University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Theses, Dissertations, and Student Research: Department of Psychology

Psychology, Department of

6-2016

Predicting Sexual Revictimization in Childhood and Adolescence: A Prospective Examination Using Ecological Systems Theory

Samantha L. Pittenger University of Nebraska-Lincoln, samantha.friedenberg@gmail.com

Follow this and additional works at: http://digitalcommons.unl.edu/psychdiss Part of the <u>Clinical Psychology Commons</u>

Pittenger, Samantha L., "Predicting Sexual Revictimization in Childhood and Adolescence: A Prospective Examination Using Ecological Systems Theory" (2016). *Theses, Dissertations, and Student Research: Department of Psychology.* 86. http://digitalcommons.unl.edu/psychdiss/86

This Article is brought to you for free and open access by the Psychology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Theses, Dissertations, and Student Research: Department of Psychology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

PREDICTING SEXUAL REVICTIMIZATION IN CHILDHOOD AND

ADOLESCENCE:

A PROSPECTIVE EXAMINATION USING ECOLOGICAL SYSTEMS THEORY

by

Samantha L. Pittenger

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Psychology

Under the Supervision of Professor David J. Hansen

Lincoln, Nebraska

June, 2016

PREDICTING SEXUAL REVICTIMIZATION IN CHILDHOOD AND ADOLESCENCE:

A PROSPECTIVE EXAMINATION USING ECOLOGICAL SYSTEMS THEORY

Samantha L. Pittenger, Ph.D.

University of Nebraska, 2016

Adviser: David J. Hansen

Child sexual abuse is a prevalent problem in the United States and is associated with revictimization: a victimization episode perpetrated by a different individual and occurring subsequent to initial abuse experiences (Barnes, Noll, Putnam, & Trickett, 2009). While evidence shows that 20-39% of sexual abuse victims report revictimization within childhood or adolescence, much of the research to date has focused on its occurrence in adulthood. Thus, there is a limited understanding of the pathways to revictimization and its associated outcomes for youth. The present study examined predictors of sexual revictimization within childhood and adolescence using ecological theory, which includes individual, family, and community-level factors.

Records of 1,915 youth presenting to a Child Advocacy Center (CAC) between 2002 and 2014 were reviewed to identify individual, familial, and community factors as well as initial abuse and investigation characteristics that are associated with risk for subsequent victimization. Results showed that 11.1% of youth experienced sexual revictimization prior to reaching adulthood and that the risk for subsequent abuse was predicted by factors across levels of the social ecological model. At the individual level, younger children, girls, and youth with an identified mental health problem were most likely to experience revictimization. Aspects of the youth's immediate context that increased vulnerability for revictimization included the presence of a non-caregiving adult in the home and domestic violence in the family. Finally, the collective educational attainment of one's neighborhood, measured as the proportion of adults with a high school diploma or GED, seemed to protect youth from revictimization.

Findings from this study provide valuable information for CACs, including patterns of revictimization as well as static and dynamic risk factors that may contribute to repeat victimizations. The implications for assessing and monitoring youth following discovery of sexual abuse are discussed.

ACKNOWLEDGEMENTS

I would like to acknowledge the Child Advocacy Center of Lincoln, Nebraska and members of the Department of Psychology at the University of Nebraska for their support of this project. Specifically, I would like to thank Lynn Ayers, Executive Director, Jill Klingensmith, Administrative Assistant, and the Board of Directors at the Child Advocacy Center for enabling the research team access to this data and providing resources at their facility to execute this project. I would also like to thank Drs. David Hansen and Mary Fran Flood for encouraging me to pursue my research interests and for facilitating my accomplishments. A special acknowledgement is due to my fellow graduate student in the Child Maltreatment Lab, Jessie Pogue, for her data coordination efforts. Without her assistance, this project would not have been completed. Finally, I would like to thank my husband and colleague, Steven T. Pittenger, for his confidence in my abilities, his personal sacrifice to support my success, and for offering his consultation and support whenever called upon.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW	1
Sexual Revictimization	5
The Cycle of Victimization	
Consequences Associated with Revictimization	9
An Ecological Approach to Understanding Sexual Revictimization	11
Bronfenbrenner's Bioecological Model of Development	11
Applying the Ecological Model to Revictimization	15
Ontogenic Development	17
Microsystems	25
Mesosystems	30
Exosystems	31
Macrosystems	33
Interactions across Systems	34
Purpose of the Present Study	36
Aim 1	37
Aim 2	41
CHAPTER 2: RESEARCH DESIGN AND METHOD	43
Research Site	43
Participants and Procedures	43
Data Sources	48
Data Collection	52
Analyses	54
CHAPTER 3: RESULTS	59
Occurrence of Revictimization	59
Aim 1	61
Aim 2	77

CHAPTER 4: DISCUSSION	
Occurrence of Revictimization	87
The Social Ecology of Revictimization	88
Ontogenic Factors	88
Microsystem Factors	94
Exosystem Factors	98
Interactions across Systems	100
Limitations and Strengths	102
Conclusions and Recommendations	103
References	
Appendices	
Appendix A: Case Record/Intake	136

Appendix A: Case Record/Intake	136
Appendix B: Forensic Interview	140
Appendix C: Medical Examination	142
Appendix D: Outcomes Study	153
Appendix E: Authorization to Release Information	155

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Child sexual abuse (CSA) is a prevalent problem that disrupts developmental trajectories and impacts victims across their lifespan. While epidemiological data vary, an astonishing number of children experience sexual abuse each year (Friedenberg, Hansen, & Flood, 2013) and consequently endure a number of negative outcomes in the forms of psychological, behavioral, and neurobiological sequelae (De Bellis, Spratt, & Hooper, 2011; Putnam, 2003). Rigorously designed studies have provided evidence for the pervasiveness of issues stemming from initial victimization experiences, shedding light on the long-term consequences that individuals experience (Polusny & Follette, 1995); one of which is sexual revictimization. Over the past few decades, investigators have shown that experiences of sexual abuse heighten subsequent risk for victimization within childhood, adolescence, and adulthood (for reviews see Arata, 2002; Breitenbecher, 1999; Classen, Palesh, & Aggarwal, 2005). The majority of research exploring factors that increase the risk sexual revictimization has focused on symptomatology associated with initial abuse experiences (Grauerholz, 2000) which is often reported retrospectively by adult women; however, the issue may be best understood when viewed within a developmental model that accounts for individual, familial, environmental, and societal factors (Grauerholz, 2000; Matta Oshima, Johnson-Reid, & Seay, 2014; Messman-Moore & Long, 2003; Simmel, Postmus, & Lee, 2012).

Prevalence rates of sexual abuse have been historically difficult to estimate due to underreporting by victims and methodological issues with epidemiological studies (Pereda, Guilera, Forns, & Gumez-Benito, 2009), although international and national estimates indicate that CSA is a significant public health issue. Internationally, surveys have indicated that 20-53% of women and 5-60% of men have experienced CSA (Finkelhor, 1994; Pereda et al., 2009). Within the United States, sexual abuse – defined as fondling, attempted intercourse, or completed intercourse by an individual at least 5 years older than oneself (Centers for Disease Control and Prevention, 2010) – accounts for about one quarter of all reported maltreatment cases (Sedlak et al., 2010) with approximately 25% of women and 16% of men having endorsed the experience of sexual abuse. While these numbers are large, the true reach of sexual abuse may not actually be known, as it is suspected that a substantial proportion of youth do not disclose for many years, if at all (Paine & Hansen, 2002). Additionally, issues in measuring prevalence suggest the figures presented above may be under-estimating the issue (Friedenberg et al., 2013).

Surveys of the general United States population show that people with a history of CSA are three times more likely to develop a psychiatric disorder than those without such history (Perez-Fuentes et al., 2013). In comparison to non-abused youth, CSA victims tend to experience more psychological symptoms in regard to anxiety disorders, depression, self-esteem, learning problems, aggression, self-destructive behavior, and other behavior problems (Kendall-Tackett, Williams, & Finkelhor, 1993). Posttraumatic stress disorder (PTSD) has been cited as the most often occurring psychiatric disorder in child victims of sexual abuse (Nurcombe, 2000). Youth victims of CSA are also more likely than their non-abused peers to use cannabis, alcohol, and other substances, perhaps to cope with the traumatic impact of abuse (Harrison, Fulkerson, & Beebe, 1997; Wekerle, Leung, Goldstein, Thornton, & Tonmyr, 2009). Abused youth may also have

poorer outcomes when compared to non-abused substance users, as youth CSA victims tend to report earlier first use and use of more than one substance (Harrison et al., 1997).

Inappropriate sexual behavior is another common correlate of sexual abuse present in childhood and adolescence, with as many as 30% of youth victims displaying such conduct (Kendall-Tackett et al., 1993). While sexual exploration and curiosity are considered normative during childhood (Wekerle, Bennett, & Francis, 2013), sexually abused youth are more likely to engage in aberrant sexual behaviors that impede their social development and involve coercion of others (Chaffin et al., 2008). Whereas some risky behaviors are thought to serve as coping mechanisms following the experience of CSA (e.g., substance and alcohol use), sexual risk behavior remains significantly associated with the experience of sexual abuse after controlling for psychiatric disorder (Houck, Nugent, Lescano, Peters, & Brown, 2010), emphasizing the need to address these behaviors as a primary issue.

Sexual abuse in childhood is also associated with a large portion of adult-onset disorders (Perez-Fuentes et al., 2013) and has been implicated in increasing risk for the development of a variety of psychiatric disorders in adulthood. Adult women reporting a history of CSA are more likely than non-abused counterparts to meet criteria for depression, dysthymia, mania, agoraphobia, panic attack, panic disorder, PTSD, social phobia, alcohol abuse and dependence, and substance abuse and dependence (Molnar, Buka, & Kessler, 2001). Comparing men who report experiencing CSA to men who do not, Molnar and colleagues (2001) found that CSA increased risk for diagnoses of PTSD, alcohol dependence, and substance abuse and dependence. Further, there is evidence that sexual abuse contributes to the development of eating disorders for both men and women (Maniglio, 2009). In addition to the formal diagnoses listed above, adult survivors of CSA are more likely than non-abused adults to experience low-self-esteem (Gold, 1986; Gelinas, 1983), helplessness (Courtois, 1979; Meiselman, 1978), interpersonal problems (Bagley & Ramsay, 1986), and suicidal ideation and attempts (Bartholow et al., 1994; Briere, Woo, McRae, Foltz, & Sitzman, 1997; Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992; Teegen, 1999).

CSA is associated with a variety of physical effects (for review, see Irish, Kobayashi, & Delahanty, 2010) and has recently been linked to changes in neurobiological functioning (De Bellis et al., 2011). Beyond the psychosomatic effects of psychiatric disorders stemming from the experience of CSA (Bonomi, Cannon, Anderson, Rivara, & Thompson, 2008), victims tend to report poorer health-related quality of life (Cuippers et al., 2011) and are more likely than non-abused individuals to be impacted by chronic pain (Finestone et al., 2000; Najman, Nguyen, & Boyle, 2007), gastrointestinal problems (Goodwin & Stein, 2004; Newman et al., 2000; Sickel, Noll, Moore, Putnam, & Trickett, 2002), non-epileptic seizures (Magnilio, 2009), and obesity (Noll, Zeller, Trickett, & Putnam, 2007). A 30-year prospective investigation into the physical health effects of abuse and neglect showed that CSA in particular contributes to the development of oral health problems and malnutrition (Widom, Czaja, Bentley, & Johnson, 2012). A burgeoning field of research exploring neurobiological correlates of adverse child experiences suggests that child sexual abuse may have negative consequences for global brain development (De Bellis et al., 2011); however, these effects may be attributed to the development of PTSD following abuse rather than the abuse experience itself.

Thus, the experience of CSA is associated with immediate and long-term consequences indicating that it causes some disruption to normative development. In fact, maltreatment in general has long been recognized as having particular impacts for the developing individual (Cicchetti & Banny, 2014). Within the field of developmental psychology, researchers have been pushing for more emphasis on a lifespan perspective, which recognizes that developmental periods are connected and to fully understand a person's present functioning, one must consider their experiences throughout all stages of life. Baltes, Lindenberger, and Staudinger (2007) explain the goal of this perspective is "to identify the interconnections between earlier and later developmental events and processes... and to specify the biological and environmental opportunities and constraints that shape life span development of individuals" (p. 570). When attempting to understand the impact of sexual abuse and, more specifically, the relationship between sexual abuse and revictimization, keeping this lifespan development perspective, as well as considering the contextual and biological factors that serve as "constraints and opportunities," may prove useful.

Sexual Revictimization

CSA is associated with an increase in risk for subsequent sexual victimization (see Arata, 2002; Classen et al., 2005). This phenomenon has been termed "revictimization," and is here used to mean any victimization experience perpetrated by a different individual and occurring subsequently to an initial abuse occurrence (Barnes, Noll, Putnam, & Trickett, 2009). Revictimization gained interest in the 1970s (e.g., Miller et al., 1978), however, most of our understanding of sexual revictimization comes from work completed within the past two decades. Additionally, despite recent evidence that children and adolescents experience sexual revictimization, investigations have mostly focused on sexual assault in adulthood for individuals with CSA histories. These endeavors have greatly contributed to knowledge regarding the relationship between CSA and adult sexual revictimization, and there is promise that similar risk models may apply to youth.

In a meta-analysis of studies concerning revictimization, Roodman and Clum (2001) concluded that there was a definite relationship between CSA and adult sexual victimization. In fact, female victims of CSA experience rape or sexual assault in late adolescence or adulthood at a rate two to three times higher than non-abused women (Arata, 2002; Barnes et al., 2009; Coid et al., 2001; Desai, Arias, Thompson, & Basile, 2002; Gidycz, Hanson, & Layman, 1995). While 24-38% of non-abused women report sexual victimization in adulthood (Banyard, Williams, & Siegel, 2001; Barnes et al., 2009; Gidycz et al., 1995; Maker, Kemmelmeier, & Peterson, 2001), as many as 72% of adult CSA victims report revictimization (Messman & Long, 1996), thus the relationship between CSA and adult victimization is not mere coincidence. Beyond contributing to the heightened likelihood of adult sexual victimization, evidence has emerged showing that CSA may actually predict its occurrence (Gidycz, Coble, Latham, & Layman, 1993; Himelein, 1995; Roodman & Clum, 2001). Classen and colleagues (2005) provided a thorough review of the literature to date, including cross-sectional and longitudinal studies across clinical, community, and college samples from the United States and other countries. They concluded that two out of three women with a history of CSA are likely to endure subsequent sexual victimization (Classen et al., 2005). Given this evidence, it

can confidently be asserted that CSA strongly impacts risk for sexual victimization in adulthood.

CSA has also been associated with revictimization prior to adulthood (Miron & Orcutt, 2014). The few studies exploring revictimization as it occurs in childhood and adolescence suggest it is a very real issue for individuals within these developmental periods, with re-abuse rates between 20-39% (Finkelhor, Ormrod, & Turner, 2007; Swanston et al., 2002). For example, estimates show nearly one fifth of children with a documented history of sexual abuse report another substantiated incidence of CSA within 6-years after initial assessment (Swanston et al., 2002). Surveying 304 female teenagers, Krahe and colleagues (1999) found that girls with a history of sexual abuse reported more unwanted sexual experiences in comparison to non-abused peers, coerced and/or forced intercourse in particular. In their survey of 2,000 children ages 10-16 years, Boney-McCoy and Finkelhor (1995) found that children with a prior report of CSA were 11.7 times more likely than those without a prior report to have experienced sexual abuse within the past year, an effect that persisted after taking into account repeat victimization by the same perpetrator. Another large survey of adolescents also found previous sexual abuse or assault to predict sexual victimization within the past year (Smalls & Kerns, 1993). Further, a retrospective survey of 520 women found that those who reported experiencing CSA were 5 times more likely to experience attempted or completed rape and 3 times more likely to experience sexual assault between the ages of 16 and 18 years (Fergusson, Horwood, & Lynskey, 1997). Thus, sexual revictimization is commonly experienced by CSA victims, occurs more frequently than can be considered chance, and impacts youth as well as adults. This realization calls for imminent need to better

understand and conceptualize the link between victimization experiences so that it may be addressed in prevention efforts.

The Cycle of Victimization

The likelihood of experiencing re-abuse provides evidence that victimization is not a simple phenomenon of occurrence but is actually an ongoing condition, or cycle, within which an individual lives. This notion has been supported by a number of adult studies indicating that multiple victimization experiences occur frequently enough to be considered normative (Casey & Nurius, 2005; Green et al., 2000; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). Examining patterns of a broad array of victimization types, including their likelihood of recurrence and association with other forms of victimization, Finkelhor and colleagues (2007) noted limitations to conceptualizing victimization events within childhood and adolescence as individual, non-normative occurrences. The authors conducted two waves of telephone surveys, approximately one year apart, with over 1,400 respondents ages 2 to 17 years (caregivers provided information as appropriate) and calculated risk ratios to explore how various kinds of victimization – including conventional crime, property crime, physical assault, peer or sibling victimization, sexual victimization, maltreatment, and indirect victimization (e.g., being witness) – influenced risk of subsequent harm. While findings show that victimization of any type increased risk for victimization of other types, the risk ratios consistently indicated that youth were more vulnerable to experiencing same-type victimizations. For example, having experienced sexual victimization at the first phone survey placed individuals at 6.9 times more risk for sexual victimization by the time of the second phone interview, whereas risk ratios ranged from

2.9-6.4 for other victimization subtypes (Finkelhor et al., 2007). Information provided by Finkelhor and colleagues (2007) lends evidence to the conceptualization of victimization as a cycle of violence whereby early experiences perpetuate vulnerability for subsequent maltreatment. In turn, being trapped within the cycle of victimization is associated with more severe negative outcomes in comparison to single experiences of victimization.

Consequences Associated with Sexual Revictimization

Numerous studies provide evidence for the cumulative negative effects of multiple victimization experiences on psychological well-being. Green and colleagues (2000) conducted a large examination of the impact of multiple interpersonal traumatic events (e.g., sexual victimization) on psychological functioning. Reviewing questionnaire data from 2,507 female college students, the authors found that experiencing multiple interpersonal traumas was associated with significantly higher selfreported psychological distress compared to women reporting multiple non-interpersonal traumas (i.e., natural disaster, car accident, etc.) and those experiencing a single trauma (either interpersonal and non-interpersonal). In her review of the sexual revictimization literature, Arata (2002) concluded that revictimized women report more posttraumatic stress, depression, and anxiety symptoms, have a higher prevalence of dissociative disorders, and have lower self-esteem compared to non- or singly-victimized women. The effects were similar comparing multiply victimized women to those with CSA history or adult sexual assault history only (Arata, 2002). An array of studies following suit has shown that victims of multiple instances of sexual violence tend to report more psychological distress, suicidality and self-harm behaviors, poorer physical health, and more substance and alcohol use compared to those with single instances of victimization

(Balsam, Lehavot, & Beadnell, 2011; Casey & Nurius, 2005; Fortier et al., 2009). The cumulative effects of revictimization are thus a public health concern, given the economic burden of physical and mental health services necessary to care for victims (Barnes et al., 2009). Further, the development of these problems may increase the likelihood of individuals continuing in the cycle of victimization.

Although there has been no formal investigation of the cumulative impact of revictimization on youth, it is clear that the psychosocial consequences of CSA are associated with risk for subsequent abusive episodes. For example, the emotional impact of CSA may place youth at higher risk for revictimization, which, in turn, increases risk for adult sexual assault. Utilizing data from the Developmental Victimization Survey, Cuevas, Finkelhor, Clifford, Ormrod, and Turner (2010) sought to explore predictors of revictimization for children and adolescents. Results indicated that reported psychological distress – calculated as an aggregate of depression, anxiety, and anger – predicted revictimization within one year of initial interview. Additionally, surveying 1,569 women, Humphrey and White (2000) found that those who have experienced victimization in both childhood and adolescence had the highest rates of sexual assault as young adults. Multiple victimizations appear to contribute to a feedback loop whereby the impacts of initial abuse increase vulnerability for subsequent victimization, potentially compounding negative psychological effects and further perpetuating abusive experiences.

Thus, sexual revictimization is a social concern not only because it exposes individuals to violence, but also because it is associated with poorer psychosocial functioning and seems to perpetuate a cycle of victimization throughout the lifespan. Developing a better understanding of revictimization earlier in development will help reduce the occurrence of sexual trauma and the associated behavioral and psychological sequelae. Therefore, it seems logical to view revictimization within a developmental framework that captures multiple important contexts of human development in order to achieve this heightened understanding.

An Ecological Approach to Understanding Sexual Revictimization

CSA has very palpable and negative impacts on the developing individual, including insults to an integrated and healthy sense of self, impairments in social functioning, and influences on sexual development. All of these aspects of the individual have major implications for how they function within society, and these developmental impacts in conjunction with the circumstances that led to initial abuse experiences may be the culprits to encouraging the victimization cycle. To more fully explore this theory, abuse and revictimization must be considered from an ecological perspective, parsing out individual, familial, community, and societal influences on risk for harm or promotion of resilience.

Bronfenbrenner's Bioecological Model of Development

Urie Bronfenbrenner (1977) first articulated the ecological approach to understanding human development. Whereas prior theories examined the individual and family as the sole contexts for development, Bronfenbrenner recognized that external influences on the family, even those with which the individual may never directly interact, have great impact on who the individual grows to be. Bronfenbrenner's model of development is continually evolving, and currently is referred to as the bioecological model to account for an individual's genetic potential in addition to the environmental influences on development (Bronfenbrenner & Ceci, 1994). For purposes of better understanding revictimization, however, the present study focuses on the ecology of maltreatment. Specifically, we will explore how the contexts of development interact to place someone within the cycle of victimization.

The propositions of Bronfenbrenner's bioecological model have particular value in attempting to understand revictimization from this perspective. Proposition 1 states:

"Especially in its early phases, and to a great extent throughout the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to henceforth as proximal processes..."

(Bronfenbrenner, 1994, p. 572)

In sum, this proposition reiterates what others before Bronfenbrenner have argued, that development occurs within interpersonal contexts as well as interaction between an active being and the environment. The proximal processes discussed are considered positive in that they promote reciprocal interaction. Bronfenbrenner (1994) explains that abusive interactions "imply low levels of proximal processes because they reduce possibilities for progressively more complex reciprocal interaction" (p. 572) and that these types of interactions, as well as others that provide for low levels of proximal processes, promote the development of maladaptive interactions with others and the environment. Proposition 2 states:

"The form, power, content, and direction of the proximal processes effecting development vary systematically as a joint function of the characteristics of the developing person, of the environment – both immediate and more remote – in which the processes are taking place, and of the nature of the developmental outcomes under consideration" (Bronfenbrenner, 1994, p. 572)

This proposition explains that the influence of proximal processes on the developing individual depends on a number of factors. Specifically, Bronfenbrenner is referring to individual characteristics, the various environmental contexts of development, and the actual developmental outcome that is being examined.

An important component of these interdependent propositions is the environment. In this bioecological model, there are five types of environmental contexts, or systems, within which development occurs: microsystems, mesosystems, exosystems, macrosystems, and chronosystems. Microsystems refer to those contexts in which the individual is immediately present and within which interactions between the developing individual and environment occur. Common microsystems include the family, school, peer groups, and workplace. Mesosystems represent interactions between at least two of these microsystems, for example, the relationship between the family and school (Bronfenbrenner, 1994). Expanding to more remote contexts of development, exosystems represent relationships between at least two systems, one of which the individual is not immediately present. Thus, the individual is influenced indirectly by exosystems. For example, while a child may not interact with their caregivers' workplace, the workplace influences caregivers' moods, cognitions, and behaviors in ways that may carry over into the home environment. Bronfenbrenner described macrosystems to capture cultural characteristics that permeate the other, more proximal systems within which the individual develops.

Finally, human development must be considered in light of chronosystems that influence the individual. Beyond mere age, chronosystems capture characteristics of the era in which one grows, incorporating both individual and environmental changes and consistencies across time. To draw from current social and political events, one might explore the influence of chronosystems by examining how opinions of marriage equality differ for those born in 1960 and 2000. In this example, it would be expected that a person's age and exposure to media coverage and legislative changes regarding marriage equality would influence their views of the matter.

The two propositions not only imply various contexts of development, they call attention to the complex interaction between and their environment and create a need for a paradigm to help us understand the nature and influence of these interactions. Thus, Bronfenbrenner and Morris (2006) thoroughly discuss a *person-process-context-time* framework as the foundation for understanding the bioecological model. As described by the model, the person is considered an active agent in their development as well as the point from which developmental outcomes are measured; they are a means and an end in understanding development. "Processes" represent the interactions that individuals have with others and the environment, which are the "contexts" within which development takes place. Time, while a familiar construct, represents a rather complicated notion within Bronfenbrenner's model and is parsed into meso- and macrolevels. At the mesolevel, time refers to the changing or maintenance of conditions within which the individual exists across a set period. Many explorations of this time level suggest

detriments to healthy development as more instability is introduced (e.g., Pulkkinen, 1983). Similar to the overall notion of chronosystems, the macrolevel of time refers to the historical context of development, for example, coming of age in an economic depression or wartime era.

Having reviewed the bioecological contexts of development as well as the *person-process-context-time* model, the following section examines evidence supporting the notion that CSA and revictimization are developmental concerns that should be examined from this ecological perspective.

Applying the Ecological Model to Revictimization

Since its inception in the 1970s, the ecological framework has been used to account for the complexities of many conditions. For example, Bronfenbrenner's ecological model was applied to the phenomenon of child maltreatment and widely disseminated by Jay Belsky (1989, 1993). Seeking to shed light on the etiology of child maltreatment, Belsky argued that it was the interplay of individual characteristics of children (also called ontogenic development), parent and family characteristics (microsystems), the community (exosystems), and broader cultural values (macrosystems) that influenced risk for maltreatment (Belsky, 1989). However, Belsky's developmental-ecological model of maltreatment appears to lack discussion of sexual abuse, and at some points even purposefully excludes it (e.g., Belsky, 1993). Despite this absence in the ecology of maltreatment literature, CSA and revictimization will be better understood when considered from this framework, as it enables researchers to examine the complex interactions within and between ecological levels that impact a child's risk (Sidebotham, 2001).

Studies employing the ecological perspective regarding revictimization have begun to emerge, although they continue to remain sparse. Extending the work of Heise (1998), who sought to integrate knowledge about violence against women into an ecological model, Grauerholz (2000) provided a review of the revictimization literature urging future research endeavors to utilize this framework. Her review of evidence from research with adult samples thoroughly describes the interplay between individual characteristics, the contexts within which victimization occurs, and broader societal values that influence victims and perpetrators. This model was further endorsed by Messman-Moore and Long (2003) who urged for a shift in conceptualizing risk from an intra- to interpersonal perspective.

