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CHILDHOOD SEXUAL ASSAULT, SCHEMAS, AND REVICTIMIZATION: THE ROLE OF EARLY MALADAPTIVE SCHEMAS ON REVICTIMIZATION

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A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
General Experimental Psychology

by
Lisa Shannon Motley
June 2016
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ABSTRACT

Childhood sexual assault (CSA) refers to a sexual act that is imposed on a child or adolescent who lacks the emotional capacity, maturity, and cognitive development to understand what they are engaging in, and is incapable or unwilling to give consent. Many individuals who experience CSA also experience adult sexual assault, such as rape. To date, there is limited research that has examined early maladaptive schemas (EMS) and CSA, and no research that examines the relationship between CSA, EMS, and revictimization. The present study examined EMS as mediators of revictimization and mental health outcomes (i.e., depression and PTSD) among 263 college women who experienced CSA. Participants completed the Sexual Experiences Survey (SES-LFV; Koss et al., 2007) which assesses victimization and perpetration of unwanted sexual experiences, the Young Schema Questionnaire (YSQ-SF: Young, 1998) to measure early maladaptive schemas, Posttraumatic Stress Disorder Checklist 5, a brief self-report instrument consisting of 20 items that reflect the symptoms of PTSD outlined in DSM-5, and the Center for Epidemiological Studies Depression Scale (CESD-R; Radloff, 1977) is a brief self-report instrument used to measure symptoms of depression.

As hypothesized, CSA was positively correlated with revictimization. CSA was correlated with EMS, specifically, emotional deprivation, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice, but not abandonment. Surprisingly, EMS did not mediate the relationship between CSA and...
revictimization. EMS mediated the relationship between CSA and mental health outcomes, such as, depression and PTSD. EMS social isolation mediated the relationship between CSA and depression symptoms and EMS mistrust/abuse, social isolation, and self-sacrifice mediates the relationship between CSA and PTSD. In conclusion, our findings could be used to further investigate what appropriate early childhood interventions could possibly be used to address and treat early maladaptive schemas.
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Finally, I would also like to thank Dr. Cynthia Crawford of California State University, San Bernardino for being my undergraduate mentor, where I gained my first experience as an undergraduate researcher in her Developmental Biological Psychopharmacology lab.
DEDICATION

I must express my profound gratitude to my family, my mother, a strong independent woman, who grew in an era where being bi-racial (i.e., Hispanic, Caucasian) was very difficult. From her struggles in life, I have learned to persevere like her, to make ends meet, and get through tough times in life. Thank you mom, I am grateful for the love and strength you gave me, but most of all, I grew into the women I am today from the things that you were unable to give me.

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CHAPTER ONE

INTRODUCTION

Childhood Sexual Assault

Childhood sexual assault (CSA) is a global epidemic that affects millions of children of different genders worldwide from different communities, cultures, and socioeconomic backgrounds (Pereda, Guilera, Forns, & Gómez-Benito, 2009). CSA is a major public health concern in the United States. The estimated lifetime cost of childhood maltreatment (i.e., physical abuse, sexual abuse, psychological abuse, and/or neglect) is $210,012 per victim of nonfatal child maltreatment and $1,272,900 per victim of fatal child maltreatment (Fang, Brown, Florence, & Mercy, 2012). Controversially, terminological ambiguity exists in defining the term CSA, because each of these three words and the criteria that encompass CSA have been operationally defined differently by researchers, law makers, and clinicians without much consensus (Finkelhor, Shattuck, Turner, & Hamby, 2014; Haugaard, 2000). As a result, the definition of CSA has noticeably changed over the past 30 years; undergoing various interpretations and changes according to society's morals, values, and the taboos of each era (Haugaard, 2000; Tsopelas, Tsetsou, Ntounas, & Douzenis, 2012). A great effort has been made to reduce the definitional ambiguity, as a multidisciplinary team approach is necessary in understanding, defining, and reducing CSA occurrences (Haugaard, 2000).
The World Health Organization (WHO, 2003) defines CSA as a sexual act that is imposed or coerced on a child or adolescent who lacks the developmental awareness, emotional capacity, maturity, and cognitive development to understand what they are engaging in, and is incapable or unwilling to give consent. Additional factors of CSA may include the inducement or coercion of a child to engage in any unlawful sexual activity, exploitation by prostitution of a child, or child pornography. CSA can vary in frequency and seriousness of sexual activity, ranging from no physical contact (e.g., being exposed to exhibitionism, pornography, and masturbation and/or sexual intercourse) to physical contact (e.g., fondling, kissing, oral stimulation, vaginal, oral, and anal penetration with a penis and/or foreign object; Courtois, 1999; Goodyear-Brown, 2012).

Lifetime prevalence of CSA before age 18 is 26.6% for females and 5.1% for males, suggesting that 1 in 4 girls and 1 in 20 boys have been sexually abused or assaulted before age 18 (Finkelhor et al., 2014). When broken down by perpetrator type (adult vs. juvenile), the lifetime prevalence of sexual abuse/assault by adult perpetrators is 11.2% for females and 1.9% for males before age 18; indicating the rate of lifetime CSA at the hands of an adult is 1 in 9 girls and 1 in 53 boys. According to Finkelhor, Shattuck, Turner, and Hamby (2014) over half of the total estimated CSA offenses were perpetrated at the hands of juvenile offenders, with a vast majority of them being acquaintance peers. Comparatively, another national study shows that 1 in 10 individuals has
experienced CSA before age 18, with the prevalence being much higher among females than males (Pérez-Fuentes et al., 2013). Unfortunately, the distribution between male and female CSA survivors may be obscured by under-detection and under-reporting of males as the fear being viewed as a victim or a homosexual (Alaggia, 2005).

CSA differs in duration, frequency, severity, type of perpetrator, and consequences (Badmaeva, 2011; Fischer & McDonald, 1998; Haugaard, 2000; Magalhães et al., 2009; McLeod, 2015; Tsopelas et al., 2012). Current research indicates that potentially 20% of CSA cases are perpetrated by women, and like their male counterparts, women perpetrate more female children than male children (McLeod, 2015). Perpetrators fall into two categories: either intrafamilial (IF) CSA or extrafamilial (EF) CSA (Badmaeva, 2011). IF CSA perpetrators are family members of the victim who usually live in the same home as the victim. Importantly, Incest is defined as any sexual contact or intercourse between family members (Finkelhor, 1979). IF CSA perpetrators include parents (i.e. biological mother and father), step-parents, foster parents, siblings, step-siblings, foster-siblings, cousins, other blood relatives, and in some instance multiple family members are perpetrators of CSA (Fischer & McDonald, 1998; Magalhães et al., 2009). Perpetrators are more likely to be male if they are listed as the step-parent of the victim and female if the victim is a biological child (McLeod, 2015).

EF CSA involves people who are outside of the family, such as, friends, caregivers (i.e., baby-sitters, day-care workers, and legal guardians), teachers,
counselors, mom’s boyfriend, stranger, acquaintance, neighbor, friend’s father, family friend, and friend’s male relatives (Fischer & McDonald, 1998; Magalhães et al., 2009). Additionally, it is important to note that females report more instances of CSA; however both male and female children are equally susceptible to both IF CSA and EF CSA (Magalhães et al., 2009). Ultimately, both IF CSA and EF CSA can negatively impact the survivors throughout their lifetime (Gomes et al., 2014).

