

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

CHILDHOOD SEXUAL ABUSE AS A RISK FACTOR FOR ADULT
VICTIMIZATION: THE INFLUENCE OF DISSOCIATIVE SYMPTOMS

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by

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TABLE OF CONTENTS

Signature Page	ii
Acknowledgements	iii
List of Tables	v
List of Figures	vi
Abstract	vii
CHAPTER I – INTRODUCTION	1
Statement of the Problem	1
Definitions	2
Hypotheses	3
CHAPTER II - REVIEW OF LITERATURE	4
Childhood Sexual Abuse	4
Childhood Sexual Abuse as a Risk Factor for Revictimization	7
PTSD Symptoms and Revictimization	11
Theoretical Frameworks	16
The Current Study	21
CHAPTER III – METHODOLOGY	23
Participants	23
Procedure	23
Measures	24
CHAPTER IV – RESULTS	27
Descriptive Statistics	27
Chi-square Analyses	27
One-way between-subjects ANOVA	28
Two-way between-subjects ANOVA	29
Structural Equation Modeling	30
CHAPTER V – DISCUSSION	35
Summary of Findings	35
Discussion	36
Limitations	37
Future Directions	39
Conclusions	40
REFERENCES	42
Appendix A - Physical and Sexual Victimization Survey	51
Appendix B - Curious Experiences Survey	53
Appendix C - Demographics Questionnaire	55
Appendix D - Implied Consent	56
Appendix E – Debriefing	58

LIST OF TABLES

Table 1 - Frequencies and Percentages for Each Category of the Childhood Sexual Abuse and Adult Victimization Variables	28
Table 2 - Covariance Matrix and Means & Standard Deviations for Measured Variables	34

LIST OF FIGURES

Figure 1 - Mean Adult Victimization Frequency for Individuals with and without a History of Childhood Sexual Abuse	29
Figure 2 - Mean Scores on the CES for Individuals with and without a History of Childhood Sexual Abuse and Adult Victimization	30
Figure 3 - Hypothesized Model of Revictimization	31
Figure 4 – Revised Model of Revictimization with Standardized Solution	34

ABSTRACT

CHILDHOOD SEXUAL ABUSE AS A RISK FACTOR FOR ADULT VICTIMIZATION: THE INFLUENCE OF DISSOCIATIVE SYMPTOMS

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Adult females were recruited from two sources (a college campus and online through a survey recruitment website) to participate in a study examining the relationship between childhood sexual abuse and adult victimization. Participants were given questionnaires to assess their experiences of childhood sexual abuse and adult victimization as well as symptoms of dissociation. It was predicted that women reporting histories of sexual abuse in childhood would report more pathological dissociation and more victimization experiences in adulthood. It was also predicted that levels of dissociation would mediate the relationship between childhood sexual abuse and adult victimization. A one-way ANOVA revealed that women with a history of childhood sexual abuse did experience more victimization in adulthood. A two-way ANOVA revealed that levels of dissociation were higher for women who reported victimization experiences in childhood or adulthood than those who reported no victimization. Finally, structural equation modeling confirmed the predicted mediating effect of dissociation on the relationship between childhood sexual abuse and adult victimization.

CHAPTER 1

INTRODUCTION

Statement of the Problem

Childhood sexual abuse has consistently been identified as a significant risk factor for adult sexual revictimization (Arata, 2000; Coid, Petruckevitch, Feder, Chung, Richardson, & Moorey, 2001; Fergusson, Horwood, & Lynsky, 1997; Nelson, Heath, Madden, Cooper, Dinwiddie, Bucholz, et al., 2002; Randall & Haskell, 1995). Studies have shown that women with a history of childhood sexual abuse are two to three times more likely to be sexually assaulted in adulthood than women without a history of childhood sexual abuse (Coid et al., 2001). The present research examines how certain posttraumatic symptoms may contribute to putting an individual at an increased risk for revictimization.

While research exists to show that posttraumatic stress disorder (PTSD) symptoms mediate the relationship between childhood sexual abuse and adult sexual victimization (Arata, 1999; Banyard, Williams, & Siegel, 2001; Koverola, Proulx, Battle, & Hanna, 1996), not all victims of childhood sexual abuse who experience PTSD are revictimized as adults. As there are currently a variety of symptom profiles that those diagnosed with PTSD may possess, the question remains whether only certain symptoms of PTSD lead to greater risks of revictimization. In particular, symptoms of dissociation have been associated with prolonged sexual abuse in childhood, whereas symptoms of hyperarousal and “re-experiencing” have been linked more with single episode traumatic events (Terr, 1991; Courtois, 2004). Researchers have even found physiological evidence

for these two very different reactions to trauma in neuroimaging studies (Lanius, Vermetten, Loewenstein, Brand, Schmahl, Bremner, & Spiegel, 2010).

By untangling the different symptom presentations possible with PTSD, and specifying the conditions under which certain symptoms may lead to a greater risk of sexual assault, we may be able to develop a more comprehensive model of revictimization. While there is no way to completely prevent acts of sexual or physical victimization, it is worthwhile to identify factors that may increase previously victimized women's vulnerability to future assaults.

In the present study, I looked at the broader relationship between childhood sexual abuse and various types of interpersonal victimization in adulthood. I specifically wanted to look at symptoms of dissociation as a mediator of this relationship. Building on the evidence found in neuroimaging studies that there is a distinct dissociative response to more sustained and severe trauma, I predicted that more severe experiences of childhood sexual abuse would lead to more pathological dissociation, and ultimately more severe victimization in adulthood. While the evidence is still inconsistent that pathological dissociation as opposed to peritraumatic dissociation increases the risk of sexual revictimization, some researchers have found that it did increase the risk for physical victimization (Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003). Therefore, I wanted to determine whether pathological dissociation mediates the relationship between childhood sexual abuse and both types of adult victimization (sexual and nonsexual).

Definitions

1. *Childhood sexual abuse* is defined as episodes of unwanted sexual contact or intercourse that occur before the age of 16. The age of 16 was chosen as the cut-

off for childhood victimization based on the chosen age-cut off in several previous studies (i.e., Arata, 2000; Noll et al., 2003; Risser, Hetzel-Riggin, Thomsen, & McCanne, 2006).

2. *Adult sexual victimization* is defined as episodes of unwanted sexual contact or intercourse that occur at age 16 or older.
3. *Adult victimization* includes those episodes defined under the definition of adult sexual victimization as well as episodes of non-sexual physical violence or threats of violence (e.g., a mugging at gunpoint).
4. *Dissociation* is defined as the inability to integrate one's thoughts, feelings, or experiences into present awareness (Bernstein & Putnam, 1986).

Hypotheses

Specifically, I predicted the following: (1) Individuals who have experienced either childhood sexual abuse or adult victimization will report higher levels of dissociation than those who have not experienced either, respectively. However, this effect will be strongest for those who have experienced childhood sexual abuse. (2) There will be a significant relationship between childhood sexual abuse and adult victimization such that individuals with a history of childhood sexual abuse will report more incidents of adult victimization than those without a history of childhood sexual abuse. (3) The relationship between childhood sexual abuse and adult victimization will be mediated by levels of dissociation, with levels of dissociation being positively correlated with the severity of childhood sexual abuse.

CHAPTER II
REVIEW OF LITERATURE

Childhood Sexual Abuse

Childhood sexual abuse refers to a range of inappropriate sexual behaviors that occur between an adult perpetrator and a child victim. These behaviors can include sexual intercourse, attempted intercourse, oral-genital contact, touching of the genitals, exposing the child to pornography, or using the child in pornography or for prostitution (Putnam, 2003). Childhood sexual abuse was not recognized as a widespread problem until the early 1970s, when issues of child abuse and rape were brought to the public's attention by those involved in child protection regulation and the feminist movement during this time (Cosentino & Collins, 2006). The famous 1962 paper "The Battered Child Syndrome" eventually led to the passing of the Child Abuse Prevention and Treatment Act in 1974 that required educators and other mandated reporters to report instances of child sexual abuse (Kempe, Silverman, Steele, Droegemuller, & Silver, 1962). This shift in social attitudes created a safer platform for victims to speak openly about their abuse (Cosentino & Collins, 2006).

According to Fourth National Incidence Study of Child Abuse and Neglect (NIS-4), an estimated 135,300 children were sexually abused in 2005, which translates to roughly two children per 1,000 in the United States (Sedlak, Mettenberg, Basena, & Peta, 2010). It is estimated that between 30% and 40% of girls and roughly 13% of boys will experience some form of childhood sexual abuse in their lifetime (World Health Organization, 2001). While childhood sexual abuse occurs consistently across all ethnic and social groups, other risk factors have been identified. Reports suggest that girls are

between two and three times more likely to be victims of childhood sexual abuse than boys, although boys are likely underrepresented in clinical samples (Fergusson et al., 1997; Finkelhor, 1993). The risk for childhood sexual abuse seems to increase with age, with the majority of victims being older than four and the largest age group being those older than 12 (Finkelhor, 1993). Children with physical disabilities are also at a larger risk, most likely due to their increased vulnerability, dependency, and communication difficulties (Westcott & Jones, 1999). Finally, family makeup can serve as a risk factor when there is an absence of one or both parents (Finkelhor, 1993) or when a stepfather is present (Mullen, Martin, Anderson, Romans, & Herbison, 1993).