At the individual or ontogenic level, Grauerholz argued that factors such as the individual's historical experiences, including initial victimization occurrences, influence risk for revictimization. An especially important and widely examined factor at this level is psychopathology, although Grauerholz (2000) cautions that we are missing the big picture when such characteristics are the sole focus of research. Specifically, focusing on individual mental health functioning may encourage victim blaming. Thus, Grauerholz (2000) follows Belsky's model and describes factors at the micro-, exo-, and macrosystem levels that influence adult women's risk for revictimization. At the microsystem level, she states that female abuse victims may be at risk due to heightened likelihood of (a) exposure to potential perpetrators and (b) potential perpetrators acting aggressively. The most notable factor Grauerholz (2000) describes at the exosystem level is social disadvantage; however, only evidence relating to CSA and not revictimization was available at the time of her review (Fergusson et al., 1997; Mullen,

Martin, Anderson, Romans, & Herbison, 1994). At the macrosystem level, Grauerholz calls attention to the American public's penchant for blaming victims for their own misfortune, stating that this perpetuates victimization by labeling victims as sexually promiscuous and damaged.

Sixteen years have passed since Grauerholz's review. Given the accumulation of new research evidence regarding risk for revictimization, it seems necessary to reevaluate the application of the theory. Additionally, with the emergence of research regarding revictimization prior to adulthood, we must examine this issue as it relates to children and adolescents. Figure 1 (Pittenger, Huit, & Hansen, 2016) illustrates a systems approach to examining revictimization using Belsky's (1989) conceptualization of maltreatment. Complex interactions across these levels are also examined within the confines of the *person-process-context-time* model described above.

Ontogenic development. Ontogenic development accounts for the individual's personal history and represents all that they bring to interpersonal interactions (Grauerholz, 2000). Most research to date has examined how factors at this level are associated with risk for revictimization and often includes the examination of psychological and behavioral functioning attributable to earlier life experiences such as sexual abuse in childhood (Arata, 2002). In addition to these effects of CSA, evidence implicates various demographic factors as well as characteristics of the individual's initial victimization experiences as influencing risk for subsequent victimization.





Demographic factors. Although evidence is sparse, there is some indication that demographic factors such as age and ethnicity may be associated with risk for sexual revictimization. Using data from a general population survey of women residing in the state of Washington, Casey and Nurius (2005) found that women reporting multiple victimizations with different perpetrators tended to be younger at the time of initial victimization. Simmel and colleagues (2012) interviewed 423 women to examine the influences of disclosing initial abuse experiences on risk for sexual revictimization in adulthood. Results suggested that being within what the authors refer to as the "latency" period of childhood (ages 6-10 years) when initial abuse occurred significantly contributed to increased risk for subsequent victimization compared to those experiencing CSA during the preschool years (Simmel et al., 2012). Another large-scale study surveying college women found that victimization prior to the age of 14 nearly doubled the chances of sexual victimization in later adolescence (Humphrey & White, 2000).

Race, ethnicity, and culture have not been thoroughly examined in regard to how they relate to sexual victimization. Furthermore, previously executed studies have provided inconsistent findings (Friedenberg et al., 2013). For example, while national data indicates African American girls experience sexual abuse nearly twice as frequently as other ethnic groups (Sedlak et al., 2010), other studies suggest that CSA rates are highest for Hispanic women (Kalof, 2000), and some show no differences between ethnic groups (Elliott & Briere, 1992; Kalof, 2000; Sedlak et al., 2010). Examining revictimization prior to adulthood, Matta Oshima and colleagues (2014) followed a cohort of children from initial report of sexual abuse through age 18. Including all maltreatment types, they found that black children, particularly those from non-poor families, had higher risk for a subsequent maltreatment (Matta Oshima et al., 2014). Urquiza and Goodlin-Jones (1994) examined sexual revictimization, defined as experiencing both CSA and rape in adulthood, between white, African American, Latina, and Asian American women. They found that women with a history of CSA were more likely to experience rape in adulthood, regardless of ethnicity; however, 61.5% of African American women experienced revictimization, compared with 44.2% of white women, 40.0% Latinas, and 25.0% of Asian American women (Urquiza & Goodlin-Jones, 1994). The evidence that revictimization may vary between ethnic groups, controlling for poverty status, suggests that this future research should attend more closely to ethnic identification and culture.

Psychosocial effects of CSA and behavioral functioning. A number of abuse sequelae have been implicated in increasing subsequent risk for victimization, namely psychological effects such as distress, PTSD, and maladaptive cognitions, difficulty with interpersonal relationships, increased substance and alcohol abuse, and increased sexual activity. This paper includes a limited discussion of the relevant literature, as multiple reviews exist on this topic (e.g., Arata, 2002; Classen et al., 2005; Messman-Moore & Long, 2003).

As described above, Cuevas and colleagues (2010) showed that reported psychological distress following initial abuse experiences predicted youth's revictimization within one year of initial interview. Poor psychological adjustment also predicts revictimization in adulthood (Gidycz et al., 1993), and psychological distress has been shown to mediate the relationship between CSA and adult sexual victimization (Orcutt, Cooper, & Garcia, 2005). PTSD has also been shown to mediate and moderate (Arata, 2000; Sandberg, Matorin, & Lynn, 1999) the relationship between CSA and revictimization in adulthood. Examining PTSD as a cause and correlate of victimization, Messman-Moore and colleagues (2005) found avoidance, hyperarousal, and dissociative symptoms of PTSD to mediate the relationship between CSA and revictimization in adulthood. Risser, Hetzel-Riggin, Thomsen, and McCanne (2006) also found hyperarousal symptoms of PTSD to mediate revictimization in adulthood of being in and staying in risky situations. Avoidance symptoms of PTSD may mediate the relationship between CSA and subsequent victimization by decreasing awareness and the ability to detect danger, which leaves victims more likely to engage in relationships with abusive partners (Chu, 1992). Fortier and colleagues (2009) also used meditational analysis to provide evidence that avoidant coping following the experience of CSA exacerbates trauma symptoms therefore placing individuals at even higher risk for revictimization.

Peterson and Seligman (1983) proposed a theory of learned helplessness in which individuals experiencing CSA develop an internal, stable, and global attributional style leading them to believe they are the cause of their abuse, the abuse will not stop, and that their lives will be permanently and negatively affected by their abuse experiences. This attributional style leads individuals to be emotionally numb and passive to the point where they will submit to perpetrators rather than attempt to escape risky situations (Peterson & Seligman, 1983). Characterological and behavioral self-blame following CSA have been associated with poorer outcomes (Frazier, 2003) and may mediate the relationship between CSA and revictimization along with posttraumatic stress symptoms and risky sexual behavior (Arata, 2000; Tapia, 2014).

Both CSA and revictimization are associated with difficulties in regard to interpersonal skills, which is hallmark to the ecological model of development. For example, Cloitre, Scarvalone, and Difede (1997) showed that women who have experienced victimization in childhood and adulthood indicate more difficulty in the interpersonal areas of sociability, submissiveness, intimacy, responsibility and control. Further, despite using retrospective report, the authors showed that these effects were not primarily attributable to the experience of multiple episodes of victimization but rather mediated the relationship between CSA and revictimization in adulthood (Cloitre et al., 1997). Classen, Field, Koopman, Nevill-Manning, and Spiegel (2001) also supported this notion that revictimized women have more difficulties interpersonally. Although they did not explore mediators of revictimization, they found the interpersonal characteristics of attributing more responsibility to oneself, having difficulty being assertive, being socially avoidant, and being overly nurturing were associated with revictimization (Classen et al., 2001). Additionally, in response to the emotional distress that accompanies CSA, victims may employ maladaptive coping techniques such as withdrawing from others in an attempt to avoid or diminish negative thoughts and feelings (DiPalma, 1994; Oaksford & Frude, 2003). Both difficulty relating to others and behavioral withdrawal may greatly impact interpersonal functioning thus influencing risk for future victimization.

Those who experience CSA tend to report increased alcohol and substance use and abuse (Kotchick, Shaffer, Forehand, & Miller, 2001; Sartor, Agrawal, McCutcheon,

22

Duncan, & Lynskey, 2008; Walsh et al., 2014) and risky sexual practices (Kotchick et al., 2001), both of which increase risk for subsequent sexual victimization (Polusny & Follette, 1995). Alcohol and substances tend to be used by CSA victims as coping strategies for the commonly experienced symptoms of psychological distress and have largely been associated with adult experiences of sexual victimization (Messman-Moore & Long, 2003). Testa, Hoffman, and Livingston (2010) recently examined how risky behaviors, including sexual risk taking and increased alcohol use, influence the relationship between adolescent and college experiences of sexual victimization. Results indicated that heavy episodic drinking partially mediated this relationship showing that adolescent experiences of victimization increased likelihood of heavy drinking, which then increased likelihood of college victimization (Testa et al., 2010). Bolstering these findings, Walsh and colleagues (2014) found that female college students with multiple victimization experiences were more likely to abuse substances.

Finally, the increases in sexualized behavior that often follow CSA may bear the most weight out of all the psychosocial factors discussed thus far. A breadth of studies employing adult and adolescent samples provide evidence that heightened sexualization greatly increases future risk of victimization. Exploring possible mediators of adolescent sexual revictimization, Bramsen and colleagues (2013) collected victimization and behavioral information from high school girls. The authors found that the relationship between CSA and adolescent victimization was fully accounted for by the number of sexual partners and sexual risk behaviors, and that youth victims of CSA also experience difficulties setting sexual boundaries with male partners although this did not mediate sexual revictimization (Bramsen et al., 2013). These findings build on prior evidence that

sexual and overall risk taking increase risk of adolescent sexual revictimization (Koss & Dinero, 1989; Mandoki & Burkhart, 1989; Mayall & Gold, 1995; Simons & Whitbeck, 1991). In regards to studies of adult populations, risky sexual behaviors are more prevalent in women who report experiencing both childhood and adult sexual victimization (Miner, Klotz Flitter, & Robinson, 2006) and may even have the same mediating effect as has been found in adolescent samples (Fargo, 2009; Van Bruggen, Runtz, & Kadlec, 2006). Other studies have demonstrated heightened risk for revictimization among women who engage in sexual acts with multiple partners and those who exchange in sex for money (Rinehard, Yeater, Musci, Letourneau, & Lenberg, 2014; Ullman & Vasquez, 2015).

Abuse-specific characteristics. Although much of the research literature linking CSA and subsequent victimization dichotomizes initial abuse experiences (i.e., present and not-present), there is reason for future endeavors to account for characteristics of initial abuse experiences in helping to explain risk for revictimization. For example, these characteristics may include frequency and duration of abuse, abuse severity, and use of force (Classen et al., 2005) as well as the recency of initial abuse (Collins, 1998; Himelein, 1995; Maker et al., 2001). Using path analysis to predict sexual revictimization of adult women, Arata (2000) found that repeated victimization was associated with more enduring and severe forms of initial abuse. Similar findings by Waldron and colleagues (2015) suggested that more frequent abuse experiences in childhood are related to revictimization in adulthood. Swanston and colleagues (2002) used a longitudinal design to examine factors promoting re-abuse of 183 youth who

six years after initial presentation, the authors found that severity of abuse significantly predicted subsequent victimization. Specifically, those youth who had experienced penetrative sexual abuse were at higher risk of re-abuse (Swanston et al., 2002). These findings have been bolstered by more recent investigations showing strong associations between initial abuse severity and sexual revictimization (Casey & Nurius, 2005; Simmel et al., 2012). However, a study by Matta Oshima and colleagues (2014) found no relationship between abuse severity and later revictimization risk.

Taking into consideration the impacts of revictimization, it may be helpful to explore CSA experiences from a cumulative risk perspective in predicting the likelihood of persistent victimization. For example, Loeb, Gaines, Wyatt, Zhang, and Liu (2011) found that summed composite scores of abuse severity helped explain the relationship between victimization occurrences better than a simple binary measure. This summed composite included information about the specific abusive acts, relationship of perpetrator to victim, recency of abuse, and victim age at abuse onset (Loeb et al., 2011).

Microsystems. Microsystem factors that impact risk for revictimization include contexts in which initial and subsequent abusive interactions occur. In addition, the ecological model of revictimization must recognize the other environmental contexts that may influence the individual's behavior following abuse. The specific microsystems of interest include the family, reactions to initial abuse disclosure or discovery, helping professionals, and the victim-perpetrator relationship.

Family. The family may be the single most important context of development. Especially in childhood and adolescence, individuals spend a significant portion of their waking hours interacting with their relatives and operating within family norms and values. Children are also highly dependent on family members for basic needs, financial and emotional support, and access to the outside world.

There are many factors stemming from within the family that may lead to entrapment in the cycle of victimization, promoting both initial and subsequent abuse experiences. For example, using structural equation modeling to examine revictimization risk, Fargo (2009) identified the childhood family environment as a significant predictor of child sexual and physical abuse. Results indicated that youth being left alone by parents, having parents that used weapons against one another or hit one another, having a mother with a mental health or drinking problem, and having lived with a variety of different caregivers were all significant risk factors for revictimization (Fargo, 2009). Kellogg and Hoffman (1997) surveyed 538 youth and young adults presenting to various clinics with focus on sexual abuse, family planning, family practice, and pregnancy/parenting. The authors found that those coming from homes in which there was violence and/or substance abuse were more likely to report unwanted sexual experiences by multiple perpetrators, thus they concluded that children from homes with these problems may be exposed to more perpetrators over time (Kellogg & Hoffman, 1997). In their study described above, Swanston and colleagues (2002) found that instability in primary caregivers increased risk of subsequent abuse and neglect. In addition to the chaotic family characteristics of violence and instability, youth living within families on state assistance are at increased risk for revictimization (Matta Oshima et al., 2014). Finally, Finkelhor and colleagues (2007) examined factors that both promote and buffer from repeated victimization. The authors found that parental supervision and the presence of older siblings protected from revictimization at their oneyear follow-up. Living within a violent family increased risk for subsequent victimization (Finkelhor et al., 2007) and predicted the emergence of victimization for youth who had not been victimized at the first data collection time-point (Finkelhor et al., 2007).

Reactions and support surrounding the initial victimization. Caregiver support is widely evidenced to promote healthy adjustment following the experience of CSA (Elliott & Carnes, 2001). Aside from helping youth's emotional and behavioral wellbeing following CSA, caregiver support may be influential in a child's decision to disclose abuse (Malloy & Lyon, 2006), which is the first step in removing them from the abusive situation and gaining access to support services. Further, there is some evidence suggesting that a lack of parental support following disclosure may influence risk of continued victimization. Examining prosecuted CSA cases, Sas and Cunningham (1995) found that of those cases in which parents had not responded to disclosure, 60% of youth experienced re-abuse. However, the effect of caregiver support remains unknown given inconsistent findings. Examining caregiver characteristics in general (as opposed to reactions surrounding abuse discovery), Jankowski, Leitenberg, Henning, and Coffey (2002) surveyed adult women using self-report questionnaires and found that neither maternal nor paternal warmth and caring acted as a buffer for the increased risk of sexual revictimization in CSA survivors. Mayall and Gold (1995) found similar effects also using questionnaires to examine mediators of the CSA-revictimization relationship. However, at least one large-scale study has found that in comparison to women with single victimization experiences, women who have experienced multiple instances of

sexual victimization report feeling that responses to their disclosures were less supportive (Casey & Nurius, 2005).

Helping professionals. The impact of receiving treatment from a helping professional, such as a therapist, after the experience of sexual abuse is unclear regarding risk for revictimization. Therapeutic support may buffer the risk for repeat victimization (Mayall & Gold, 1995); however, some sexual revictimization prevention programs have failed to show reduction in risk (Breitenbecher & Gidycz, 1998; Hanson & Gidycz, 1993). The Youth Relationships Manual (Wolfe et al., 1996), an 18-session intervention based on skills-enhancement that draws upon feminist theories of societal norms for females, is one approach for reducing risk for dating violence in adolescents with child maltreatment histories. In an evaluation of this program, Wolfe and colleagues (2003) found that intervention led to reductions in participants' report of emotional abuse and threatening behavior within intimate partner relationships. This unique sample included males and females, indicating differential impact on report of physical abuse within romantic relationships; males exhibited better treatment gains compared to female intervention participants. Marx, Calhoun, Wilson, and Meyerson (2001) employed a brief intervention design to enhance risk detection skills in adult women with histories of adolescent or adult sexual assault. The two-day intervention – focused on offender characteristics, common reactions to assault, risk recognition and response, problem solving skills, assertiveness, and communication skills – resulted in less report of rape in the two months following intervention for those who participated in treatment sessions versus no-intervention controls (Marx et al., 2001). Combatting the harmful effects of avoidance, Hill, Vernig, Lee, Brown, and Orsillo (2011) developed a mindfulness and

acceptance based intervention to reduce adult sexual assault in college women with histories of CSA. Although women who received the intervention were less likely to experience rape during the follow-up period, the effect was nonsignificant.

Recently, DePrince, Chu, Labus, Shirk, and Potter (2015) compared Wolfe and colleagues' (1996) feminist intervention with an adapted version of the risk detection intervention designed by Marx and colleagues (2001), evaluating their impact on likelihood of subsequent sexual victimization. Using these programs with adolescent girls in the child welfare system, the authors found that youth not receiving either of the prevention programs reported higher rates of sexual revictimization than those receiving the feminist approach (DePrince et al., 2015).

Perpetrator characteristics. As with many other contextual factors, the influence of one's relationship to the initial abuse perpetrator on subsequent victimization remains unclear. Few investigations have examined how relationship to CSA perpetrators might increase or decrease risk for revictimization, and the results have been inconsistent. In their longitudinal study, Matta Oshima and colleagues (2014) found that having a male perpetrator and experiencing abuse by a parent's significant other increased risk for subsequent victimization. Drake, Jonson-Reid, Way, and Chung (2003) reviewed case records of youth and families who had been involved with the Missouri Division of Family Services for an initial report of abuse or neglect between 1993 and 1994. Examining 4,681 cases of sexual abuse, they found no significant difference between parent and non-parent perpetrators on likelihood of having a re-report. Classen and colleagues (2005) also note the dearth of information regarding perpetrator characteristics in their review of sexual revictimization literature. They state that at least one study has
shown intrafamilial CSA to increase risk of victimization in adulthood (Kessler & Bieschke, 1999), while other investigations have returned null findings.

When examining revictimization, it is important to consider the perpetrator's role in subsequent assaultive episodes. Grauerholz (2000) provides a thorough discussion of this in her review, stating that vulnerability for revictimization may be influenced by an increased likelihood that a perpetrator will act aggressively toward that individual. Specifically, she notes that "there are other factors also at work that serve to increase the likelihood that men will perceive women as easy targets or perceive situations as ones in which their sexually aggressive attempts will be successful" (Grauerholz, 2000, p. 11). Rossmo (1997, 2000) and Beauregard, Rossmo, and Proulx (2007) describe the hunting processes used by sex offenders in great detail, noting both perpetrator and victim behaviors that influence victim selection. Following availability (i.e., proximity to and access by perpetrator), perpetrators take into account potential victims' physical appearance, vulnerability, age, personality, and behavior (Rebocho & Silva, 2014). Thus, there is interplay between the individual and potential perpetrator that may increase the risk of a victimization occurrence, and examining perpetrator hunting behaviors may help clarify this interaction.

Mesosystems. Although Belsky (1980) did not address mesosystems in his etiological model of child maltreatment, focusing on this contextual level has potential to greatly contribute to our understanding of revictimization. As stated above, mesosystems represent the interaction of any two microsystems for a given individual. For example, some important mesosystems for youth may include the interactions between parents and schools, peers and family members, or helping professionals and family members.

Unfortunately, examination of these systems is missing from the revictimization literature, likely due to the difficulty of gathering information from sources outside of the family for research purposes. In their review, Kotchick and colleagues (2001) recommend taking a multi-system perspective to adolescent sexual risk behaviors, noting reciprocal influence of family, peers, and self. Parental interaction with peer groups occurs largely through monitoring behaviors (i.e., requesting names, addresses, and phone numbers of peers; building rapport with peers and their parents; check-ins while youth are out of the home, etc.) and youth whose parents consistently monitor their social interactions engage in less sexual activity (Romer et al., 1994).

Another interesting mesosystem involves parents and the child welfare system. Youth in the child welfare system, particularly those in foster care, are at higher risk for revictimization than their peers (DePrince et al., 2015). In order to relinquish child welfare involvement, parents often have to comply with recommendations and exhibit their ability to provide a safe environment for their children. Therefore, parents who are incapable of complying with child welfare mandates or recommendations may place their children at heightened risk for subsequent victimization by prolonging involvement with the child welfare system.

Exosystems. As stated in the descriptions of both Bronfenbrenner's and Belsky's models, exosystems refer to those contexts in which the developing individual may not immediately interact but that influence more proximal contexts of development (i.e., microsystems). Considering sexual abuse and continued victimization, these contexts are likely to include one's community/neighborhood and the legal system implemented by those communities.

Community/Neighborhood. Evidence is mounting to show that youth from neighborhoods with certain unfavorable characteristics may be at higher risk for a number of negative outcomes, among them victimization of many forms. Coulton, Crampton, Irwin, Spilsbury, and Korbin (2007) reviewed 25 studies of the link between neighborhood characteristics and child maltreatment, concluding that there is a strong association between these constructs. Specific to sexual abuse, neighborhoods with fewer economic and social resources tended to have higher rates of maltreatment reports (Drake & Pandy, 1996; Ernst, 2000). These neighborhoods may also impact child adjustment following maltreatment, with those in suboptimal environments experiencing more psychological problems (Jaffee, Caspi, Moffitt, Polo-Tomas, & Taylor, 2007).

Regarding continued risk for victimization, a recent investigation showed that youth who moved into neighborhoods they perceived as "worse" in comparison to others were more likely to be persistent victims (Finkelhor et al., 2007). Additionally, Drake and colleagues (2003) found that sexually abused youth living in neighborhoods with low median incomes (i.e., less than \$20,000 per year) had higher rates of re-abuse than those living in higher income neighborhoods. Although they did not specifically explore sexual revictimization, Obasaju, Palin, Jacobs, Anderson, and Kaslow (2009) showed that perceived neighborhood disorder and community cohesion moderated the relationship between childhood abuse and experiencing intimate partner violence in adulthood.

Legal and judicial responses to abuse. The Child Advocacy Center (CAC) model was developed in part to reduce psychological trauma to children caused by multiple invasive interviews (Anderson & McMaken, 1990). As such, it is expected that investigations occurring within this model may impact child functioning following abuse disclosure; however, few studies have examined how investigative and judicial processes influence risk for continued victimization. Examining the impact of case outcome, Drake and colleagues (2003) found substantiation to be associated with higher rates of abuse re-report for youth experiencing physical abuse and neglect, although this effect was not significant for sexual abuse. Wolfteich and Loggins (2007) sought to evaluate how the CAC model specifically impacts revictimization of sexually abused youth. The authors found that cases investigated through the CAC model had a higher case substantiation rate in comparison to two other child maltreatment investigation models, although there were no differences in rates of revictimization (Wolfteich & Loggins, 2007). There appear to be some advantages to the current model of child abuse investigation; however, little is known about its impact on the cycle of victimization.

Macrosystems. Macrosystems refer to the overarching beliefs and values of the culture(s) within which the developing individual exists that permeate the other, more proximal systems. Given their abstract nature, factors at the macrosystem level may be some of the most difficult constructs to empirically test in regard to specific developmental outcomes. As such, there is little evidence to examine regarding the role of macrosystems in promoting or protecting youth from revictimization. In her theoretical integration of sexual revictimization research, Grauerholz (2000) calls attention to the broader societal values of emphasizing traditional gender roles and promoting prejudiced views of sexual assault victims in how they might lead to repeat victimization. She identifies victim-blaming attitudes as culprits in promoting revictimization, citing that notions of "good girl" versus "bad girl" and society's value of sexual virtue for women encourage suspicion of those who have experienced sexual

abuse or assault (Grauerholz, 2000). While these factors are far removed from the individual, they surely impact perceptions of support as well as victims' feelings of guilt and shame following abuse.

More concrete examples of this contextual level include federal policy regarding child maltreatment and governing bodies that oversee entities that serve child victims. The Federal Child Abuse Prevention and Treatment Act (CAPTA, 1974) as amended by the CAPTA Reauthorization Act of 2010, for example, describes a coordinated response to child abuse and neglect, requiring the child protection system to prevent recurrence of abuse through federal and state mechanisms designed to support children and families. This Act, although devised in a context far removed from the individual, provides the legislation that may fund programs with which the individual interacts, namely prevention programs that aim to keep children safe.

The National Children's Alliance (NCA) is another exosystem factor that influences the individual through policies and procedures set forth by CACs. NCA is the national association and accrediting body for CACs and thus is important in advocating for victims' rights and services at the macrolevel. To some degree, societal and cultural values dictate the policies that are enacted to protect children, thus examining the impact of policy changes on revictimization may be a promising method to gain insight into the impact of these distal systems.

Interactions across systems. Finally, any ecological model must take into consideration the influence of factors within and between systems. Bronfenbrenner captured this notion, summarizing that human existence is so complex that in order to understand etiology we must first identify and then account for *all* factors at play. Belsky

(1980) reiterated this by emphasizing the importance of examining "nested relationships that exist between causative agents" (p. 321). The notion that systems interact in regard to revictimization is present in the work of many researchers attempting to develop path models that follow individuals from initial to subsequent victimization episodes.

Although many research efforts have focused solely on factors within the individual, at the ontogenic development level (e.g., Bramsen et al., 2013; Orcutt et al., 2005; Testa et al., 2010; Van Bruggen et al., 2006), Arata (2000) and Fargo (2009) executed two notable studies including multiple contexts of development. In her revictimization model, Arata (2000) hypothesized that characteristics of the initial abuse experience, including the relationship of perpetrator to victim, would influence the development of emotional and behavioral symptoms, leading to a higher likelihood of revictimization. While many factors were examined from the individual level, inclusion of relationship to perpetrator extends the model to the microsystem as well. In the final model, however, only ontogenic development factors (i.e., self-blame, posttraumatic stress symptoms, sexual behaviors) were significantly associated with sexual revictimization. Fargo's (2009) model of revictimization accounted for negative childhood environment as influencing initial abuse experiences and the development of behaviors that place adolescents at higher risk for subsequent victimization. As described on page 32, Fargo's model identified multiple environmental risk factors that influence risk for revictimization thus providing empirical support that ecological contexts beyond the individual matter. For example, being poorly monitored and living in homes with domestic violence and/or parental mental health or alcohol problems increased revictimization risk.