**Impairments Associated With Childhood Sexual Assault**

Previous research documents the pervasive and often devastating impact of CSA which elucidates numerous problematic short- and long-term consequences, such as, early maladaptive schemas, physical impacts, insecure attachments, amnesia, emotional dysregulation, addictions, suicidal ideation, chronic pain, impulsiveness, eating disorders, risky sexual behavior, and mood and personality disorders (Badmaeva, 2011; Cantón-Cortés, Cortés, & Cantón, 2015; Fernández-Montalvo, López-Goñi, & Arteaga, 2015; Kastbom, Sydsjö, Bladh, Priebe, & Svedin, 2015; Pérez-Fuentes et al., 2013; Waxman, Fenton, Skodol, Grant, & Hasin, 2014; Wenninger & Ehlers, 1998; Wolf & Nochajski, 2013). It is difficult to tease out exact conclusions or consequences associated with a specific subtype of maltreatment like CSA, because CSA is often comorbid with multiple types of abuse, such as, neglect and physical and mental abuse (Aber, Allen, Carlson, & Cicchetti, 1989; Harding, Burns, & Jackson, 2012;
Lumley & Harkness, 2007). CSA is associated with child-hood onset psychiatric disorders, and reoccurring adult onset psychiatric disorders (Green et al., 2010).

Immediate physical impacts that may occur due to CSA include physical trauma to genitalia and anus, pregnancy, and/or sexual transmitted diseases (Gomes et al., 2014). In addition, other problematic short-term impacts include early sexual debut, low self-esteem, emotional dysregulation, interpersonal conflict, interpersonal aggression, risky sexual behavior and enduring cognitive dysfunction maladaptive schemas (Cantón-Cortés et al., 2015; Coyle, Karatzias, Summers, & Power, 2014; Kastbom et al., 2015; Payne et al., 2014).

Long-term pervasive impacts of CSA include emotional dysregulation, mood disorders, personality disorders, addiction, low self-esteem, impulsiveness, and suicidal ideation (Dion, Cantinotti, Ross, & Collin-Vezina, 2015; Fernández-Montalvo et al., 2015; Kalichman, Gore-Felton, Benotsch, Cage, & Rompa, 2004; Payne et al., 2014; Waxman et al., 2014). Like women, men also suffer long term consequences of CSA including anger/rage, anxiety/fear, hypervigilance/flashbacks, guilt, regret, shame, low self-esteem, drug and alcohol abuse, sexual identity confusion, and hyper-sexuality (Payne et al., 2014). Some of the most common mood disorders that impact CSA survivors over their lifetime are anxiety, depression, and post-traumatic stress disorder (PTSD; Cukor & McGinn, 2006; Harding et al., 2012; Lumley & Harkness, 2007, 2009), which result in other pervasive outcomes, such as, poverty and revictimization (Oshima, Jonson-Reid, & Seay, 2014).
Childhood maltreatment is associated with poor attachment in childhood, and insecure attachments created in childhood also impair relationships in adulthood (Murphy, Elklit, Hylan, & Shelvin, 2016).

Insecure attachments are also associated with early maladaptive schemas (i.e., emotional deprivation, emotional inhibition, social isolation, and defectiveness; McLean, Bailey, & Lumley, 2014). Perceptions of greater parental rejection are associated with higher levels of both intra and interpersonal maladaptive schemas which influence intra and interpersonal motivations for self-harm in adulthood (Quirk, Wier, Martin, & Christian, 2015).

Revictimization

As previously discussed, it is well documented the CSA survivors are at increased risk for short- and long-term interpersonal, health, and psychological consequences (Badmaeva, 2011; Cantón-Cortés et al., 2015; Coyle et al., 2014; Fernández-Montalvo et al., 2015; Waxman et al., 2014). Furthermore, CSA is a strong and consistently replicated predictor of revictimization (Arata, 2000; Barnes, Noll, Putnam, & Trickett, 2009; Roodman & Clum, 2001; Waldron, Wilson, Patriquin, & Scarpa, 2015). Roodman and Clum (2001) conducted a meta-analysis of 19 empirical studies of adult females who experienced CSA and later revictimization. They found an overall effect size of .59 (a moderate effect) for the relationship between CSA and adult revictimization, suggesting a definite relationship between CSA and adult revictimization. Findings from this study also showed varying rates of revictimization, ranging from 15-79% in women who
have experienced CSA. In large, the variance in prevalence rates of revictimization is thought to occur because of methodological differences in definitions for both CSA and revictimization. Additionally, it was also suggested that there needs to be more research conducted using longitudinal designs to obtain more accurate prevalence rates of CSA and associated revictimization.

Barnes, Noll, Putnam, and Trickett (2009) examined the association between CSA and the rates and characteristics of both physical and sexual revictimization. Participants included females with CSA histories referred by child protective services who participated in an 18-year longitudinal study and comparison females who were assessed using the Comprehensive Trauma Interview. Comparison females (without CSA histories) were recruited from the same neighborhoods in which the abused participants lived by advertisements and posters in newspapers, welfare, daycare, and community locations. Results indicated that CSA victims were almost twice as likely to have experienced sexual and physical revictimization, when compared to the control group of females who shared the same demographics but did not experience CSA. However, the sample of this study could be considered as a limitation because it was drawn from a Mid-Atlantic metropolitan region with specific ethnic and cultural characteristics, the large inner city environment is associated with higher rates of crime and victimization, which may limit generalizability. Furthermore, over 50 percent of participants were Caucasian, 43 percent were African American, 2 percent were Hispanic, and 1 percent were Asian.
Waldron, Wilson, Patriquin, and Scarpa (2015) examined victimization history, depression symptoms, and physiological reactivity to a sexual threat as predictors of sexual revictimization. Participants were undergraduate students (primarily white) that completed child abuse, sexual victimization, and depression surveys, and heart rate was assessed when participants viewed computerized versions of the Emotional Stroop paradigm for sexual threat and neutral baseline video. Results indicated that CSA was associated with greater adult revictimization and experiencing more CSA events as a child increased the risk for adult revictimization. Additionally, this study also found that CSA survivors showed a lower sympathetic and parasympathetic response during the sexual threat task, which was significantly related to increased incidences of sexual revictimization. This result indicates that women who are not able to physiologically recognize sexual threat are at increased risk of revictimization. Generalizing the findings from this study could be perceived as difficult as there a limitations to this study including a small sample size (14 individuals participated in all phases of the study) and the participants were primarily white undergraduate students.