Adverse Effects of Childhood Sexual Abuse

Researchers have identified a host of adverse effects that have been associated with childhood sexual abuse. Children reporting sexual abuse are more likely to suffer from a variety of mental health conditions including major depression, anxiety disorders, borderline personality disorder, conduct disorders, substance use disorders, eating disorders, dissociative disorders, and suicidal behaviors than those not reporting sexual abuse (Fergusson et al., 1997; Mullen et al., 1993; Nelson et al., 2002). Also, individuals with histories of childhood sexual abuse tend to have significant problems with impulse control, emotion regulation, somatization, cognitive distortions, and socialization problems (De Bellis, Keshavan, & Clark, 1999).

Childhood sexual abuse has also been found to impact normal sexual development. Noll et al. (2003) conducted a 10-yr prospective study of 77 sexually abused and 89 comparison women. They found that abused women as a whole were more preoccupied with sex, used less birth control, and were significantly younger than non-

abused women at the age of first consensual intercourse. Those who reported relatively less severe forms of abuse (e.g., abuse by a just one perpetrator, less physically violent abuse, or abuse over shorter durations) were the most likely to display high levels of sexual preoccupation. On the other hand, sexual aversion and avoidance were more common for those abused by a biological father.

Types of Childhood Trauma

Guided by her clinical work with child trauma survivors, Terr (1991) proposed there are two subtypes of childhood trauma. The first type (“Type I trauma”) refers to trauma that results from single unexpected events, such as a rape, a natural disaster, or a serious injury or accident. Terr noted that children who suffered from this type of “single blow” trauma exhibited certain symptoms that differentiated them from children experiencing more prolonged trauma. She observed that these children usually had full, detailed memories of the event. They also tended to re-experience the event through flashbacks and engage in cognitive reappraisals. In contrast, children who suffered prolonged periods of repeated trauma (“Type II trauma”)—often sexual abuse or incest—usually did not have a full memory for the events. These children were often in denial and engaged in dissociation and self-hypnosis in order to escape from the memories.

Other scholars first started using the term “complex trauma” (comparable to Terr’s “Type II trauma”) when they found that distressed victims of ongoing child abuse did not always neatly fit into the diagnosis of PTSD, which was first developed to fit the reactions of male victims exposed to war trauma (Finkelhor, 1984). Researchers found that individuals exposed to this “complex trauma” suffered from several unique psychological symptoms including depression, anxiety, self-hatred, self-destructive and

risk-taking behaviors, interpersonal and relational problems, somatic concerns, and higher rates of revictimization (Courtois, 2004).

Childhood Sexual Abuse as a Risk Factor for Revictimization

Researchers have found considerable evidence suggesting that childhood sexual abuse is a significant risk factor for adult sexual victimization. Classen, Gronskey-Palesh, and Aggarawal (2005) reviewed over 90 empirical studies on the topic and found that while the prevalence of adult sexual victimization is high for anyone previously victimized, individuals who experience sexual abuse in childhood are the most at risk. Coid et al. (2001) interviewed 1,207 women seeking primary care services in London and found that women with a history of childhood sexual abuse were two to three times more likely to be sexually assaulted in adulthood than those without a history of childhood sexual abuse. Nelson and colleagues (2002) showed a relationship between childhood sexual abuse and adult sexual victimization in a study of 1,991 twin pairs after controlling for environmental risk factors. A large number of the studies reviewed were cross-sectional and relied on retrospective reports of abuse, so it is not possible to conclude that childhood sexual abuse *causes* adult sexual victimization. However, some prospective studies do exist to show that childhood sexual abuse predicts adult sexual victimization. For example, in a prospective study of 323 college women, researchers found that women sexually abused in childhood were more likely to be sexually victimized in some way over a 10-week academic period than those not sexually abused in childhood (Sandberg, Matorin, & Lynn, 1999). In a similar study, Gidycz, Hanson, and Layman (1995) found a significant relationship between childhood sexual abuse and adult sexual victimization when they followed up with 178 college women at three time

periods after an initial assessment.

Mediators of the Relationship between childhood sexual abuse and adult sexual victimization

The Classen et al. (2005) review also highlights several mediators to the relationship between childhood sexual abuse and adult sexual victimization, including the recency and severity of abuse, number of traumas, and accompanying physical abuse. In a longitudinal study, Himelein (1995) found that the more recent the childhood sexual abuse, the more accurate it was at predicting revictimization. She found a relationship between childhood sexual abuse and adult sexual victimization prior to college, but not between childhood sexual abuse and adult sexual victimization in college. She also found a relationship between pre-college *adult* sexual victimization and revictimization that occurred while in college. In other words, while sexual abuse in childhood may have been too far removed to predict sexual revictimization in college, sexual abuse that occurred in early adulthood was still an accurate predictor. Similarly, Humphrey and White (2000) found that childhood sexual abuse predicted adolescent sexual abuse, which then predicted sexual assault in college. In a longitudinal study of adolescent mothers, Collins (1998) found that women who reported being raped within the last year were more likely than those not raped to be sexually victimized again within the following year.

Several investigators have shown that the severity of childhood sexual abuse predicts sexual revictimization (Arata, 1999; Collins, 1998; Fergusson et al., 1997; Fleming, Mullen, Sibthorpe, & Bammer, 1999; Koverola et al., 1996; Lau & Kristensen, 2010; Nelson et al., 2002). The definition of what qualifies childhood sexual abuse as

severe has varied across studies. Some have suggested that it is the nature of sexual contact that distinguishes women who are revictimized from those who are not. For example, many researchers have found that more invasive sexual contact represents a greater risk for revictimization (Arata, 2000; Fergusson et al., 1997; Fleming et al., 1999; Himelein, Vogel, & Wachowiak, 1994; Humphrey & White, 2000; Koverola et al., 1996; Nelson et al., 2002). Himelein et al. (1994) found that while non-intercourse molestation during childhood doubled the risk of date rape in pre-college women, attempted rape or rape in childhood tripled the risk. Others have found that those most at risk for adult sexual victimization are those who experience frequent sexual abuse (Koverola et al., 1996) for a long period of time (Arata, 2000). Finally, some have speculated that a victim's relationship to the perpetrator may impact the risk for revictimization. In comparing incestuous abuse with peer and non-familial abuse, Kessler and Bieschke (1999) found that sexual abuse within the immediate family was associated with the highest risk for repeated sexual victimization.

It also appears that multiple traumatic experiences including those outside of sexual abuse increase the risk of sexual revictimization. Jankowski, Leitenberg, Henning, and Coffey (2002) found an additive effect for multiple forms of abuse. The chances of being assaulted sexually after the age 16 almost doubled for those who had been sexually abused in childhood, and the risk increased with each additional trauma. Moeller, Bachmann, and Moeller (1993) observed that adult sexual victimization was related to all types of trauma in childhood. Those who experienced emotional, physical, and sexual abuse during childhood were at the most risk for revictimization (33.3%), followed by those who suffered two types of abuse (21.9%), and those who only suffered one type of

abuse (5.6%). Overall, the literature suggests that physical abuse that occurs in combination with sexual abuse puts a child at an increased risk for later sexual revictimization (Arata & Lindman, 2002; Desai, Arias, Thompson, & Basile, 2002; Merrill, Newell, Thomsen, Gold, Milner, Koss, et al., 1999; Ryan, Kilmer, Cauce, & Watanabe, 2000).

Arata Mediation Model. Arata (2000) recognized the need for a more integrative theory tested by a single sample that addressed both the effects of child abuse and the risk of adult sexual victimization. Based on the prior research of Finkelhor and Browne (1985) and Koss and Dinero (1989), Arata (2000) proposed a model suggesting that selected characteristics of childhood sexual abuse predict self-blame and certain post-traumatic symptoms that then lead to an increase in consensual sex behavior. It is this increase in sexual behavior, she reasons, that then leads to increased risk for revictimization.

To test her model, Arata (2000) sampled 221 female college students who had reported a history of childhood sexual abuse. The women completed surveys about their sexual abuse history, PTSD symptoms, and consensual sex behavior. Arata (2000) found that women who reported adult sexual victimization experienced abuse in childhood that lasted longer and involved more physical severity than those not revictimized. Repeat victims were also more likely to blame themselves and engaged in more consensual sexual activity than child-only victims. Sexual revictimization was positively correlated with the duration and severity of abuse, the amount of force used, self-blame, PTSD symptoms, and number of sex partners. While the results did not properly fit the hypothesized model, the model was revised to suggest that the mediating variables were

best predicted by the physical brutality of abuse. The final model revealed that the link between adult sexual victimization and childhood sexual abuse (in terms of physical severity) was mediated by self-blame, PTSD symptoms, and consensual sex behavior.

Non-sexual Revictimization

While most of the literature on revictimization focuses exclusively on childhood sexual abuse as a predictor of sexual revictimization, there is also evidence to suggest that childhood sexual abuse also puts an individual at a greater risk for non-sexual victimization. In their study of 648 women, Messman-Moore and Long (2000) found that victims of childhood sexual abuse were not only more likely than non-victims to experience sexual abuse in adulthood, but the victims were also more likely to experience physical abuse and psychological maltreatment. Barnes, Noll, Putnam, and Trickett (2009) conducted an 18-year longitudinal study that followed a group of 90 women with a confirmed history of childhood sexual abuse. They found that compared with a comparison group of non-abused women, the women with childhood sexual abuse histories were nearly twice as likely to experience both sexual and physical victimization in adulthood. In addition, Coid et al. (2001) found that sexual abuse in childhood put individuals at a greater risk for both sexual and physical revictimization.