Purpose of the Present Study

Little is known about sexual revictimization within childhood and adolescence due to the majority of data collected to date coming from retrospective reports by adult women. Additionally, when cross-sectional study designs are used, it is difficult to distinguish correlates, causes, and consequences of revictimization (Barnes et al., 2009). These issues highlight the need for research using prospective methods to explore contextual factors that contribute to sexual revictimization in an effort to reduce stigma and better understand the experiences of youth. Further, prior research with youth samples has shown that enduring any one type of maltreatment increases vulnerability for future victimization, and abuse of both sexual and non-sexual natures increases risk for subsequent sexual abuse (Boney-McCoy & Finkelhor, 1995; Finkelhor et al., 2007). Finally, revictimization research including male samples is virtually nonexistent, leaving much to be understood regarding differential experiences based on gender. Thus, the current project employed a prospective design using Bronfenbrenner's bioecological perspective to examine re-abuse for male and female youth who had at least one incidence of sexual victimization.

Exploring revictimization from an ecological perspective will help us better understand the disruptions to development that occur with initial victimization as well as the contexts that contribute to initial abuse experiences and continue to exist post-abuse discovery. For the present study, factors of interest included individual and personal characteristics (ontogenic development), immediate contexts in which the individual was present (microsystems), and contexts in which the individual was not immediately present but that influenced them through microsystems (exosystems). It was also expected that factors at each of the levels interacted to influence one another. Therefore, it was expected that each factor might contribute to risk independently and in conjunction with other factors. To account for these relationships between levels, this project examined how factors within and between contextual levels were related.

Within the United States, many regions have devised a coordinated response to child sexual abuse through the establishment of the Child Advocacy Center (CAC). The first CAC was developed in Huntsville, AL and opened in 1985 in response to the noted limitations of current child protective service agencies in investigating abuse cases and adequately protecting youth. The goal of establishing this program was and continues to be the coordination of a community's response to reports of child abuse to improve investigation and prevention while reducing the stresses of the investigation process on children and families (Smith, Witte, & Fricker-Elhai, 2006). Thus, identifying revictimization risk factors that can be assessed in youth after initial abuse occurrence will help inform a nationwide network of helping professionals aimed at keeping children safe from maltreatment. The specific aims and associated hypotheses of the current study were as follows:

Aim 1: Identify Factors that Predict Revictimization

Sub-aim 1.a: Explore factors relating to ontogenic development that are associated with revictimization. In this bioecological framework, the individual, or ontogenic, level includes personal characteristics and experiential history that may influence future behavior. As such, demographic and personal information (i.e., age, gender, having exhibited sexual behaviors in the past, etc.) as well as characteristics of initial abuse experiences were examined to determine associations with sexual revictimization. Abuse characteristics included time between last abuse incident and presentation to the CAC, the intrusiveness of abusive acts, and whether force or substances and/or alcohol were used.

Hypothesis 1.a.1. Prior research has indicated that age at the time of initial abuse experience may be associated with risk for revictimization (Casey & Nurius, 2005; Simmel et al., 2012). While Casey and Nurius (2005) examined age continuously to find that younger age was associated with higher risk for revictimization, Simmel and colleagues (2012) showed that initial abuse occurring between the ages of 6 and 10 years increased likelihood of subsequent victimization. Simmel and colleagues (2012) compared children within the latency period of development to young children (i.e., under 6 years) and adolescents, which they defined as ages 11 and older. Therefore, two hypotheses were explored: (a) that younger children would be at risk for sexual revictimization and (b) that risk would be highest for those within the latency period of development (ages 6-12 years). The latency period differed for this study compared to Simmel et al. (2012) to better represent the period from school initiation to average age at puberty onset.

Hypothesis 1.a.2. More frequent consensual sexual activity, early onset sexual activity, sexual risk taking behaviors, and number of sexual partners have all been shown to mediate the relationship between CSA and adolescent revictimization (Bramsen et al., 2013; Fargo, 2009; Fergusson et al., 1997; Krahe, Scheinberger-Olwig, Waizenhöfer, & Kolpin, 1999). Therefore, in the present sample it was expected that parent or caregiver reported sexual behavior problems would increase risk for future sexual victimization.

Hypothesis 1.a.3. Various characteristics of the abuse experience were expected to increase risk for subsequent victimization. Specifically, based on research outlined above, it was expected that more recent initial abuse events, longer enduring abuse by the initial perpetrator, and more intrusive abusive acts would be associated with increased risk for revictimization.

Sub-aim 1.b: Explore microsystem factors associated with revictimization.

Microsystem factors are those regarding the immediate familial context (family structure), engagement in additional support services, and the initial abuse incident perpetrator. The number of other individuals living in the household, both adult and minor, and their relationship to the individual are considered in family context. Additional important micro-system factors include the initial abuse perpetrator's relationship to the victim and where they were residing at the time of abuse.

Hypothesis 1.b.1. Grauerholz (2000) implied that repeated victims of sexual assault may find themselves at risk due to increased exposure to potential perpetrators. Additionally, Kellogg and Hoffman (1997) concluded that more chaotic family environments might provide more opportunity for perpetrators to access youth, leading to repeat victimization. Thus, it was expected that family environments enabling access to youth by adults other than primary caregivers would increase risk for revictimization. For example, youth living in homes with adults other than their primary caregivers such as a step-parent, unmarried parental partner, other adult family members, or non-kin adults were anticipated to be at increased risk for revictimization.

Hypothesis 1.b.2. The family environment is widely evidenced to influence child functioning, including the likelihood that youth will be exposed to various maltreatment

types. As reviewed above, families characterized by conflict, drug or alcohol abuse, and violence tend to have children at higher risk of experiencing multiple victimizations (Fargo, 2009; Finkelhor et al., 2007; Kellogg & Hoffman, 1997; Swanston et al., 2002). As such, a history of other adversity such as alcohol and/or substance use, domestic violence, or childhood sexual abuse for another member of the family were all expected to increase the likelihood of subsequent victimization.

Hypothesis 1.b.3. Prior research has found a relationship between engagement in therapeutic services and revictimization, such that individuals receiving this kind of support are at less risk of future victimization (Mayall & Gold, 1995). Therefore, engagement in support services as evidenced by cooperation with the Child Advocacy Center and having an identified mental health provider at the time of initial abuse were hypothesized to decrease risk for subsequent victimization.

Hypothesis 1.b.4. Post-abuse functioning may differ for individuals based on their relationship to the abuse perpetrator (i.e., Ruggiero, McLeer, & Dixon, 2000). Despite a lack of research regarding the relationship between perpetrator and victim as it relates to revictimization, it was hypothesized that the victim-initial abuse perpetrator relationship would predict risk for revictimization. Specifically, it was expected that likelihood of revictimization would increase along with youths' closeness to initial abuse perpetrator.

Sub-aim 1.c: Explore exosystem factors associated with revictimization.

Factors at this level include characteristics of the individual's community as well as case proceedings and outcomes.

Hypothesis 1.c.1. As reviewed above, characteristics of the neighborhood in which youth reside may influence their risk for experiencing sexual abuse and revictimization. Specifically, neighborhoods with lower median household income and those described as chaotic tend to have residents who experience multiple victimizations (Drake et al., 2003; Obasaju et al., 2009). Therefore, it was expected that youth living in neighborhoods with higher educational attainment and higher income would be at less risk for revictimization.

Hypothesis 1.c.2. Regarding criminal case investigation and outcome, it was expected that those youth whose perpetrator was charged with a criminal act, were either found guilty or plead guilty would be at less risk for revictimization. It was hypothesized that consequences imposed on the perpetrator would also buffer effects of CSA in regard to risk for revictimization.

Aim 2: Design a model that integrates factors across contextual levels of development to predict revictimization. Given that individuals influence and are influenced by their external worlds, it was expected that factors across and within the levels described above would be linked in such a way as to additively influence risk for revictimization. In order to examine this, relationships between factors at each level must be thoroughly explored to better understand how they may influence risk for subsequent victimization. Thus, the purpose of this aim was to identify factors that uniquely and strongly predicted revictimization and, ultimately, to identify a parsimonious model to predict likelihood of subsequent victimization so that at-risk youth may be identified and resources best allocated toward preventive efforts. *Hypothesis 2.a.* Belsky (1980) identified "nested relationships" (p. 321) between the factors he discussed as influencing risk of child maltreatment. Specifically, this means that all levels interact and influence the others. Therefore, we expected that factors within and between each contextual level of development would be related such that change in one factor was associated with change in others.

Hypothesis 2.b. Prior reviews have clearly indicated that CSA increases the likelihood of subsequent victimization (Arata, 2002; Classen et al., 2005). Additionally, a breadth of research implicates specific factors intrinsic to the individual that may influence this risk (Messman-Moore & Long, 2003). The burgeoning field of research examining factors beyond the individual provides preliminary evidence that interpersonal and cultural influences may act to protect the individual or increase risk (Grauerholz, 2000). Thus, it was hypothesized that specific and identifiable factors influencing risk for revictimization would be present across ontogenic, micro-, and exosystem levels.

CHAPTER 2: RESEARCH DESIGN AND METHOD

Research Site

Data were collected from the Lincoln CAC's closed case files. The Lincoln CAC opened its doors to families in 1998 and has served the community since that time. Students and faculty in the Clinical Psychology Training Program (CPTP) at the University of Nebraska-Lincoln (UNL) have a long-standing relationship with the Lincoln CAC. As part of their graduate training, CPTP students have been providing mental health services to families of southeast Nebraska affected by sexual abuse since 1996 through Project SAFE (Sexual Abuse Family Education) and began working with the CAC when it opened. In early 2010, a Project SAFE office was established at the CAC, officially integrating CPTP students and faculty into the program of the CAC. Through this relationship, the primary investigator was able to approach the CAC's executive director and program coordinator to discuss collaboration on this research project. With the support of the executive director, formal hypotheses and research procedures were presented to the executive committee - a sub-committee comprised of members of the CAC board of directors – who reviewed the project to ensure it adhered to CAC research collaboration guidelines. This committee made recommendations to protect the fidelity of electronic information and approved the project.

Participants

Participants included 1,915 children and adolescents who presented to the Lincoln CAC for their first abuse occurrence between 2002 and 2009. Data for the current study were archival. These youth were referred to the CAC by law enforcement or the Department of Health and Human Services following reports of child maltreatment. For

43

each child presenting to the CAC, staff maintained a case record to document contact with the family and investigation proceedings. Once any legal proceedings were completed and/or the child and their family were no longer receiving services through the CAC, the case record was considered closed; any subsequent visits to the CAC by the same child resulted in a new case record.

Youth who had at least one incident of child sexual abuse resulting in CAC contact and were considered minors in the state of Nebraska at time of their initial visit (i.e., 18 years old or younger) were included in this study. Since failure to substantiate abuse cases often reflects a lack of corroborating evidence or other issues with the investigation, rather than an indication that abuse did not occur (Lewit, 1994), all allegations of abuse were considered, regardless of substantiation status. Cases were excluded from this study if (a) they were identified at risk for abuse without any corroborating evidence (i.e., self-disclosure, witness to abuse, or physical evidence), (b) CAC staff documented suspicion of false reporting by caregiver or youth, (c) there was insufficient information documented in case record (e.g., incomplete intake report and no accompanying documentation), or, (d) the child had reported to the CAC or another entity for allegations of sexual abuse prior to 2002.

While case files were available through the year 2014, the primary investigator was interested in case files for youth who presented to the CAC for an initial abuse allegation between 2002 and 2009 to allow adequate time to capture occurrences of revictimization. Revictimization was considered to have occurred if a youth returned to the CAC for an additional abuse allegation occurring at a different time and perpetrated by a different individual from the initial report. The term "revictimization" here refers to any youth who re-presented to the CAC, which likely does not represent all youth who experienced subsequent sexual victimization but rather those who disclosed their abuse or who were responded to in a manner that allowed for a return to the CAC. All case records from 2002 through 2014 identified as instances of revictimization were coded for inclusion in the current project.

The final sample included 1,915 youth (23.6% male and 76.3% female; 0.1% missing), average age 10.2 years (SD = 4.4), presenting to the CAC for an initial abuse occurrence between December 2001 and December 2009 (see Table 2.1 for demographic information). At the time of their referral, 33 cases had reports of poly-victimization, meaning they experienced multiple forms of abuse/maltreatment which were slated for investigation.

The sample represented diverse ethnic groups with the majority of youth identifying as European American (79.0%), and just less than one quarter of the sample representing the following ethnic and racial minorities: Black or African American, Hispanic, Native American, Asian or Pacific Islander (see Table 2.1). Forty-seven (2.5%) case files were missing information regarding ethnicity. CAC staff identified a substantial number of cases as having a physical or mental health disability. The most frequently endorsed disabilities included Attention-Deficit/Hyperactivity Disorder (ADHD; 6.3%) and other mental health problems (6.8%). At the time of their referral, approximately half of the cases were in either their mother's custody (N = 512; 26.7%) or both of their biological parents' custody (N = 458, 23.9%), whether they were residing together or estranged. Many youth were in the custody of their mother and mother's partner, including married and unmarried partners (N = 364, 19.0%).

Table 2.1

Descriptive Information about Participants

Variable	Total Sample ($N = 1,915$)	Missing
	M (SD)/N (%)	N (%)
Age (years)	10.2 (4.4)	6 (0.3%)
Female	1,461 (76.3%)	2 (0.1%)
Ethnicity		47 (2.5%)
European American	1,512 (79.0%)	
African American	150 (7.8%)	
Hispanic	131 (6.8%)	
Native American	42 (2.2%)	
Asian	19 (1.0%)	
Other	12 (0.6%)	
Number of Abuse Types		0 (0%)
1	1882 (98.3%)	
2	33 (1.7)	
3 or more	3 (0.2%)	
Disabilities		135 (7.0%)
Learning	90 (4.7%)	
Hearing	13 (0.7%)	
Visual	5 (0.3%)	
Speech	52 (2.7%)	
ADHD	121 (6.3%)	

Mental Health	130 (6.8%)	
Developmental	58 (3.0)	
Intellectual	6 (0.3%)	
Cerebral Palsy	2 (0.1%)	
Autism	10 (0.5%)	
Seizure Disorder	8 (0.4%)	
Other	34 (1.8%)	
Supportive Caretaker Present	1,483 (77.4%)	50 (2.6%)
Supportive Caretaker Relationship ^a		2(< 0.1%)
Biological Parent	1,241 (83.8%)	
Grandparent	73 (3.8%)	
Foster Parent	57 (3.0%)	
Other	110 (7.4%)	
Child Currently Living With		88 (4.6%)
Biological or Adoptive Parents	458 (23.9%)	
Mother & Partner	364 (19.0%)	
Mother Only	512 (26.7%)	
Father & Partner	87 (4.5%)	
Father Only	71 (3.7%)	
Other Relative	85 (4.4%)	
Foster Home	127 (6.6%)	
Other	123 (6.7%)	
State Custody	256 (13.4%)	156 (8.1%)

Number of Children in Home	Range = $1 - 11$, Median = 2	179 (9.3%)
Number of Adults in Home	Range = $1 - 7$, Median = 2	176 (9.1%)
Number of Perpetrators	Range = $1 - 7$, Median = 1	6 (0.3%)

^adata provided only for youth who were accompanied to the CAC by a supportive caretaker

Although only 127 cases were living with foster families, 256 were identified as state wards at the time of referral (13.4%).

Data Sources

Closed case files at the CAC served as sources of data for the current study. Each case file potentially included the following forms: Case Record/Intake, Forensic Interview, Medical Examination, Authorization for Exchange of Information, and forms indicating prosecution and law enforcement outcomes. Sample forms currently used by the CAC are included in Appendices A-E, however, it should be noted that these have been modified numerous times between 2002 and 2014. Specifically, two authorization for Exchange of Information. Additionally, Appendix D displays the currently used form to document prosecution and law enforcement outcomes whereas separate forms (Juvenile Court Prosecution Outcome, Investigation Outcome, and Prosecution Outcome) were used to document this information in earlier years. Information such as parent ethnicity has been added to the more current forms; this information was not available for cases from earlier years. Additionally, cases were matched to publicly available census data using zip code. Descriptions of these sources of data and information that was coded

from each are provided below. The CAC maintains as complete and accurate records as possible; however, difficulties communicating with outside entities (e.g., law enforcement, county attorneys, child protective services, area hospitals) may have precluded complete documentation in many cases. Therefore, not every case file contained record of all forms available.

Case Record/Intake. The intake form, as shown in Appendix A, is completed by a child advocate and is intended to record demographic and family characteristics as well as details about the abuse allegation and services requested and provided at the CAC. Information contained in this form and of interest for the current study included: (a) demographic information such as age, gender, ethnicity, disability status, primary language; (b) family characteristics such as presence of supportive caretaker, number of adults in the home, number of siblings, and family history of domestic violence, substance/alcohol abuse, physical or sexual abuse, or mental health issues; (c) abuse allegation characteristics including alleged perpetrator, abusive acts, location(s) abuse occurred, and duration and frequency of abuse; (d) services provided by the CAC including but not limited to forensic interview, medical exam, and multidisciplinary team review; and (e) sociocultural information including zip code and school attended. This form was completed for every child who presented to the CAC and in some cases had incomplete data due to the CAC's inability to obtain relevant information from a knowledgeable historian.

Forensic interview. The forensic interview record (see Appendix B) is completed by the forensic interviewer and is intended to briefly document the results of the interview with the child or adolescent. Information documented in this form and of interest for the proposed study included: (a) the youth's disclosure behaviors, (b) type(s) of abuse disclosed, (c) abusive acts disclosed, and (d) and corroborating evidence found during investigation. Given the CAC's documentation policies, the absence of a forensic interview record signified that a case did not receive a forensic interview on site or by CAC staff.

Medical examination. Medical professionals use the medical examination form, shown in Appendix C, to document results of a physical examination, if one was completed at the CAC. If an exam was completed outside of the CAC, the intake form will indicate whether this exam resulted in physical evidence of abuse. Information documented in this form and of interest for the current study included: (a) indicators of sexual development such as tanner stage, menarche, inappropriate sexual behaviors, and engagement in consensual sexual activity; and (b) evidence of abuse as determined through physical findings, sexually transmitted infection laboratory results, or positive pregnancy tests. Similarly to the forensic interview, absence of this form in a case file signified that the child or adolescent did not receive a medical examination at the CAC or by CAC staff.

Investigation and prosecution outcomes. The Outcomes Study form (see Appendix D) is currently used to document outcomes of the investigative and legal processes. While separate forms were used in earlier years to document these outcomes, these forms are not available for inclusion in the Appendices. The investigation outcome includes legal action taken as a result of investigation and is documented in the case record by law enforcement or CAC staff. This information includes (a) the degree of law enforcement involvement, (b) case substantiation status, and (c) resulting actions (i.e., arrest, charges filed, changes in child placement, etc.). After completion of judicial proceedings, CAC staff document court case outcomes in the case records. Outcomes specific to a juvenile court case are documented in the case record by law enforcement or CAC staff. This information includes judicial proceedings such as county attorney actions taken, court verdict, and whether the victim provided testimony during the trial. Similarly, information is documented after criminal court proceedings, including county attorney actions taken, court verdict, whether the victim provided testimony during trial, and the sentence imposed if the defendant was found or plead guilty to any charges. Investigation and prosecution are the responsibility of law enforcement officers, child protection and safety workers, and prosecutors rather than the CAC. Therefore, the CAC may not have had complete information. For purposes of this project, it is unclear whether data related to investigation and prosecution outcome variables were missing or not applicable.

Authorizations for exchange of information. During the course of their active case, parents and legal guardians of youth victims may provide the CAC with permission to communicate with other entities (e.g., schools, private therapist, primary care, private attorney, etc.). Caregivers indicate permission by signing an authorization form. This information, as shown in Appendix E, was evaluated as a guardian's willingness to allow communication between the CAC and other important contexts in which the child or adolescent was embedded. A composite score was calculated by summing the number of entities with which the CAC was provided consent to communicate. This score ranged

from 0 to 6. Depending on both the need to communicate with other entities and whether the child interacted with other entities, this form may or may not have been applicable.

Census data. The United States Census Bureau makes information based on zip code publicly available through their American Fact Finder tool located on the World Wide Web (U.S. Census Bureau, 2000). Based on zip code recorded in each case file representing the neighborhood within which each child resided at the time of initial abuse, the following variables were accessed: median household income, the percentage of the adult population that had completed high school, and the percentage of the adult population that had completed a bachelor's degree. The American Fact Finder Profile of Selected Economic Characteristics from the 2000 Census Summary File 3 (SF 3) provided median household income for each zip code and the Profile of Selected Social Characteristics from the 2000 Census Summary File 4 (SF 4) provided education attainment proportions for the adult population.¹

Data Collection

Researchers extracted data from closed CAC files and therefore did not engage in an active recruitment process. Project personnel were allowed access to an external hard drive on which all closed case records were stored electronically. Personnel extracted a set of files to be coded for research purposes from this hard drive. Files to be extracted were determined by entering the year of interest (i.e., 2002, 2003, 2004, etc.) as a search term and scanning these files to ensure they meet inclusion criteria. Files were included in the data set if the case had been closed with the CAC, the individual was at the age of minority when presenting to the CAC, the individual presented to the CAC for at least

¹ I used Census 2000 data to best represent the economic and social characteristics of youths' neighborhoods at the time of their presentation to the CAC as data collection began with cases presenting in the year 2002.

one incident of sexual abuse, they were seen at the CAC for an initial visit between the years 2002 and 2009, and they had no indication of a visit to the CAC prior to 2002 or abuse prior to 2002. The files that met project criteria were then copied to an encrypted folder on another external hard drive used for research purposes only. Once all initial abuse allegation files were identified and copied onto the research hard drive, project personnel searched subsequent years for instances of revictimization. Individuals were considered revictimized if they had at least one additional case file at the CAC between the years 2002 and 2014, indicative of a separate incident of abuse from their initial visit. All case records indicating revictimization were copied to an encrypted folder on the research hard drive.

Data for use in this project were coded onto hard copy files with only deidentified information. Research assistants and project personnel manually sorted through electronic forms included in the closed CAC files to extract information. During the extraction process, project personnel copied information from the case record to the research file or converted categorical and other information to research codes. Coded data from hard copy files were then entered into a password protected database stored in an encrypted file on research computers and backed up to the external hard drive.

Twenty-nine percent of the data (499 non-revictimized and 56 revictimized cases) were randomly selected to be independently coded by research staff. Independent coders reviewed and extracted information from the data record and noted item-level agreement with original coders. This data checking procedure indicated 98.6% agreement between coders.

Analyses

53

Data analyses proceeded in three phases: descriptive, bivariate, and multivariate. Predictors at the individual level included age at time of initial presentation to the CAC, abuse severity, time between the last abuse incident and presentation to the CAC, and sexual behaviors or engagement in sexual activity. Age was coded as a continuous variable (age in years) and a dummy coded variable to indicate whether the child was considered to be in the latency period (ages 6-12 years). Regarding abuse severity, perpetrators' use of force, alcohol, or substances were not coded in case files and were therefore not available for analysis. Abuse intrusiveness, duration, and frequency were aggregated to form an abuse severity composite, as described in Table 2.2. A date difference was calculated to represent the amount of time that elapsed between the child's most recent abuse incident and their referral to the CAC. Many youth estimated the last abuse occurrence therefore month increments were selected to allow for calculation of this variable given imprecise data. Although there was not a specific hypothesis regarding gender difference, this variable was explored as a possible ontogenic risk factor.

Two covariates relating to ontogenic development, child ethnicity and disability status, were examined. A variety of ethnic minorities were represented and to accommodate the small samples across ethnic groups, ethnicity was dummy coded as European American or non-European American to examine the effect of ethnic minority status on revictimization. Disabilities were categorized into two dummy coded variables: those pertaining to physical health (i.e., hearing or visual disability, cerebral palsy, seizure disorder, or wheelchair bound) and mental health (i.e., ADHD, other mental health disorder, learning disability, developmental delay, intellectual disability, or autism spectrum disorder).

Microsystem factors were represented by family, service engagement, and perpetrator characteristics. These included: (a) the presence of non-caregiving adults in the home as reported on intake forms; (b) history of other family adversity such as alcohol and/or substance use, domestic violence, or childhood sexual abuse for another member of the family as reported on intake forms; (c) relationship to initial abuse perpetrator as documented on intake and forensic interview records; and (d) whether the child or adolescent was engaged in therapy at the time of their involvement with the CAC. All variables were dummy coded with "1" indicating the affirmative, except for perpetrator relationship, which was separated into three dummy coded variables: immediate familial perpetrator, extended familial perpetrator, and non-familial perpetrator. An additional service engagement variable was calculated from the number of entities with which the family provided consent for the CAC to communicate, documented on an Authorization for the Exchange of Information.

Variables representing exosystem factors were separated into two categories: investigation/prosecution outcomes and community characteristics. Law enforcements actions and judicial proceedings were selected to reflect aspects of the legal investigation and prosecution. Specifically, (1) whether law enforcement made an arrest and/or (2) a resulting court case returned a guilty verdict or plea. Zip code was used to determine qualities of the neighborhood in which youth were residing at time of initial abuse including median household income, and the percentage of the adult population who

55

2	
2	
<u>e</u>	
ig.	
Ľ3	

Scoring Scheme for Abuse Severity

	viewer Item Value Item Label	was the 0 Non-contact	1 Contact, Non-penetration	2 Penetration	?" 0 Single Day	1 2 Days - 1 Month	2 1 Year	3 >1 Year	n the 0 Once	a?" 1 Multiple Events	2 Chronic (more times than the child ca
2	Example Query for Forensic Interv	"What kind of sexual behavior(s) v	child exposed to?"		"How long did the abuse continue"				"How often was the child abused in	current episode under investigatior	
)	CSA Dimension	Type of Abuse			Duration of Abuse				Frequency of Abuse		

were identified as high school graduates or college graduates were selected to represent community-level exosystem factors.

All data were inspected to ensure they conformed to assumptions of the statistical analyses chosen. This inspection revealed satisfactory properties of all variables with the exception of time since last abuse incident, with skew of 7.046, and number of entities with which the CAC was authorized to communicate, with skew of 1.272, indicating that these variables did not conform to the assumption of normality. Therefore, nonparametric statistics were used to describe these variables and examine their relation with revictimization. Specifically, revictimized and non-revictimized groups were compared using the Kruskall-Wallace one-way analysis of variance (ANOVA). Univariate data analyses including reporting of means, standard deviations, medians, and frequencies, were used to quantitatively describe the overall sample of youth as well as revictimized and non-revictimized cases separately. Bivariate analyses of means and proportion comparisons were used to identify any significant differences between revictimized and singly victimized groups on variables hypothesized to influence risk for revictimization. For continuous, normally distributed variables, mean differences were examined using ANOVA with victimization status as the grouping variable. For categorical variables, Chi-Squared (X^2) analyses were run to examine proportion differences.