CSA and revictimization are serious problems with long term consequences that occur at disturbing rates in the United States (Messing, La Flair, Cavanaugh, Kanga, & Campbell, 2012). Alarmingly, the risk for experiencing adult sexual assault is doubled for those who have experienced CSA (Barnes et al., 2009; Fleming, Mullen, Sibthorpe, & Bammer, 1999), and the
negative effects of repeated victimizations have been shown to be pervasive and cumulative (Waldron et al., 2015; Wilson, Kimbrel, Meyer, Young, & Morissette, 2015). CSA is positively correlated with risky sexual behavior and multiple sexual partners (Roemmele & Messman-Moore, 2011), risky sexual behavior and multiple sexual partners is also positively associated with the greater risk of sexual assault (Rinehart, Yeater, Musci, Letourneau, & Lenberg, 2014). Importantly, EMS lead individuals to seek unhealthy relationships and to engage in toxic behaviors, as they perceive this is how to get their needs met (Young et al., 2003). Risk factors for revictimization include but are not limited to CSA, low self-esteem, poor coping skills, drug/alcohol abuse, dissociation, sexual permissiveness, delinquent behavior, and PTSD symptoms (Bakhshi Bojed & Nikmanesh, 2013; Filipas & Ullman, 2006; Fortier et al., 2009; Han et al., 2013; Messman-Moore, Walsh, & DiLillo, 2010; Miron, 2014; Stockdale, Logan, Sliter, & Berry, 2014; Widom, Czaja, & Dutton, 2008). Ultimately, revictimization results in greater lifelong impacts, such as, higher distress, psychiatric disorders, difficulty in interpersonal relationships, coping, self-representations, emotional regulation, and they exhibit greater self-blame and shame (Bakhshi Bojed & Nikmanesh, 2013; Classen, Palesh, & Aggarwal, 2005).

Onset of Early Maladaptive Schemas

The first use of a schema as a simple concept in learning was described by British psychologist Frederick Bartlett when he introduced his theory of remembering (Bartlett, 1932). Swiss psychologist and biologist Jean Piaget
identified and wrote about schemata in his four stages of development (i.e., sensory motor, preoperational, concrete operational, and formal operations). Piaget defined schemas as organized patterns of behavior that determine how we see, think, and engage with the world (Ginsburg & Opper, 1969; Gruber & Voneche, 1977). A schema is our internal lens of how we view the world; they are broad themes or patterns that we encode through experiences that occur early in life consisting of memories, emotions, cognitions, and bodily functions (Riso et al., 2006). Schemas and their counterpart early maladaptive schemas (EMS) are cognitive templates which are used for processing later experiences; they are enduring and pervasive over an individual’s lifetime (Riso et al., 2006; Young & Lindemann, 1992).

EMS are distorted beliefs about the self, others, and the environment which have been comprised of memories, emotions, cognitions, and bodily sensations from negative early life experiences (Young, Klosko, & Weishaar, 2003; Young & Lindemann, 1992). EMS are shaped by the individual and cumulative dysfunctional early experiences with one’s environment, they have extremely self-defeating consequences as they are profoundly ingrained patterns crucial to one’s sense of self, and they have the potential to interfere significantly with meeting core needs (i.e., self-expression, autonomy, interpersonal relatedness, social validation, and societal integration; Young & Lindemann, 1992).
Young et al., (2003) contend that EMS may develop in childhood if fundamental emotional needs are not met. Schemas that develop earlier in life are classified as unconditional because they develop early in life and are at the core of an individual’s belief system, and no matter what happens to the individual the unconditional EMS remains pervasive and influential. An EMS that is unconditional is a belief that is developed later in life and not connected to an immediate situation (i.e., “I am defective”). Conversely, an EMS that is conditional is linked to a more immediate situational perspective (i.e., “If I am not a straight A student, then I am defective”) (Riso et al., 2006). EMS (i.e., abandonment/instability, mistrust/abuse, emotional deprivation, and defectiveness/shame) develop as a result of early childhood experiences with cold, detached, or rejecting parents resulting in emotional needs for stability, safety, and belonging being unmet. Conversely, parental overindulgence can also result in EMS, such as, entitlement/grandiosity and self-control/self-discipline. It is proposed that conditional EMS (i.e., subjugation, self-sacrifice, emotional inhibition, and unrelenting standards) develop later than unconditional EMS and are more malleable to change.

Young (1998) developed the Young Schema Questionnaire–Short Form which identifies 15 EMS under five domains (i.e., Disconnection/Rejection, Impaired Autonomy and Performance, Impaired Limits, Other Directedness, and Overvigilance and Inhibition; See Table 1).
Early Maladaptive Schemas and Negative Outcomes

Children who have experienced maltreatment (i.e., CSA, physical abuse, emotional abuse, and neglect) may develop EMS, which are attributed to negative outcomes (Cukor & McGinn, 2006). It has been shown that EMS contribute to childhood adversity and maladjustment in adolescence and adulthood, such as, emotional dysregulation, low self-esteem, guilt, self-blame, delinquency, PTSD, substance abuse, impaired sexual functioning, and revictimization (Bakhshi Bojed & Nikmanesh, 2013; Cloitre, Cohen, & Scarvalone, 2002; Coyle et al., 2014; Harris & Curtin, 2002; Walker, Carey, Mohr, Stein, & Seedat, 2004; Wenninger & Ehlers, 1998). EMS are extremely important to current functioning because they drive information processing and interpretation of life experiences, filtering input which further strengthens these belief systems (Young et al., 2003).

Research thus far has examined childhood adversity, EMS, and negative outcomes, such as, personality disorders, mood disorders, and addiction (Bakhshi Bojed & Nikmanesh, 2013; Coyle et al., 2014; Lumley & Harkness, 2007). Limited research has been conducted looking specifically at CSA, EMS, and negative outcomes, such as, depression, PTSD, risky sexual behavior, and revictimization (Cloitre et al., 2002; Cukor & McGinn, 2006; Harding et al., 2012; Roemmele & Messman-Moore, 2011).

Cukor and McGinn (2006) examined the relationship between individuals with histories of child abuse (emotional abuse/neglect, physical abuse/neglect,
and sexual abuse), adult depression, and cognitive style. It was found that women who experienced abuse were significantly more depressed and exhibited more maladaptive schemas than woman who experienced no or mild abuse. Additionally, women with a history of abuse were significantly more likely to have elevations in 7 out of 16 YSQ schemas including emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, self-sacrifice, and unrelenting standards. Several concerns pose limitations in this study. First, participants were selected from an urban minority population with high incidence of psychopathology and poor child rearing, limiting generalizability to this population. Second, only 48 women (no men) were recruited from an outpatient psychiatry department, of which 33 participants had abuse histories. Third, only combined total abuse produced significant results, this leaves many questions pertaining to CSA and EMS unanswered, such as, what EMS are acquired due to CSA? However, this would be very difficult to assess as CSA is more than likely experienced in combination with emotional and physical abuse.

Lumley and Harkness (2007) presented a cross-sectional study that examined childhood adversity (i.e. emotional maltreatment vs. physical abuse vs. sexual abuse) to specific EMS (i.e. worthlessness/loss vs. danger) and symptom profiles (i.e. depression vs. anxiety). It was hypothesized that themes of danger would mediate the relationship between physical and/or CSA and anxiety. The second hypothesis was that schemas with themes of loss and worthlessness will preferentially mediate the relation between emotional maltreatment and
depression. Results showed that CSA was not significantly related to depression or anxiety and physical and emotional abuses were equally associated with depression and anxiety. CSA was positively associated with three EMS (dependency, failure, and vulnerability). Physical abuse was positively associated with emotional deprivation, failure, and vulnerability. Emotional abuse was positively associated with emotional deprivation, dependency, social isolation, failure, vulnerability, subjugation, and self-sacrifice.