PTSD Symptoms and Revictimization

Researchers have repeatedly suggested that posttraumatic stress disorder (PTSD) symptoms, among other things, mediate the relationship between childhood sexual abuse and adult sexual victimization (Arata 1999; Banyard et al., 2001; Koverola et al., 1996). However, not all victims of childhood sexual abuse who experience PTSD symptoms are revictimized as adults, and there is some literature that does not support this mediation

pattern (Classen, Nevo, Koopman, Nevill-Manning, Gore-Felton, Rose, & Spiegel, 2002). Some researchers have looked at the symptom of dissociation in particular as a mediator of the relationship between childhood sexual abuse and adult sexual victimization. Dissociation as a psychological construct can be defined as the inability to integrate one's thoughts, feelings, or experiences into present awareness (Bernstein & Putnam, 1986). Chu (1992) proposed that when in a dissociative state, individuals are more inhibited in terms of their awareness of danger and therefore more vulnerable to victimization. Support for this finding has been mixed, and it seems that the timing of the dissociative symptoms is crucial to consider. For example, in their retrospective analysis, Kessler and Bieschke (1999) found that dissociation was not a significant predictor of adult sexual victimization when they measured participants' current levels of dissociative symptoms. Sandberg, Matorin, and Lynn (1999) also did not find support for current levels of dissociation increasing the risk of revictimization. Noll et al. (2003), however, found that peritraumatic dissociation (i.e., dissociation that happens during initial trauma) was positively correlated with sexual revictimization, while pathological dissociation (i.e. dissociation that persists long after the initial trauma) increased the risk of later physical victimization.

Wilson, Calhoun, and Bernat (1999) assessed how long it took non-victimized, singly victimized, and revictimized women to recognize risk in an audiotaped dating situation. They found that overall revictimized women took longer to perceive risk than did the non-victimized or singly victimized women. However, they also found that revictimized women with higher levels of hyperarousal and re-experiencing symptoms of PTSD took less time to perceive risk than those with lower levels of these symptoms. The

authors suggested it was the hyperarousal symptoms that made those women particularly vigilant and responsive to threat cues. It may be that different symptom combinations in PTSD result in different vulnerabilities to revictimization, although the literature has not been consistent in identifying which symptoms most often lead to revictimization.

Adding to the complexity, in their study examining the effects of PTSD symptoms on revictimization, Risser et al. (2006) found that individuals with high levels of hyperarousal were more vulnerable to revictimization, thus contradicting the conclusion drawn by Wilson et al. (1999). Also, as previously noted, several researchers have suggested that the trauma associated with more pervasive, interpersonal trauma looks quite different than that associated with single-event disasters (Courtois, 2004; Terr, 1991), which may account for differences in symptom presentations. To better understand these findings, it is useful to take a closer look at the symptoms and varieties of PTSD.

PTSD and the DSM

The DSM-IV-TR diagnostic criteria for PTSD necessitated exposure to a traumatic event that caused “fear, helplessness, or horror” as well as symptoms from three symptom clusters—intrusive recollection, avoidant/numbing, and hyper-arousal (American Psychiatric Association, 2000). In order to be diagnosed with PTSD, a person was required to exhibit at least one symptom from the intrusive recollection cluster (e.g., recurrent dreams, re-experiencing the event), three from the avoidant/numbing cluster (e.g., inability to recall information about the trauma, estrangement from others), and two from the hyper-arousal cluster (e.g., inability to fall or stay asleep, hyper-vigilance).

Under this definition, there were a myriad of symptoms that an individual with

PTSD may possess, of which represented a wide spectrum of possible presentations. For example, an individual could be diagnosed with PTSD for experiencing mostly dissociative-like symptoms from the avoidant/numbing cluster but very few from the hyper-arousal or intrusive recollection cluster. This all-encompassing description of PTSD made it difficult to interpret research findings from studies that do not address the large variance in symptom presentations, or when the measures of PTSD reflect an imbalance of attention paid to different symptom clusters.

The newly released DSM-5 removed PTSD and acute stress disorder from the anxiety disorders section and moved them to a new classification of “trauma and stressor-related disorders” (American Psychiatric Association, 2013). Also, the three symptom clusters of the DSM-IV-TR became four clusters in new manual—intrusion, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity. Another notable change was that the criterion specifying there must have been “fear, helplessness, or horror” immediately after the traumatic incident was removed. Of particular relevance to the topic at hand, the DSM-5 added a new dissociate subtype of PTSD for individuals who experience additional symptoms of depersonalization and derealization. This was based on over a decade of research in search of evidence for this subtype, which could possibly explain why not all victims of childhood sexual abuse are at the same risk for revictimization.

Evidence for a Dissociative Subtype of PTSD

Bremner (1999) first proposed the subtype theory of PTSD by noting that there seemed to be two distinct types of the acute traumatic response that point to unique paths to chronic posttraumatic symptoms. Several researchers have found support for a

dissociative subtype in combat-related PTSD (Bremner, Southwick, Brett, Fontana, Rosenheck, & Charney, 1992; Putnam, Carlson, Ross, Anderson, Clark, Torem, et al., 1996; Waelde, Silvern, & Fairbank, 2005). A taxon (subtype) of highly dissociative individuals was discovered through complex taxometric analyses (Waelde et al., 2005). The members of the dissociative taxon showed more severe PTSD symptoms and were more often diagnosed with PTSD than were non-members of the taxon.

Neuroimaging studies have also revealed the existence of two types of responses that persist in individuals with chronic PTSD (Frewen, 2006; Lanius, Bluhm, Lanius, & Pain, 2006). These responses show distinct displays of neural activation upon exposure to cues that serve as reminders of traumatic events. These patterns of activation are not completely distinct in that many individuals show both patterns. However, scientists have found that people with more prolonged periods of trauma such as chronic child abuse show more enduring symptoms of dissociation than do those with a history of acute trauma.

In their review of emotion modulation in PTSD, Lanius et al. (2010) summarized the research that points to a dissociative subtype, which they claim is a result of an overmodulation of affect. Overmodulation refers to restricting unwanted emotional content. Individuals with this subtype of PTSD show very high levels of activation in parts of the brain involved in emotional regulation, such as the dorsal anterior cingulate cortex and the medial prefrontal cortex. In contrast, undermodulation of affect is represented not by dissociation but by symptoms of re-experiencing and hyperarousal. These individuals show abnormally low activation in the brain regions related to emotion regulation.

These opposite patterns have been demonstrated in studies using functional MRI and script-driven imagery. In one study, patients were asked to write a description of their trauma that would be read to them while in an fMRI machine (Keane, 2008). The patients were told to recall the trauma as intensely as possible during “trauma scripts” and directly afterward while the fMRI measured their brains’ use of oxygen. The results showed a range of psychobiological responses. Roughly 70% of the patients showed an increased heart rate and reported “re-experiencing” the target event while recalling the trauma. The other 30% of patients showed a dissociative response characterized by experiences of depersonalization and derealization. These patients showed no increase in heart rate. Opposite patterns of brain activation in regions linked with arousal modulation and emotion regulation were observed. As noted, individuals with PTSD may show both response patterns, however those with sustained traumatic experiences tend to exhibit more frequent dissociative symptoms than those with single episodes of trauma (Lanius et al., 2010).

Theoretical Frameworks

In attempts to explain possible mechanisms behind the trends of revictimization, scholars have proposed several theories. Some have applied social learning theory (Bandura, 1977) to sexual abuse to describe how the abuse may be cyclical. Wheeler and Berliner (1988) proposed that victims of childhood sexual abuse may internalize inappropriate sexual behaviors and experiences modeled and reinforced by the perpetrator of the abuse. These learned behaviors and attitudes might then influence an abused child’s vulnerability to adult victimization. It has also been proposed that sex-role stereotyping may contribute to the view that victimization is just “part of being a woman”

(Walker & Browne, 1985). This creates an atmosphere where revictimization is more likely to occur because the abuse is seen as normal and expected.

Other theories proposed to explain revictimization relate to the relationship choices of women who have experienced childhood sexual abuse. It is thought that women who have been sexually abused as children may learn to associate sex with pain and punishment, therefore not viewing additional sexual victimization as unusual or unacceptable (Messman & Long, 1996). Some researchers have noted a tendency for these women to over-sexualize all relationships with men, to repeatedly become involved in relationships with abusive men, and even choosing men who resemble their past abusers (Jehu & Gazan, 1983; Tsai & Wagner, 1978).

Learned helplessness (Seligman, 1975) has also been proposed as at least a partial explanation for revictimization. Walker and Browne (1985) suggested that women who have been subject to multiple physical, sexual, and psychological assaults that were non-contingent on their behavior tend to perceive fewer and fewer opportunities to escape the abuse. Their focus becomes on simply reducing injury and coping with the pain and fear of the abuse experience. As a result, these women may fail to recognize viable escape options that would be clearly visible to those not influenced by the learned helplessness.

Traumagenic Dynamics Model

Finkelhor and Browne (1985) offered a “traumagenic dynamics model” of childhood sexual abuse. Although this model was not specifically developed to explain revictimization, they elaborated on both the consequences and behavioral manifestations of each dynamic, which may shed light onto why childhood sexual abuse so often leads to revictimization. They specified four dynamics—traumatic sexualization, betrayal,

stigmatization, and powerlessness. They proposed that each dynamic works to distort a child's self-concept and limit her emotional capacities.