Multivariate models were run using logistic regression which does not assume normality of data and therefore was appropriate for all variables of interest. All variables, regardless of the significance of bivariate analyses, were included in each within-level logistic regression model (i.e., ontogenic, microsystems, and exosystems) unless they met a specified threshold of missing data. Due to the archival nature of the project, many data were missing; therefore, variables with more than one-third missing data (i.e., 640 cases with missing data) were excluded from multivariate analyses to allow for a large list-wise sample size. Further, only cases with complete data for all variables of interest for multivariate models were included in analyses. Model specification occurred across two steps for within-level models: (a) specifying a full model for each contextual level including hypothesized variables regardless of their individual relation with revictimization and (b) reducing to a trimmed model based on a backward deletion procedure and examining the likelihood ratio and Hosmer and Lemeshow test statistics. Variables were deleted one-by-one and each step was examined each to identify any changes in either the magnitude or direction of independent variable relations with revictimization.

Pearson correlation coefficients were used to examine relationships between predictors within and between contextual levels. Finally, a multiple-step approach was employed to identify the most parsimonious model predicting revictimization including variables across contextual levels. A full model was specified in the first step and included all variables hypothesized to predict revictimization, regardless of their individual relation with revictimization. Then, similarly to within-level regression models, a trimmed model was identified using a backward deletion stepwise procedure. This trimmed model was compared to the full model using the likelihood ratio test as well as the Hosmer and Lemeshow test. This regression model was also used to evaluate classification performance of predictor variables so that individuals beyond the current sample may be evaluated for risk of revictimization. All analyses were run using Statistical Package for the Social Sciences (SPSS) version 23 (IBM Corp, 2013).

CHAPTER 3: RESULTS

Of the 1,915 cases included in this study, all had a completed intake form, 1,745 (91.1%) underwent forensic interview at the CAC, 201 (10.5%) underwent a medical examination at the CAC, 724 (37.8%) had completed investigation outcomes forms, and 198 (10.3%) had completed prosecution outcomes forms. Additionally, 972 (50.8%) youth had case files that included authorizations for the CAC to exchange information with outside entities.

Due to missing data – expected with archival research – results below are presented with the largest sample available to run analyses. For example, descriptive statistics included all youth in the sample with data for a given variable, bivariate analyses included all youth with data available for each pair of variables, and multivariate analyses included only those youth with data for each variable examined across models to allow for meaningful interpretation and comparison of models. The sample size available for each variable is listed in tables where appropriate. For multivariate analyses, only the 986 cases with complete data for all variables examined across models were included.

Occurrence of Revictimization

A total of 213 (11.1%) youth re-presented to the CAC for subsequent sexual abuse allegations and were therefore known to be revictimized. Although not considered revictimization in the present study, 44 youth returned for additional abuse allegations by the same perpetrator that was identified during their first CAC visit; nine youth were revictimized *and* had subsequent abuse allegations against their first incident perpetrator. These latter cases were included in the revictimization group. A survival analysis including all cases, presented in Figure 3.1, shows that nearly half of the revictimized



Figure 3.1. Survival distribution function of youth's risk for revictimization. This figure illustrates the survival rate over time in months regarding revictimization.

youth presented within two years of their initial victimization. Twenty-nine youth (13.6% of revictimization cases) returned to the CAC within 6 months of their initial abuse incident and 87 (41.0%) had returned by 24 months. There was a wide range in time to revictimization episode, with some re-presenting to the CAC within one month and the longest time span being 11.4 years (Median = 30 months).

Additionally, 28 of the revictimized youth presented for multiple instances of revictimization: 23 youth presented for two revictimization episodes, three youth presented for three revictimization episodes, and two cases presented for four additional episodes. The small sample of multiply-revictimized youth precluded formal comparison

of multiply-revictimized youth to non-revictimized and singly-revictimized youth; however, Table 3.1 presents descriptive information for multiply-revictimized youth presenting to the CAC.

Aim 1: Identify Factors that Predict Revictimization

Sub-aim 1.a: Explore factors relating to ontogenic development that are associated with revictimization. Table 3.2 presents descriptive data for variables hypothesized to relate to revictimization across ecological levels. Results from bivariate analyses comparing singly victimized and revictimized youth, including Chi-Squared (X^2) and *F*-tests, are also presented.

As stated above, ontogenic variables included youth age, gender, exhibition of sexual behaviors, and initial abuse severity. Additionally, ethnicity and disability status were examined as potential covariates. It was hypothesized that youth age at presentation to the CAC would exhibit a non-linear relationship such that children ages 6-12 years would be at the highest risk for revictimization. There was no difference between revictimized and non-revictimized groups when examining children within the latency period of childhood, $X^2(1) = 1.189$, p = .276. However, youth age in years at the time of initial referral to the CAC, examined as a continuous variable, exhibited a significant linear relationship with revictimization, F(1, 1908) = 7.210, p = .007, such that revictimized youth were younger (M = 9.4, SD = 4.1) when they initially presented to the CAC compared to non-revictimized youth (M = 10.3, SD = 4.5). Thus, age as measured via this continuous variable was used for multivariate analyses. The presence of sexual behaviors was reported by the person providing a medical history for the victim if a medical examination was completed at the CAC. A total of 201 cases underwent a

Table 3.1

	Multiple Revictimization Cas	es ($N = 28$)
		Missing
	M (SD)/ %	N (%)
Ontogenic Characteristics		
Age (years)	9.6 (4.2)	0 (0.0%)
Age (Latency Period)	39.3%	0 (0.0%)
Female	85.7%	1 (3.6%)
Sexual Behavior Problems	0.0%	23 (82.1%)
Abuse Severity Composite	4.6 (2.6)	20 (71.4%)
Months since Last Abuse	Range = $0 - 98$; Median = 4.0	23 (82.1%)
Microsystems		
Parental Alcohol/Substance Use	46.4%	9 (32.1%)
Domestic Violence in Home	57.1%	9 (32.1%)
Prior CSA of Other Family		
Member	53.6%	9 (32.1%)
Non-Caregiving Adult in Home	21.4%	2 (7.1%)
In Therapy	42.9%	3 (10.7%)
Authorizations to Communicate	Range = $0 - 4$; Median = 1	13 (46.4%)
Perpetrator Relationship		
Immediate Family	28.6%	2 (7.1%)
Extended Family	25.0%	2 (7.1%)

Descriptive Information for Multiply-revictimized Youth

Non-Familial	35.7%	2 (7.1%)
Exosystems		
Law Enforcement Action	14.3%	15 (53.6%)
Guilty	10.7%	24 (85.7%)
Income	\$38,696 (\$9,258)	0 (0.0%)
% High School Graduate/GED	8.9 (4.4)	0 (0.0%)
% College Graduate (Bachelor's)	26.6 (8.4)	0 (0.0%)
Covariates		
European American	57.1%	1 (3.6%)
Disability		
Physical	3.6%	0 (0.0%)
Mental Health	39.3%	0 (0.0%)

medical examination by CAC medical staff; therefore, data regarding this variable were available for only 167 singly victimized and 27 revictimized youth. Medical historians reported that 7.4% of revictimized youth exhibited sexual behaviors compared to 8.4% of non-revictimized youth and this difference was not significant, $X^2(1) = .029$, p = .864. Unfortunately, abuse frequency, duration, intrusiveness, and the date of last abuse incident were documented exclusively on the forensic interview forms; therefore, data was only available regarding these constructs if the child was interviewed at the CAC *and* they disclosed abuse during this interview. As stated above, a composite variable was calculated to represent abuse severity. Given the data available, an abuse severity score was calculated for only 562 non-revictimized and 65 revictimized youth. Means

Table 3.2

Descriptive and Bivariate Statistics Comparing Revictimized and Non-revictimized Youth with Sample Size for Each Variable

	Singly Victimiz	ed	Revictimized				
	(N = 1, 702)		(N = 213)				
	% /(QS) W	Ν	W (SD)/ %	Ν	F/X^2	đf	d
Ontogenic Characteristics							
Age (years)	10.3 (4.5)	1,696	9.4 (4.1)	213	7.210	1, 1908	.007
Age (Latency Period)	41.6%	1,696	45.5%	213	1.189	1	0.276
Female	75.3%	1,701	84.9%	212	9.321	1	0.002
Sexual Behavior Problems	8.4%	167	7.4%	27	0.029	1	0.864
Abuse Severity Composite	2.8 (2.1)	562	2.9 (2.1)	65	0.153	1, 626	0.696
Months since Last Abuse	Range = 0 - 182;		Range = 0 - 98;				
	Median = 0	531	Median = 0	59	I	I	0.487
Microsystems							
Parental Alcohol/Substance Use	54.2%	1,176	58.9%	163	1.292	1	0.256
Domestic Violence in Home	44.9%	1,137	58.7%	167	11.188	1	0.001
Prior CSA of Other Family							
Member	57.3%	1,113	67.3%	159	5.703	1	0.017

Non-Caregiving Adult in Home	15.3%	1,577	21.7%	203	5.342	1	0.021
In Therapy	31.8%	1,518	41.0%	195	6.640	1	0.010
Authorizations to Communicate	Range = $0 - 6;$		Range = 0 - 6;				
	Median = 1	843	Median = 1	112	I	I	0.442
Perpetrator Relationship							
Immediate Family	39.2%	1,660	37.6%	205	0.210	1	0.647
Extended Family	16.0%	1,660	17.1%	205	0.166	1	0.683
Non-Familial	41.6%	1,660	42.0%	205	0.008	1	0.929
Exosystems							
Law Enforcement Action	31.3%	556	27.1%	96	0.693	1	0.409
Guilty	79.2%	149	66.7%	18	1.461	1	0.227
Income	\$40,110 (\$10,067)	1,656	\$38,440 (\$9,187)	208	5.175	1, 1863	0.023
% High School Graduate/GED	87.8 (5.2)	1,656	87.0 (5.3)	208	4.648	1, 1863	0.031
% College Graduate (Bachelor's)	25.6 (10.2)	1,656	25.4 (9.3)	208	0.079	1, 1863	0.778
Covariates							
European American	81.6%	1,661	75.0%	208	5.270	1	.022
Disability							
Physical	1.6%	1,580	1.5%	199	0.006	1	0.936

-
<.001
1
24.412
199
32.2%
1,580
17.5%
Mental Health

p* < .05; *p* < .01

66

comparisons between groups did not yield significant differences, F(1, 626) = .153, p = .696. Data regarding the time since last abuse incident were available for 531 non-revictimized and 59 revictimized youth. Most of the youth in each group were referred to the CAC within one month of their last abuse incident, therefore this variable was skewed, as stated in the Analyses section. Testing differences in the distributions between groups using the Kruskall-Wallace one-way ANOVA failed to reject the null hypothesis (p = .487) that months since last abuse incident differed between revictimized and singly victimized cases.

The groups differed significantly regarding gender make-up, with a larger proportion of female youth re-presenting to the CAC (75.3% and 84.9% female in singly and revictimized groups, respectively), $X^2(1) = 9.321$, p = .002.

The covariates of child ethnicity and disability status exhibited significant relations with revictimization. Chi-squared analyses showed that a significantly smaller proportion of children identifying as European American were revictimized (75.0%, compared to 81.6% in the singly victimized group) during the study period, $X^2(1) =$ 5.270, p = .022. Additionally, significantly more youth in the revictimized group had an identified mental health problem at presentation to the CAC for initial abuse allegations (32.2%) compared to non-revictimized youth (17.5%), $X^2(1) = 24.412$, p < .001. There was no significant difference in the proportion of youth with a physical disability between singly victimized (1.6%) and revictimized (1.5%) youth, $X^2(1) = .006$, p = .936.

Multivariate ontogenic level logistic regression model. Cases were selected for inclusion in multivariate models if they had complete data for all variables examined

across contextual levels. This resulted in a total sample of 986 youth, 124 (12.6%) of whom were revictimized.

Due to missing data, variables representing sexual behaviors, abuse severity, and months since the last abuse episode were not included in the multivariate model. As described above, none of these variables exhibited a significant bivariate relation with revictimization (see Table 3.2). Given the significant relation between revictimization and continuous age, the categorical variable depicting whether or not the victim was within the latency period of development was excluded from multivariate models. Thus, the full ontogenic model was identified with four independent variables: child age in years at presentation to the CAC, gender, ethnicity, and mental health disability. The latter two variables were explored as covariates and exhibited significant relations with revictimization, therefore they were considered necessary in specifying a multivariate model, which is presented in Table 3.3. Inclusion of these variables resulted in a significant model, $X^2(4) = 44.87$, p < .001, and a Hosmer and Lemeshow test indicating good fit, $X^2(8) = 8.994$, p = .343. Additionally, all variables exhibited significant relations with revictimization; therefore, a trimmed model was not examined.

As with bivariate analyses, children were less likely to be revictimized as they aged, with a 9.4% decrease in risk for every year they are older. Girls were 288% more likely to be revictimized when age, ethnicity, and presence of a mental health problem were held equal. Youth identifying as the ethnic majority were 42.1% less likely to return for revictimization. Finally, having a mental health problem at presentation to the CAC for initial abuse allegation was associated with over three times higher odds of returning for revictimization.

Table 3.3

Multivariate, Within-level Binary Logistic Regression Model Examining Ontogenic Risk Factors (N = 986)

Variables	X^2	р	Exp(B)	В	р	95% CI
Full Model	44.87	<.001				
Age (years)			.906	099	<.001	.862952
Gender			2.867	1.053	<.001	1.646-4.994
Ethnicity			.579	547	.022	.362925
Mental Health Problem			3.081	1.125	<.001	1.964-4.831

Hosmer Lemeshow Test 8.994 .343

p* < .05; *p* < .01

Summary. Child age at the time of initial presentation to the CAC was significantly associated with revictimization, which was consistent with hypotheses that younger children would be at greater risk. This effect persisted when controlling for gender, ethnicity, and mental health problems. Neither sexual promiscuity nor initial abuse attributes were associated with revictimization, and these constructs were excluded from multivariate analyses due to a large amount of missing data. Additionally, exploring gender as it related to revictimization proved to be a fruitful endeavor, as girls were significantly more likely to experience subsequent abuse episodes in both bivariate and multivariate analyses. Finally, the anticipated covariates of ethnicity and mental health problems were significantly related to revictimization in bivariate analyses and

multivariate analyses. Minority youth and those with a mental health problem were more likely to experience revictimization.

Sub-aim 1.b: Explore microsystem factors associated with revictimization. Microsystems including the family environment, engagement in the apeutic support services, and relationship to the initial abuse perpetrator were examined as they related to revictimization. Bivariate analyses revealed many significant relations between these factors and revictimization. For example, the presence of a non-caregiving adult in the home differed significantly across groups, with a larger proportion of revictimized youth having at least one additional adult in their home (21.7%) compared to non-revictimized cases (15.3%), $X^{2}(1) = 5.342$, p = .021. A larger proportion of youth who presented for revictimization reported living in a household where there was domestic violence at the time of their initial referral to the CAC (58.7% vs. 44.9% in the singly victimized group), $X^{2}(1) = 11.188$, p <.001. Additionally, having another family member with a sexual abuse history differed significantly across groups, with more youth reporting this in the revictimization group (67.3%) compared to the singly victimized group (57.3%), $X^2(1) =$ 5.342, p = .021. Having a parent with a substance or alcohol problem was not significantly related to revictimization, as groups reported high, yet similar, rates (58.9% and 54.2% in revictimized and non-revictimized, respectively), $X^2(1) = 1.292$, p = .256.

Nearly one-third of children and adolescents presenting to the CAC were already involved with mental health services at the time of their referral (N = 563, 32.9%; missing n = 202). However, this differed across groups, with 41.0% of revictimized youth having an identified mental health provider compared to 31.8% of singly-victimized youth, $X^2(1) = 6.640$, p = .010. As shown in Table 3.2, singly and

revictimized groups exhibited similar patterns of allowing communication between the CAC and various other entities (Authorizations to Communicate). Upon inspection, this variable was positively skewed, therefore the Kruskall-Wallace one-way ANOVA was used to test the hypothesis that revictimized youth would have fewer entities with which the CAC was allowed to communicate. This test failed to reject the null, p = .442, indicating that groups did not differ in willingness to allow communication between the CAC and other important entities such as school, therapist, and attorneys, among others.

Perpetrator relationship to the child was coded into three binary variables representing immediate family member, extended family member, and non-family member. The majority of youth had only one perpetrator (N = 1,692); however, at least 173 youth identified two or more perpetrators. Perpetrator information was missing for 50 cases. Since youth may have had more than one perpetrator, it was also possible that they were abused by someone within and outside of the family, causing overlap in the categories of perpetrator relationship. Pearson's Chi-Squared analyses, displayed in Table 3.2, revealed that groups were similar on all three perpetrator variables.

Multivariate microsystem logistic regression model. Using the missing data cutoff, the only variable excluded from multivariate analyses was authorization to communicate. This resulted in a full microsystem-level model including the following variables: reported parental alcohol or substance problem, report of domestic violence in the home, another family member with CSA history, presence of a non-caregiving adult in home, having a perpetrator in the immediate family, extended family, and/or outside of the family, and engagement in mental health services at the time of presentation to the CAC. As shown in Table 3.4, this full model significantly predicted revictimization,

 $X^{2}(8) = 24.346$, p = .002 (Hosmer and Lemeshow test $X^{2}(8) = 6.527$, p = .588); however, many variables exhibited non-significant odds ratios and were therefore not helpful in predicting revictimization risk factors. Using backward stepwise deletion, a number of variables were removed, resulting in a trimmed model, which included the independent variables of domestic violence in the family, presence of a non-caregiving adult in the home, and having a perpetrator in the immediate family. This model was also significant, $X^{2}(3) = 20.902$, p < .001, and the Hosmer and Lemeshow test indicated good model fit, $X^{2}(4) = 3.618$, p = .460. The likelihood ratio test determined that the full model did not produce a significant change in the Chi-Squared statistic ($\Delta X^{2} = 3.444$, p = .632) compared to the reduced model.

Both the presence of a non-caregiving adult in the child's home at the time of their initial abuse allegation and reporting domestic violence in the home significantly predicted revictimization. Youth exposed to domestic violence were 176% (95% CI = 119\% to 259\%) more likely to be revictimized and those with extra adults were nearly 197% (95% CI = 128\% to 305\%) more likely to be revictimized. Having an intrafamilial perpetrator exhibited a trend toward significance, reducing the likelihood of revictimization.

Summary. As hypothesized, the presence of a non-caregiving adult was associated with an increased risk for revictimization and this effect was consistent across bivariate and multivariate analyses. Domestic violence in the child's home was reported more frequently by revictimized youth and increased risk for revictimization when included in multivariate models. While prior CSA of another family member was reported more frequently by youth in the revictimization group, this construct was not

Table 3.4

Multivariate, Within-level Binary Logistic Regression Models Examining Microsystem Risk Factors (N = 986)

Variables	X^2	р	Exp(B)	В	р	95% CI
Full Model	24.346	.002				
Parental						
Alcohol/Substance Use			1.038	.038	.864	.674-1.599
Domestic Violence in						
Home			1.596	.467	.034	1.036-2.458
Prior CSA of Other						
Family Member			1.327	.283	.182	.860-2.012
Non-Caregiving Adult in						
Home			1.939	.662	.003	1.252-3.004
In Therapy			1.255	.227	.254	.849-1.854
Perpetrator Relationship						
Immediate Family			.662	475	.183	.309-1.251
Extended Family			.884	123	.742	.425-1.850
Non-Familia1			.948	054	.877	.483-1.861
Hosmer Lemeshow Test	6.527	.588				
Trimmed Model	20.902	<.001				
Domestic Violence in						
Home			1.761	.566	.004	1.19-2.590

Non-Caregiving Adult in H	Home		1.972	.679	.002	1.275-3.049
Perpetrator Relationship						
Immediate Family			.679	387	.064	.450-1.024
Hosmer Lemeshow Test	3.618	.460				

*p < .05; **p < .01

associated with risk for revictimization when controlling for other microsystem variables. Contrary to the hypothesis, a larger proportion of youth who were engaged in therapy at the time of their initial visit to the CAC were represented in the revictimization group, although this effect did not persist in the multivariate model. Finally, closeness to initial abuse perpetrator exhibited an interesting relation with revictimization, as having an immediate familial perpetrator reduced risk for revictimization, however this relation only trended toward significance.

Sub-aim 1.c: Explore exosystem factors associated with revictimization. Two categories of exosystem factors were explored: legal/judicial proceedings and community characteristics. Examining the broader community, it appeared that both median household income and the percent of adults aged 25 years and older with a high school diploma or GED were associated with revictimization. Youth in the revictimized group came from neighborhoods with lower median household income (M = \$38,440, SD = \$9,187) compared to non-revictimized youth (M = \$40,110, SD = \$10,067), F(1, 1863) = 5.175, p = .023. The revictimized group also came from neighborhoods with a lower proportion of high school graduates (M = 87.0%, SD = 5.3%) compared to non-revictimized group also came from neighborhoods with a lower proportion of high school graduates (M = 87.0%, SD = 5.3%) compared to non-revictimized group also came from neighborhoods with a lower proportion of high school graduates (M = 87.0%, SD = 5.3%) compared to non-revictimized group also came from neighborhoods with a lower proportion of high school graduates (M = 87.0%, SD = 5.3%) compared to non-revictimized youth, (M = 87.8%, SD = 5.2%), F(1, 1863) = 4.648, p = .031. There was no significant difference between groups regarding the proportion of the population with a four-year college degree, F(1, 1863) = .079, p = .778.

As noted at the beginning of this chapter, few case files included documentation of law enforcement and prosecution outcomes, resulting in a large amount of missing data for variables of interest (see Table 3.2). Based on the available data, there was not a significant difference in the proportion of revictimized (27.1%) and non-revictimized (31.3%) youth whose perpetrator was cited or arrested, $X^2(1) = .693$, p = .409. Revictimized youth appeared to have fewer perpetrators receive a guilty verdict or submit a guilty plea (66.7% vs. 79.2%), however, this difference was non-significant, $X^2(1) =$ 1.461, p = .227.

Multivariate exosystem logistic regression model. As shown in Table 3.2, law enforcement actions and guilty plea/verdict were missing data for over 60% of the sample; therefore, these variables were excluded from multivariate analyses. The full model specified for the exosystem level included median household income, percent of adults aged 25 and over who graduated high school or completed their GED, and the percent of adults with a bachelor's degree (see Table 3.5). This full model was significant, $X^2(3) = 10.528$, p = .015, and the Hosmer and Lemeshow test indicated good fit, $X^2(8) = 7.020$, p = .534; however, only high school graduates returned a significant odds ratio, with youth being 5.8% less likely to be revictimized for every one-point increase in the proportion of adult high school graduates in their neighborhood. Using the backward stepwise deletion method, this model was trimmed to include only percent high school graduates, $X^2(1) = 10.019$, p = .002 (Hosmer and Lemeshow test, $X^2(8) = 7.980$, p = .435). Similarly, for every one-point increase in the percentage of adults with a high school diploma or GED, risk for revictimization decreased by 5.5%. The

Table 3.5

Multivariate, Within-level Binary Logistic Regression Models Examining Exosystem Risk Factors (N = 986)

Variables	X^2	р	Exp(B)	В	р	95% CI
Full Model	10.528	.015				
Income			1.000	.000	.801	1.000-1.000
% High School Graduate/GED			.942	060	.037	.890996
% College Graduate						
(Bachelor's)			1.008	.008	.518	.984-1.033
Hosmer Lemeshow Test	7.020	.534				
Trimmed Model	10.019	.002				
% High School Graduate/GED			.945	056	.001	.913979
Hosmer Lemeshow Test	7.980	.435				

p* < .05; *p* < .01

likelihood ratio test determined that the full model did not produce a significant change in the Chi-Squared statistic ($\Delta X^2 = .509$, p = .775) compared to the reduced model.

Summary. Hypothesis 1.c.1, that neighborhood socioeconomic characteristics would predict revictimization, was partially supported as median household income and high school education attainment exhibited significant relationships with revictimization. Revictimized youth tended to come from neighborhoods with lower household income, although income was not significant when accounting for education attainment variables. Revictimized youth also came from neighborhoods where fewer adults graduated high school (or obtained their GED) and this predicted revictimization while controlling for

income and higher education attainment. The proportion of college graduates within a child's neighborhood was not associated with revictimization.

Aim 2: Identify a Model that Integrates Factors across Levels to Predict Revictimization

Relationships between factors. Variables of interest to the current study were believed to be interrelated, thus bivariate correlations were run to identify associations of variables within each contextual level as well as between levels. A correlation matrix examining relations between individual, microsystem, and exosystem factors is displayed in Table 3.6 (N = 986).

Ontogenic and microsystem factor relationships. Child demographic information including age, gender, and ethnicity exhibited significant associations with microsystem factors. For example, child age in years at the time of their initial referral to the CAC was related to perpetrator characteristics and mental health service engagement. Specifically, older youth were less likely to have a familial perpetrator, both immediate, r(986) = -.167, p < .001, and extended, r(986) = -.094, p = .003. Not surprisingly, then, older youth were more likely to have a non-familial perpetrator, r(986) = .239, p < .001. As youth aged, they were more likely to be involved with mental health services at the time of their referral, r(986) = .120, p < .001. Ethnic majority children also tended to less frequently have a perpetrator in their extended family, r(986) = -.093, p = .004, however there was no significant relationship between ethnicity and having a perpetrator in the immediate family.

The presence of a mental health problem was related to various factors representing a chaotic home environment as well as therapeutic service engagement.