In another study, Roemmele and Messman-Moore (2011), sought to examine the similarities and differences between the types of child abuse (i.e., CSA, child physical abuse, and child emotional abuse), EMS, and risky sexual behavior among 653 female college students. CSA was positively correlated with emotional deprivation, mistrust/abuse, abandonment/instability, defectiveness/shame, self-sacrifice, and there was evidence of a partial mediation by EMS (disconnection/rejection) between CSA and lifetime number of sexual partners. Like the previously mentioned study by Cukor and McGinn, this study also poses several limitations. First, there are no male participants who took part in this study, and 92.6% of participants were Caucasian from a Midwest university. Second, only 6% participants were victims of CSA. Third, promiscuity was measured by the amount of lifetime partners each participant had. Each participant averaged 2-3 lifetime partners; hence, age could have restricted this particular outcome. Fourth, this study only found CSA assault to be significantly correlated with risky sexual behavior involving a health risk with a regular partner.
(i.e., not using a condom during sex), this study does not delineate whether or not this is one regular partner or several regular partners. Ultimately, CSA, EMS, and risky sexual behavior need to be further investigated.

Harding, Burns, and Jackson (2011) examined the relationship between CSA, EMS, and the development and maintenance of PTSD in young adult females. This study used a cluster analytic approach to identify subgroups of CSA survivors by EMS subscale scores, identifying how strongly a CSA survivor endorsed EMS (i.e., low, medium, high). First, it was hypothesized that the different subgroups of survivors of maltreatment would be present. Second, it was hypothesized that subgroups characterized by the presence of high levels of abuse related EMS (i.e. vulnerability to harm, mistrust/abuse, and defectiveness/shame) would report more maltreatment in childhood. Third, it was hypothesized that individuals who reported high levels of EMS in vulnerability to harm and mistrust/abuse would display greater PTSD symptoms.

Using a cluster analytic strategy the researchers identified three subgroups (low EMS, moderate EMS, & high EMS) of CSA on the basis of their EMS scores. These three subgroups did not differ significantly in regard to the level of CSA experienced in childhood. However, they did differ in regards to the amount of additional abuse they also experienced (i.e., physical abuse, emotional abuse, & neglect), those who experienced multiple forms of abuse had higher EMS scores. CSA victims who were in the high subgroup showed the following EMS which are primary predictors of PTSD (vulnerability to harm,
mistrust/abuse, emotional deprivation) and secondary predictors of PTSD, (subjugation social isolation, defectiveness, emotional inhibition and abandonment) of PTSD symptoms. Specifically, EMS that were positively correlated with PTSD were endorsed by participants in the high EMS group.

Importantly, this study shows that all types of child maltreatment are hard to separate because many individuals experience multiple types of abuse. Limitations include a predominately young, white female sample from a university; results may not be generalizable to the general population. Individuals who had the highest levels of EMS also experienced other forms of abuse, making it possible that emotional abuse drives the relationship between group membership and EMS severity.

Only one known study has attempted to a look at interpersonal schemas, CSA, and revictimization (Cloitre et al., 2002). Cloitre, Cohen, and Scarvalone (2002) presented and tested an interpersonal schema model to explain revictimization, specifically looking at submissiveness/dominance and friendly/hostile dimensions in relationships with significant others. Attachment is based on an interpersonal schema model developed in childhood; it suggests that if we have a secure or insecure attachment with our caregiver we will later generalize this attachment or perception of relationship to our significant other later in life. First, it was hypothesized that individuals who experienced abuse in childhood would have negative interpersonal expectations as an adult. Second, it was hypothesized that abuse victims would have a limited number of
expectations in their current relationship, generalizing the maladaptive interpersonal schema across interpersonal relationships. Lastly, it was hypothesized that revictimization would be associated with the tendency to automatically apply negative schemas from childhood to adulthood relationships.

Results from Cloitre, Cohen, and Scarvalone (2002) determined that both revictimized women and never victimized women generalize schemas formed in early childhood to their current relationships; the only difference was the content of the schema (adaptive or maladaptive). Interestingly, women who experience CSA, but not revictimization, reported no overlap between the expectation of their relationship with their parents and the expectation of their significant others. Although they did not examine EMS, it is important to note that individuals who experienced CSA and revictimization have an interpersonal expectation (derived from interpersonal schemas) that was significantly more negative than individuals who have not experienced either forms of sexual assault. Limitations of this study include participants in this study were predominately white, middle aged, and educated. Ultimately, more research is needed to further delineate these findings, particularly in clinical samples.

As previously discussed, prior research has shown mixed results in comparing childhood maltreatment and EMS. Lumley and Harness (2007) found that CSA was significantly associated with EMS dependence/incompetence, vulnerability to harm/illness, and failure. Cukor and McGinn (2006) found that EMS emotional deprivation, abandonment, mistrust/abuse, social isolation, and
defectiveness/shame mediated the relationship between CSA and depression. Roemmele and Messman-Moore (2011) concluded that emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice mediated the relationship between CSA and risky sexual behavior. Harding, Burns, and Jackson (2012) indicate that individuals who experience CSA and other abuse show the highest scores for all EMS and that mistrust/abuse, vulnerability to harm, and emotional deprivation mediate the relationship between CSA and PTSD. Table 2 summarizes the significant result of EMS’s in the previously mentioned studies.

Purpose

The purpose of this current study is to examine the complex relationships between childhood sexual assault, early maladaptive schemas, revictimization, depression, and PTSD.

Hypotheses:

1) CSA will be positively correlated with revictimization.

2) CSA will be positively correlated with early maladaptive schemas. This is exploratory as there has been such limited research in regards to CSA and EMS.

   a. As evidenced in the literature it is specifically predicted that emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice will be positively correlated with CSA.
3) The relationship between CSA and revictimization will be mediated by EMS.

4) The relationship between CSA and depression and PTSD will be mediated by EMS.
CHAPTER TWO

METHODOLOGY

Participants

The present sample was comprised of 263 female undergraduate students from California State University, San Bernardino. When identifying race, the majority of participants identified themselves as Other (biracial; 40.7%), Caucasian or White (35.4%), African American (6.1%), Asian (Asian American) (5.3%), and American Indian (3.8%). Ethnically, the majority of participants identified as Hispanic or Latino ethnic background (68.1%), not Hispanic or Latino (29.3%), and unknown (08%). The mean age of all participants was 22.76 (SD = 5.83). The majority of participants were not married (90%) and over two-thirds of participants (70%) had an average income of $14,999 or less. For additional demographic information see Table 3.