The first dynamic—traumatic sexualization—refers to the inappropriate ways in which a child's sexuality may develop in response to sexual abuse. Children may be rewarded for sexual behavior, thus learning that sex can be used to get their needs met. They may also be conditioned to associate sexual activity with negative emotions or memories. Common behavioral manifestations of traumatic sexualization include sexual preoccupations and compulsive sexual behaviors, promiscuity, prostitution, sexual dysfunctions (e.g., difficulty in arousal or orgasm), and avoidance or fear of sexual intimacy. Next, the dynamic of betrayal refers to when children discover that a person whom they once depended on has hurt them in some way, or wishes to hurt them. This may not be limited to the just the perpetrator. It could also apply to mothers who were unable or unwilling to protect their children. This can lead to depression, social isolation, extreme dependency, an impaired ability to judge others' trustworthiness, aggression or delinquency, allowing their own children to be victimized, and an increased vulnerability to subsequent exploitation. The third dynamic is stigmatization and refers to the damaging messages children receive about themselves (e.g., worthlessness, shame, guilt) as a result of their abuse. Even when not outright blamed for the abuse, children may still blame themselves and search for reasons why such terrible things have happened to them. Consequences of stigmatization include low self-esteem, guilt, shame, social isolation, substance abuse, delinquency, self-harming behaviors, and suicide. Finally, the dynamic of powerlessness refers to when a child's independence is threatened, or when there is a direct threat of injury. This can lead to heightened anxiety and fear, lowered self-efficacy,

somatic complaints, eating and/or sleeping disorders, nightmares, depression, dissociation, and aggressive behavior.

According to Finkelhor (1987), one of the strengths of this model is that it allows for childhood sexual abuse to be viewed as a process rather than a single event. As previously discussed, childhood sexual abuse is often conceptualized as a “complex trauma” because it often takes place over the course of many months or years, as opposed to single episode traumatic events such as a car accident or natural disaster. Some clinicians have come to believe that it is often the process of disclosure that is more traumatic to some children than the abuse itself, especially when it is not taken seriously (Finkelhor, 1987). This betrayal response may be even more detrimental to an individual if it existed in her family before the abuse even began (i.e., the child never felt as if she could trust her parent). For this reason, the dynamics described in this model are to be understood as existing before, during, and after the actual abuse experience.

An Ecological Framework

In their empirical review of the psychological precursors to sexual revictimization, Messman-Moore and Long (2003) noted the lack of a commonly accepted theoretical framework. Even the detailed traumagenic dynamics model falls short at explaining trends of revictimization. Messman-Moore and Long (2003) suggested using an ecological model to understand various factors that contribute to the relationship between childhood sexual abuse and adult sexual victimization. This ecological model was first discussed with regards to revictimization by Grauerholz (2000) and is based on Belsky’s (1980) adaptation of the Bronfenbrenner (1977, 1979) model. The ecological model defines four levels of factors that may contribute to an

individual's experience— ontogenic development, the microsystem, the exosystem, and the macrosystem.

Ontogenic development refers to how an individual's prior experiences impact her behavior in the current situation. When we use this model to understand revictimization the "current situation" refers to that adult victimization experience. Ontogenic development factors may include past experiences of abuse, environmental factors related to family or peer relations, or pre-existing issues such as mental or physical illness. For example, developmentally disabled adults may be more likely to be revictimized due to the vulnerable state they are in due to their condition.

The next level—the microsystem—is the immediate context in which the revictimization occurs. Within this level there are two mechanisms that may be used to explain revictimization. The first mechanism refers to an individual's overall exposure risk. This may be influenced by the tendency of a woman to engage in risky behaviors that increase the level of contact she has with perpetrators. For example, a woman who frequently engages in sexual contact with strangers while under the influence of alcohol is at a higher risk of being victimized. The second mechanism relates to the psychological vulnerability of a woman which then increases the chances a perpetrator may take advantage. This can happen when a woman dissociates and is therefore less reactive to her environment or when she is under the influence of substances. It can also refer to perceptions made by the perpetrator about the victim that may or not be accurate. For example, a rapist may make the assumption that a woman who appears timid and shy is an "easy target."

The exosystem is the third level and involves social structures that may influence the current abuse situation. This may include such factors as socioeconomic status, race, or the neighborhood in which an individual lives. Women of low socioeconomic status may not have access to quality healthcare resources that may then increase their chances of being revictimized. For example, a woman who has a history of severe abuse in childhood who is not able to afford ongoing supportive psychotherapy may be at a disadvantage when it comes to avoiding many of the risk-enhancing behaviors described as part of the microsystem level.

Finally, the macrosystem refers to overarching cultural values and norms that may influence revictimization. This may include a culture's tendency to blame the victim or strict gender roles. A woman who is taught early on that she was at fault for the abuse she experienced may begin to accept it as the norm and be more vulnerable to future abuse. Similarly, a woman who has been taught that men are superior to women may be less likely to fight back when in an abusive situation.

This ecological model is one of the most encompassing models proposed to date to explain revictimization. The advantage to this model is that it allows for the amalgamation of research from a variety of disciplines (e.g., sociology, psychology, public health) while addressing a wide scope of factors involved in the course of revictimization.

The Current Study

The current research looks at revictimization from the perspective of this ecological model, focusing specifically on the ontogenic development and microsystem levels. Ontogenic development factors are examined by looking at the characteristics of

individuals' sexual abuse experiences in childhood, while the microsystem is studied by looking at how symptoms of dissociation may increase vulnerability to later victimization experiences.

CHAPTER III
METHODOLOGY

Participants

Two hundred and thirty-eight adult female participants over the age of 18 were recruited from two sources—the CSUN Psychology Department’s human subject pool ($N = 200$) and online through a research recruitment website ($N = 38$). Individuals from the CSUN subject pool were recruited according to the standard SONA Systems procedures and were awarded course credit for their participation. Participants recruited online were recruited through Psychological Research on the Net (PRN; www.psych.hanover.edu/research/exponnet.com), a website that has been in operation since 1996 with the purpose of promoting online psychological research. All participants were given the option of entering their names into a random drawing for the chance to win a \$50 Visa Gift Card.

Participants ranged in age from 18 to 66, with a mean age of 21.5 ($SD = 6.48$). One hundred and one (42.4%) identified as Hispanic/Latino, 66 (27.7%) as White/Caucasian, 35 (14.7%) as Asian/Pacific Islander, and 16 (6.7%) as Black/African American. Twenty participants (8.4%) declined to state their race. The majority of participants were single and had never been married (87.4%). Most had completed high school (53.7%) or some college (48.3%).

Procedure

All participants were instructed to click on a link to questionnaires hosted on Qualtrics, a survey hosting website. They were first asked to read the Implied Consent form that stated that some of the questions asked would be of a sensitive nature and that they were free to discontinue participation at any time. They were also informed that all

of their responses would be anonymous. They were then instructed to click “yes” to indicate they had read the form and agreed to participate.

Participants then completed the two questionnaires (The PSVS and the CES) that had been counter-balanced to vary the order in which participants completed each survey. They then answered four demographic questions that included the following—age, race/ethnicity, marital status, and highest level of education completed. After completing the questionnaires, participants were given the option of providing their email address if they wished to be entered into the drawing for the chance to win a \$50 Visa gift card. Finally, participants were debriefed via a final screen on the Qualtrics website. They were provided with a list of therapeutic resources, along with contact information for the researcher and the faculty advisor.

Approval for this study was granted by CSUN’s Standing Advisory Committee for the Protection of Human Subjects (SACPHS). Due to the anonymous online format of data collection, the researcher was not mandated to report the childhood sexual abuse experiences revealed by participants.

Measures

The Physical & Sexual Victimization Survey (PSVS). The purpose of The PSVS was to collect information about victimization experiences in both childhood and adulthood. This survey was created by the researcher and consisted of eight questions about various forms of sexual and physical victimization. The first two questions inquired about the participants’ experiences with episodes of sexual abuse in childhood. They were first asked to indicate if they had ever experienced the given scenario (yes, no, maybe/unsure). If they answered “yes” or “maybe/unsure,” they were then asked to

provide information on how often the situation occurred (once, twice, or more than three times), how old they were when it occurred, and their relationship to the perpetrator (an immediate family member, an extended family member, someone she knows but who is not a family member, or a stranger). The next six items referred to incidents of adult victimization and were formatted in a similar manner to the questions about childhood victimization, the difference being that participants were only asked to provide details about the frequency of each scenario. Items on this survey were taken from The Sexual and Physical Abuse Questionnaire (SPAQ; Kooiman, Ouwehand, & ter Kuile, 2002) and the Trauma History Questionnaire (THQ; Green, 1996).

For the purposes of this study, childhood sexual abuse was defined as any episodes of unwanted sexual contact or intercourse that occur before the age of 16. Adult victimization included episodes of victimization that occur at age 16 or older. These may include unwanted sexual contact or intercourse, physical abuse (i.e., physical beatings or attacks with a weapon), or incidents of crime that occur directly between an individual and a perpetrator such as a robbery or a mugging. The age of 16 was chosen as the cut-off for childhood victimization based on the chosen age-cut off in several previous studies (i.e. Arata, 2000; Noll et al., 2003; Risser et al., 2006).

