b < 0$, $t(38)$ = -.07, p = .94, was noted on posttraumatic growth.[1, 2]

[1]Additional moderation models were conducted examining the moderating role of the Trust, Communication, and Alienation subscales of the IPPA. The overall models for maternal trust and communication were significant, but there were no significant main effects or interactions. The overall model for paternal trust was significant, but there was no significant main effect or interaction.

[2] These moderation models were also conducted excluding participants who did not endorse trauma exposure and were non-significant.

CHAPTER IV

Discussion

The primary purpose of the current study was to examine the role of parental attachment as a moderator in the relation between trauma exposure and posttraumatic growth among a sample of justice involved adolescents for the first time. It was hypothesized that the relation between trauma exposure and the occurrence of posttraumatic growth would be moderated by parental attachment security, such that the relation between trauma exposure and posttraumatic growth among adolescents with greater parental attachment security would be positive and significant. Conversely, when adolescents reported lower parental attachment security, there would be a non-significant relation between trauma exposure and posttraumatic growth. The proposed study aimed to test this interaction model. These hypotheses were tested using survey data from detained, justice-involved adolescents between the ages of 12 to 17 years.

Preliminary analyses yielded several notable findings worth discussing. Posttraumatic growth was significantly positively correlated with both maternal and parental attachment, which is consistent with previous literature that supports a positive relation between parental attachment and the occurrence of posttraumatic growth (Salo, Qouta, & Punamaki, 2005; Schmidt, Blank, Bellizzi, & Park 2012).

Further, experiences of sexual abuse, particularly unwanted genital touching and being forced to have unwanted sex with someone, were negatively correlated with the occurrence of posttraumatic growth. Existing research supports that experiences of sexual trauma are associated with higher rates of PTSD than many other traumas (Kessler et al., 1995), suggesting that perhaps the development of posttraumatic growth is precluded by

the predominance of psychological symptoms. Indeed, Kira and colleagues (2013) found no association between sexual trauma and posttraumatic growth among adults. However, a 2016 meta-analysis found that sexual trauma is consistently associated with posttraumatic growth in existing literature (Ulloa et al., 2016). Our findings are in contrast with their conclusion.

A possible explanation for the negative correlation between reported sexual trauma and posttraumatic growth in the current study could be that adolescents a) lack the cognitive sophistication with which to adaptively cope with and reappraise sexual trauma in order to experience psychological growth at their neurodevelopmental stage, and b) are differentially impacted by potential social consequences compared to adults should they report sexual trauma, which could lead to untreated, related psychopathology and hinder growth. Indeed, Ullman (2014) found that greater levels of maladaptive coping, characterological self-blame, and negative social reactions from others were all related to less posttraumatic growth in a sample of adults who experienced sexual assault. Further, it is important to note the current study sampled justice-involved adolescents, a population that experiences greater prevalence of trauma exposure and symptoms of depression, anxiety, and PTSD than non-justice involved adolescents (Wolpaw & Ford, 2004; Schufelt & Cocozza, 2006; Wood, Foy, Layne, Pynoos, & James, 2002). Therefore, adolescents from this population may be even less likely to experience growth.

The broad aim of the current study was to examine the extent to which parental attachment would affect the likelihood of posttraumatic growth among adolescents after exposure to a traumatic event. Overall, parental attachment did not appear to play a significant role in the relation between trauma exposure and posttraumatic growth. First,

it was hypothesized that the relation between trauma exposure and the occurrence of posttraumatic growth would be moderated by parental attachment security, such that the relation between trauma exposure and posttraumatic growth among adolescents with greater parental attachment security would be positive and significant. Conversely, it was hypothesized that when adolescents reported lower parental attachment security, there would be a non-significant correlation among trauma exposure and posttraumatic growth. These hypotheses were explored using a total score of parental attachment security from the IPPA (i.e., maternal attachment and paternal attachment separately) as the moderator variables between trauma exposure, assessed with the UCLA PTSD Index, and posttraumatic growth, assessed with the PTGI-C-R. Results did not provide evidence that parental attachment security significantly moderated trauma exposure and posttraumatic growth.

Because few studies have examined adolescent posttraumatic growth, it is difficult to compare findings from the current study to those existing in the literature. Indeed, the current study is the first direct examination of posttraumatic growth within a justice-involved adolescent population. Despite a lack of longitudinal research in this area, existing studies have demonstrated that adolescents have the capacity to experience some form of growth after exposure to a traumatic event (Milam, Ritt-Olson, Tan, Unger, & Nezami, 2005; Turner-Sack, Menna, & Setchell, 2012; Milam, Ritt-Olson, & Unger, 2004). Additionally, existing studies have provided support for the positive relation between parental attachment and the occurrence of posttraumatic growth (Salo, Qouta, & Punamaki, 2005; Schmidt, Blank, Bellizzi, & Park 2012).