Measures

The Young Schema Questionnaire–Short Form

The YSQ (YSQ-SF: Young, 1998) is a 75 item self-report questionnaire that assesses the presence and severity of 15 early maladaptive schemas. Each scale consists of five items rated on a six-point Likert-type scale. Higher scores indicate greater presence and/or severity of EMS. As previously described the 15 scales is as follows: Disconnection/Rejection (abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, social
isolation/alienation); Impaired autonomy/Performance (dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, failure); Impaired Limits (entitlement/grandiosity, insufficient self-control/self-discipline); Other Directedness (subjugation, self-sacrifice); and Over vigilance/Inhibition (emotional inhibition and unrelenting standards/hypocriticalness. Adequate internal consistency of the schema subscales has been reported with Cronbach’s alpha coefficients ranging from .76 to .93 (Welburn, Coristine, Dagg, Pontefract, & Jordan, 2002) and .71 to .93 (Glaser, Campbell, Calhoun, Bates, & Petrocelli, 2002). Construct validity of this measure is supported where 70 of the 75 items loaded as designed and where all 15 of the EMS subscales compared well to other symptoms measures and accounted for statistically significant variance in several measures of psychological symptoms (Glaser, Campbell, Calhoun, Bates, & Petrocelli, 2002).

The Sexual Experiences Survey Long Form Victimization

The sexual experiences survey (SES-LFV; Koss et al., 2006) is a sexual experience survey that measures victimization of unwanted sexual encounters including rape. The scale will measure how many times an unwanted sexual experience occurred (0, 1, 2, and 3+) before the age of 14 and after the age of 14. The SES-SFV uses gender-neutral language and includes seven items designed to measure sexual victimization in both heterosexual and same-sex encounters. The items provide behaviorally specific descriptions of unwanted sexual acts (sexual touching, such as kissing or fondling, completed or attempted
forms of sexual intercourse, anal sex, oral sex). Each item comprises behavioral
descriptions of different aggressive strategies: (a) verbal pressure, (b)
exploitation of the victim's incapacitated state (e.g., following alcohol or
substance intoxication), and (c) use or threat of physical violence. Rape is
defined as vaginal or anal penetration (with penis, fingers, or objects) and oral
sex (obtained or performed) perpetrated through the use or threat of force and
exploitation of a victim’s incapacitated state. Koss and colleagues (2007) are in
the process of psychometric analyses to confirm the outcome categories in the
SES-LFV.

Posttraumatic Stress Disorder Checklist-5

The PCL-5 (Weathers, Litz, Keane, Palmieri, Marx, & Schnurr, 2013) is a
brief self-report instrument consisting of 20 items that reflect the symptoms of
PTSD outlined in DSM-5. The PCL was revised to reflect the changes that were
made when the DSM-V came out, PCL-5 scores showed strong internal
consistency ($\alpha = .94$), test-retest reliability ($r = .82$), and convergent ($rs = .74$ to
.85) and discriminant ($rs = .31$ to .60) validity (Blevins, Weathers, Davis, Witte, &
Domino, 2015). Respondents are asked to rate on a 5-point scale the amount of
distress experienced within the past 30 days as a result of PTSD symptoms.

Center for Epidemiological Studies Depression Scale

The CESD-R (CESD-R; Radloff, 1977) is a brief self-report instrument
used to measure symptoms of depression. The CESD-R consists of 20 items
reflecting symptoms of depression. Respondents are asked to indicate how
often they have experienced these symptoms over the past week on a 4-point scale, ranging from 1 (rarely, or none of the time) to 4 (most or all of the time). Internal validity and construct validity has been thoroughly examined in the literature. Multiple-group confirmatory factor analysis supported full measurement and structural invariance, and no sex difference for the four latent factors (i.e. depressed affect, positive affect, somatic symptoms, and interpersonal difficulty; Gomez & McLaren, 2015; Ros et al., 2011). The CESD was revised to the current instrument CESD-R to reflect updated diagnostic criteria; psychometric properties of the CESD-R were also assessed to ensure the test was measuring what it is supposed to measure. According to the study conducted by Van Dam and Earleywine (2011) the CESD-R exhibited good psychometric properties, including high internal consistency, strong factor loadings, and theoretically consistent convergent and divergent validity.

Procedure

Participants signed an informed consent before participating in this study, individuals were made aware that all answers were confidential, they were made aware of risks and benefits, individuals had to option to withdraw at any time during the study, and had were informed how to access to mental health services if necessary on campus. Students received extra credit in exchange for their participation. Upon accessing the survey, individuals were asked to complete the YSQ-SF, the SES-LFV, the PTSD-5, and the CESD-R online using Qualtrics an
internet survey software program. All information was collected confidentially online through Qualtrics.

Results

Data Analysis

The current study utilized a cross-sectional correlational design with CSA and EMS as predictors and revictimization, PTSD and depression as outcome variables. All study hypotheses were tested with correlational and multiple regression analyses. Mediation hypotheses were tested utilizing the Preacher and Hayes Process macro (2008) to test for indirect effects of multiple mediators simultaneously.

Zero-Order Correlations

Zero-order, bivariate correlations were calculated for all variables of interest (See Table 4). As hypothesized, CSA was positively correlated with revictimization $r = .35, p < .001$. Additionally, CSA was significantly correlated with emotional deprivation $r = .14, p < .05$, mistrust/abuse $r = .17, p < .01$, social isolation $r = .13, p < .05$, defectiveness/shame $r = .27, p < .001$, self-sacrifice $r = .20, p < .01$, but was not correlated with abandonment $r = .09, p > .05$.

Tests of Mediation

Three separate tests of mediation were conducted using a bootstrapping procedure with Preacher and Hayes Process macro (2008). Specifically, tests of mediation were conducted with EMS (i.e., emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice) as
potential mediators, CSA as the independent variable and revictimization, CESD, and PTSD symptoms as outcome variables.

With respect to the association between CSA and revictimization, results from mediational analyses were non-significant, indicating that none of the EMS significantly accounted for the association between CSA and revictimization (See Table 8). Additional mediational analyses revealed that the EMS (i.e., mistrust/abuse, social isolation, and self-sacrifice) significantly mediated the association between CSA and PTSD symptom severity (See Table 6). The third mediational analyses showed that EMS social isolation mediated the relationship between CSA and depression (See Table 7).
CHAPTER THREE

CONCLUSION

Discussion

The goal of the present study was to examine the complex relationships between CSA, EMS, revictimization, and mental health outcomes (i.e., PTSD and depression) by using a quantitative method. First, we sought to replicate previous findings, testing the correlation between CSA and revictimization. Results were consistent with our primary hypothesis; CSA was positively correlated with revictimization, 27% reported victimization before age 14. Second, we examined the association between CSA and EMS. Specifically, we hypothesized that EMS (emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice) would be positively correlated with CSA. Results showed that all but abandonment were positively correlated with CSA. Third, we hypothesized that CSA and revictimization would be mediated by EMS. This result was not founded. Lastly, we hypothesized that CSA and depression and PTSD would be mediated by EMS. EMS social isolation mediated the relationship between CSA and depression symptoms and EMS (i.e., mistrust/abuse, social isolation, and self-sacrifice) mediated the relationship between CSA and PTSD symptoms.