The Curious Experiences Survey (CES; Goldberg, 1999). The CES is a 31-item self-report questionnaire that measures the frequency of individuals' dissociative experiences. The CES was developed as a revised version of the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986) in an effort to create a simpler, more user-friendly measure of dissociation to be used with both clinical and non-clinical samples. Revisions reflected in the CES include a 5-point Likert response scale as

opposed to the original 11-point percentage scale (0 – 100%) and more concise, less redundant wording within the statements. Participants were asked to rate each statement on a 5-point scale with regards to how frequently they had experienced the scenario described in the statement (1 = “This never happens to me.” → 5 = “This is almost always happening to me.”). There are three subscales—Depersonalization, Absorption, and Amnesia. When the CES was tested on a large ($N = 775$) community sample the reliability estimates were quite high, with a .90 alpha for the total scale and .88, .75, and .69 for the subscales of Depersonalization, Absorption, and Amnesia respectively (Goldberg, 1999).

CHAPTER IV

RESULTS

Descriptive analyses were conducted using SPSS 22.0 for Windows. Structural equation modeling was conducted using EQS version 6.1 for Windows.

Descriptive Statistics

Overall, 19.7% of participants expressed having experienced some form of childhood sexual abuse (5.9% “maybe”), with 31% of these participants having experienced forced sexual intercourse in addition to sexual touch.

The average ages of onset for episodes of childhood sexual abuse were 9.02 ($SD = 3.64$) and 11.11 ($SD = 4.20$) for sexual touch and intercourse, respectively. In terms of frequency of childhood sexual abuse, there was a bimodal distribution with the majority of participants having experienced the abuse only once or more than three times.

Overall, 28.2% of participants expressed having experienced some form of adult victimization (4.2% “maybe”). Among these participants, 75.6% experienced physical victimization, 55.1% experienced sexual victimization, and 30.8% experienced both physical and sexual victimization.

Chi-square Analyses

One hundred and thirty-one participants (55.0% of total) had experienced neither childhood sexual abuse nor adult victimization whereas 20 participants (8.4%) reported experiencing both childhood sexual abuse and adult victimization (see Table 1). Twenty-two (9.2%) had experienced childhood sexual abuse but not adult victimization, and 42 (17.6%) had experienced adult victimization but not childhood sexual abuse. Frequencies

and percentages for those who answered “maybe” to questions regarding childhood and adult victimization can also be seen in Table 1.

Pearson’s chi-squared test of independence was conducted to determine if the variables of childhood sexual abuse and adult victimization were independent of each other (i.e. Does the presence of one form of victimization depend on the presence of the other?). The test revealed that the two variables were not independent, $\chi^2(4, N = 238) = 15.79, p = .003$, Cramer’s $V = .182$. In other words, it was found that the having experienced adult victimization was in some way dependent on having experienced childhood sexual abuse.

Table 1
Frequencies and Percentages for Each Category of the Childhood Sexual Abuse and Adult Victimization Variables

		Adult Victimization			
		No	Maybe	Yes	Total
Childhood Sexual Abuse	No	131 (55.0%)	4 (1.7%)	42 (17.6%)	177 (74.4%)
	Maybe	8 (3.4%)	1 (0.4%)	5 (2.1%)	14 (5.9%)
	Yes	22 (9.2%)	5 (2.1%)	20 (8.4%)	47 (19.7%)
	Total	161 (67.6%)	10 (4.2%)	67 (28.2%)	238 (100%)

One-way between-subjects ANOVA

To determine whether a difference existed in the frequency of adult victimization experiences among those who did and did not report childhood sexual abuse, a one-way between subjects ANOVA was conducted with the presence of childhood sexual abuse as the independent variable and frequency of adult victimization experiences as the dependent variable. The analyses showed a significant effect, $F(2, 237) = 14.93, p < .001$, partial $\eta^2 = .113$ (See Figure 1). Those who reported childhood sexual abuse ($M = 2.64, SD = 3.78$) reported significantly more experiences of adult victimization than those

who did not report childhood sexual abuse ($M = 0.64$, $SD = 1.52$). Participants who responded with “maybe” to questions regarding childhood sexual abuse ($M = 1.43$, $SD = 3.03$) experienced fewer adult victimization experiences than those who reported “yes” and more than those who reported “no.” However, the differences in “maybe vs. “yes” and “maybe” vs. “no” were not significant.

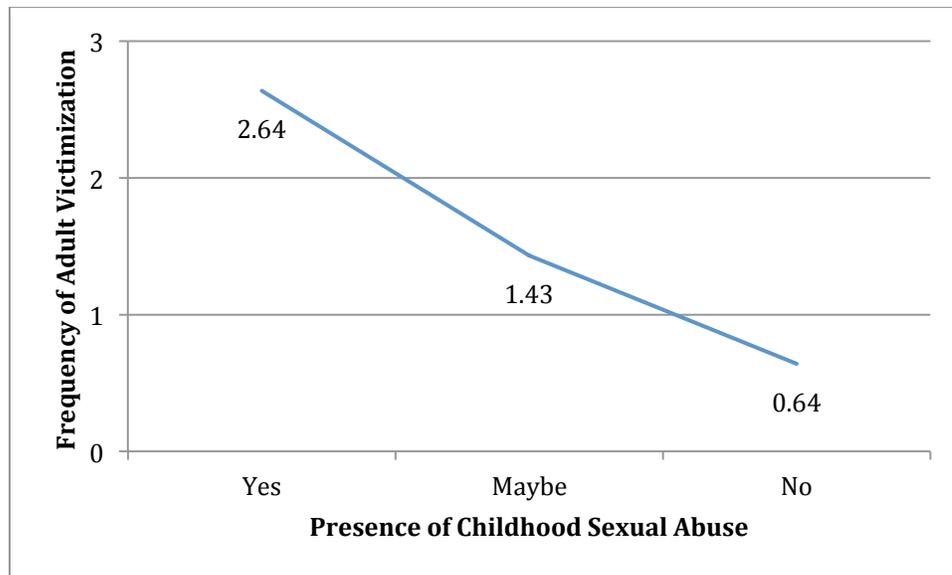


Figure 1. Mean Adult Victimization Frequency for Individuals With and Without a History of Childhood Sexual Abuse

Two-way between-subjects ANOVA

Next, a two-way between-subjects ANOVA was conducted with the presence of childhood sexual abuse and adult victimization as the independent variables and the total score on the Curious Experiences Survey as the dependent variable. The analyses showed significant main effects for childhood sexual abuse, $F(2, 224) = 8.92$, $p < .001$, partial $\eta^2 = .077$ and adult victimization, $F(2, 224) = 4.13$, $p < .05$, partial $\eta^2 = .037$ (See Figure 2). Participants who experienced childhood sexual abuse ($M = 67.78$, $SD = 24.48$) scored significantly higher on the CES than did those who did not experience childhood sexual abuse ($M = 54.39$, $SD = 15.42$). Participants who responded with “maybe” to questions

regarding childhood sexual abuse ($M = 64.07$, $SD = 15.41$) scored slightly lower on the CES than those who reported “yes” and slightly higher than those who reported “no.”

In addition, participants who experienced adult victimization ($M = 65.93$, $SD = 23.35$) scored significantly higher on the CES than did those who did not experience adult victimization ($M = 53.65$, $SD = 13.96$). Participants who responded with “maybe” to questions regarding adult victimization ($M = 71.70$, $SD = 24.33$) scored slightly higher on the CES than those who reported “yes” and significantly higher than those who reported “no.”

Despite the significant main effects, there was not a significant interaction between the variables of childhood sexual abuse and adult victimization, $p > .05$.

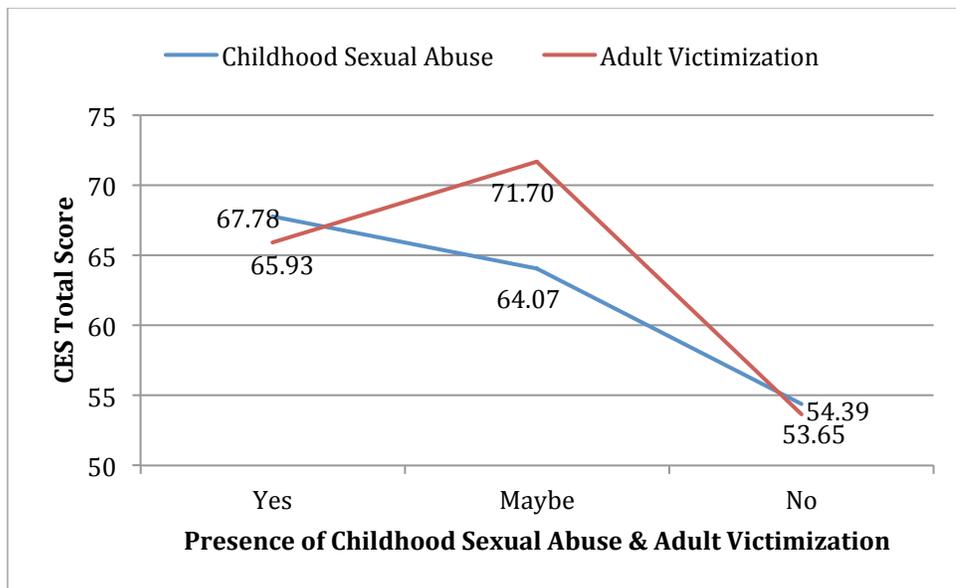


Figure 2. Mean Scores on the CES for Individuals With and Without a History of Childhood Sexual Abuse and Adult Victimization

Structural Equation Modeling

In order to examine the combined effects of a variety of indicators, structural equation modeling was used to test the hypothesized model of revictimization

represented in Figure 3 below.