The lack of support of the hypotheses in the current study may be due to several factors. First, prospective power analyses recommended fifty-five participants. While this sample size was attained overall, data collection was cut short by the COVID-19 pandemic and, due to missing data, sample sizes varied by analyses such that moderation by maternal attachment with regard to posttraumatic growth was tested in fifty-two participants, and moderation by paternal attachment with regard to posttraumatic growth was tested in forty-three participants. Therefore, analyses in the current study were underpowered to detect significant effects. Indeed, observed power was calculated using GPower with effect size $f^2 = 0.15$ and $\alpha = 0.05$, and the observed power for the maternal attachment model was 0.60, while power for the paternal attachment model was 0.51. Future research should endeavor to test the role of parental attachment as a moderator of the relation between trauma and posttraumatic growth in a larger sample.

Second, the current sample consisted of adolescents who were detained in a juvenile justice facility, which is unique from samples in existing literature. First, justice involved adolescents experience relatively higher rates of trauma and associated negative mental health symptoms than non-justice involved adolescents (Schufelt & Cocozza, 2006; Wolpaw & Ford, 2004; Wood, Foy, Layne, Pynoos, & James, 2002). In the current study, the majority of participants endorsed exposure to at least one traumatic event; therefore, it is possible there are ceiling effects given the small trauma exposure variance in the current sample. Additionally, a 2012 meta-analysis by Hoeve and colleagues found that poor parental attachment was significantly linked to adolescent delinquency, with stronger effect sizes for maternal attachment than paternal attachment. Given this, there may be floor effects with regard to parental attachment security. Further, it is possible the

IPPA may not accurately reflect the family demographics of participants in the current sample, as these adolescents may not have stable, intact family units. Additionally, there may be floor effects with regard to posttraumatic growth given the high rates of trauma endorsed in the current sample and the curvilinear relation between PTSD and posttraumatic growth discussed below.

Third, the current study had some methodological limitations. Because participants consented to and completed the study during times when they would have otherwise been in class, it is possible some may have been motivated to participate in order to avoid class or other activities; this may have affected the effort put into their responses. It is also possible that the in-person survey approach of this study affected participant responses; specifically, participants' level of honest responding regarding prior traumatic experiences or other sensitive information may have been impacted by the researcher's presence in the room. However, 89.1% of participants in the current study endorsed trauma exposure, which is consistent with existing literature estimating approximately 90% of justice-involved youth have experienced a traumatic event (Dierkhising, 2013). Because the measures of interest within the current study were part of a larger data collection study, it is also possible that participant responses may have been affected by fatigue given that they were asked to respond to a large variety of surveys (the order of measures was randomized for all participants). Further, trauma exposure was measured as a count of traumatic experiences ranging from 0 to 14; this was treated as a continuous variable for the current analyses, but this could be improved by utilizing a larger range of measurement that exceeds the 14 traumatic experience exposure limit measured in the current study. Finally, internal consistency for the parental

attachment measure was somewhat low, perhaps indicating our failure to capture the parental attachment construct through that instrument.

Finally, while the current study measured posttraumatic growth retrospectively, the occurrence of such growth would best be measured using a prospective, longitudinal design from the point of trauma exposure. Most existing studies have measured adolescent posttraumatic growth retrospectively, which is a significant limitation of existing literature (Harmon & Venta, 2020). Numerous studies have highlighted the limitations of retrospective examinations of the occurrence of posttraumatic growth among adult samples (see Infurna & Jayawickreme, 2019 for a review). Specifically, the authors found that while retrospective measurement of growth may reflect meaningful change, it may also reflect "maladaptive reality distortions, selective appraisals, coping strategies, personality characteristics, ways of explaining emotion levels, reflections of people's implicit theories of change, and beliefs that their past selves were worse than they actually were" (Infurna & Jayawickreme, 2019). Hence, these authors recommended using caution when interpreting studies using retrospective measures of growth, and they encouraged the use of prospective, longitudinal designs which may more accurately assess psychological change occurring in the time between trauma exposure and assessment. However, there is no empirically identified window of time which must occur for an individual to experience posttraumatic growth given a lack of consistency across studies (Ulloa et al., 2016). Regardless, the measures used in the current study did not assess how much time had elapsed since participants experienced their reported trauma, which is an additional limitation.