CSA is a strong consistently replicated predictor of revictimization (Arata, 2000; Barnes, Noll, Putnam, & Trickett, 2009; Roodman & Clum, 2001; Waldron, Wilson, Patriquin, & Scarpa, 2015), of which we also found that CSA and
revictimization to be positively correlated. EMS contributes to childhood adversity and maladjustment in adolescence and adulthood, such as, emotional dysregulation, low self-esteem, PTSD, and revictimization (Cloitre, et al., 2002; Coyle et al., 2014; Harding et al., 2012). EMS are extremely important to current functioning because they drive information processing and interpretation of life experiences, filtering input which further strengthens these belief systems (Young et al., 2003).

During exploration, we found that CSA is associated with EMS, specifically, emotional deprivation, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice, but not abandonment. Similarly, Roemmele and Messman-Moore (2011) found that CSA was associated with emotional deprivation, mistrust/abuse, defectiveness/shame, and self-sacrifice. Conversely, they also found that the EMS abandonment was positively correlated with CSA, while we did not get this result in this current study. Likewise, Harding, Burns, & Jackson (2011) found that mistrust/abuse, emotional deprivation, social isolation and self-sacrifice were associated with CSA and abandonment was not significantly correlated with CSA. In opposition, we found that defectiveness/shame was positively associated with CSA, while Harding, Burns, & Jackson (2011) did not get this result. Ultimately, it is not surprising that emotional deprivation, mistrust/abuse, social isolation, defectiveness/shame, and self-sacrifice were positively correlated with revictimization, as CSA is linked to high risk sexual behaviors (Barnes et al., 2009) and other negative outcomes.
(Cukor & McGinn, 2006) because they potentially do not know what appropriate boundaries to set to keep from being revictimized as adults.

Our third hypothesis, that CSA and revictimization will be mediated by EMS was not supported. This was surprising, as previous research conducted by Cloitre, Cohen, and Scarvalone (2002) determined that both revictimized women and never victimized women generalize schemas (i.e., submissiveness/dominance and friendly/hostile) formed in early childhood to their current relationships; the only difference was the content of the schema (adaptive or maladaptive). While Cloitre and colleagues (2002) examined interpersonal schemas, one would think that EMS would mediate the relationship between CSA and revictimization.

Our final hypothesis that the relationship between CSA and PTSD symptom severity would be mediated by EMS was confirmed. Specifically, EMS mistrust/abuse, social isolation, and self-sacrifice had an indirect effect on the acquisition or development of PTSD symptoms through the experience of the CSA. Harding, Burns, and Jackson (2012) found that EMS mistrust/abuse, vulnerability to harm, and emotional deprivation were strong predictors of PTSD status. Additionally, subjugation, social isolation, defectiveness, emotional inhibition, and abandonment were moderate predictors of PTSD status. In our study only two (i.e., mistrust/abuse, social isolation) of the six EMS found in the Harding, Burns, and Jackson (2012) study were found to mediate CSA and PTSD symptoms. Conversely, we found that self-sacrifice mediated CSA and
PTSD symptoms, where Harding and colleagues (2012) did not. It is not a surprise that EMS (i.e., mistrust/abuse, social isolation) are positively correlated with PTSD symptoms, as not being able to trust who or what the enemy or danger is, is a symptom of PTSD (Harding, Burns, and Jackson, 2012). Additionally, social isolation is also a common symptom of individuals who are diagnosed with PTSD, because if you are in large crowds you may not be able to identify the enemy or potential danger.

Finally, results revealed that social isolation significantly mediated the relationship between CSA and depression symptoms; this is not surprising as a symptom of depression is social isolation. Although Lumley & Harkness (2007) found a correlation between CSA and EMS (i.e., dependence/incompetence, vulnerability to harm/illness, & failure), they did not have a significant mediation between any of these EMS. Conversely, Cukor & McGinn (2006) found that abandonment/instability, mistrust/abuse, emotional deprivation, and defectiveness/shame mediate CSA and depression symptoms in adulthood, whereas in our study we did not have a significant mediation with these specific EMS.

This study has a number of strengths, but also does not go without limitations. This study utilizes a cross-sectional design, which makes it impossible to speak to the direction of relationships between variables or causality. Further, our study relied exclusively on the completion of self-report measures which may be subject to recall bias, as well as under- or over-
reporting of psychological symptoms. Also, the YSQ-SF, SES-LFV, CESD-R, and the PCL utilize Likert scales, which bring up a few concerns specifically pertaining to the social desirability bias, people may report based on what they perceive is the most socially desirable answer versus reporting on their personal experiences. However, the YSQ-SF, SES-LFV, CESD-R, and the PCL have been utilized in several studies throughout research (Welburn et al., 2002; Glaser et al., 2002; Koss et al., 2007). An additional limitation of our study was our select sample. Our study was comprised of female college students who reported prior exposure to sexual assault. It is unknown whether our results generalize to other assault or trauma populations. Future studies would benefit from utilizing longitudinal forms of assessment.

An additional caveat is separating types of maltreatment to determine what EMS develop solely from CSA and further facilitate revictimization. It is difficult to tease out exact conclusions or consequences associated with a specific subtype of maltreatment like CSA, because CSA is often comorbid with multiple types of abuse, such as, neglect and physical and mental abuse (Aber, Allen, Carlson, & Cicchetti, 1989; Harding et al., 2012; Lumley & Harkness, 2007). As previously described, different forms of child maltreatment produce different consequences, including but not limited to EMS and revictimization (Badmaeva, 2011; Cloitre, Cohen, & Scarbalone, 2002; Lumley & Harkness, 2007, 2009), thus it is very important to thoroughly examine each type of child
abuse (emotional, physical, sexual, neglect, and combined). The results of this need further investigation.

Future research should attempt to examine the potential differential impacts of IF and EF CSA, as the question remains as to which type (i.e., IF or EF) of CSA of abuse has the greatest impact or causes the most negative consequences for the survivor (Fischer & McDonald, 1998; Magalhães et al., 2009). Betrayal Trauma like incest could negatively impact individuals by the acquisition of EMS, as this trauma is a violation of trust that has occurred within a close relationship (Lindblom & Gray, 2010). Previous research on betrayal trauma has shown that individuals who experienced CSA also experienced high betrayal trauma, which negatively impacted mental and physical health outcomes (Edwards, Freyd, Dube, Anda, & Felitti, 2012). It has also been shown that incest is the most serious and damaging form of child sexual assault, due to its occurrence and maintenance over long periods of time within family systems (Courtois, 1999).

As previously mentioned, it was a surprise that abandonment was not significantly correlated with CSA. This could be due to the fact that more individuals in this study experienced EF versus IF CSA. A consequence of CSA betrayal trauma that leads to poor attachment among other negatives consequences is abandonment and rejection (Edwards et al., 2012; Murphy et al., 2015). It is important that future research delineate the differences between IF and EF CSA, as interventions could be implemented that protect individuals
from the potential negative outcomes which have been shown to impact the individual throughout their lifetime.