Table 3.6

Bivariate Pearson Correlation Coefficients between All Social Ecological Risk Factors (N = 986)

	-	2	ŝ	4	2	9	٢	8	6	10	11	12	13	14
Ontogenic Factors														
1. Age (years)	ł													
2. Gender	.256**	ł												
3. Ethnicity	.056	.049	ı											
4. Mental Health Problem	.210**	021	900.	ł										
Microsystem Factors														
5. Parental														
alcohol/substance use	001	014	001	.087**	1									
6. Domestic Violence in														
Home	038	.027	055	.109**	.422**	I								
7. Prior CSA of Family														
Member	044	060	.002	.084**	.255**	.255**	ł							
8. Non-Caregiving Adult in														
Home	019	500.	041	.022	.064*	.085**	.065*	I						

9. Perpetrator in Immediate

									I		.738**		.441**	
						I			.083**		.102**		.110**	
					I	022			003		.003		-000	
			ł		354**	<u>200.</u>			015		059		.017	
I			344**		581**	.021			002		.030		.015	
- 004			.023		038	.024			.007		010		.048	
080	2		.092**		132**	.084**			124**		061		003	
118**			.002		055	.124**			103**		018		006	
734	1.00		.064*		028	.081*			052		028		.020	
000			017		.040	.169**			084**		062		001	
<i>cc</i> 0	1		093**		.023	.028			.121**		.041		142**	
030	17A-		010		.051	004			052		051		025	
- 167**			094		.239**	.120**			.016		.018		004	
Esmiltr	(******* *	10. Perpetrator In Extended	Family	11. Non-Familial	Perpetrator	12. Currently in Therapy	Exosystem Factors	13. Median Household	Income	14. % High School	Graduate/GED	15. % College Graduate	(Bachelor's)	* <i>p</i> < .05; ** <i>p</i> < .01

Youth with an identified mental health diagnosis more frequently reported coming from a family with parental substance or alcohol problems, r(986) = .087, p = .007, domestic violence, r(986) = .109, p = .001, and a family member with a sexual abuse history, r(1009) = .084, p = .008. These youth were also more frequently engaged in mental health services, r(986) = .169, p < .001.

Ontogenic and exosystem factor relationships. Neither child age nor child gender were associated with community characteristics. Identifying as an ethnic minority, however, exhibited significant relations with median household income and education attainment. Interestingly, European American children came from neighborhoods that had higher median household income, r(986) = .121, p < .001, and a smaller proportion of college graduates, r(986) = .142, p < .001. In addition, youth with a pre-existing mental health condition came from neighborhoods with lower median household income, r(986) = -.084, p = .009.

Microsystem and exosystem factor relationships. Youth presenting to the CAC with indicators of family violence tended to come from neighborhood with lower median household income. This was the case for both domestic violence, r(986) = -.103, p = .001, and sexual abuse history of another family member, r(986) = -.124, p < .001. Engagement in mental health services was more frequent for youth in communities characterized by higher socioeconomic status, with positive relationships between having an identified therapist at presentation to the CAC and median household income, r(986) = .083, p = .009, proportion of the adult population with a high school diploma/GED, r(986) = .102, p = .001, and proportion of the adult population with a bachelor's degree, r(986) = .110, p = .001.

Multivariate logistic regression model including risk factors across

contextual levels to predict revictimization. A full model including all ontogenic,

microsystem, and exosystem variables with no more than 33% missing data was

specified. This included the following variables:

- 1. Ontogenic:
 - a. age in years at time of referral;
 - b. gender;
 - c. ethnicity; and,
 - d. presence of a mental health problem.
- 2. Microsystems:
 - a. parental alcohol and/or substance use;
 - b. domestic violence in the home;
 - c. history of CSA for another family member;
 - d. presence of a non-caregiving adult in the home;
 - e. having an identified mental health provider at the time of referral; and,
 - f. perpetrator relationship to child, including: in the immediate family, in the extended family, and not in the family.
- 3. Exosystems:
 - a. median household income;
 - b. percent of the adult population with a high school diploma or GED; and,
 - c. percent of the adult population with a bachelor's degree.

This full model, presented in Table 3.7, significantly predicted revictimization, $X^2(15) =$ 73.369, p < .001, and the Hosmer and Lemeshow test indicated good fit, $X^2(8) = 10.636$, p = .223. As this model included a number of non-significant predictors, it was trimmed using a backward stepwise deletion method to determine the most parsimonious model. This method reduced the model to eight predictors, representing factors across all social ecological levels examined. The final model indicated good fit (Hosmer and Lemeshow test statistic $X^2(8) = 6.137$, p = .632) and significantly predicted revictimization, $X^2(8) = 69.257 \ p < .001$. The likelihood ratio test determined that the full model did not produce a significant change in the Chi-Squared statistic ($\Delta X^2 = 4.112$, p = .767) compared to the reduced model.

All ontogenic factors included in the model remained significant while controlling for risk factors across levels, with the exception of child ethnicity. Child age continued to exhibit a negative relationship with revictimization with youth 9.8% less likely to be revictimized for each year they age. Holding all other variables constant, girls were 279% more likely to experience revictimization. One of the most robust findings was that youth with an identified mental health problem were 287% more likely to experience revictimization.

Some aspects of the home environment, including domestic violence and noncaregiving adults, significantly predicted revictimization. Youth who reported domestic violence in their homes were over 1.5 times more likely to present for revictimization episodes. Those who identified a non-caregiving adult in their home were nearly 2 times more likely to experience revictimization. Additionally, youth identifying a perpetrator

Table 3.7

Multivariate, Between-level Binary Logistic Regression Models Examining All Identified Social Ecological Risk Factors (N =

986)

(a.a						
Variables	X_{2}	d	Exp(B)	В	đ	95% CI
Full Model	73.369	< 0.001				
Age (years)			0.897	108	< 0.001	0.852-0.945
Gender			2.858	1.050	< 0.001	1.620-5.042
Ethnicity			0.594	520	0.043	0.359-0.983
Mental Health Problem			2.687	986.	< 0.001	1.675-4.312
Parental Alcohol/Substance Use			1.045	.044	0.846	0.669-1.633
Domestic Violence in Home			1.426	.355	0.121	0.910-2.234
Prior CSA of Other Family Member			1.312	.271	0.220	0.850-2.023
Non-Caregiving Adult in Home			1.938	.662	0.004	1.229-3.055
In Therapy			1.268	.237	0.268	0.833-1.928
Perpetrator Relationship						
Immediate Family			0.546	604	0.096	0.268-1.113

Extended Family			0.740	301	0.429	0.351-1.561
Non-Familial			0.994	-006	0.986	0.500-1.928
Income			1.000	000	0.582	1.000-1.000
% High School Graduate/GED			0.946	056	0.063	0.892-1.003
% College Graduate (Bachelor's)			966.0	004	0.774	.970-1.023
Hosmer Lemeshow Test	10.636	0.223				
I rimmed Model	107.69	< 0.001				
Age (years)			0.902	103	< 0.001	0.857-0.949
Gender			2.787	1.025	< 0.001	1.585-4.900
Ethnicity			0.643	442	0.070	0.398-1.037
Mental Health Problem			2.870	1.054	< 0.001	1.811-4.547
Domestic Violence in Home			1.549	.438	0.032	1.039-2.309
Non-Caregiving Adult in Home			1.976	.681	0.003	1.260-3.100
Perpetrator Relationship						
Immediate Family			0.612	491	0.025	0.399-0.939
% High School Graduate/GED			0.954	048	0.010	0.920-0.989

Hosmer Lemeshow Test

6.137 0.632

p* < .05; *p* < .01

within their immediate family were 38.8% less likely to experience revictimization when controlling for factors across the social ecological model. Finally, the proportion of adults who graduated high school or obtained their GED in youths' neighborhoods appeared to be a protective factor. For each one-point increase in the proportion of adults with this level of educational attainment, youth were 4.6% less likely to experience revictimization.

This final model accurately classified 87.4% of the sample as either revictimized or non-revictimized. The majority of errors occurred in mis-classifying revictimized youth as non-revictimized (N = 121); only 3 revictimization cases were accurately classified as revictimized (2.4% correct classification of revictimization group). Of the 862 non-revictimized youth included in multivariate analyses, only three were misclassified.

CHAPTER IV: DISCUSSION

The purpose of the present study was to examine factors that predict known sexual revictimization in a sample of children and adolescents who presented to a local community organization. The archival data used in this study enabled the prospective examination of revictimization of youth. Bivariate analyses implicated a number of variables to be associated with sexual revictimization across levels of a social ecological framework and these results were further supported by multivariate, predictive models.

Occurrence of Revictimization

In the current sample, the rate of known sexual revictimization, defined as a representation to the CAC, was 11.1% with 213 revictimization cases out of the total sample of 1,915 youth. Although time to revictimization varied substantially (within one month to nearly 11 ¹/₂ years), many youth returned to the CAC within two years of initial abuse. This supports our hypothesis that individuals experience revictimization prior to reaching adulthood, and reveals a rather quick return rate for many children. However, the proportion of youth presenting to the CAC for at least one episode of revictimization in this sample was considerably lower than previous studies. Prior adult studies have estimated that as many as 66% of CSA victims will experience revictimization (Classen et al., 2005). In youth, this number is reduced, with 20-39% of children and adolescent CSA victims reporting revictimization (Finkelhor, Ormrod, & Turner, 2007; Swanston et al., 2002). It can be expected that a smaller proportion of children and adolescents report revictimization compared to adults, as they have undoubtedly had fewer opportunities to experience assault. Regardless, the present findings contribute to the growing body of literature that shows youth are at risk for subsequent abuse in both childhood and

adolescence, which is concerning given the potential negative impact of experiencing multiple victimizations.

The current sample may present a conservative estimate of revictimization for a number of reasons. The most obvious of which is that abuse must have been discovered and reported to law enforcement or child protective services for the child to be seen at the CAC and included in this study. The country's current response systems for CSA is overly dependent on child disclosure, which we know often fails to happen in close proximity to the abuse incident, if at all. An estimated 55-60% of individuals do not disclose sexual abuse as children (London, Bruck, Wright, & Ceci, 2008) and nearly onethird of victims may never disclose (Smith et al., 2000). This poses a troubling problem to future investigations as observed with the current sample. Requiring that both initial abuse and episodes of revictimization are not only disclosed, but responded to in a manner that promotes law enforcement or child protective services involvement naturally reduces the sample and therefore may be underestimating abuse and re-abuse occurrence. Despite a potential underestimation of revictimization, a substantial number of youth were identified as having multiple victimization episodes here, providing further evidence that this phenomenon requires attention.

The Social Ecology of Revictimization

Ontogenic Factors. In Bronfenbrenner's bioecological model, ontogenic characteristics include personal attributes and experiential history that may influence future behavior. At this level, it was hypothesized that child age, sexual behaviors, and initial abuse characteristics would influence risk for revictimization. Child gender was explored in an effort to contribute to the small body of literature concerning repeat

victimization of males. Finally, ethnicity and disability status, both physical and mental health, were examined as potential covariates.

To contribute to prior research findings, two hypotheses were explored regarding age at the time of initial presentation to the CAC. First, it was anticipated that age would exhibit a linear relationship with revictimization such that younger children would be at risk. Second, we hypothesized that children ages 6 to 12 years would be at highest risk for revictimization. Although the hypothesis regarding youth within the latency period of childhood was not supported in bivariate analyses, age in years was significantly related to revictimization with younger children more likely to experience revictimization. This effect persisted in multivariate models including ontogenic, microsystem, and exosystem risk factors. Past findings regarding age at time of initial abuse have been inconsistent, which was partly the reason behind multiple hypotheses in the present study. Whereas experiencing first sexual abuse in childhood versus adolescence increases risk for revictimization in some samples (i.e., Casey & Nurius, 2005; Maker et al., 2001), others have found no significant effect of age at first assault (Classen et al., 2001; Jankowski et al., 2002). Still, some investigators have pointed to a cascading effect of victimization whereby childhood experiences of sexual abuse increase risk for adolescent victimization, which then increases risk for adult sexual assault (Miron & Orcutt, 2014). Results of the present study provide support for this cascading effect of victimization, and it should be noted that both this study and Miron and Orcutt (2014) employed youth samples.

Sexual promiscuity and risk taking have strong evidentiary support as predictors of revictimization. Sexual risk behaviors (i.e., trading sex for money, cigarettes, or drugs), consensual sexual activity, and number of consensual sexual partners, with or without intercourse have all been found to mediate the relationship between CSA and sexual revictimization in both adolescence and adulthood (Arata, 2000; Bramsen et al., 2013; Fergusson et al, 1997; Krahe et al., 1999; Mayall & Gold, 1995). Therefore, youth identified as exhibiting sexual behaviors were hypothesized to be at heightened risk for subsequent victimization in the present study. Unfortunately, independent examination indicated that report of sexual behaviors did not differ across singly victimized and revictimized youth, and the limited data regarding sexual activity and behaviors precluded examination of this construct in multivariate models. Of the studies cited above, those including youth samples focused on adolescents rather than children. Therefore, it may be wise to distinguish sexual promiscuity from non-normative sexual behaviors, which were measured here, as contributing to future risk.

Hypotheses regarding initial abuse characteristics and time elapsed since most recent abuse were not supported. A variety of characteristics were compiled to create a composite abuse severity score for youth who were sexually victimized at their initial presentation to the CAC. This method was first employed by Loeb and colleagues (2011) who found that likelihood of adult sexual revictimization was dependent on the severity of abuse rather than whether or not it had occurred. Abuse severity was originally conceptualized as a composite of scores representing intrusiveness of abuse acts, abuse frequency, closeness to the perpetrator, and child age at onset of abuse (Loeb et al., 2011). As some of these variables were hypothesized to independently predict revictimization, abuse intrusiveness, frequency, and duration were compiled to represent abuse severity in the present study. Examining the sub-sample of youth who had complete data for which to calculate an abuse severity score, we did not observe differences between revictimized and non-revictimized groups. Although there were some differences in conceptualizing severity, this is contrary to Loeb et al.'s (2011) study as well as a wide body of literature identifying various aspects of the initial abuse intrusiveness and physicality to revictimization (Arata, 2000; Classen et al., 2005; Gidycz et al., 2003; Humphrey & White, 2000; Mayall & Gold, 1995). There has been some debate over the duration of child sexual abuse as Arata (2000) found longer enduring abuse to distinguish singly and revictimized women while Classen and colleagues (2001) found no differences based on total years of sexual abuse. However, the sample included in this latter study experienced incestuous abuse which spanned multiple years for the majority of women.

The finding that abuse recency was not related to revictimization is contrary to prior research showing that more recent abuse episodes predict revictimization in adolescence (Collins, 1998; Himelein, 1995). It should be noted that both abuse severity and time elapsed since the most recent abuse episode were documented during the forensic interview and therefore relied on youth disclosure in the present study. This may have introduced selection bias thus negating any potential effects.

This study did not hypothesize a specific gender effect on risk for revictimization due to the absence of male samples in prior research, but rather explored this variable as it related to subsequent victimization in the present sample. Three-quarters of the present sample were female, which should be expected given the gender discrepancy in experiencing sexual abuse. Epidemiological data estimate that 25% of women and 16% of men endorse having experienced child sexual abuse (CDC, 2010). In other terms, if there were equal populations of men and women in the United States, for every 2 male victims, there would be 3 female victims of sexual abuse. Interestingly, the present study exceeded this ratio, which is consistent with empirical studies examining causes, correlates, consequences, and treatment of child sexual abuse. For example, Trask, Walsh, and DiLillo (2011) performed a meta-analysis of 35 studies examining treatments for common disorders following child sexual abuse. Based on data reported, 71% of participants across these studies were female. The discrepancy between the picture formed by epidemiological data and our investigations into abuse sequelae and treatment may be caused by cultural gender norms as it is suspected that males are less likely to disclose abuse due to fears of being labeled homosexual, not wanting to be considered a victim, and expecting their abuse to be minimized (i.e., males desiring sexual contact) (Alaggia, 2004).

Although males may have been underrepresented in this sample, gender revealed a significant relationship with revictimization. Specifically, girls were more likely to experience revictimization examining gender independently and while controlling for other contextual factors. It is important to note, however, that some male CSA victims in this sample did re-present to the CAC for episodes of revictimization, indicating that this is not a phenomenon solely impacting girls and women.

A variety of ethnic minority groups were represented in the data used for this study. As shown in Table 2.1, youth presenting to the CAC were primarily European American (78.7%). In Lincoln, NE, 89% of the population identified as white based on census data from the year 2000 (U.S. Census Bureau, 2000), far more than was observed in the current sample. This discrepancy is not surprising given trends of reported child maltreatment across the United States. Individuals identifying as ethnic minorities are overrepresented in child welfare systems (Hines, Lemon, Wyatt, & Merdinger, 2004); therefore, this sample is consistent with national trends and is indicative of a variety of problems plaguing minority groups. First, a larger proportion of ethnic minority individuals are reported as living below the federal poverty line (Macartney, Bishaw, & Fontenot, 2013) compared to ethnic majority individuals. Citizens of low socioeconomic status are likely to live in more dangerous neighborhoods and have more members living in their household; poverty correlates that may serve to provide perpetrators access to children. Additionally, there is a phenomenon of over monitoring minority groups. Thus, it is possible that involvement with support services available to impoverished families leads to a "surveillance effect" such that these families are more likely to be reported to child welfare systems (Mikton & Butchart, 2009).

For youth in the present sample, identifying as an ethnic minority also meant that they came from poorer neighborhoods. This correlate may have accounted for a portion of the effect of ethnic identity on risk for revictimization as the influence of ethnicity on risk diminished in the social ecological model including factors across contextual levels. Few studies have examined racial disparities in regard to revictimization, and their findings have been mixed. Whereas Urquiza and Goodlin-Jones (1994) found revictimization to occur at similar rates across racial groups, Matta Oshima and colleagues (2014) found a higher incidence of re-abuse for black children. Similarly to the present study, Matta Oshima and colleagues (2014) included various abuse types in their definition of revictimization. The effects driving this racial disparity are uncertain without further investigation. As stated above, at least some portion of risk for minority youth may be due to increased surveillance and therefore higher likelihood of abuse discovery and interaction with the child welfare system.

Just over one-quarter of the sample was identified as having a disability, with 17.8% indicating at least one psychiatric disorder. This number rose dramatically when examining only revictimized youth, as nearly one-third was identified as having a mental health problem compared to 17.5% of non-revictimized youth. Although only considering ages 8 to 15 years, the National Health and Nutrition Examination Survey found the one-year mental health disorder incidence to be 13.1%, which is substantially lower than the sample included here (Centers for Disease Control and Prevention, 2016). Revictimization research has largely focused on the potential contributing impact of mental health problems, most often conceptualized as resulting from initial abuse episodes, and results from the present study support this notion. Additionally, these findings may suggest that risk for initial and subsequent victimization is elevated for children with emotional disturbance in general, as youth may have exhibited emotional problems prior to their initial victimization episode.

Microsystem Factors. The family environment, initial abuse perpetrator, and engagement in therapeutic support were all included as microsystems hypothesized to relate to risk for revictimization. Consistent with the notion that abuse is more likely to occur when opportunities to perpetrate are presented (Grauerholz, 2000), it was hypothesized that having a non-caregiving adult in the home would be associated with subsequent abuse episodes. Additionally, living within a chaotic family environment characterized by parental substance or alcohol use, domestic violence, or prior sexual abuse of another family member was considered to be more dangerous to youth. Therapeutic support was hypothesized as a protective factor as it was anticipated that youth engaged in therapy at the time of initial abuse would be less likely to return for revictimization. Finally, closeness to initial abuse perpetrator was hypothesized to contribute to subsequent abuse risk as this has been conceptualized to contribute to initial abuse severity (Loeb et al., 2011).

The presence of a non-caregiving adult in the child's home was significantly related to revictimization in both bivariate and multivariate analyses. There are two ways to conceptualize this finding, each based on differing sides of the assumption that one of the non-caregiving adults was the sexual abuse perpetrator, which was not specified by the data. If it was the case that the child was abused by an additional adult in the home, the findings lend support to the availability hypothesis of perpetrators' hunting process (Rebocho & Silva, 2014). Alternately, having additional adults in the home may be an indicator of socio-economic status. However, in the present study, presence of a non-caregiving adult was not associated with median household income of the child's neighborhood and remained a significant predictor of revictimization when socioeconomic characteristics were included in multivariate models.

Adult women with multiple victimizations tend to report parental violence and family conflict more frequently compared to singly victimized women (Banyard et al., 2001; Long & Jackson, 1991). Further, studies with youth and young adult samples have also shown more frequent reports of parental conflict by those who have experienced revictimization (Finkelhor et al., 2007; Nelson et al., 2002; Swanston et al., 2002). The present study supports these prior findings as youth were significantly more likely to experience revictimization if domestic violence was reported in their family. Witnessing violence in the home is considered child maltreatment, thus this effect may suggest that poly-victimization increases risk for future abuse. It may also be the case that the postdisclosure environment either contributes to or protects from future harm. For example, a chaotic family environment may prevent help seeking (Collin-Vezina, De La Sablonniere-Griffin, Palmer, & Milne, 2015) and contribute to the development of mental health problems. Although parental substance or alcohol did not show a significant association with revictimization in the current sample, an astonishing proportion of youth overall had a parent with a drug or alcohol problem, suggesting that this may be a significant risk factor for maltreatment in general.

Prior sexual abuse of a family member was only related to revictimization in bivariate analyses; when accounting for other ecological factors, youth were not more or less likely to experience revictimization if another family member had a sexual abuse history. Unfortunately, information regarding who this family member was in relation to the index victim was not available, nor was the relationship of their perpetrator to themselves or the index victim. It is quite possible that having another victim in the family is an indicator of having a perpetrator within or closely associated to the family, thereby increasing opportunity for the perpetrators' access to children. This finding may also suggest caregiver challenges in protecting and monitoring children, particularly if the abused family member was the index victim's sibling. Some evidence exists for the intergenerational transmission of sexual abuse (Kreklewetz & Piotrowski, 1998; Lev-Weisel, 2006) and although the present data only allow for speculation, familial abuse histories should be further examined in regard to the risk posed to youth.

Contrary to hypotheses, initial abuse perpetrator closeness to the victim was not significantly associated with revictimization in bivariate analyses. Further, when controlling for factors across the social ecology, youth with an immediate familial perpetrator were less likely to return to the CAC for a subsequent abuse episode. Prior research has suggested that victims with intra-familial or caregiving perpetrators suppress risk detection mechanisms in order to preserve their attachment to the perpetrator, which leads to future risk (DePrince, 2005). This is consistent with Kessler and Bieschke's (1999) findings that women who have experienced incestuous abuse are at higher risk for adult sexual revictimization. Children and adolescents experience a variety of negative consequences when their perpetrator is a member of the family. A parent, caregiver, or beloved sibling may be removed from the home, sometimes permanently, and in many cases all communication with the perpetrator may be prohibited by legal authorities. If we expect that some children may experience revictimization and not report, it appears logical that youth who felt punished for their initial abuse discovery would remain quiet in the future.

Contrary to hypotheses, being engaged in mental health services at the time of youths' initial visit to the CAC was associated with increased risk for revictimization; however, this effect did not persist when accounting for other contextual factors. Effective treatments exist to remediate the emotional, behavioral, and interpersonal problems that often stem from child maltreatment (Cohen, Mannarino, Berliner, & Deblinger, 2000; Gilboa-Schechtman et al., 2010) and revictimization prevention programs are in early stages of development (DePrince et al., 2015; Marx et al, 2001). Initially, it was anticipated that therapeutic support could protect from revictimization as it was expected to reduce mental health sequelae of initial abuse. However, correlational analyses showed that youth engaged in therapy were also those more likely to have a mental health problem; therefore, this variable likely reflected the risk for revictimization that stems from emotional disturbance. It is also possible that a similar surveillance effect as discussed in the Ontogenic Characteristics section above may increase the likelihood that abuse of children in mental health services is identified and addressed.

Exosystem Factors. Various aspects of the child's community and the legal and judicial proceedings surrounding their cases were examined as exosystem factors. Specifically, neighborhood factors included median household income and education attainment for their zip code of residence; investigation and prosecution factors included law enforcement issuing a citation or arresting the abuse perpetrator and a judicial outcome of either a guilty plea or verdict. It was hypothesized that youth residing in more affluent neighborhoods as measured by higher median household income and a larger proportion of adults with either a high school diploma or college degree would be at less risk for revictimization. Additionally, any consequences imposed on the abuse perpetrator were hypothesized to reduce risk for revictimization.

Hypotheses regarding neighborhood characteristics were only partially supported, with the proportion of adults with a high school diploma presenting as the only significant predictor of revictimization in multivariate models. Youth in the revictimization group were from neighborhoods with significantly lower household income; however, education attainment appeared to account for this effect. This is consistent with prior research, as Matta Oshima and colleagues (2014) also found median household income based on census data to be unrelated to repeat victimization. Interestingly, the authors did note that children from families with indicators of poverty such as participation in welfare programs were four times more likely to have re-reported. Examining revictimization in adolescence, Fergusson, Horwood, and Lynskey (1997) did not find socio-economic status to be associated with revictimization. These authors used caregiver occupation to determine socio-economic status, categorizing job roles by education level and income, which is similar to the procedures employed in the present study. However, looking at education in two manners, through high school diploma and four-year college degree, results of the present study suggest that cumulative educational attainment may not matter as much as meeting a minimum threshold (i.e., completing the 12th grade). Thus, neighborhood hazards may best be measured by a minimum educational threshold rather than income or higher education attainment, or a composite of these constructs.

Although the CAC model has advantages such as maximizing disclosure and enhancing likelihood of prosecution, few studies have examined the impact of CAC investigation outcomes on revictimization. Unfortunately, results of the present study contribute little to our understanding of investigators' and prosecution's role in prevention. Law enforcement actions of either arresting or issuing a citation to a perpetrator, and prosecution outcomes were not associated with revictimization in bivariate analyses and there were insufficient samples with complete data to include these variables in logistic regression models. Additionally, it is plausible that other risk factors such as domestic violence in the home, abuse severity, and perpetrator relationship all relate to investigation and prosecution outcomes, therefore future research should examine this area more fully.

Interactions across Systems. Aside from the individual contribution of factors within each level, it was hypothesized that ontogenic, microsystem, and exosystem factors would be interrelated both within and across levels such that change in one factor would be associated with change in others. This hypothesis was supported using correlational analyses displayed in Table 3.6, showing significant relationships between factors across all levels. Some of the most interesting findings were between ontogenic and microsystem factors, including effects of age, gender, and mental health problems. As noted above, younger children were more likely to experience revictimization, and these children more frequently had an intra-familial perpetrator (both immediate and extended). If we examine simple effects, it may seem that younger children are at heightened risk perhaps due to the longer time-span of opportunity to experience re-abuse and because of vulnerabilities inherent to being abused by an immediate family member. When age was held constant in multivariate analyses, however, the effect of perpetrator closeness diminished and appeared to change directions, potentially serving as a protective factor. Consistent with the literature, we also found that age was related to the presence of a mental health problem, with older youth more likely to have a psychiatric diagnosis (Kendall-Tackett et al., 1993), and to be involved with mental health services. Despite this, older youth were still less likely to experience revictimization. It may be that age truly influences risk for revictimization; however, the CAC only serves youth up to age 19 years and therefore age may be confounding the present findings.