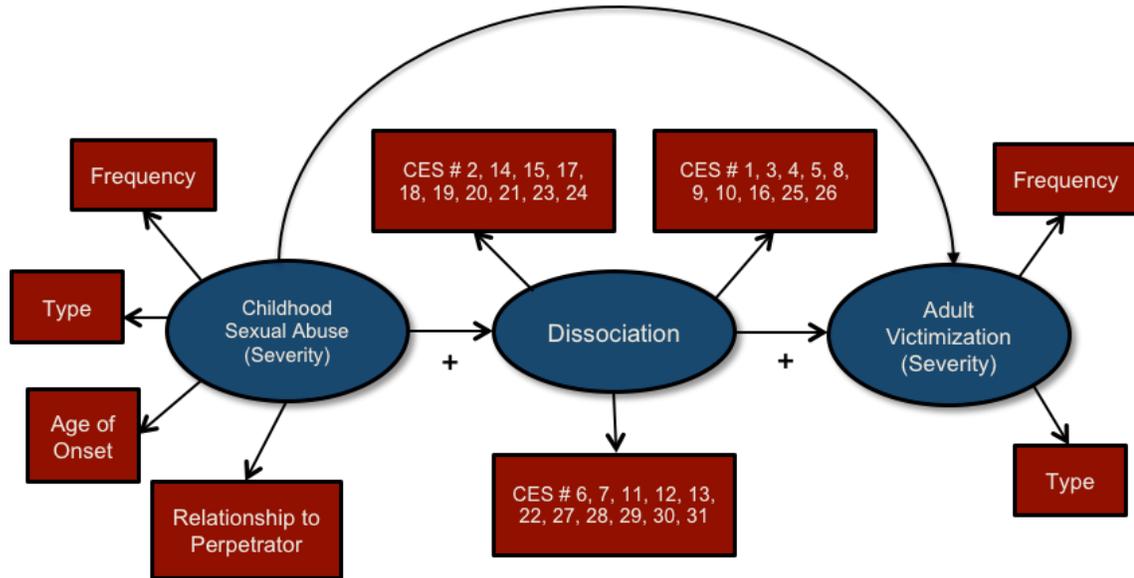


Figure 3. Hypothesized Model of Revictimization

The advantage to using structural equation modeling (SEM) is that it allows for the study of numerous variables—either observed or latent—at once while also accounting for measurement error. In the above model, latent factors are represented as circles/ovals and observed or measured variables are represented as squares/rectangles.

The indicators of the latent factor of childhood sexual abuse were chosen based on previous research to represent severity, and were measured by the Physical & Sexual Abuse Survey (PSVS). Risser et al. (2006) found that the type of abuse (based on level of physical contact) and frequency of abuse were among a set of variables that were highly correlated for childhood sexual abuse and seemed to accurately reflect severity. Other researchers have suggested that age of onset (i.e., younger age of onset) and relationship to perpetrator (i.e., immediate family members) are also indicative of severity (McClellan, Adams, Douglas, McCurry, & Storck, 1995; Kessler & Bieschke, 1999).

The possible scores for the indicator of type ranged from 0-2 (0 = no childhood

sexual abuse, 1 = sexual touch, 2 = intercourse). The possible scores for the frequency indicator ranged from 0-6 and were found by adding the responses given for the frequency for each of the questions pertaining to childhood sexual abuse (0 = never, 1 = once, 2 = twice, 3 = three times or more). For the age of onset indicator, each participant was assigned a score from 0-5 based on the earliest age they indicated having experienced sexual abuse (0 = no sexual abuse, 1 = ages 13-15, 2 = ages 10-12, 3 = ages 7-9, 4 = ages 4-6, 5 = ages 0-3). Finally, for the relationship to perpetrator indicator, participants were assigned a score of 0-4 based on their stated relationship to the perpetrator of their abuse, taking the highest coded value for either of the questions pertaining to childhood sexual abuse (0 = no sexual abuse, 1 = stranger, 2 = known, not family, 3 = extended family, 4 = immediate family).

To form the latent factor of Dissociation, item parceling was used to divide 31 items of the Curious Experiences Survey (CES) into three composite “parcels” to serve as this factor’s measured indicators. These parcels were loosely based on the three defined subscales of the CES (e.g., Depersonalization, Amnesia, and Absorption). This method was used in an effort to preserve the SEM model while also incorporating all of the items on the CES, which was not possible when relying on the previously defined subscales. The first parcel included items 2, 14, 15, 17, 18, 19, 20, 21, 23, and 24 and was based on the Absorption subscale. The second parcel included items 1, 3, 4, 5, 8, 9, 10, 16, 25, and 26 and based on the Amnesia subscale. The third parcel included items 6, 7, 11, 12, 13, 22, 27, 28, 29, 30 and 31 and was based on the Depersonalization subscale.

Finally, the indicators of type and frequency defined the adult victimization latent factor. The possible scores for the type indicator range from 0-3 (0 = no adult

victimization, 1 = physical victimization, 2 = sexual touch, 3 = sexual intercourse). For participants with more than one type of victimization, the “most severe” or highest coded response was chosen. The possible scores for the frequency indicator range from 0-16, resulting from the addition of each of the responses provided for the frequency portion of each of the questions pertaining to adult victimization, with any response for question #8 counting as “1.”

Preliminary runs in EQS found that the indicators of “age of onset” and “relationship to perpetrator” for the Childhood Sexual Abuse latent factor did not hold up, so they were dropped from the model.

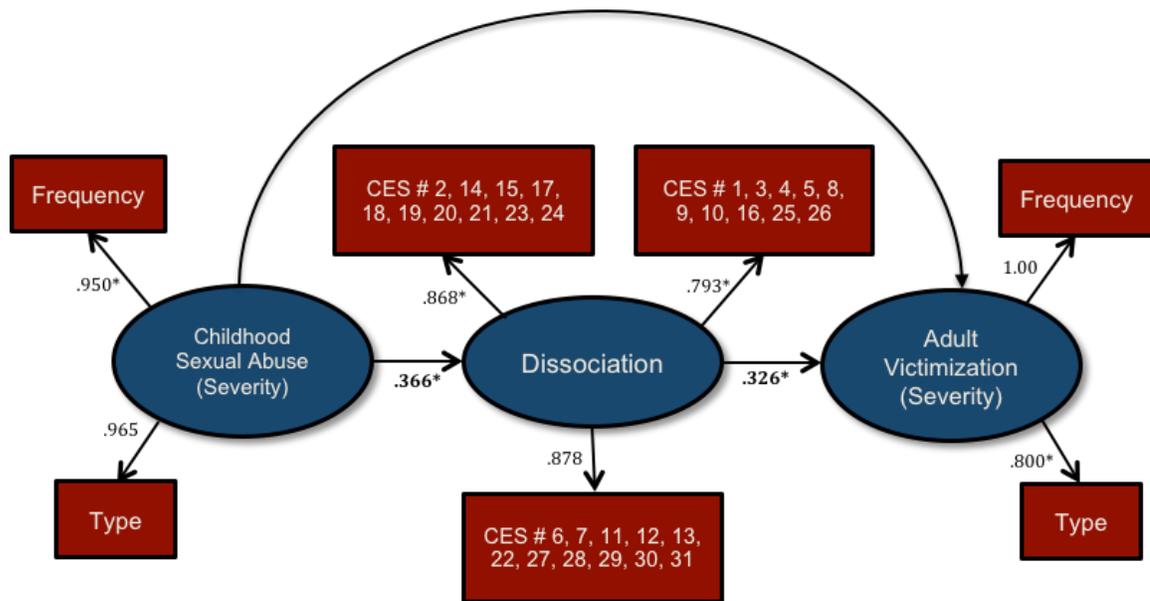
The fit of the revised model was tested using maximum likelihood estimation. While the chi square test of model fit indicated a poor fit for the data, $\chi^2 (11, N = 238) = 12.147, p = .353$, this test usually indicates a poor fit for large models. The comparative fit index (CFI) value of .999 indicated a good fit, as did the RMSEA value of .021. The covariance matrix along with the means and standard deviations for all of the measured variables can be found in Table 2 below. The standardized solution for the final model can be seen in Figure 4.

All three path coefficients for the model were significant. The severity of childhood sexual abuse was a significant predictor of dissociation ($\beta = .366, p < .05$), and dissociation was a significant predictor of adult victimization severity ($\beta = .326, p < .05$). In addition, childhood sexual abuse predicted adult victimization ($\beta = .339, p < .05$), and this effect was mediated by levels of dissociation. Evidence for this mediation effect was found by conducting the Sobel Test using the unstandardized regression coefficients and

standard errors, $z = 3.66$, $p < .001$. Childhood sexual abuse and dissociation together accounted for 30.2% of the variance in adult victimization.