To our knowledge, this is the first study that examined the association between CSA, EMS, and revictimization. The current study contributes to our understanding of how early life trauma, such as, CSA impacts the possible development EMS (enduring schemas about the self, others, and the world) and further potential consequences like revictimization, depression, and PTSD. Additional research is needed to replicate and lengthen the current findings, and also using a qualitative study to encompass clinical and community samples (i.e., in-depth perspectives of these links in participants’ own words that can then be developed into a survey and tested quantitatively). Our findings could be used to further investigate what appropriate early childhood interventions could possibly be used to address and treat CSA.
Table 1. Summary of the Domains and Characteristics of Early Maladaptive Schemas (EMS).

<table>
<thead>
<tr>
<th>Domain</th>
<th>EMS</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disconnection/Rejection</strong></td>
<td>Abandonment/Instability</td>
<td>The belief that the people closest will leave or fail to protect an individual.</td>
</tr>
<tr>
<td></td>
<td>Mistrust/Abuse</td>
<td>The belief and/or expectation that others cannot be trusted and have mal-intentions towards one.</td>
</tr>
<tr>
<td></td>
<td>Emotional Deprivation</td>
<td>The belief that emotional needs will not be adequately met by others.</td>
</tr>
<tr>
<td></td>
<td>Defectiveness/Shame</td>
<td>The belief that one is defective, bad, unwanted, and/or inferior; or that one would be unlovable because of perceived flaws.</td>
</tr>
<tr>
<td></td>
<td>Social Isolation/</td>
<td>The belief that one is isolated (does not fit in) with the rest of the world, different from other people, and /or not part of any group or community.</td>
</tr>
<tr>
<td>Alienation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impaired Autonomy/Performance</strong></td>
<td>Dependence/Incompetence</td>
<td>The belief that one is unable to handle everyday responsibilities without considerable help from others and may present as helplessness.</td>
</tr>
<tr>
<td></td>
<td>Vulnerability to</td>
<td>The exaggerated belief that imminent catastrophe will occur at any time and that one will be unable to prevent it.</td>
</tr>
<tr>
<td>Harm/Illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enmeshment/Undeveloped Self</td>
<td>The excessive emotional involvement and closeness with one or more significant others (i.e. parents, children, or partner), at the expense of full individuation or normal social development.</td>
</tr>
<tr>
<td></td>
<td>Failure</td>
<td>The belief that one has failed, will fail, or is inadequate in comparison to one’s peers, in areas of achievement.</td>
</tr>
</tbody>
</table>
Table 1 (continued).  Summary of the Domains and Characteristics of Early Maladaptive Schemas (EMS).

<table>
<thead>
<tr>
<th>Domain</th>
<th>EMS</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired Limits- The deficiency in internal limits, responsibility to others, or long-term goal-orientation. It leads to difficulty respecting the rights of others, cooperating with others, making commitments, or setting and meeting realistic personal goals.</td>
<td>Entitlement/Grandiosity</td>
<td>The belief that one is superior to other people, entitled to special rights and privileges, or not bound by social rules of reciprocity that guide normal social interaction.</td>
</tr>
<tr>
<td></td>
<td>Insufficient Self-control/Self-discipline</td>
<td>Pervasive difficulty or refusal to practice adequate self-control and frustration tolerance to achieve one’s personal goals, or to restrain from the excessive expression of one’s emotions or impulses.</td>
</tr>
<tr>
<td>Other Directedness- Excessive focus on the wants, needs, feelings, and responses of others, at the expense of one’s own needs in order to gain love and approval, preserve one’s sense of connection, or avoid retaliation. It usually includes suppression and lack of awareness regarding one’s own feelings and natural inclinations.</td>
<td>Subjugation</td>
<td>Excessive surrendering of control to others because one feels pressured usually to avoid anger, retaliation, or abandonment.</td>
</tr>
<tr>
<td></td>
<td>Self-Sacrifice</td>
<td>Excessive focus on voluntarily meeting the needs of others, at the expense of one’s own gratification.</td>
</tr>
<tr>
<td>Over Vigilance/Inhibition- Excessive emphasis is placed on suppressing one’s natural feelings, impulses, and choices or on meeting rigid, internalized rules and expectations about performance and ethical behavior, often at the expense of happiness, self-expression, relaxation, close relationships, or health.</td>
<td>Emotional Inhibition</td>
<td>The excessive inhibition of spontaneous action, feeling, or communication to avoid disapproval by others.</td>
</tr>
<tr>
<td></td>
<td>Unrelenting Standards/Hypocriticalness</td>
<td>The underlying belief that one must strive to meet very high internalized standards (sometimes unrealistic) of behavior and performance to avoid criticism.</td>
</tr>
</tbody>
</table>
Table 2. Summary of Studies That Found a Significant Correlation Between Child Sexual Assault (CSA) and Early Maladaptive Schemas (EMS). The Last Column is the EMS Correlated with PTSD per Harding, Burns, and Jackson (2012).

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Disconnection/Rejection</td>
<td>Abandonment/</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Instability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mistrust/Abuse</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotional Deprivation</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Defectiveness/</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shame</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Isolation/</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td>Alienation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impaired Autonomy/Performance</td>
<td>Dependence/</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Incompetence</td>
<td></td>
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<tr>
<td></td>
<td>Vulnerability to Harm/Illness</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enmeshment/</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Undeveloped Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Impaired Limits</td>
<td>Entitlement/</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grandiosity</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Insufficient Self-control/</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Self-discipline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Directedness</td>
<td>Subjugation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-Sacrifice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Approval-seeking/</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Recognition Seeking</td>
<td></td>
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<tr>
<td></td>
<td>Emotional Inhibition</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Over Vigilance/Inhibition</td>
<td>Unrelenting Standards/</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypocriticalness</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36
Table 3. *Demographic and other Characteristics of the Sample (N=263).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M(SD)</th>
<th>n(%)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>263</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>22.76(5.83)</td>
<td>248</td>
<td>17-58</td>
</tr>
<tr>
<td><strong>Years of college</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>41(15.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>38(14.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>85(32.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>99(37.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Student yearly income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-$14,999</td>
<td>185(70.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$15,000-$29,999</td>
<td>55(20.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30,000-$44,999</td>
<td>11(4.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$45,000-$59,999</td>
<td>6(2.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$60,000-$74,999</td>
<td>3(1.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$75,000-$89,999</td>
<td>1(.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$90,000-$99,999</td>
<td>1(.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over $100,000</td>
<td>1(.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>111(42.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a committed relationship</td>
<td>105(39.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with significant other</td>
<td>18(6.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>27(10.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced, Separated, or Widowed</td>
<td>2(0.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethnic background</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>179(68.1)</td>
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</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>77(29.3)</td>
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<tr>
<td>Unknown</td>
<td>4(1.5)</td>
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</tr>
<tr>
<td><strong>Racial background</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian or White</td>
<td>85(35.4)</td>
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<td></td>
</tr>
<tr>
<td>Asian (Asian American)</td>
<td>14(5.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>16(6.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>10(3.8)</td>
<td></td>
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</tr>
<tr>
<td>Other</td>
<td>107(40.7)</td>
<td></td>
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</tr>
</tbody>
</table>
Table 4. Summary of intercorrelations for Child Sexual Assault, Early Maladaptive Schemas, and Revictimization and Mental Health Outcomes (i.e., Depression, and PTSD) (n=263).