Many of the factors examined here, particularly those considered to contribute to childhood adversity, were often present in youth identified as having mental health problems. Youth with mental health concerns were more likely to have a parent with a substance and/or alcohol problem, live in a family with domestic violence, and have a relative with a CSA history. These youth were also more likely to come from lower SES neighborhoods, which is concerning given that engagement in mental health treatment was reported less frequently as median household income and educational attainment decreased. Poly-victimization and cumulative adversity often lead to psychiatric problems including posttraumatic stress disorder and depression (Ford, Elhai, Connor, & Freuh, 2010; Grasso, Dierkhising, Branson, Ford, & Lee, 2013). The present study lends claim to the notion that multiple adverse experiences not only impact psychiatric functioning, but also contribute to the perpetuation of this cycle of violence.

Further, results of the present study supported the hypothesis that the most parsimonious and predictive model would include factors across levels of the social ecology. Despite the trimming of many factors, the final logistic regression model included at least one factor from each level. Upon inspection, the risk factors identified as contributing to revictimization appear to be quite similar to those that lead to child sexual abuse in general. For example, being female, having non-high school graduate parents, living with adults other than one's parent, and witnessing family conflict have all been identified as risk factors for sexual abuse (Finkelhor, 1993; Sedlak et al., 2010). There is also the issue of perpetrators selecting vulnerable youth (Rebocho & Silva, 2014), to which mental health problems and adverse family environments may contribute. Thus, youth presenting for multiple victimization episodes in the current study seem to have the volume turned up on risk in general – that is, they embody a number of risk factors known to be associated with CSA. This challenges our notions about revictimization as a product of initial abuse sequelae and rather calls attention to
the environmental risk factors that place youth in harm's way. Whereas youth living in environments characterized by the aforementioned criteria may be likely to experience child maltreatment, those with cumulative risk factors are more likely to be caught in the cycle of victimization.

Limitations and Strengths

This study has a number of limitations that should be considered, including many issues inherent to using archival data. The final sample included in multivariate analyses was large (N = 986), although there was a substantial amount of missing data. As these data were suspected to be missing not at random, imputation methods were not used in statistical analyses. Additionally, there are likely multiple victims from the same family included in the dataset as we were not able to track whether children were related to one or more other victims. As stated above in this discussion, this study only captured youth whose initial and subsequent abuse experiences had been reported and responded to in a fashion that led them to the CAC. There is a strong possibility that youth may have experienced revictimization and failed to present to the Lincoln CAC due to nondisclosure or moving out of the CAC's catchment area. This limitation may have contributed to the relatively low revictimization rate and may also interfere with the predictive value of the logistic regression models presented. The CAC only serves individuals 18 years and younger, with some exceptions made for developmental abilities. While the focus of this study was to examine revictimization prior to adulthood, individuals who delay disclosure until their adulthood may have been missed in the dataset.

The limited ethnic diversity in the present sample and the resulting categorization of ethnicity in analyses may cause concern for generalizing results presented. The state of Nebraska has a relatively homogenous population, compared to other states in the nation. Thus, the youth included in this study overrepresented ethnic minority children in Nebraska. While the limited diversity in the sample prevented further examination of revictimization by specific ethnic group, this may have been a function of the state's composition therefore further study in more diverse areas may be beneficial. Collapsing ethnic minorities into the same category is a concerning, yet sometimes necessary, practice as it often results in larger within-group than between-group diversity. Thus, any results here related to race and ethnicity should be interpreted with caution.

The present study had a number of strengths despite the shortcomings mentioned above. Most notable are the prospective research design and large sample size. Results of the present study contribute to our understanding of the causes of revictimization by examining case files in a prospective fashion, thereby reducing methodological concerns that plague cross-sectional and retrospective designs. Additionally, this sample reflects the larger population of youth who are brought to CACs nationwide. In 2014, 777 CACs accredited by the National Children's Alliance served a total of 315,806 youth (National Children's Alliance, 2014). Thus, these findings have the potential to impact the multitude of individuals presenting to formal responders.

Conclusions and Recommendations

The findings from the current study not only provide direction for future research and practice, but urge the field to consider the social ecology of sexual revictimization. Revictimization of youth is a public health concern as it occurs frequently and is associated with negative outcomes, including psychological and behavioral sequelae as well as *continued* victimization. Although most research has focused on the link between CSA and adult sexual assault, evidence urges a conceptual shift so that we begin to view revictimization as a cycle of violence that impacts individuals across developmental stages. This notion is supported by the downward spiral described by Miron and Orcutt (2014) whereby CSA influences risk for adolescent sexual assault which in turn increases risk for adult sexual assault.

In light of evidence provided in this study as well as prior investigations, the following recommendations are provided for future research and practice. First, the field must adopt a guiding framework to direct research and intervention endeavors (Macy, 2007; Messman-Moore & Long, 2003). Bronfenbrenner's bioecological model seems apt to fulfill this need by allowing focus on the many contexts within which individuals operate throughout the lifespan. Employing this model will not only allow for unification across the field, but will help minimize victim blaming by accounting for factors external to the individual (Grauerholz, 2000). Future endeavors should continue to use the social ecological framework by including factors across contextual levels as independent variables in research methodology.

At the ontogenic level, diverse youth samples should be examined to further elucidate the effects of ethnic identification, as this study was only able to compare ethnic minority to majority youth. Additionally, psychopathology as it interacts with broader contextual influences should be investigated further. This may include such issues as PTSD, relationship difficulties, maladaptive cognitions (i.e., self-blame, guilt, shame), and engagement in risk behaviors of both a sexual and non-sexual nature. The literature consistently shows a link between psychopathology and revictimization and results of the present study suggest that psychopathology pre-dating initial abuse may also contribute to the cycle of victimization. Regardless of whether psychopathology is present prior to or after initial abuse experiences, this seems an important factor to consider and was minimally examined in the present study.

At the microsystem level, more attention should be focused on the family environment and the influence of peer groups. This project brought light to important aspects of the family environment including household makeup and other sources of adversity (i.e., domestic violence, low SES). Future research should examine the interactions between individual child characteristics and these family variables, particularly what may mitigate the risks posed by these factors. As discussed in the literature review, peer groups take increasingly important roles in an individual's life as they age and they should be examined in regard to their potential contribution to risk for revictimization.

Mesosystems were not represented in this investigation but should be considered in future research. This may include cooperation between the CAC, schools, community centers, and law enforcement and prosecutors. CACs serve many roles in the community. They are a resource for parents, schools, and community members in providing education about preventing and responding to child abuse, and they coordinate investigative services to maximize likelihood of prosecution and perpetrator punishment. To work effectively with law enforcement and county prosecutors, CACs are often responsible for coordinating multidisciplinary teams attended by police, attorneys, CAC staff, mental health professionals, and child protection authorities. Research projects often evaluate MDT decisions as they influence legal and child protection outcomes (Brink, Thackeray, Bridge, Letson, & Scribano, 2015; Herbert & Bromfield, 2015) and should continue to examine MDT actions as they relate to revictimization. A similar line of research may also evaluate CAC educational programs in the community to hopefully inform revictimization prevention efforts.

At the exosystem level, future research projects should consider examining public policy regarding child welfare. Many of these revictimized children seem to have overlapping risk factors for involvement with child protective systems; however, many youth who experience sexual victimization will not interact with child welfare. Given the negative impacts of sexual abuse and assault on individual functioning (Putnam, 2003; Widom et al., 2012), sexual revictimization is a public health concern. Therefore, as evidence continues to mount and prevalence rates are clarified, public policy should be revised to promote the protection of these high-risk youth.

Second, future research endeavors should contribute to the small but growing body of literature addressing the cycle of victimization within childhood and adolescence. At present, there is evidence that youth who experience initial victimization at or before pre-adolescence are more likely to be revictimized (Casey & Nurius, 2005; Humphrey & White, 2000; Simmel et al., 2011), as are those with greater distress following initial abuse (Cuevas et al., 2010) and those who engage in sexual risk taking (Bramsen et al., 2013; Koss & Dinero, 1989; Mandoki & Burkhart, 1995; Simons & Whitbeck, 1991). Results from this study support some of these claims and further investigation of youth revictimization will help bridge the gap that currently exists between adult and child/adolescent literature, ultimately serving to provide a clear picture of the cycle of victimization across the lifespan. Additionally, although there are well-developed treatments for psychological symptoms and sexual behavior problems in child sexual abuse victims (Carpentier, Silovsky, & Chaffin, 2006; Cohen et al., 2000), little has been said of treatment effects on risk for subsequent victimization. As such, more effort should be focused on evaluating the preventive quality of interventions designed for and widely disseminated to these youth.

Third, evidence to-date suggests a recommendation that all CACs consider employing mental health professionals to provide on-site assessment and intervention for youth and families. These professionals can assess for the psychological symptoms and contextual factors that influence risk for revictimization and either provide brief intervention or referral to other providers while serving in a case managing role (Jones & Walsh, 2010). Oftentimes, in cases of child physical abuse or neglect, entities external to the family become involved for monitoring reasons (i.e., Department of Health and Human Services); however, this occurs less frequently in cases of sexual abuse. Parents may not be deemed to need monitoring in order to keep their children safe in the immediacy, although brief intervention and assessment may help families access support, potentially protecting youth in the long-term.

As demonstrated, revictimization is influenced by a variety of factors, both static and malleable, across multiple contexts of development. Most importantly, we see an effect whereby revictimization is most likely to occur for youth who live in environments where the volume is tuned up on risks. The fact that we can predict risk for revictimization without necessarily considering post-abuse functioning urges the exploration of individual characteristics as they interact with factors across micro- and exosystems in order to protect youth from future harm.

References

- Alaggia, R. (2004). Many ways of telling: Expanding conceptualizations of child sexual abuse disclosure. *Child Abuse & Neglect*, 28, 1213-1227. doi:10.1016/j.chiabu.2004.03.016
- Anderson, A. F., & McMaken, M. E. (1990). Implementing child advocacy: A rationale and basic blueprint. *Juvenile and Family Court Journal*, 41, 1-14. doi:10.1111/j.1755-6988.1990.tb00669.x
- Arata, C. M. (2000). From child victim to adult victim: A model for predicting sexual revictimization. *Child Maltreatment*, 5, 28-38. doi:10.1177/1077559500005001004
- Arata, C. M. (2002). Child sexual abuse and sexual revictimization. *Clinical Psychology:* Science And Practice, 9, 135-164. doi:10.1093/clipsy.9.2.135
- Bagley, C., & Ramsay, R. (1986). Sexual abuse in childhood: Psychosocial outcomes and implications for social work practice. *Journal of Social Work and Human Sexuality*, 4, 33-47. doi:10.1300/J291v04n01_07
- Balsam, K. F., Lehavot, K., & Beadnell, B. (2011). Sexual revictimization and mental health: A comparison of lesbians, gay men, and heterosexual women. *Journal of Interpersonal Violence*, 26, 1798-1814. doi:10.1177/0886260510372946
- Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (2007). Life span theory in developmental psychology. In W. Damon & R. M. Lerner (Eds.), *Handbook of Child Psychology* (6th ed., pp. 569–664). Hoboken, NJ: John Wiley & Sons. doi:10.1002/9780470147658.chpsy0111

- Banyard, V. L., Williams, L. M., & Siegel, J. A. (2001). The long-term mental health consequences of child sexual abuse: An exploratory study of the impact of multiple traumas in a sample of women. *Journal of Traumatic Stress, 14*, 697-715. doi:10.1023/A:1013085904337
- Barnes, J. E., Noll, J. G., Putnam, F. W., & Trickett, P. K. (2009). Sexual and physical revictimization among victims of severe childhood sexual abuse. *Child Abuse & Neglect*, 33, 412–420. doi:10.1016/j.chiabu.2008.09.013
- Bartholow, B. N., Doll, L. S., Joy, D., Douglas, J. M., Bolan, G., Harrison, J. S., ... McKirnan, D. (1994). Emotional, behavioral, and HIV risks associated with sexual abuse among adult homosexual and bisexual men. *Child Abuse & Neglect*, 18, 747-761. doi:10.1016/0145-2134(94)00042-5
- Beauregard, R., Rossmo, K., & Proulx, J. (2007). A descriptive model of the hunting process of serial sex offenders: A rational choice perspective. *Journal of Family Violence*, 22, 449-463. doi:10.1007/s10896-007-9101-3
- Belsky, J. (1980). Child maltreatment: An ecological integration. *American Psychologist*, 35, 320-355. doi:10.1037/0003-066X.35.4.320
- Belsky, J. (1989). Child maltreatment: An ecological integration. *American Psychologist*, 35, 320-335. doi:10.1016/0145-2134(94)00042-5
- Belsky, J. (1993). Etiology of child maltreatment: a developmental-ecological analysis. *Psychological Bulletin*, 114, 413–434. doi:10.1037/0033-2909.114.3.413
- Boney-McCoy, S., & Finkelhor, D. (1995). Psychosocial sequelae of violent victimization in a national youth sample. *Journal of Consulting and Clinical Psychology*, 63, 726-736. doi:10.1037/0022-006X.63.5.726

Bonomi, A. E., Cannon, E. A., Anderson, M. L., Rivara, F. P., & Thompson, R. S.
(2008). Association between self-reported health and physical and/or sexual abuse experienced before age 18. *Child Abuse & Neglect*, *32*, 693–701.
doi:10.1016/j.chiabu.2007.10.004

Bramsen, R. H., Lasgaard, M., Koss, M. P., Shevlin, M., Elklit, A., & Banner, J. (2013). Testing a multiple mediator model of the effect of childhood sexual abuse on adolescent sexual victimization. *American Journal of Orthopsychiatry*, 83, 47-54. doi:10.1111/ajop.12011

Breitenbecher, K. H. (1999). The association between the perception of threat in a dating situation and sexual victimization. *Violence and Victims*, *14*, 135-146.

Breitenbecher, K. H., & Gidycz, C. A. (1998). An empirical evaluation of a program designed to reduce the risk of multiple sexual victimization. *Journal of Interpersonal Violence*, 13, 471-488. doi:10.1177/088626098013004004

- Briere, J., Woo, R., McRae, B., Foltz, J., & Sitzman, R. (1997). Lifetime victimization history, demographics, and clinical status in female psychiatric emergency room patients. *The Journal of Nervous and Mental Disease*, 185, 95-101. doi:10.1097/00005053-199702000-00005
- Brink, F. W., Thackeray, J. D., Bridge, J. A., Letson, M. M., & Scribano, P. V. (2015). Child advocacy center multidisciplinary team decision and its association to child protective service outcomes. *Child Abuse & Neglect*, 46, 174-181. doi:10.1016/j.chiabu.2015.04.011
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*, 513-531. doi:10.1037/0003-066X.32.7.513

- Bronfenbrenner, U. (1994). Ecological models of human development. In International Encyclopedia of Education, Vol. 3 (2nd ed.) (pp. 1643-1647). Oxford: Elsevier.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: a bioecological model. *Psychological Review*, 101, 568–586. doi:10.1037/0033-295X.101.4.568

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology (6th ed.): Volume 1, Theoretical models of human development* (pp. 793-828).
Hoboken, NJ: John Wiley & Sons Inc. doi:10.1002/9780470147658.chpsy0114

- Carpentier, M., Silovsky, J. F., & Chaffin, M. (2006). Randomized trial of treatment for children with sexual behavior problems: Ten year follow-up. *Journal of Consulting and Clinical Psychology*, 74, 482-488. doi:10.1037/0022-006X.74.3.482
- Casey, E. A., & Nurius, P. S. (2005). Trauma exposure and sexual revictimization risk: comparisons across single, multiple incident, and multiple perpetrator victimizations. *Violence against Women*, *11*, 505–530. doi:10.1177/1077801204274339
- Centers for Disease Control and Prevention (2010, September 20). Adverse childhood experiences (ACE) study: Data and statistics. Retrieved from http://www.cdc.gov/ace/prevalence.htm
- Centers for Disease Control and Prevention (2016). *National Health and Nutrition Examination Survey*. Retrieved from

http://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-amongchildren.shtml

- Chaffin, M., Berliner, L., Block, R., Johnson, T. C., Friedrich, W. N., Louis, D. G., ... Silovsky, J. F. (2008). Report of the ATSA task force on children with sexual behavior problems. *Child Maltreatment*, 13, 199-218. doi:10.1177/1077559507306718
- Child Abuse Prevention and Treatment Act, 42 U.S.C.A. § 5106g (1974).
- Chu, J. A. (1992). The revictimization of adult women with histories of childhood abuse. Journal of Psychotherapy Practice and Research, 1, 259-269.
- Cicchetti, D., & Banny, A. (2014). A developmental psychopathology perspective on child maltreatment. In M. Lewis & K. D. Rudolph (Eds.), *Handbook of developmental psychopathology* (pp. 723–741). New York, NY: Springer. doi:10.1007/978-1-4614-9608-3_37
- Classen, C., Field, N. P., Koopman, C., Nevill-Manning, K., & Spiegel, D. (2001). Interpersonal problems and their relationship to sexual revictimization among women sexually abused in childhood. *Journal of Interpersonal Violence*, 16, 495– 509. doi:10.1177/088626001016006001
- Classen, C. C., Palesh, O. G., & Aggarwal, R. (2005). Sexual revictimization: A review of the empirical literature. *Trauma, Violence, & Abuse, 6*, 103-129. doi:10.1177/1524838005275087
- Cloitre, M., Scarvalone, P., & Difede, J. (1997). Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress*, 10, 437-452. doi:10.1002/jts.2490100309

- Cohen, J. A., Mannarino, A., Berliner, L., & Deblinger, E. (2000). Trauma-focused cognitive behavioral therapy for children and adolescents: An empirical update. *Journal of Interpersonal Violence*, 15, 1202-1223. doi:10.1177/088626000015011007
- Coid, J., Petruckevitch, A., Feder, G., Chung, W. S., Richardson, J., & Moorey, S.
 (2001). Relation between childhood sexual and physical abuse and risk of revictimisation in women: a cross-sectional survey. *The Lancet*, 358, 450-454. doi:10.1016/S0140-6736(01)05622-7
- Collins, M. E. (1998). Factors influencing sexual victimization and revictimization in a sample of adolescent mothers. *Journal of Interpersonal Violence*, 13, 3-24. doi:10.1177/088626098013001001
- Collin-Vezina, D., De La Sablonniere-Griffin, M., Palmer, A. M., & Milne, L. (2015). A preliminary mapping of individual, relational, and social factors that impede disclosure of childhood sexual abuse. *Child Abuse & Neglect*, 43, 123-134. doi:10.1016/j.chiabu.2015.03.010
- Coulton, C. J., Crampton, D. S., Irwin, M., Spilsbury, J. C., & Korbin, J. E. (2007). How neighborhoods influence child maltreatment: A review of the literature and alternative pathways. *Child Abuse & Neglect*, 31, 1117–1142. doi:10.1016/j.chiabu.2007.03.023
- Courtois, C. (1979). The incest experience and its aftermath. *Victimology: An International Journal, 4,* 337-347.

- Cuevas, C. A., Finkelhor, D., Clifford, C., Ormrod, R. K., & Turner, H. A. (2010).
 Psychological distress as a risk factor for re-victimization in children. *Child Abuse* & Neglect, 34, 235-243. doi:10.1016/j.chiabu.2009.07.004
- Cuijpers, P., Smit, F., Unger, F., Stikkelbroek, Y., Ten Have, M., & de Graaf, R. (2011).
 The disease burden of childhood adversities in adults: a population-based study. *Child Abuse & Neglect*, 35, 937–945. doi:10.1016/j.chiabu.2011.06.005
- De Bellis, M., Spratt, E., & Hooper, S. (2011). Neurodevelopmental biology associated with childhood sexual abuse. *Journal of Child Sexual Abuse*, 20, 548–587. doi:10.1080/10538712.2011.607753
- DePrince, A. P. (2005). Social cognition and revictimization risk. *Journal of Trauma & Dissociation, 6,* 125-141. doi:10.1300/J229v06n01_08
- DePrince, A. P., Chu, A. T., Labus, J., Shirk, S. R., & Potter, C. (2015). Testing two approaches to revictimization prevention among adolescent girls in the child welfare system. *Journal of Adolescent Health*, 56, 533-539. doi:10.1016/j.jadohealth.2014.06.022
- Desai, S., Arias, I., Thompson, M. P., & Basile, K. C. (2002). Childhood victimization and subsequent adult revictimization assessed in a nationally representative sample of women and men. *Violence and Victims*, 17, 639-653. doi:10.1891/vivi.17.6.639.33725
- DiPalma, L. M. (1994). Patterns of coping and characteristics of high-functioning incest survivors. Archives of Psychiatric Nursing, 8, 82-90. doi:10.1016/0883-9417(94)90038-8

- Drake, B., & Pandey, S. (1996). Understanding the relationship between neighborhood poverty and specific types of child maltreatment. *Child Abuse & Neglect*, 20, 1003-1018. doi:10.1016/0145-2134(96)00091-9
- Drake, B., Jonson-Reid, M., Way, I., & Chung, S. (2003). Substantiation and recidivism. *Child Maltreatment*, 8, 248–260. doi:10.1177/1077559503258930
- Elliott, A. N., & Carnes, C. N. (2001). Reaction of nonoffending parents to the sexual abuse of their child: A review of the literature. *Child Maltreatment*, *6*, 314-331. doi:10.1177/1077559501006004005
- Elliott, D. M., & Briere, J. (1992). Sexual abuse trauma among professional women:
 Validating the Trauma Symptom Checklist-40 (TSC-40). *Child Abuse & Neglect*, 16, 391-398. doi:10.1016/0145-2134(92)90048-V
- Ernst, J. S. (2000). Mapping child maltreatment: Looking at neighborhoods in a suburban county. *Child Welfare*, *79*, 555-572.
- Fargo, J. D. (2009). Pathways to adult sexual revictimization: Direct and indirect behavioral risk factors across the lifespan. *Journal of Interpersonal Violence*, 24, 1771-1791. doi:10.1177/0886260508325489
- Fergusson, D. M., Horwood, L. J., & Lynskey, M. T. (1997). Childhood sexual abuse, adolescent sexual behaviors and sexual revictimization. *Child Abuse & Neglect*, 21, 789-803. doi:10.1016/S0145-2134(97)00039-2
- Finestone, H. M., Stenn, P., Davies, F., Stalker, C., Fry, R., & Koumanis, J. (2000). Chronic pain and health care utilization in women with a history of childhood sexual abuse. *Child Abuse & Neglect*, 24, 547-556. doi:10.1016/S0145-2134(00)00112-5

- Finkelhor, D. (1993). Epidemiological factors in the clinical identification of child sexual abuse. *Child Abuse & Neglect*, 17, 37-70. doi:10.1016/0145-2134(93)90009-T
- Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse* & Neglect, 18, 409-417. doi:10.1016/0145-2134(94)90026-4
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Re-victimization patterns in a national longitudinal sample of children and youth. *Child Abuse & Neglect*, 31, 479-502. doi:10.1016/j.chiabu.2006.03.012
- Ford, J. D., Elhai, J. D., Connor, D. F., & Freuh, C. (2010). Poly-victimization and risk of posttraumatic, depressive, and substance use disorders and involvement in delinquency in a national sample of adolescents. *Journal of Adolescent Health*, 46, 545-552. doi:10.1016/j.jadohealth.2009.11.212
- Fortier, M. A., DiLillo, D., Messman-Moore, T. L., Peugh, J., DeNardi, K. A., & Gaffey, K. J. (2009). Severity of child sexual abuse and revictimization: The mediating role of coping and trauma symptoms. *Psychology of Women Quarterly*, *33*, 308-320. doi:10.1111/j.1471-6402.2009.01503.x
- Frazier, P. A. (2003). Perceived control and distress following sexual assault: A longitudinal test of a new model. *Journal of Personality and Social Psychology*, 84, 1257-1269. doi:10.1037/0022-3514.84.6.1257

Friedenberg, S. L., Hansen, D. J., & Flood, M. F. (2013). Epidemiology of child and adolescent sexual abuse. In D. S. Bromberg & W. T. O'Donohue (Eds.), *Handbook of child and adolescent sexuality: developmental and forensic psychology* (pp. 303-324). Oxford, UK: Elsevier Inc. doi:10.1016/B978-0-12-387759-8.00012-X

- Gelinas, D. J. (1983). The persisting negative effects of incest. *Psychiatry: Interpersonal* and Biological Processes, 46, 312-332. doi:10.1521/00332747.1983.11024207
- Gidycz, C. A., Coble, C. N., Latham, L., & Layman, M. J. (1993). Sexual assault experience in adulthood and prior victimization experiences. *Psychology of Women Quarterly*, 17, 151-168. doi:10.1111/j.1471-6402.1993.tb00441.x
- Gidycz, C. A., Hanson, K., & Layman, M. J. (1995). A prospective analysis of the relationships among sexual assault experiences: An extension of previous findings. *Psychology of Women Quarterly*, 19, 5-29. doi:10.1111/j.1471-6402.1995.tb00276.x
- Gilboa-Schechtman, E., Foa, E. B., Shafran, N., Aderka, I. M., Powers, M. B.,
 Rachamim, L., ... Apter, A. (2010). Prolonged exposure versus dynamic therapy for adolescents PTSD: A pilot randomized controlled trial. *Journal of the American Academic of Child & Adolescent Psychiatry*, 49, 1034-1042.
 doi:10.1016/j.jaac.2010.07.014
- Gold, E. R. (1986). Long-term effects of sexual victimization in childhood: An attributional approach. *Journal of Consulting and Clinical Psychology*, 54, 471-475. doi:10.1037//0022-006X.54.4.471
- Goodwin, R. D., & Stein, M. B. (2004). Association between childhood trauma and physical disorders among adults in the United States. *Psychological Medicine*, 34, 509-520. doi:10.1017/S003329170300134X
- Grasso, D. J., Dierkhising, C. B., Branson, C. E., Ford, J. D., & Lee, R. (2015).Developmental patterns of adverse childhood experiences and current symptoms and impairment in youth referred for trauma-specific services. *Journal of*

Abnormal Child Psychology. Advance online publication. doi:10.1007/s10802-015-0086-8