Table 2
Covariance Matrix and Means & Standard Deviations for Measured Variables

	CSA- Type	CSA- Freq.	CES- Deper.	CES- Absorp.	CES- Amnesia	AV- Type	AV- Freq.
CSA- Type	0.394						
CSA- Freq.	0.87	2.281					
CES- Deper.	0.138	0.317	0.467				
CES- Absorp.	0.131	0.297	0.378	0.527			
CES- Amnesia	0.103	0.241	0.25	0.772	0.285		
AV- Type	0.222	0.487	0.259	0.211	0.156	1.058	
AV- Freq.	0.656	1.571	0.721	0.594	0.434	1.951	5.627
<i>M</i>	0.341	0.714	1.617	2.406	1.583	0.609	1.08
<i>SD</i>	0.628	1.51	0.683	0.726	0.534	1.028	2.372



* = Path coefficients statistically significant, $p < .05$

Figure 4. Revised Model of Revictimization with Standardized Solution

CHAPTER V

DISCUSSION

Summary of Findings

The main goal of this study was to determine if there is a relationship between childhood sexual abuse and adult victimization, and whether or not levels of dissociation mediate that relationship. The chi-square analysis revealed that the variables of childhood sexual abuse and adult victimization were in some way dependent on each other. When examining the cross-tabulations, it can be seen that the largest percentage of participants (55.0%) did not experience childhood sexual abuse or adult victimization, followed by 17.6% who experienced adult victimization but not childhood sexual abuse. A nearly equal number of participants fell into either of the last two categories—those who experienced childhood sexual abuse but not adult victimization (9.2%) and those who experienced both childhood sexual abuse and adult victimization (8.4%). It was originally predicted that there would be more participants who reported childhood sexual abuse and adult victimization than those who just reported adult victimization. This did not occur. However, when the mean frequencies for adult victimization were compared through the one-way ANOVA, those who reported childhood sexual abuse were found to experience significantly more episodes of adult victimization than those who did not report sexual abuse in childhood. Furthermore, the small number of participants who answered “maybe” to questions regarding childhood abuse experiences did not experience adult victimization significantly more or less often than those who answered “yes” or “no.”

It was also originally hypothesized that levels of dissociation would be highest for those who reported childhood sexual abuse, but also high for those who reported adult

victimization. The significant main effects for each variable found through the two-way ANOVA revealed that individuals who had experienced either type of victimization reported more dissociative symptoms. This effect was the strongest for those reporting childhood sexual abuse experiences, although this difference was not significant. Interestingly, participants who answered “maybe” regarding experiences of adult victimization scored significantly higher on the CES than those who answered “no.” Perhaps the ambiguity these participants felt with regards to reporting information about their victimization experiences led them to dissociate more than those who were more certain or more comfortable reporting this information.

The SEM analysis confirmed the predicted mediating effect of dissociation on the relationship between childhood sexual abuse and adult victimization. The indicators of type and frequency turned out to be accurate severity indicators for both childhood sexual abuse and adult victimization. However, the variables of age of onset and relationship to perpetrator were not found to be accurate indicators of childhood sexual abuse severity, which may be due to the inability of the SEM software to analyze these categorical variables.

Discussion

The results of the present study are consistent with the widespread findings in previous research (Arata, 2000; Coid et al., 2001; Fergusson et al., 1997; Nelson et al., 2002; Randall & Haskell, 1995) that childhood sexual abuse is a risk factor for later victimization. The significant path from childhood sexual abuse to both sexual and non-sexual victimization experiences adds to the small but growing body of research (Barnes et al., 2008; Coid et al., 2001; Messman-Moore & Long, 2000) suggesting sexual abuse in

childhood increases the risk for all types of victimization, not just sexual.

In addition, the significant mediating effect of dissociation helps clarify what types of posttraumatic symptoms may be especially likely to lead to revictimization. This finding also provides more support for the existence of a dissociative subtype of PTSD. The SEM model revealed that the severity of childhood sexual abuse (based on the indicators of type and frequency) was associated with higher levels of dissociation, which could mean that the individuals who experienced the most severe abuse in childhood suffered from this dissociative subtype of PTSD. Similarly, the significant path from dissociation to adult victimization is perhaps consistent with previous research (Chu, 1992) suggesting that individuals are less attentive to their surroundings when in a dissociative state and therefore more vulnerable to victimization.

Limitations

There are several limitations that need to be acknowledged. First, the retrospective reporting of childhood sexual abuse could lend itself to individuals' poor memory of the events or to an unwillingness to be completely forthcoming. The same may be true for victimization experiences reported in adulthood. Women with histories of childhood sexual abuse may also be less likely to report adult victimization if they have learned that these experiences are not unusual or unacceptable given their histories. It is unknown how this may have influenced the results of the study because the inaccuracies may have gone in either direction (i.e., an individual recalled an event that never happened or failed to recall an event that did happen).

The research in this field often makes the distinction between peritraumatic dissociation that occurs during or directly after trauma and pathological dissociation that

persists long after the trauma. The items on the CES refer to dissociative experiences that individuals currently experience, so it is likely that any dissociation measured is pathological, unless it was a result of a very recent trauma. However, due to this retrospective reporting it is still impossible to know for certain if the pathological dissociation reported on the CES came as a result of sexual abuse experienced in childhood. This is especially problematic for the individuals reporting both childhood sexual abuse and adult victimization because the dissociation could have resulted from either experience, both, or neither.

Another limitation is that this study only asked about the ages of the victims, and not the ages of the perpetrators. It was assumed that the childhood sexual abuse experiences reported in this study referred to adult perpetrators and much younger victims. However, it is possible that some instances may have involved an older child who was sexually abused by an individual not much older (i.e., a 13 year-old girl abused by a 14 year-old boy). These situations would not likely be analogous to more extreme cases of childhood sexual abuse in which the perpetrator is much older the victim. That said, it is also probable that participants may not have considered those types of experiences to be “abuse” and therefore did not report them.

Limitations also exist in the way victimization experiences were captured through the Physical & Sexual Victimization Survey. The answer choices for items that asked about the frequency of certain experiences were poorly defined. In particular, the option of “3 times or more” led to problems interpreting the results of the SEM analysis. The frequencies from each of the questions were added together to create an overall frequency value for both the childhood sexual abuse and adult victimization variables. So while one

individual choosing “3 times or more” may have experienced that particular event three times, another individual choosing that same option may have experienced the event five times. While these items were originally constructed this way in an effort to get more of a response from participants (i.e., they may be more likely to respond to multiple-choice questions), it may have been better to leave these items open-ended.

The online format of this study may also be a limitation. While this method of data collection likely leads to more participant comfort in revealing such personal information, it may also lead to over-reporting of abuse experiences. Knowing that their responses would be kept completely anonymous, participants may have been prone to exaggerate. In addition, with any survey that is unmonitored, there is the possibility that some participants may not even read the questions fully or at all before answering, leading to less valid results.

This study’s sample represents a diverse group of subjects, as participants were recruited from two sources—a college campus known for its ethnic diversity and an website drawing in people of all ages from around the world. However, this may detract from the internal validity of the findings, making it difficult to apply these results to specific populations (i.e., clinical samples). Also, this study is limited to the investigation of how childhood sexual abuse affects women, so results cannot be generalized to males.

Future Directions

The final model of revictimization should not be mistaken for a complete picture of the revictimization process. The model presented in this study accounted for roughly a third of the variance in revictimization. While this is a decent effect size, there are undoubtedly countless other variables involved. One area to consider is the presence of

additional physical victimization or neglect experiences in childhood that may further increase the risk for future victimization. There is evidence, for example, to suggest an additive risk effect for multiple forms of abuse in childhood (Jankowski et al., 2002).

Another area to consider for future study is the influence of hyperarousal symptoms on revictimization. As previously noted, evidence has been found that individuals who show primarily dissociative symptoms of trauma have different neurological responses to trauma cues than those who present with primarily hyperarousal symptoms of (Frewen, 2006; Lanius, et al., 2006). The present study focused on dissociation in part because of the recent attention surrounding the new dissociative subtype of PTSD added to the DSM-5 (American Psychiatric Association, 2013). However, it would be useful to expand the model of revictimization to include measurements of hyperarousal.

Finally, it may also be of interest to look into other levels of the ecological model when attempting to explain the process of revictimization. This study focused on the ontogenic and microsystem levels, which look at revictimization from an individual and immediate context perspective. However, there are broader cultural and societal levels that almost certainly play a role as well. It may be interesting to examine how variables such as access to mental healthcare or the belief in certain gender stereotypes influence the revictimization process.

Conclusions

This study aimed to clarify the variables that make physical and sexual revictimization more likely to occur in individuals who have already experienced sexual trauma in childhood. The potential benefits of this type of research are substantial.

Researchers have been assiduously working to uncover explanations for the high rate of revictimization among survivors of childhood sexual abuse. The more we discover about the underlying mechanisms of this process, the better we can work to prevent future victimization and help those already affected. While progress has certainly been made, numerous questions remain. The present research adds to the existing literature specifically in terms of how pathological dissociation may mediate the relationship between childhood sexual abuse and all types of adult victimization.

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APPENDIX A

Physical and Sexual Victimization Survey (PSVS)

1. Before the age of 16, did anyone ever touch private parts of your body, or make you touch theirs, under force or threat?

Yes No Maybe/Unsure

If yes, how many times did this happen?

- Once
 2 times
 3 times or more

If yes, how old were you when this first happened? _____

If yes, please indicate your relation to the person(s) who did this to you (Check all that apply):

- A member of my immediate family (e.g. a parent or sibling)
 A member of my extended family (e.g. an uncle or cousin)
 Someone I know who is not a family member
 A stranger

2. Before the age of 16, did anyone ever force you to have sexual intercourse or oral/anal sex against your will?

Yes No Maybe/Unsure

If yes, how many times did this happen?