<table>
<thead>
<tr>
<th></th>
<th>Emotional Deprivation</th>
<th>Abandonment</th>
<th>Mistrust/Abuse</th>
<th>Social Isolation</th>
<th>Defectiveness/Shame</th>
<th>Self-Sacrifice</th>
<th>Child Rape</th>
<th>Adult Rape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Deprivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abandonment</td>
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<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td>.00***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mistrust/Abuse</td>
<td></td>
<td>.52</td>
<td>.64</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Isolation</td>
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<td>.58</td>
<td>.48</td>
<td>.63</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defectiveness/Shame</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td>.00***</td>
<td></td>
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</tr>
<tr>
<td>Self-Sacrifice</td>
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<td>.36</td>
<td>.46</td>
<td>.41</td>
<td>.38</td>
<td>1.00</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td>.00***</td>
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</tr>
<tr>
<td>Child Rape</td>
<td></td>
<td>.14</td>
<td>.09</td>
<td>.17</td>
<td>.13</td>
<td>.27</td>
<td>.20</td>
<td>1.00</td>
</tr>
<tr>
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<td>.02*</td>
<td>.17</td>
<td>.01**</td>
<td>.03*</td>
<td>.00***</td>
<td>.00**</td>
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<tr>
<td>Adult Rape</td>
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<td>.13</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>.03*</td>
<td>.01**</td>
<td>.00***</td>
<td>.00***</td>
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*p < .05, **p < .01, ***p < .001
Table 5. Summary of Intercorrelations for Child Sexual Assault, Early Maladaptive Schemas, and Mental Health Outcomes (i.e., Depression, and PTSD) (n=263).

<table>
<thead>
<tr>
<th></th>
<th>Emotional Deprivation</th>
<th>Abandonment</th>
<th>Mistrust/Abuse</th>
<th>Social Isolation</th>
<th>Defectiveness/Shame</th>
<th>Self-Sacrifice</th>
<th>PTSD Symptoms</th>
<th>Depression Symptoms</th>
<th>Child Rape</th>
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</thead>
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<td>PTSD Symptoms $r$</td>
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<td>.53</td>
<td>.58</td>
<td>.52</td>
<td>.49</td>
<td>.45</td>
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<td></td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression Symptoms $r$</td>
<td>.43</td>
<td>.44</td>
<td>.48</td>
<td>.56</td>
<td>.63</td>
<td>.31</td>
<td>.71</td>
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<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td>.00***</td>
<td></td>
<td>.00***</td>
<td></td>
</tr>
<tr>
<td>Child Rape $r$</td>
<td>.14</td>
<td>.09</td>
<td>.17</td>
<td>.13</td>
<td>.27</td>
<td>.20</td>
<td>.27</td>
<td>.19</td>
<td>1.00</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.02*</td>
<td>.17</td>
<td>.01**</td>
<td>.03*</td>
<td>.00***</td>
<td>.00**</td>
<td>.00***</td>
<td>.00**</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, ** p < .01, ***p < .001
Table 6. *Summary of Mediation (indirect effects of Early Maladaptive Schemas on PTSD).*

<table>
<thead>
<tr>
<th></th>
<th>Effect</th>
<th>Boot SE</th>
<th>Boot LLCI</th>
<th>Boot ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1.15</td>
<td>.47</td>
<td>.65</td>
<td>2.35</td>
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<td>Emotional Deprivation</td>
<td>.04</td>
<td>.10</td>
<td>-.09</td>
<td>.33</td>
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<tr>
<td>Mistrust/Abuse</td>
<td>.47</td>
<td>.26</td>
<td>.15</td>
<td>1.16</td>
</tr>
<tr>
<td>Social Isolation</td>
<td>.19</td>
<td>.26</td>
<td>.00</td>
<td>.95</td>
</tr>
<tr>
<td>Defectiveness/ Shame</td>
<td>.16</td>
<td>.20</td>
<td>-.19</td>
<td>.63</td>
</tr>
<tr>
<td>Self-Sacrifice</td>
<td>.29</td>
<td>.13</td>
<td>.10</td>
<td>.63</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001, bolded items were statistically significant.*
Table 7. Summary of Mediation (indirect effects of Early Maladaptive Schemas on Depression).

<table>
<thead>
<tr>
<th></th>
<th>Effect</th>
<th>Boot SE</th>
<th>Boot LLCI</th>
<th>Boot ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>.57</td>
<td>.34</td>
<td>.13</td>
<td>1.29</td>
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<tr>
<td>Emotional Deprivation</td>
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<td>.08</td>
<td>-.06</td>
<td>.24</td>
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<tr>
<td>Mistrust/Abuse</td>
<td>.13</td>
<td>.12</td>
<td>-.01</td>
<td>.43</td>
</tr>
<tr>
<td>Social Isolation</td>
<td>.24</td>
<td>.26</td>
<td>.03</td>
<td>.91</td>
</tr>
<tr>
<td>Defectiveness/ Shame</td>
<td>.13</td>
<td>.17</td>
<td>-.17</td>
<td>.50</td>
</tr>
<tr>
<td>Self-Sacrifice</td>
<td>.02</td>
<td>.06</td>
<td>-.10</td>
<td>.15</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, ***p < .001, bolded items were statistically significant.
Table 8. Summary of mediation (indirect effects of EMS on Revictimization).

<table>
<thead>
<tr>
<th>Effect</th>
<th>Boot SE</th>
<th>Boot LLCI</th>
<th>Boot ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>.05</td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>Emotional Deprivation</td>
<td>.00</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Mistrust/Abuse</td>
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<tr>
<td>Social Isolation</td>
<td>.01</td>
<td>.03</td>
<td>-.01</td>
</tr>
<tr>
<td>Defectiveness/ Shame</td>
<td>.03</td>
<td>.03</td>
<td>-.03</td>
</tr>
<tr>
<td>Self-Sacrifice</td>
<td>.01</td>
<td>.01</td>
<td>-.00</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, ***p < .001
APPENDIX B

INSTITUTIONAL REVIEW BOARD CONSENT FORMS
PI: Hassija and Motley
From: Michael R. Lewin

Project Title: Childhood Sexual Assault, Schemas, and Revictimization: The Role of Early Maladaptive Schemas on Revictimization

Project ID: H-15-WI-06
Date: 1/30/15

Disposition: Expedited Review

Your IRB proposal is approved. This approval is valid until 1/30/16.

Good luck with your research!

Michael R. Lewin,
Co-Chair
Psychology IRB
Sub-Committee
PI: Hassija, Christina

From: John P. Clapper

Project Title: Childhood Sexual Assault, Schemas, and Revictimization: The Role of Early Maladaptive Schemas on Revictimization

Project ID: H15WI-06

Date: 2/13/16

Disposition: Renewal Request

Your IRB renewal request is approved to include 60 participants. If you need additional participants, an addendum will be required. This approval is valid until 2/13/2017.

Good luck with your research!

John P. Clapper,
Co-Chair
Psychology IRB
Sub-Committee
REFERENCES


Fili


familial cases. *Journal of Forensic and Legal Medicine, 16*(8), 455-459. doi: 10.1016/j.jflm.2009.05.007