- Grauerholz, L. (2000). An ecological approach to understanding sexual revictimization: Linking personal, interpersonal, and sociocultural factors and processes. *Child Maltreatment*, 5, 5–17. doi:10.1177/1077559500005001002
- Green, B. L., Goodman, L. A., Krupnick, J. L., Corcoran, C. B., Petty, R. M., Stockton, P., & Stern, N. M. (2000). Outcomes of single versus multiple trauma exposure in a screening sample. *Journal of Traumatic Stress*, 13, 271-286. doi:10.1023/A:1007758711939
- Hanson, K. A., & Gidycz, C. A. (1993). Evaluation of a sexual assault prevention program. *Journal of Consulting and Clinical Psychology*, *61*, 1046-1052. doi:10.1037/0022-006X.61.6.1046
- Harrison, P. A, Fulkerson, J. A, & Beebe, T. J. (1997). Multiple substance use among adolescent physical and sexual abuse victims. *Child Abuse & Neglect*, 21, 529–539. doi:10.1016/S0145-2134(97)00013-6
- Herbert, J. L., & Bromfield, L. (2015). Evidence for the efficacy of the Child Advocacy Center model: A systematic review. *Trauma, Violence, & Abuse*. Advance online publication. doi:10.1177/1524838015585319
- Heise, L. (1998). Violence against women: An integrated, ecological framework. Violence Against Women, 4, 262-290. doi:10.1177/1077801298004003002
- Hill, J. M., Vernig, P. M., Lee, J. K., Brown, C., & Orsillo, S. M. (2011). The development of a brief acceptance and mindfulness-based program aimed at reducing sexual revictimization among college women with a history of childhood

sexual abuse. *Journal of Clinical Psychology*, 67, 969-981. doi:10.1002/jclp.20813

- Himelein, M. J. (1995). Risk factors for sexual victimization in dating: A longitudinal study of college women. *Psychology of Women Quarterly*, 19, 31-48. doi:10.1111/j.1471-6402.1995.tb00277.x
- Hines, A. M., Lemon, K., Wyatt, P., & Merdinger, J. (2004). Factors related to the disproportionate involvement of children of color in the child welfare system: A review and emerging themes. *Children and Youth Services Review*, 26, 507-527. doi:10.1016/j.childyouth.2004.01.007
- Houck, C., Nugent, N., Lescano, C. M., Peters, A., & Brown, L. K. (2010). Sexual abuse and sexual risk behavior: Beyond the impact of psychiatric problems. *Journal of Pediatric Psychology*, 35, 473–483. doi:10.1093/jpepsy/jsp111
- Humphrey, J. A., & White, J. W. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, 27, 419-424. doi:10.1016/S1054-139X(00)00168-3
- IBM Corp (2013). IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IMB Corp.
- Irish, L., Kobayashi, I., & Delahanty, D. L. (2010). Long-term physical health consequences of childhood sexual abuse: A meta-analytic review. *Journal of Pediatric Psychology*, 35, 450-461. doi:10.1093/jpepsy/jsp118
- Jaffee, S. R., Caspi, A., Moffitt, T. E., Polo-Tomas, M., & Taylor, A. (2007). Individual, family, and neighborhood factors distinguish resilient from non-resilient

maltreated children: A cumulative stressors model. *Child Abuse & Neglect, 31*, 231-253. doi:10.1016/j.chiabu.2006.03.011

- Jankowski, M. K., Leitenberg, H., Henning, K., & Coffey, P. (2002). Parental caring as a possible buffer against sexual revictimization in young adult survivors of child sexual abuse. *Journal of Traumatic Stress*, 15, 235–244. doi:10.1023/A:1015259412746
- Jones, L. M., & Walsh, W. A. (2010). Improving access to mental health services for abused children in NH: System recommendations for CACs (Summary Report).
 Durham, NH: Crimes Against Children Research Center, University of New Hampshire.
- Kalof, L. (2000). Ethnic differences in female sexual victimization. Sexuality & Culture,4, 75-98. doi:10.1007/s12119-000-1005-9
- Kellogg, N. D., & Hoffman, T. J. (1997). Child sexual revictimization by multiple perpetrators. *Child Abuse & Neglect*, 21, 953-964. doi:10.1016/S0145-2134(97)00056-2
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113, 164-180. doi:10.1037//0033-2909.113.1.164
- Kessler, B. L., & Bieschke, K. J. (1999). A retrospective analysis of shame, dissociation, and adult victimization in survivors of child sexual abuse. *Journal of Counseling Psychology*, 46, 335-341. doi:10.1037/0022-0167.46.3.335

- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995).
 Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 52, 1048-1060. doi:10.1001/archpsyc.1995.03950240066012
- Koss, M. P., & Dinero, T. E. (1989). Discriminant analysis of risk factors for sexual victimization among a national sample of college women. *Journal of Consulting* and Clinical Psychology, 57, 242-250. doi:10.1037//0022-006X.57.2.242
- Kotchick, B. A., Shaffer, A., Forehand, R., & Miller, K.S. (2001). Adolescent sexual risk behavior: A multi-system perspective. *Clinical Psychology Review*, 21, 493-519. doi:10.1016/S0272-7358(99)00070-7
- Krahe, B., Scheinberger-Olwig, R., Waizenhöfer, E., & Kolpin, S. (1999). Childhood sexual abuse and revictimization in adolescence. *Child Abuse & Neglect*, 23, 383-394. doi:10.1016/S0145-2134(99)00002-2
- Kreklewetz, C. M., & Piotrowski, C. C. (1998). Incest survivor mothers: Protecting the next generation. *Child Abuse & Neglect*, 22, 1305-1312. doi:10.1016/S0145-2134(98)00102-1
- Lev-Weisel, R. (2006). Intergenerational transmission of sexual abuse? Motherhood in the shadow of incest. *Journal of Child Sexual Abuse*, 15, 75-101. doi:10.1300/J070v15n02_06
- Lewit, E. M. (1994). Reported child abuse and neglect. *The Future of Children*, *4*, 233-242. doi:10.2307/1602533
- Loeb, T. B., Gaines, T., Wyatt, G. E., Zhang, M., & Liu, H. (2011). Associations between child sexual abuse and negative sexual experiences and revictimization among

women: Does measuring severity matter? *Child Abuse & Neglect*, *35*, 946–955. doi:10.1016/j.chiabu.2011.06.003

- London, K., Bruck, M., Wright, D. B., & Ceci, S. J. (2008). Review of the contemporary literature on how children report sexual abuse to others: Findings, methodological issues, and implications for interviewers. *Memory*, 16, 29-47. doi:10.1080/09658210701725732
- Long, P. J., & Jackson, J. L. (1991). Children sexually abused by multiple perpetrators. *Journal of Interpersonal Violence*, *6*, 147-159. doi:10.1177/088626091006002001
- Macartney, S., Bishaw, A., & Fontenot, K. (2013). Poverty rates for selected detailed race and Hispanic groups by state and place: 2007-2011. *American Community Survey Briefs*. U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. Retrieved from https://www.census.gov/prod/2013pubs/acsbr11-17.pdf
- Macy, R. J. (2007). A coping theory framework toward preventing sexual revictimization. Aggression and Violent Behavior, 12, 177-192. doi:10.1016/j.avb.2006.09.002
- Maker, A. H., Kemmelmeier, M., & Peterson, C. (2001). Child sexual abuse, peer sexual abuse, and sexual assault in adulthood: a multi-risk model of revictimization. *Journal of Traumatic Stress*, 14, 351-68. doi:10.1023/A:1011173103684
- Malloy, L. C., & Lyon, T. D. (2006). Caregiver support and child sexual abuse : Why does it matter? *Journal of Child Sexual Abuse*, 15, 97–104. doi:10.1300/J070v15n04

Mandoki, C., & Burkhart, B. (1989). Sexual victimization: Is there a vicious cycle?

Violence and Victims, 4, 179-190.

- Maniglio, R. (2009). The impact of child sexual abuse on health: A systematic review of reviews. *Clinical Psychology Review*, 29, 647-657. doi:10.1016/j.cpr.2009.08.003
- Marx, B. P., Calhoun, K. S., Wilson, A. E., & Meyerson, L. A. (2001). Sexual revictimization prevention: An outcome evaluation. *Journal of Consulting and Clinical Psychology*, 69, 25-32. doi:10.1037/0022-006X.69.I.25
- Matta Oshima, K. M., Jonson-Reid, M., & Seay, K. D. (2014). The influence of childhood sexual abuse on adolescent outcomes: The roles of gender, poverty, and revictimization. *Journal of Child Sexual Abuse*, 23, 367-386. doi:10.1080/10538712.2014.896845
- Mayall, A., & Gold, S. R. (1995). Definitional issues and mediating variables in the sexual revictimization of women sexually abused as children. *Journal of Interpersonal Violence*, 10, 26-42. doi:10.1177/088626095010001002

Meiselman, K. (1978). Incest. San Francisco, CA: Jossey-Bass.

- Messman-Moore, T. L., Brown, A. L., & Koelsch, L. E. (2005). Posttraumatic symptoms and self-dysfunction as consequences and predictors of sexual revictimization. *Journal of Traumatic Stress*, 18, 253–261. doi:10.1002/jts.20023
- Messman-Moore, T. L., & Long, P. J. (2003). The role of childhood sexual abuse sequelae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Psychology Review*, 23, 537-571. doi:10.1016/S0272-7358(02)00203-9

- Messman, T. L., & Long, P. J. (1996). Child sexual abuse and its relationship to revictimization in adult women: A review. *Clinical Psychology Review*, 16, 397-420. doi:10.1016/0272-7358(96)00019-0
- Mikton, C., & Butchart, A. (2009). Child maltreatment prevention: A systematic review of reviews. *Bulletin of the World Health Organization*, 87, 353-361. doi:10.1590/S0042-96862009000500012
- Miller, J., Moeller, D., Kaufman, A., DiVasto, P., Pathak, D., & Christy, J. (1978). Recidivism among sexual assault victims. *American Journal of Psychiatry*, 135, 1103-1104.
- Miner, M. H., Klotz Flitter, J. M., & Robinson, B. B. E. (2006). Association of sexual revictimization with sexuality and psychological function. *Journal of Interpersonal Violence*, 21, 503–524. doi:10.1177/0886260505285913
- Miron, L. R., & Orcutt, H. K. (2014). Pathways from childhood abuse to prospective revictimization: Depression, sex to reduce negative affect, and forecasted sexual behavior. *Child Abuse & Neglect*, 38, 1848-1859.

doi:10.1016/j.chiabu.2014.10.004

- Molnar, B. E., Buka, S. L., & Kessler, R. C. (2001). Child sexual abuse and subsequent psychopathology: Results from the National Comorbidity Survey. *American Journal of Public Health*, 91, 753-760.
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1994).
 The effect of child sexual abuse on social, interpersonal, and sexual functioning in adult life. *British Journal of Psychiatry*, 165, 35-47. doi:10.1192/bjp.165.1.35

- Najman, J. M., Nguyen, M. L. T., & Boyle, F. M. (2007). Sexual abuse in childhood and physical and mental health in adulthood: An Australian population study. *Archives of Sexual Behavior*, 36, 666-675. doi:10.1007/s10508-007-9180-5
- National Children's Alliance (2014). National Children's Alliance Annual Report 2014. Retrieved from

http://www.nationalchildrensalliance.org/sites/default/files/download-

files/NCA_annualreport_FINALweb.pdf

- Nelson, E. C., Heath, A. C., Madden, P.A., Cooper, M. L., Dinwiddie, S. H., Bucholz, K. K.,... Martin, N. G. (2002). Association between self-reported childhood sexual abuse and adverse psychosocial outcomes: Results from a twin study. *Archives of General Psychiatry*, 59, 139-145. doi:10.1001/archpsyc.59.2.139.
- Newman, M. G., Clayton, L., Zuellig, A., Cashman, L., Arnow, B., Dea, R., & Taylor, C.
 B. (2000). The relationship of childhood sexual abuse and depression with somatic symptoms and medical utilization. *Psychological Medicine*, *30*, 1063-1077. doi:10.1017/S003329179900272X
- Noll, J. G., Zeller, M. H., Trickett, P. K., & Putnam, F. W. (2007). Obesity risk for female victims of childhood sexual abuse: A prospective study. *Pediatrics*, 120, e61-e67. doi:10.1542/peds.2006-3058
- Nurcombe, B. (2000). Child sexual abuse I: Psychopathology. *The Australian and New Zealand Journal of Psychiatry*, *34*, 85–91. doi:10.1046/j.1440-1614.2000.00642.x
- Oaksford, K., & Frude, N. (2003). The process of coping following child sexual abuse: A qualitative study. *Journal of Child Sexual Abuse*, *12*, 41-72. doi:10.1300/J070v12n02_03

- Obasaju, M. A., Palin, F. L., Jacobs, C., Anderson, P., & Kaslow, N. J. (2009). Won't you be my neighbor?: Using an ecological approach to examine the impact of community on revictimization. *Journal of Interpersonal Violence*, 24, 38-53. doi:10.1177/0886260508314933
- Orcutt, H. K., Cooper, M. L., & Garcia, M. (2005). Use of sexual intercourse to reduce negative affect as a prospective mediator of sexual revictimization. *Journal of Traumatic Stress*, 18, 729-739. doi:10.1002/jts.20081
- Paine, M. L., & Hansen, D. J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review*, 22, 271-295. doi:10.1016/S0272-7358(01)00091-5
- Pereda, N., Guilera, G., Forns, M., & Gumez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect*, 33, 331-342. doi:10.1016/j.chiabu.2008.07.007
- Perez-Fuentes, G., Olfson, M., Villegas, L., Morcillo, C., Wang, S., & Blanco, C. (2013). Prevalence and correlates of child sexual abuse: A national study. *Comprehensive Psychiatry*, 54, 16–27. doi:10.1016/j.comppsych.2012.05.010
- Peterson, C., & Seligman, M. E. P. (1983). Learned helplessness and victimization. Journal of Social Issues, 39, 103-116. doi:10.1111/j.1540-4560.1983.tb00143.x

Pittenger, S. L., Huit, T. Z., & Hansen, D. J. (2016). Applying ecological systems theory to sexual revictimization of youth: A review with implications for research and practice. *Aggression and Violent Behavior*, 26, 35-45. doi:10.1016/j.avb.2015.11.005

- Polusny, M. A., & Follette, V. M. (1995). Long-term correlates of child sexual abuse: Theory and review of the empirical literature. *Applied and Preventive Psychology*, 4, 143-166. doi:10.1016/S0962-1849(05)80055-1
- Pulkkinen, L. (1983). Finland: The search for alternatives to aggression. In A. P.
 Goldstein & M. Segall (Eds.), *Aggression in global perspective* (pp. 104-144).
 New York, NY: Pergamon Press. doi:10.1016/B978-0-08-026346-5.50009-4
- Putnam, F. W. (2003). Ten-year research update review: Child sexual abuse. Journal of the American Academy of Child and Adolescent Psychiatry, 42, 269-278. doi:10.1097/00004583-200303000-00006
- Rebocho, M. F., & Silva, P. (2014). Target selection in rapists: The role of environmental and contextual factors. *Aggression and Violent Behavior*, 19, 42-49. doi:10.1016/j.avb.2013.12.003
- Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., Saunders, B. E., & Best, C. L. (1993).
 Prevalence of civilian trauma and posttraumatic stress disorder in a representative sample of women. *Journal of Consulting and Clinical Psychology*, *61*, 984-991. doi:10.1037/0022-006X.61.6.984
- Rinehard, J. K., Yeater, E. A., Musci, R. J., Letourneau, E. J., & Lenberg, K. L. (2014). The role of ethnicity, sexual attitudes, and sexual behavior in sexual revictimization during the transition to emerging adulthood. *Child Maltreatment*, 19, 178-187. doi:10.1177/1077559514551946
- Risser, H. J., Hetzel-Riggin, M. D., Thomsen, C. J., & McCanne, T. R. (2006). PTSD as a mediator of sexual revictimization: The role of reexperiencing, avoidance, and

arousal symptoms. *Journal of Traumatic Stress*, *19*, 687-698. doi:10.1002/jts.20156

- Romer, D., Black, M., Ricardo, I., Fiegelman, S., Kaljee, L., Galbraith, J., ... Stanton, B. (1994). Social influences on the sexual behavior of youth at risk for HIV exposure. *American Journal of Public Health*, 84, 977-985. doi:10.2105/AJPH.84.6.977
- Roodman, A. A., & Clum, G. A. (2001). Revictimization rates and method variance: A meta-analysis. *Clinical Psychology Review*, 21, 183-204. doi:10.1016/S0272-7358(99)00045-8
- Rossmo, D. K. (1997). Geographic profiling. In J. L. Jackson & D. A. Bekerian (Eds.), Offender profiling: Theory, research and practice (pp. 159-175). Hoboken, NJ: John Wiley & Sons.
- Rossmo, D. K. (2000). Geographic profiling. Boca Raton, FL: CRC Press.
- Ruggiero, K. J., McLeer, S. V, & Dixon, J. F. (2000). Sexual abuse characteristics associated with survivor psychopathology. *Child Abuse & Neglect*, 24, 951–64. doi:10.1016/S0145-2134(00)00144-7
- Sandberg, D. A., Matorin, A. I., & Lynn, S. J. (1999). Dissociation, posttraumatic symptomatology, and sexual revictimization: A prospective examination of mediator and moderator effects. *Journal of Traumatic Stress*, 12, 127-138. doi:10.1023/A:1024702501224
- Sartor, C. E., Agrawal, A., McCutcheon, V. V., Duncan, A. E., & Lynskey, M. T. (2008).Disentangling the complex association between childhood sexual abuse and alcohol-related problems: A review of methodological issues and approaches.

Journal of Studies on Alcohol and Drugs, 69, 718-727. doi:10.15288/jsad.2008.69.718

- Sas, L. D., & Cunningham, A. H. (1995). *Tipping the balance to tell the secret: The public discovery of child sexual abuse*. London, Ontario, Canada: London Family Court Clinic.
- Saunders, B. E., Villeponteaux, L. A., Lipovsky, J. A., Kilpatrick, D. G., & Veronen, L. J. (1992). Child sexual assault as a risk factor for mental health disorders among women: A community sample. *Journal of Interpersonal Violence*, *7*, 189-204. doi:10.1177/088626092007002005
- Sedlak, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): Report to Congress. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families.
- Sickel, A. E., Noll, J. G., Moore, P. J., Putnam, F., & Trickett, P. K. (2002). The longterm physical health and healthcare utilization of women who were sexually abused as children. *Journal of Health Psychology*, 7, 583-597. doi:10.1177/1359105302007005677
- Sidebotham, P. (2001). An ecological approach to child abuse: a creative use of scientific models in research and practice. *Child Abuse Review*, 10, 97–112. doi:10.1002/car.643
- Simmel, C., Postmus, J., & Lee, I. (2012). Sexual revictimization in adult women: examining factors associated with their childhood and adulthood experiences. *Journal of Child Sexual Abuse*, 21, 593–611. doi:10.1080/10538712.2012.690836

- Simons, R., & Whitbeck, L. (1991). Sexual abuse as a precursor to prostitution and victimization among adolescent and adult homeless women. *Family Issues*, 72, 361-379. doi:10.1177/019251391012003007
- Smalls, S. A., & Kerns, D. (1993). Unwanted sexual activity among peers during early and middle adolescence: Incidence and risk factors. *Journal of Marriage and the Family 55*, 941-952. doi:10.2307/352774
- Smith, D. W., Letourneau, E. J., Saunders, B. E., Kilpatrick, D. G., Resnick, H. S., & Best, C. L. (2000). Delay in disclosure of childhood rape: Results from a national survey. *Child Abuse & Neglect*, 24, 273-287. doi:10.1016/S0145-2134(99)00130-1
- Smith, D. W., Witte, T. H., & Fricker-Elhai, A. E. (2006). Service outcomes in physical and sexual abuse cases: A comparison of child advocacy center-based and standard services. *Child Maltreatment*, 11, 354-360. doi:10.1177/1077559506292277
- Swanston, H. Y., Parkinson, P. N., Oates, R. K., O'Toole, B. I., Plunkett, A. M., & Shrimpton, S. (2002). Further abuse of sexually abused children. *Child Abuse & Neglect*, 26, 115-127. doi:10.1016/S0145-2134(01)00311-8
- Tapia, N. D. (2014). Survivors of child sexual abuse and predictors of adult revictimization in the United States: A forward logistic regression analysis. *International Journal of Criminal Justice Sciences*, 9, 64-73.
- Teegen, F. (1999). Childhood sexual abuse and long-term sequelae. In A. Maercker, M. Schutzwohl, & Z. Solomon (Eds.), *Post-traumatic stress disorder: A lifespan developmental perspective* (pp. 97-112). Seattle, WA: Hogrefe & Huber.

- Testa, M., Hoffman, J. H., & Livingston, J. A. (2010). Alcohol and sexual risk behaviors as mediators of the sexual victimization-revictimization relationship. *Journal of Consulting and Clinical Psychology*, 78, 249–259. doi:10.1037/a0018914
- Trask, E. V., Walsh, K., & DiLillo, D. (2011). Treatment effects for common outcomes of child sexual abuse: A current meta-analysis. *Aggression and Violent Behavior*, 16, 6-19. doi:10.1016/j.avb.2010.10.001
- Ullman, S. E., & Vasquez, A. L. (2015). Mediators of sexual revictimization risk in adult sexual assault victims. *Journal of Child Sexual Abuse*, 24, 300-314. doi:10.1080/10538712.2015.1006748
- Urquiza, A. J., & Goodlin-Jones, B. L. (1994). Child sexual abuse and adult revictimization with women of color. *Violence and Victims*, *9*, 223–232.
- U.S. Census Bureau (2000). *Census 2000, American Fact Finder*. Retrieved from http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml
- Van Bruggen, L. K., Runtz, M. G., & Kadlec, H. (2006). Sexual revictimization: the role of sexual self-esteem and dysfunctional sexual behaviors. *Child Maltreatment*, 11, 131–145. doi:10.1177/1077559505285780
- Waldron, J. C., Wilson, L. C., Patriquin, M. A., & Scarpa, A. (2015). Sexual victimization history, depression, and task physiology as predictors of sexual revictimization: Results from a 6-month prospective pilot study. *Journal of Interpersonal Violence*, *30*, 622-639. doi:10.1177/0886260514535258
- Walsh, K., Resnick, H. S., Danielson, C. K., McCauley, J. L., Saunders, B. E., &Kilpatrick, D. G. (2014). Patterns of drug and alcohol use associated with lifetime sexual revictimization and current posttraumatic stress disorder among three

national samples of adolescent, college, and household-residing women. *Addictive Behaviors*, *39*, 684-689. doi:10.1016/j.addbeh.2013.12.006

- Wekerle, C., Bennett, T., & Francis, K. (2013). Child sexual abuse and adolescent sexuality. In D. S. Bromberg & W. T. O'Donohue (Eds.), *Handbook of child and adolescent sexuality: Developmental and forensic psychology* (pp. 325-345).
 Oxford, UK: Elsevier Inc. doi:10.1016/B978-0-12-387759-8.00013-1
- Wekerle, C., Leung, E., Goldstein, A., Thornton, T., & Tonmyr, L. (2009). Up against a wall: Coping with becoming a teen when you have been maltreated as a child.
 (Substance use among adolescents in child welfare versus adolescents in the general population: A comparison of the Maltreatment and Adolescent Pathways [MAP] Longitudinal Study with the Ontario Student Drug Use Survey [OSDUS] datasets). London, ON: University of Western Ontario. Retrieved from http://www.phac-aspc.gc.ca/ncfv-cnivf/pdfs/nfnts-ado-wallmur-eng.pdf
- Widom, C. S., Czaja, S. J., Bentley, T., & Johnson, M. S. (2012). A prospective investigation of physical health outcomes in abused and neglected children: new findings from a 30-year follow-up. *American Journal of Public Health*, 102, 1135–1144. doi:10.2105/AJPH.2011.300636
- Wolfe, D. A., Wekerle, C., Scott, K., Straatman, A., Grasley, C., & Reitzel-Jaffe, D. (2003). Dating violence prevention with at-risk youth: A controlled outcome evaluation. *Journal of Consulting and Clinical Psychology*, *71*, 279-291. doi:10.1037/0022-006X.71.2.279
- Wolfe, D. A., Wekerle, C., Gough, R., Reitzel-Jaffe, D., Grasley, C., Pittman, A., Lefebvre, L., & Stumpf, J. (1996). *The youth relationships manual: A group*

approach with adolescents for the prevention of woman abuse and the promotion of healthy relationships. Thousand Oaks, CA: Sage Publications.