Despite these limitations, the current study did have strengths worth noting. First, the age range within the current sample was 12-17 years, which is a good representation of the overall age demographic of adolescents, a critical period of psychosocial development and reorientation. A second strength of the current study is that the sample was ethnically diverse and therefore provides a generalizable representation of posttraumatic growth among adolescents from varying ethnic backgrounds. Additionally, the current sample consisted of justice-involved adolescents, a vulnerable population with disproportionately high rates of trauma and life stressors. Given these adolescents' relatively higher rates of trauma exposure than their non-justice involved peers, studies like this one are imperative to informing clinical intervention which may promote posttraumatic growth. Because justice-involved adolescents are a difficult population with which to gain research access, existing research in this area is limited. Indeed, the current study provides novel information, as it explored the role of parental attachment in the relation between trauma exposure and posttraumatic growth among a sample of justice-involved adolescents for the first time.

Future research should examine the occurrence of posttraumatic growth among justice-involved adolescents addressing some of the aforementioned limitations. Specifically, future research may examine the occurrence of posttraumatic growth among justice-involved adolescents who meet diagnostic criteria for PTSD. Existing research examining a potential cause-and-effect relationship between posttraumatic growth and PTSD among adults supports a curvilinear relationship across various traumas (Borton, Boals, & Knowels, 2013; Dekel, Mandl, & Solomon, 2011; Kleim & Ehlers, 2009; Shakespeare-Finch & Armstrong, 2010). Overall, these studies' findings suggest that too

little or too much symptomology could hinder an individual's ability to experience growth. It is thought that too little distress may not motivate an individual to experience growth, while too much distress will result in significant mental health symptoms which preclude the experience of posttraumatic growth. Similar to what has been reported in the adult literature, a 2008 study by Levine and colleagues found a curvilinear relation between PTSD and posttraumatic growth among Israeli adolescents exposed to terrorism, with the greatest posttraumatic growth occurring when trauma-related symptoms were moderate in severity. However, there are no existing studies examining the relationship between posttraumatic growth and PTSD within justice-involved adolescent samples.

Given that trauma-exposed adolescent females are at a particularly elevated risk of mental health consequences compared with trauma-exposed adults and 73.4% of the participants in the current study were male, future research should specifically examine rates of posttraumatic growth among justice-involved adolescent females. Additionally, given that existing literature has found that sexual trauma is consistently associated with posttraumatic growth among adults (Ulloa et al., 2016), future research should specifically examine the relation between sexual trauma and posttraumatic growth among adolescents, particularly given that experiences of sexual abuse were correlated with posttraumatic growth in the current study.

Because literature regarding parental attachment within justice-involved adolescent populations is limited, this should also be a focus of future research, along with other potential moderators of posttraumatic growth. Future research into these areas is increasingly important given the current rate of adolescent incarceration and the psychological and behavioral impacts of traumatic experiences. Therefore, future

research providing support for specific moderators of adolescent posttraumatic growth would greatly inform interventions aimed at enhancing the likelihood of such growth for this vulnerable population. Findings from the current study provide the first attempt at directly examining posttraumatic growth and parental attachment security within a justice-involved adolescent sample.

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VITA

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Pre-Doctoral Psychology Intern **June 2020 - Present**
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PUBLICATIONS

Harmon, J., Boland, J., & Venta, A. (2021). Further validation of the motivations for electronic interaction scale. *Current Psychology.* Advance online publication.

Harmon, J., & Venta, A. (2020). Adolescent posttraumatic growth: A review. *Child Psychiatry & Human Development*. Advance online publication.

Venta, A., **Harmon, J.,** Abate, A., Marshall, K., & Mouton-Odum, S. (2019). Pilot data supporting an attachment-based theory of adolescent social media use. *Child and Adolescent Mental Health*, *24*(3), 274-282.

CONFERENCE PRESENTATIONS

1. Abate, A., **Harmon, J.,** Marshall, K., & Venta, A. (2020, March). *Experiences of discrimination and offending: Examining the moderating role of self-efficacy.* Paper presented at the annual convention of the American Psychology-Law Society, New Orleans, LA.
2. Henderson, C.E., Salami, T., Anderson-White, E., Boland, G., Krembuszewski, B., Bailey, C., & **Harmon, J.** (2019, October). *Working with Religiously Diverse Clients.* Workshop presented at the annual convention of the Texas Psychological Association, San Antonio, TX.

3. Formon, D., **Harmon, J.,** Ricardo, M., Henderson, C., & Johnson, D. (2019, March). *Effectiveness of Positive Psychology on a Substance-Abusing Probation Population.* Paper presented at the annual convention of the American Psychology-Law Society, Portland, OR.

4. Abate, A., **Harmon, J.,** & Venta, A. (2019, March). *The mediating role of hypermentalizing and emotion regulation in the relation between attachment and conduct problems.* Paper presented at the annual convention of the American Psychology-Law Society, Portland, OR.