- Once
 2 times
 3 times or more

If yes, how old were you when this first happened? _____

If yes, please indicate your relation to the person(s) who did this to you (Check all that apply):

- A member of my immediate family (e.g. a parent or sibling)
 A member of my extended family (e.g. an uncle or cousin)
 Someone I know who is not a family member
 A stranger

3. As an adult (16 and older), has anyone ever touched private parts of your body, or made you touch theirs, under force or threat?

Yes No Maybe/Unsure

If yes, how many times has this happened?

- Once
 2 times

3 times or more

4. As an adult (16 and older), has anyone ever forced you to have sexual intercourse or oral/anal sex against your will?

Yes No Maybe/Unsure

If yes, how many times has this happened?

- Once
 2 times
 3 times or more

5. As an adult (16 and older), has anyone ever attacked you with a gun, knife, or some other weapon?

Yes No Maybe/Unsure

If yes, how many times has this happened?

- Once
 2 times
 3 times or more

6. As an adult (16 and older), has anyone ever beaten or attacked you *without* a weapon?

Yes No Maybe/Unsure

If yes, how many times has this happened?

- Once
 2 times
 3 times or more

7. As an adult (16 and older), has anyone ever tried to take something directly from you by using force or the threat of force, such as a mugging or robbery?

Yes No Maybe/Unsure

If yes, how many times has this happened?

- Once
 2 times
 3 times or more

8. As an adult (16 and older), have you ever been the victim of a crime that has not been mentioned?

Yes No Maybe/Unsure (If yes, please specify below)

APPENDIX B

The Curious Experiences Survey (CES)

Here are some experiences that people have in their daily lives. We are interested in how often you have these experiences (when you are not under the influence of alcohol or drugs). Please select the appropriate response, using the following scale:

- 1 = This never happens to me.
- 2 = This occasionally happens to me.
- 3 = This sometimes happens to me.
- 4 = This frequently happens to me.
- 5 = This is almost always happening to me.

- | | | | | | |
|---|---|---|---|---|---|
| 1. Drove or rode somewhere without remembering later what happened during all or part of the trip. | 1 | 2 | 3 | 4 | 5 |
| 2. Was listening to someone talk and suddenly realized I did not hear part or all of what was said. | 1 | 2 | 3 | 4 | 5 |
| 3. Found myself in a place and had no idea how I had gotten there. | 1 | 2 | 3 | 4 | 5 |
| 4. Found myself dressed in clothes I didn't remember putting on. | 1 | 2 | 3 | 4 | 5 |
| 5. Found new things among my belongings that I didn't remember buying. | 1 | 2 | 3 | 4 | 5 |
| 6. Was approached by someone I didn't know who called me by another name or who insisted that he or she had met me before. | 1 | 2 | 3 | 4 | 5 |
| 7. Had the experience of feeling as though I was standing next to myself, or watching myself as if I was looking at a different person. | 1 | 2 | 3 | 4 | 5 |
| 8. Was told that I sometimes do not recognize a friend or family member. | 1 | 2 | 3 | 4 | 5 |
| 9. Found that I had no memory for some important event in my life (for example, a wedding or graduation). | 1 | 2 | 3 | 4 | 5 |
| 10. Had the experience of being accused of lying when I did not think I had lied. | 1 | 2 | 3 | 4 | 5 |
| 11. Had the experience of looking in a mirror and not recognizing myself. | 1 | 2 | 3 | 4 | 5 |
| 12. Had the experience of feeling that other people, objects, and the world around me were not real. | 1 | 2 | 3 | 4 | 5 |
| 13. Had the experience of feeling that my body did not belong to me. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|--|---|---|---|---|---|
| 14. Had the experience of remembering a past event so vividly that it felt like I was reliving that event. | 1 | 2 | 3 | 4 | 5 |
| 15. Had the experience of not being sure whether things I remember happening really did happen, or whether I just dreamed them. | 1 | 2 | 3 | 4 | 5 |
| 16. Had the experience of being in a familiar place but finding it strange and unfamiliar. | 1 | 2 | 3 | 4 | 5 |
| 17. Found that when I was watching television or a movie I became so absorbed in the story that I was unaware of other events happening around me. | 1 | 2 | 3 | 4 | 5 |
| 18. Found that I became so involved in a fantasy or daydream that it felt like it was really happening to me. | 1 | 2 | 3 | 4 | 5 |
| 19. Found that I was able to ignore pain. | 1 | 2 | 3 | 4 | 5 |
| 20. Find that I sometimes sit staring off into space, thinking of nothing, and am not aware of the passage of time. | 1 | 2 | 3 | 4 | 5 |
| 21. Talked out loud to myself. | 1 | 2 | 3 | 4 | 5 |
| 22. Find that in one situation I act so differently from when I'm in another situation that I feel almost as if I were two different people. | 1 | 2 | 3 | 4 | 5 |
| 23. Find that in certain situations I am able to do things with amazing ease and spontaneity that would usually be difficult for me. | 1 | 2 | 3 | 4 | 5 |
| 24. Found that I could not remember whether I had done something or had just thought about doing that thing. | 1 | 2 | 3 | 4 | 5 |
| 25. Found evidence that I had done things that I did not remember doing. | 1 | 2 | 3 | 4 | 5 |
| 26. Found writings, drawings, or notes among my belongings that I must have done but cannot remember doing. | 1 | 2 | 3 | 4 | 5 |
| 27. Found that I heard voices inside my head that told me to do things or that commented on things that I was doing. | 1 | 2 | 3 | 4 | 5 |
| 28. Felt as though I was looking at the world through a fog so that people and objects appeared far away or unclear. | 1 | 2 | 3 | 4 | 5 |
| 29. Felt like I was dreaming when I was awake. | 1 | 2 | 3 | 4 | 5 |
| 30. Felt like I was disconnected from my body. | 1 | 2 | 3 | 4 | 5 |
| 31. Felt that I could not move my hands or feet. | 1 | 2 | 3 | 4 | 5 |

APPENDIX C

Demographics Questionnaire

1. How old are you? _____

2. What is your race?
 - White/Caucasian
 - Hispanic or Latino
 - Black or African American
 - Native American or American Indian
 - Asian/Pacific Islander
 - Other/Decline to answer

3. What is your marital status?
 - Single, never married
 - Married or in a domestic partnership
 - Separated
 - Divorced
 - Widowed
 - Other/Decline to answer

4. What is the highest level of education you have completed?
 - Some high school
 - High school graduate or GED
 - Some college
 - 2-year college degree
 - 4-year college degree
 - Master's degree
 - Doctorate or Professional degree
 - Other/Decline to answer

APPENDIX D

Implied Consent

California State University, Northridge CONSENT TO ACT AS A HUMAN RESEARCH PARTICIPANT

You are being asked to participate in a research study conducted as part of the requirements for the M.A. degree in General-Experimental Psychology. Participation in this study is completely voluntary. Please read the information below before consenting to participate.

PURPOSE OF STUDY

The purpose of this research study is to explore how experiences of sexual abuse in childhood may relate to experiences of interpersonal victimization in adulthood.

INCLUSION REQUIREMENTS

You are eligible to participate in this study if you are **female** and **at least 18 years old**.

PROCEDURES

You will complete two surveys. One survey will ask questions about various psychological symptoms. The other will ask questions about your current and past experiences with physical and/or sexual abuse. Each survey can be completed in about 10 minutes.

RISKS AND DISCOMFORTS

The possible risks and/or discomforts associated with this study include experiencing minor to severe psychological distress, retraumatization, shame, or embarrassment when asked to recall traumatic events or report psychological symptoms.

In order to minimize these risks, the researcher has put certain precautions into place. All information you provide will be anonymous and will be kept strictly confidential. You are free to leave the study at any time for any reason. At the end of the study you will be given a list of supportive resources you can turn to should you experience any distress, discomfort, or retraumatization. You will also be given contact information for the researcher and the faculty advisor in charge of this study.

BENEFITS

Subject Benefits

You may not directly benefit from participation in this study.

Benefits to Others or Society

This study has the potential to benefit society by adding to the existing literature about what makes certain individuals more vulnerable to revictimization. This information may help in the prevention of future physical and sexual assaults and in determining how to best help those already affected.

COMPENSATION

If you were recruited through CSUN's human subjects pool, you will receive 2 research credits.

At the end of the study you will also have the option of entering your email address into a random drawing for the chance to win a \$50 Visa Gift Card.

VOLUNTARY PARTICIPATION STATEMENT

By selecting "yes" below, you are indicating that you have read the information in this consent form and have agreed to participate in this study.

I am a female who is at least 18 years old and I agree to participate in the study.

Yes No

APPENDIX E

Debriefing

Thank you for your participation. If you have questions or concerns regarding the study or if you would like to be contacted about the final results, please feel free to contact the researcher, Rebecca Stephens at Rebecca.stephens.210@my.csun.edu, or the faculty advisor for this study, Dr. Andrew Ainsworth at Andrew.ainsworth@csun.edu.

If you are experiencing any distress or discomfort after participating in the study, you are encouraged to refer to the following resources:

- RAINN (Rape, Abuse, & Incest National Network) National Sexual Assault Hotline: 1-800-656-HOPE
 - RAINN website: <http://www.rainn.org>
- CSUN University Counseling Services: Bayramian Hall 520, (818) 677-2366
- The Sexual Assault Services & Family Violence Recovery Programs @ Valley Trauma Center: (818) 787-9700
- Valley Trauma Center 24-hour Crisis Hotlines:
 - San Fernando Valley: (818) 886-0453
 - Santa Clarita Valley: (661) 253-0258