Wolfteich, P., & Loggins, B. (2007). Evaluation of the children's advocacy center model: Efficiency, legal and revictimization outcomes. *Child and Adolescent Social Work Journal*, 24, 333–352. doi:10.1007/s10560-007-0087-8

Child Advocacy Center	CHILD	ADV	OCACY C	ENTE RD	ĒR	
CAC CASE NUMBER:			DAG 🗌	ADVOCA	ТЕ□к	AVAN
			MEDI		OVIDER	П LOCH
DATE	TIME		IN TWRIGHT [][KLE]F ANT][TERVIEN DARLING OSTER DTHER	WER SNE	ELLER-HAMILTON RRY
	CHII	D INFO	RMATION			
Child's Name			Date of Birth		Age	Female
Address			J			
City		County			State	Zip
Home Phone	NOP Wo	ork Phon	e	Cell Ph	one 🗆	
					_	_
White (Inclu Hispanic/Lat Black/Africa Native Amare Asian Native Hawa None ADHD Learning Di Asperger's Source	des Middle Eastern) ino n American ican/Alaskan Native <u>ilian/Pacific Islander</u> Speech I Hearing sabled Visually Seizure I Cerebral	Empaired Impaired Impaired Disorder Palsy	English Spanish Vietnam Arabic Nuer Other Wheelch Develop Mental H Other:	ese nair Bound mentally D Health	Pelayed	
Physical Physical Domestic V Neglect Orug Endar Kidnap Other	iolence gered	Services Requested	Forensic Extende Medical ChildGua Medical Hospital Child Ad	Interview d Forensic Evaluation ard Consultatio Advocacy vocate On	Interview on ly	
Date of Referral to C	AC Referral Sour	ce (Agei	icy/Person)	•	Telephon	e
Date of Referral to I	nvestigative Agency	/:		i_		
Law Enforcement	Phone		CPS Worker		Phone	6
	Law Enforcement Not I	nvolved		CPS N	 ot Involved	
	2					1 Page

S	UMMARY	OF ALLE	GED ABU	SE				<u> </u>
Perpetrator Unknown								
County of Jurisdiction:								
1. Alleged Perpetrator		Date o	f Birth	Age			Male	
a Anogou i cipetitici		Date 0	i bii ch	, ngc			Female	
Race White Hispanic/La	atino	Black	Native An	nerican		Asia	n 🗌	Other
Relationship to Child								
Currently in the home			Does not liv	e in home	with	child		
Temporarily out of home			In custody		mui	uniu		
2. Alleged Perpetrator		Date o	f Birth	Age			Male	
Race White Hispanic/La	atino 🕅	Black	Native Ar	nerican			n Female	Other
Relationship to Child		JUCK			البي	Asia	···	ould
Compatible in the base			D			-1-11-2		
Currently in the home Temporarily out of home		F	Does not liv In custody	e in home	with	child		
3. Alleged Perpetrator Da			e of Birth Age		Male			
							Female	
Race 🗌 White 🗌 Hispanic/La	atino 🗌	Black	Native Ar	nerican		Asiar	ם ו	Other
Relationship to Child								
Currently in the home		Γ	Does not liv	e in home	with	child		
Temporarily out of home			In custody					
Evaminar	OUTSIC	DE MEDI	CAL EXAM		<u> </u>	Dat		
Examiner	Loca	tion				Date	5	
Findin								
ringings								
No physical finding	s							
Indings Ophysical findings Ophysical findings pr Ophysical finding Ophysical findings Ophysical findings Ophysical find	s resent and o	consistent	with abuse					
No physical finding: No physical finding: Physical findings pr Physical findings pr Physical findings or	s resent and r resent but r resent but i	consistent not related nconclusiv	with abuse I to abuse re regarding	abuse				
No physical finding Physical findings pr Physical findings pr Physical findings pr	s resent and resent but r resent but i BACKO	consistent not related nconclusiv GROUND	with abuse I to abuse 'e regarding CHECKS	abuse				
No physical finding: Physical findings pr Check child's CAC history	s resent and resent but r BACKO Check ch	consistent not related nconclusiv BROUND hild's his	with abuse I to abuse re regarding CHECKS tory on ND	abuse	heck	NO	P's histo	ry on
No physical findings Physical findings pr Check child's CAC history Yes No When?	s resent and resent but r resent but i BACKO Check ch	consistent not related nconclusiv BROUND hild's his	with abuse I to abuse regarding CHECKS cory on ND	abuse EN CI N	heck DEN	NOI	P's histo	ry on
No physical findings Physical findings pr Physical findings pr Physical findings pr Physical findings pr Check child's CAC history Yes No When?	s resent and resent but r resent but i BACKO Check cl	consistent not related nconclusiv GROUND hild's his	with abuse to abuse regarding CHECKS tory on ND	abuse EN CI N	heck DEN	NO	P's histo	ry on
Check AP's CAC history	s resent and resent but r BACKC Check ch	consistent not related nconclusiv BROUND hild's histon	with abuse I to abuse re regarding CHECKS tory on ND	abuse EN Cl N	heck DEN heck	NOI	P's histo Offendo	ry on er
No physical findings Physical findings pr Physical findings	s resent and r resent but r BACKC Check cl	consistent not relatec nconclusiv SROUND hild's histon P's histon	with abuse I to abuse re regarding CHECKS tory on ND	abuse EN CI N CI R	heck DEN heck egist	NOI Sex	P's histo Offende	ry on er
A physical findings Physical findings pr Physical findings	s resent and r resent but r BACKC Check cl Check A	consistent not related nconclusiv 3ROUND hild's hist P's histor	with abuse to abuse <u>e regarding</u> CHECKS tory on NDE	abuse EN CI N CI R	heck DEN heck egist	NOI Sex ry	P's histo Offende	ry on Pr
A physical findings pr Physical findings pr Physical findings pr Physical findings pr Physical findings pr Check child's CAC history Yes No When? Check AP's CAC history	s resent and resent but r BACKC Check cl Check A	consistent not related nconclusiv BROUND hild's hist	with abuse I to abuse re regarding CHECKS cory on ND	abuse EN CI N CI R	heck DEN heck egist	NOI Sex	P's histo Offende	ry on er
The child's CAC history Check AP's CAC history Check AP's CAC history	s resent and resent but i BACKC Check ch Check A	consistent not related nconclusiv GROUND hild's hist	with abuse I to abuse re regarding CHECKS cory on ND	abuse EN CI N CI R	heck DEN heck egist	NOI Sex ry	P's histo Offende	ry on Pr

	C	HILD'S TEA	M			
County Attorney					Phone	
Child's School		Child's	Primary	/ Physiciar	1	
St. Mary's	*****					
Child's Therapist						
		ſ	Child no	nt involved in	therapy at time of refe	
		CUSTODY	_] Clinu no		therapy at time of fere	
Who has legal custo	dy of the child?					
Mother/Father (marr	ied) 🗌 Joint	Custody (divore	ce)	State	e Ward	
Mother Only	Fath	er Only	*****	Othe	er	
In parents' or primary	g Arrangement		ecidential/	institutional	treatment	
In foster/adoptive ho	me		roup hom	e	ueaunent	
Residing with other re	elatives	🗌 Oth	er	-		
	CAREG	IVER INFORM	NOITAN			
Name of Caregiver	D	ate of Birth		Age	Male	
			<u> </u>	Amer-1		
Race:	🔲 Hispanic/Latino	Пвіяск	🛄 Nati	ve American	LJAsian	
Place of Employmen	t			Can we c	all you at work?	
				Yes [No	
Relationship to Chil	d					
Biological Parent	Step Parent			Fost	er Parent	
Adopted Parent	Caregiver's B	oyfriend/Girlfrie	nd	🗌 Othe	er Relative	
Name of Caregiver	D	ate of Birth		Age	Male	
		Diaste		. American		
Race:		DIACK		ve American	Asian	
Place of Employment	t			Can we c	all you at work?	
				∐ Yes [] No	
Relationship to Chil	d					
Biological Parent	Step Parent			E Fost	er Parent	
Adopted Parent	Caregiver's B	oyfriend/Girlfrie	nd		er Relative	
M - 41	BIOLOGICAL PARE	ENT(S) – IF N	OTLIST	ED ABOV	E Mala	
Mother		Date of Birt	n A	ge		
-			D N -1500	A m o mi		
Race:	Hispanic/Latino	TTRISCK		American	Lasian	
Address		City			State	
Eathor		Date of Birt	h A	<u></u>		
rather				ge	Female	
Race: White	Hispanic/Latino	Black	□ Native	American	Asian	
		City			State	
Address		City			state	
lame:		SIBLINGS				
--	--	--	---------------------------	---	---	--
10111C.	DOB/Age:	White Hispanic/Latino Black Native American	☐Male □Female	In home	Whole	
lame:	DOB/Age:	Asian White Hispanic/Latino Black Native American	☐Male □Female	In home Out of home Out of home Out of home	Adoptiv	
lame:	DOB/Age:	Asian White Hispanic/Latino Black Native American	☐Male ☐Female		Adoptiv Adoptiv Adoptiv Adoptiv Adoptiv Adoptiv	
lame:	DOB/Age:	White Hispanic/Latino Black Native American	☐Male □Female	In home Out of home	Adoptiv	
lame:	DOB/Age:	White Hispanic/Latino Black Native American Asian	☐Male □Female	In home Out of home	U Whole Half Step Foster Adoptiv	
WH		IN THE HOME WIT			Male	
ame	Rela	ationship to Child	DOB/Ag	B/Age: Ma		
DOMESTIC VIOLENC	E to keep your child safe mestic violence in the	of drug or alcohol ab e, you need to be safe home. Do you feel	e. Many of safe at hor	S NO our parents a ne? Has you OWN	UNKNOWN are in unsaf ar child eve	
realize in order for you tuations because of do itnessed violence in the lotes:	home?	YES NO	-			
realize in order for you tuations because of do vitnessed violence in the lotes: HILDHOOD ABUSE as <u>anyone in your fami</u> ne alleged perpetrator? otes:	home?	abuse? Have <u>you</u> e	experienced YES	sexual abuse	? Wh]UNKN	

APPENDIX B

[J]	
Child	
Advocacy Center	-

FORENSIC INTERVIEW SUMMARY

This report is a summary of a recorded interview of a child victim or witness alleging, explaining, denying or describing an act of sexual assault or child abuse as part of an investigation. For the child's complete statement, please refer to the DVD recording provided to law enforcement.

	Aldag Andrews	Cassidy Kav	an
Child's Name	Dat	te of Birth	Age
Alleged Perpetrator			Age
Relationship to Child		🗌 Unknown	
 ☐ Biological parent ☐ Step parent ☐ Foster parent ☐ Adoptive parent ☐ Other relative 	☐ Mother's paramour ☐ Father's paramour ☐ Sibling ☐ Child care staff	r Tea Oth Uni Inta Oth	acher, coach, youth leader her adult known to child known adult ernet relationship her
Date of Referral	Referral Source (Agency a	nd Person)	
Date of Interview	Start Time	Stop Tim	e
Name of Interviewer Maja Cartwright Braegan Darling Interpreter Used Yes No Others in the Observati	Troy Cockle Kike Barry Nan	Frank Foster Chad Bryant ne of Interpreter	C Other:
Did the child make a dis If YES, who did the child	closure of abuse prior to the d disclose to (check all that a	forensic interview pply):	v? 🗌 Yes 🗌 No
 ☐ Biological mother ☐ Biological father ☐ Step parent ☐ Sibling 	☐ Foster parent ☐ School ☐ Grandparent ☐ Mental ☐ Other relative ☐ Health @ ☐ Friend ☐ Other	professional health provider care provider	☐ Clergy ☐ Law enforcement personnel ☐ CPS Worker
Did the child disclose a	buse during the forensic inte	rview?	
□ Yes □ No □	Child refused interview	Child developmenta	lly unable to participate

If the child disclosed abuse, what type of abuse did s/he report? (Check all that apply)

Sexual Neglect Physical Homicide Domestic Violence Drug Endang	☐ Kidnap/Attempted Kidnap ☐ Witness to Sexual/Physical Abuse gered ☐ Other
If the child disclosed SEXUAL ABUSE, what exposed to? (Check all that apply)	t kind of sexual behavior(s) was the child
 Sexual suggestive talk, hugs, kissing Exposure of genitals Pornography (magazines, video, internet) Fondling over child's clothes Fondling under child's clothes Simulated intercourse over clothes Attempted intercourse under the clothes Penile penetration of vagina Penile penetration of rectum Child forced to fondle perpetrator's genitals 	 Oral contact (perpetrator to child's genitals) Oral contact (child to perpetrator's genitals) Digital or object penetration Ejaculation by perpetrator Internet solicitation Photos or video taken Child was confined or restrained Child was hit or beaten Threats or bribes Other
If the child disclosed PHYSICAL ABUSE, what the child exposed to? (Check all that apply)	t kind of physically abusive behavior(s) was
 ☐ Pushing or shaking ☐ Pinching, biting causing injury ☐ Hit, punched, spanked, kicked causing injury ☐ Hit or spanked with object causing injury 	☐ Threatened with a weapon ☐ Kept in restraints, locked up, held in seclusion ☐ Inflicted burns ☐ Other
How often was the child abused in the current	episode under investigation?
Single incident Less than 10 times	☐ More than 10 times ☐ Unable to determine
When was the last incident?	Jurisdiction
Where did the alleged abuse occur? (Check all Child's home S Offender's home (different from child) C Relative's home V Friend's home C	that apply) School Dark Child Care Other public setting /ehicle Hotel/Motel Other—
Interview Summary Completed by Braegan Darling	Date
······································	

APPENDIX C

Child Advocacy Center

. .

Report of Medical Evaluation

Date of Evaluation	Time of Evaluat	ion	Staci	e Bleicher, M.D. David, M.D.
			C Kirst	en Loch. R.N.
Child's Name	Date of Birth	Age		Female Male
Referring Agency				L
Officer/Worker				
Name of Caregiver(s) Providing History		Relati Child	onship to	
Reason for Referral				
Past Medical History				
Perinatal History	· · · · · · · · · · · · · · · · · · ·			
Review of Systems				
Current Medications	<u> </u>			
Allergies				
Additional Information	Provided by Care	giver(s)		
Additional Information	Provided by Child	l		

Child Advocacy Center 5025 Garland Street Lincoln, NE 68504 (402) 476-3200

	A COL	Constitution of the second	ation	ATTACK AND	
Temp Pulse	RR	BP	Height	Weight	BM
HEENT					
Neck					
Cardiovascular		2			
Respiratory					
Al. J					
Addominal					
Genitourinary					
Neurologic	enondiarean et de la contra a				
Extromition					
Extremities					
Skin		analterier de dereiae	**** ***********		
Impressions					
Treatment/Recom	mendations				
ricutilititi, necon					
Lab Results					
Signature of Medio	cal Examiner			Date of Signa	iture
Conies of the Medi	ical Evaluation	Report p	rovided to:		
copies of the file					

. ۱۹۰۱ - ۲۰۰۹ مربع

Child Advocacy Center	cal E	ixam V	orks	hee	t		
Date of Exam	· · ·	Time of Exar	n _	Stacie B Jeff Dav	Bleicher, M.D. vid, M.D.		
Child's Name		Date of Birth	Aq	je	Female		
☐ White (Includes Middle Eastern ☐ Hispanic/Latino ♡ ☐ Black/African American ☑ Native American/Alaskan Nativ ☐ Asian ☐ Other	n) ve	Definition of the second secon			se Se		
Interpreter Used		Name of Inte	erpreter				
Name of Referring Agency							
				•			
Name of Officer/Worker			Telep	ohone			
Alleged Perpetrator	Date	of Birth	Age	Asian	fale emale		
Relationship to Child							
Currently in the home		Does not li	ve in home	with chi	ld		
lame of Caregiver(s) Providing History Tod	lay	In custody		Telep	hone		
lelationship to Child		entility for the state of the light of the state of the	talay attemps any . July 2 america				
Parent/Guardian Consent	□ c +	ato Ward-HUS	Concent	la Borod Dr.	·		
		ate waru-nh3	consent				
ate of Most Recent Alleged Event					linknow		
ate of Most Recent Alleged Event		6 data of over	m?		Olkiowi		
ate of Most Recent Alleged Event las child been previously examined for lleged abuse?	If YE	S, uate of exa					

Summary of Current Allegation	(Include Source)		
	-		
	17. 11.44.094.0.		<u> </u>
Past: Medical History/Review o	fSystems	and the second second	
Name of Child's Primary Physician	Nar	ne of Pharm	204
		ne or Fridini	acy
Indicates Positive History	Genitourinary		Rectal
HEENT	Pain		Pain
Cardiovascular	Itching		
Respiratory	Discharge		Constipation
	Bleeding		
neurologic			
Jetans from positive above:			
			1. 1.01810
· · · · · · · · · · · · · · · · · · ·			
any recent anal-genital injuries, s	urgeries, diagnostic p	rocedures of	r medical treatment? 🗋 Yes 🛄 N
Any other pertinent medical condi	tions that may affect	the interpre	tations of findings? 🗌 Yes 🗌 Ne
lospitalizations/Surgeries	Significant Illness/Ir	njury	Growth and Development
	Yes		WNL
			Medications
No			
Perinatal History:	CIRNOWI		
			·····
listory of Physical Abuse		Vielence	History of Course Abuse
Yes		e violence	
No	No		
Unknown			
Other Intercourse (adolescents)	🗌 Yes 🗌 No	Menstrua	al Periods
r yes, anal within past 5 days?	When	If Yes, ag	e of menarche:
r yes, vaginal within past 5 days?	When	Last Mens	trual Period:
Tyes, ald ejaculation occur?	Where	Tampons?	Yes 🗌 No
r yes, was a condom used?	Yes No	1	

seneral Physical Exam			Halata			1				
remp	80/1	P/RK		Height		Weight	BMI			
Female Tanner St	age		1		2	3	4	5		
	WNL	ABN	Not Examined	See Body Diagram		Describe Abr	normal Findi	ormal Findings		
Appearance			it in the second							
Affect/Behavior			8							
Skin										
Head										
Eyes										
Ears										
Nose										
Mouth/Pharynx										
Teeth										
Neck										
Trunk										
Lungs										
Chest										
Heart										
Abdomen										
Back										
Buttocks										
Extremities										
Neurological							<u></u>			
Genitourinary						· · · · · · · · · · · · · · · · · · ·				
Anus										
		14. 45 478 C 14 A 15		N A VOCEMENTING	California and an		a disarta marchana			







Genital/Vaginal Contac Penis		Int	erviewed	ung	to ne		
Genital/Vaginal Contac Penis	YES	NO	ATTEMPTE	D	UNSUR	E	N/A
Penis	r/Pene	trat	ion by:	a faile.		1	AN STATE OF
Turre					П	24.82	
Finger		H			- #-		
Object (describe)	- 14	-	- H		- 2		- #
Associated pain?	- H	- H					
Associated blooding?	-H-	─₩					┢
Associated bleeding?		250920			NORMAN COM	1	
	MEOVAR	<u> </u>					<u> </u>
Finance	<u> </u>	_₩			<u> </u>		<u> </u>
Finger		⊢⊢			<u> </u>		Ц
Object (describe)	<u> </u>		<u>_</u>				
Associated pain?	<u> </u>	<u> </u>	<u>_</u>				
Associated bleeding?	Ц			and a second	Ц		
a prail is a pulled on of genit	als:	1010	等 计内部中断	10	(Let	1 9	in the
Of Child by Perp							
Of Perp by Child							
elektropulationsok in US	for the for	- The second	Section in Practice	i de la construcción de la constru La construcción de la construcción d			Sale -
Of Child by Perp				100.000	m	10000000	
Of Perp by Child	Ħ-		F		-Ħ-		Ħ
Anstanting							
Of Child by Pern				0.000000		10000	
Of Bern by Child	岩	片	<u> </u>		- H-		+
of Feip by clind		┈┝┽╴					
If Yos, noto location							ليا
IT Tes, note location:		- Am	us /Bostum		Badya		
On hadding On Clath	laa		us/Reclum		bouy s	urra	lce
	ing		ner				
		10000000		YES)	N/A
CONTRACEDEVE OF NUDFICE	nt pro	duct	87				
If yes, note type: UF	oam	🗌 Je	lly 🗌 Lubr	ican		Con	dom
				YES	S NC)	N/A
Were force or threats us	sed?						
Were weapons used?							
Were pictures/videotap	es take	en o	r shown?				
Were drugs or alcohol u	sed?						
Loss of memory?							\square
Lapse of consciousness?	,			Π			H
Vomited after act(s)?				H	-		H
Behavioral changes?				Ħ			H
<u>Denutional changes</u>	KI MAL	2.5				al an	



Conorpl Formale (M	Direct	visua	ization		Colposcope	Other m	agnifica	tion	
General Female/Male	WNL	ABN	Describ	e	Male Genitalia	348943		5 N.S.N. 2865.9	in heiter
Inguinal adenopathy						WN	L ABN	Describ	e
Perineum					Penis				
Genital Tanner Stage	1	2	□3 □4	5	Circumcised				
Female Genitelle			A. S. S.		Uncircumcis	ed			
Exam position/methods	Separati	on T	raction Kn	ee chest	Foreskin				
Supine					Glans Penis				
Prone					Penile Shaft				
Saline/Water Moiste	ned Swab		atheter [] Other	Urethral meatus	•			Trans. II
	WNL	ABN	Descr	ibe	Scrotum			1.000	
Labia majora					Testes				
Labia minora						YES	NO	Describ	e
Clitoral hood					Discharge				
Vestibule					Female/Male Anu	s and Rect	um	1. 1. 1. 1.	Street .
Hymen 🗆 Supine 🗋 Prone					Exam positions/metho	ods Ob:	servation	Obse with	rvatior tractio
Record morphology					Supine				
Annular					Supine knee che	st			
Crescentic					Prone knee ches	t			
Imperforate					Lateral recumbe	nt			
Septate					Moistened swab	Toluidine blue	e dye	Anoscopy	Doth
	WNL	ABN	Descri	ibe		WNL	ABN	Descrit	be
Fossa navicularis					Buttocks				
Posterior fourchette					Perianal skin				
/agina (Pubertal)					Anal verge/folds	<u>ا</u> ا			
Cervix (Pubertal)					Rectum				
	YES	NO				YES	NO	Undet	ermined
Discharge					Anal dilation			[
					Stool present				
indings and Interpretation	אנ: מנ				Medical Lab Tests	Performed	l : 🚬		
nal/Genital Findings					STD Cultures		GC (Chlamydia	Other
and octinent i manings					Oral				
Normal anal/genital exa	m			I				-	
Normal anal/genital exa Abnormal anal/genital e	m xam				Vestibular				
Normal anal/genital exa Abnormal anal/genital e Indeterminate anal/geni	m xam ital exam				Vestibular Vaginal				
Normal anal/genital exa Abnormal anal/genital exa Indeterminate anal/geni Assessment of Anal/Genit	m xam ital exam al Findir	igs			Vestibular Vaginal Cervical				
Abnormal anal/genital exa Abnormal anal/genital exa Indeterminate anal/genital Assessment of Anal/Genit Consistent with history	m xam ital exam al Findir	igs			Vestibular Vaginal Cervical Rectal				
Normal anal/genital exa Abnormal anal/genital exa Indeterminate anal/genital exa Indeterminate anal/genital Assessment of Anal/Genital Consistent with history Inconsistent with history	m xam ital exam al Findir /	igs			Vestibular Vaginal Cervical Rectal Penile				
Normal anal/genital exa Abnormal anal/genital exa Indeterminate anal/genital Sesssment of Anal/Genit Consistent with history Inconsistent with history Limited/insufficient history	m xam ital exam al Findir / pry	igs			Vestibular Vaginal Cervical Rectal Penile Serology	yphilis [atitis
Normal anal/genital exa Abnormal anal/genital exa Indeterminate anal/genit sessment of Anal/Genit Consistent with history Inconsistent with history Limited/insufficient histor	m xam al Findir al Findir y pry nital Fin	igs dings			Vestibular Vaginal Cervical Rectal Penile Serology	yphilis [atitis
Normal anal/genital exa Abnormal anal/genital exa Indeterminate anal/genital essessment of Anal/Genit Consistent with history Inconsistent with history Limited/insufficient histor nterpretation of Anal/Gen Normal; can neither conf	m xam ital exam al Findir ' ory nital Fin 'irm/nega	ngs dings ate sexu	al abuse		Vestibular Vaginal Cervical Rectal Penile Serology	yphilis [[nent Presc	U U U U HIV Blood		atitis
Normal anal/genital exa Abnormal anal/genital exa Indeterminate anal/genital essessment of Anal/Genit Consistent with history Inconsistent with history Limited/insufficient hist nterpretation of Anal/Gen Normal; can neither conf Non-specific; may be cau	m xam ital exam al Findir / ory nital Fin ïrm/nega ised by al	igs dings ate sexu buse or	al abuse other mean	s	Vestibular Vaginal Cervical Rectal Penile Serology	yphilis [[nent:Presc	 	U U U Hep. Urin	atitis

APPENDIX D

Child Advocacy Center	ome St	CAC #			
Child's Name	Child's Age	Child's Gender			
Child's White Hispanic Africence	rican Am 📋 Asia	Native Am 🗌 Other—			
Type of Abuse Sexual Physical Neglect Domestic Violence Drug Endangered Other DO NOT DO OUTCOME STUDY FOR HAIR FOLLICLE ONLY					
Alleged Perpetrator's Name		Demotrator not identified			
Age of Alleged Perpetrator Gender of Alleged Perpetrator Gender of Alleged Perpetrator					
Ethnicity of Alleged Derpetrator	🗋 African Am 🔲	Asian 🔲 Native Am 🗌 Unknown			
Relationship to Child Biological parent Mother's Step parent Father's p Foster parent Sibling Adoptive parent Child care Other relative Other relative	paramour paramour e staff	 Teacher, coach, youth leader Other adult known to child Unknown adult Internet relationship Other 			
Was the child interviewed at the CAC? Yes No IF YES, list the name of the person who conducted the interview at the CAC					
Interviewer's Gender Did th	e child disclose	abuse? 🗌 Yes 📋 No			
List the name of the investigating officer		Law enforcement not involved			
Did the child receive a medical exam ? If YES, who performed the medical exam? Were medical findings present consistent wi	fes DNO Bleicher C th abuse? N	David Hospital Goddard /es No			
Was the child referred to mental health serv If YES, who was the child referred to?	ices by CAC?	Yes No Already involved Private Therapist referral? Yes No Unknown			

Citation or Arres Law enforcement	st – CONTINUE nt not involved – STOP FORM
What action was ta Criminal charge Prosecution dec	ken by the county attorney? :s filed clined – STOP FORM
County:	Name of Prosecuting County Attorney:
What was the outco	ome of the criminal case? (PLEASE LIST THE ACTUAL CHARGES)
 Plead guilty to a Plead guilty as a 	a lesser charge charged
 Plead no contes Plead no contes 	it as charged it to a lesser charge
 Found guilty as Found guilty to 	charged a lesser charge
Criminal charge	s dismissed – STOP FORM
Found not guilty	y – STOP FORM
🗌 Other, explain—	•
Did the child testify	r at trial? Yes No
Name of the Judge	imposing criminal sentence:
What was the sen amount of the fine)	tence imposed: (Include the length of probation or incarceration/or t
Probation Fine only	
Incarcerated	



AUTHORIZATION FOR EXCHANGE OF INFORMATION

Child's Name

- O I understand one of the goals of the Child Advocacy Center is to reduce the number of times my child will need to be interviewed during the course of the investigation. However, this does not mean that my child will never have to talk about the abuse again. My child's case may or may not reach the court process. The fact that the interview has been recorded does not mean that my child will not have to testify in court proceedings.
- A trained forensic interviewer will interview my child while other CAC team members watch the interview on a television monitor. The CAC team members who may be watching the interview on the monitor include law enforcement, protection and safety, a representative from the prosecutor's office and CAC personnel.
- O I understand my child's interview at the Child Advocacy Center is recorded on a DVD. The DVD is turned over to law enforcement. The county attorney controls who can view the DVD.
- O I understand another goal of the Child Advocacy Center is to continue to improve the quality of interviews for child victims of abuse. In certain instances, the DVD of my child's interview may be shown to law enforcement or protection and safety workers for peer review and ongoing training.
- O The Child Advocacy Center is an appointed member of the Child Abuse and Neglect Investigation Team and will share information gained during the forensic interview or medical evaluation of my child with law enforcement, protection and safety, as well as the county attorney's office.

I hereby authorize the Child Advocacy Center to exchange limited information about my child's case with the following agencies or individuals:

O Therapist	
O Primary Physician	
O School Personnel	
O Private Attorney	
OUNL-Project SAFE	
OLutheran Family Services	
Oother	

I understand this authorization to exchange information becomes effective when I sign this release. I further understand I may revoke this authorization to exchange information at any time. In order to do so, I need to give written notice to the Child Advocacy Center stating this intent.

Signature of Parent or Legal Guardian	Da	ate

Federal law prohibits recipients of Justice Department funding from discriminating against individuals or groups either in employment or in the delivery of services or benefits, on the basis of race, color, national origin, religion, sex, or disability. If you believe you have been denied services on the basis of race, color, national origin, religion, sex, or disability, you should file a complaint with our Executive Director as soon as possible or contact the Office of Civil Rights of the U.S. Department of Justice. http://www.ojp.usdoi.gov/about/ocr/complaint.htm