5. Venta, A., **Harmon, J**., Mouton-Odum, S., & Sharp, C. (2018, May). *Attachment and social cognition in adolescent social media use*. Poster presented at the annual convention of the Association for Psychological Science, San Francisco, CA.

6. Bailey, C., **Harmon, J.,** & Henderson, C. (2018, March). *Working with religiously diverse clients.* Invited oral presentation presented at the monthly meeting of the Sam Houston Area Psychological Association, The Woodlands, TX.

7. **Harmon, J**., Bailey, C., & Venta, A. (2018, March). *The role of emotion regulation in the relation between online cyber-aggression and real-life conduct problems.* Poster presented at the annual convention of the American Psychology-Law Society, Memphis, TN.

8. Bailey, C., **Harmon, J.,** & Henderson, C. (2017, November). *Working with religiously diverse clients.* Workshop presented at the annual meeting of the Texas Psychological Association, Houston, TX.

9. **Harmon, J.,** Abate, A., & Venta, A. (2017, March). *Adolescent PTSD and re-offending: Examining the roles of self-identity and exposure to violence*. Paper presented at the annual convention of the American Psychology-Law Society, Seattle, WA.

10. Abate, A., **Harmon, J**., Marshall, K., Hart, J., Ball, E., Henderson, C., Desforges, D., & Venta, A. (2017, March). *Perceptions of the legal system and recidivism: Investigating the mediating role of perceptions of chances for success in juvenile offenders*. Paper presented at the annual convention of the American Psychology-Law Society, Seattle, WA.

11. Hoskowitz, N., Schmidt, A., Marshall, K., **Harmon, J**., & Henderson, C. (2016, March). *Psychotropic medication does not decrease delinquent behaviors in at-risk youth over a five-year period.* Paper presented at the annual meeting of the American Psychology-Law Society, Atlanta, GA.

12. **Harmon, J.**, Scott, S., & Rhoades, G. (2014, November). *Depressive symptoms and sexual minority stress in female same-sex couples*. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.

RESEARCH EXPERIENCE

Project Leader **August 2018 - May 2019**
Effectiveness of Positive Psychology on Post-Intensive Outpatient Probationers
Montgomery County Department of Community Supervisions & Corrections

Graduate Researcher **September 2017 – April 2020**
Psychosocial Assessment of Justice-Involved Youth
Montgomery County Juvenile Services

Project Leader **May 2016 - January 2017**
The Psychological Effects of Social Media Use in Teens
Youth and Family Studies Lab
Sam Houston State University

NIJ Funded Interviewer **August 2015 - May 2016**
The Lonestar Project: A study of Offender Trajectories, Association, and Re-Entry
National Institute of Justice, Grant No. 2014-MU-CX-0111
Sam Houston State University

Graduate Research Assistant **August 2015 - May 2016**
Resilience and Social Cognition Lab
The Hogg Foundation for Mental Health
Sam Houston State University

Research Project Coordinator **February 2014 - May 2015**
Genes, Environment, and Mood Lab
University of Denver

Research Assistant **December 2013 - February 2014**
Genes, Environment, and Mood Lab
University of Denver

Research Assistant **May 2013 - May 2015**
Marital and Family Studies Lab
University of Denver

SUPERVISION EXPERIENCE

Clinical Supervisor **March 2021 – Present**
Eastern Louisiana Mental Health System

Clinical Supervisor **June 2017 – August 2019**
Sam Houston State University

Graduate Mentor **August 2016 - May 2017**
Sam Houston State University

Research Supervisor/Undergraduate Mentor **October 2015 - September 2016**
Neuropsychology, Neuroscience, and Behavioral Genetics in the Criminal Justice System: A Quantitative Case Law Review

TEACHING EXPERIENCE

Instructor **January 2020 – May 2020**
History of Psychology (online)

Instructor **August 2019 – December 2019**
History of Psychology (online)

Instructor **January 2016 – May 2017**
Introduction to Psychology

Instructor **August 2016 – December 2016**
Introduction to Psychology

CERTIFICATIONS

Certified Evaluator **October 2017**
Texas Risk Assessment System (TRAS)
Texas Department of Criminal Justice

SERVICE

Volunteer Member **August 2020 - Present**
Advocacy & Community Dialogue Action Group
Tulane University School of Medicine
New Orleans, LA

Volunteer Member **July 2020- April 2021**
Equity, Diversity, and Inclusion Committee
Eastern Louisiana Mental Health Services
Jackson, LA

Volunteer Assistant Event Coordinator **April 2019**
Contemporary Issues in Forensic Psychology Continuing Education Workshops
American Academy of Forensic Psychology
Dallas, TX

Volunteer Mental Health Consultant/Interviewer **June 2018**
Sam Houston State University College of Criminal Justice
National Institute of Corrections
Bryan, TX