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## Child Sexual Abuse and Its Effects on a Young Adult Relationship with a Sexual Partner, Friends, and Community

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# Walden University

College of Health Professions

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Miriam Cires

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Walden University  
2022

Abstract

Child Sexual Abuse and Its Effects on a Young Adult Relationship With a Sexual  
Partner, Friends, and Community

by

Miriam Cires

MS, Barry University, 2014

MD, University of Havana, 1976

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

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## Abstract

In the United States, child sexual abuse is a significant public health issue, but society lacks awareness and its consequences. Therefore, little is known about the influence of sociodemographic factors on a sexually abused child and the quality of relationships as a young adult. A quantitative cross-sectional study based on the social-ecological model was carried out to assess whether the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child inappropriate relationships as a young adult. Logistic regression analyses were conducted using secondary data collected from 1300 children and their families from the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN) participants. Multiple logistic regressions models with dichotomous responses were used to answer research questions. The female sex in a sexually abused child was a significant predictor of inappropriate relationships with a best friend and community as a young adult ( $p=.000$ ). Consequently, the study findings will cause positive social change by stimulating more studies that improve the quality of the relationships among this population. Furthermore, the results could encourage public health professionals to design and implement effective surveillance programs among young adults at individual, interpersonal, and community levels.

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## Chapter 1: Introduction to the Study

Child sexual abuse (CSA) is a significant public health issue, but society lacks awareness of it (Krugman & Poland, 2019). The lifetime economic burden of CSA was approximately \$9.3 billion in 2015 (Letourneau, et al., 2018). Between 10% to 53% of survivors of CSA live in unhealthy/abusive intimate relationships as adults (Docherty, et al., 2018; Domhardt, et al., 2015). It is one of the well-described long-term effects of the CSA (Brazelton, 2015; Eisikovits, Tener, & Lev-Wiesel, 2017; Soleimanpour, Geierstanger, & Brindis, 2017). Being a victim of CSA increase the future maltreatment risk in its different forms depending upon its timing, severity, duration, and nature, and upon the child's age that compromise the wellbeing of these population (Vasudevan & Lau, 2019; World Health Organization [WHO], 2015.). The acceptance of child marriage is one of the facts confirming that CSA is not perceived as a public health problem (Krugman & Poland, 2019). Child marriage is a legal practice in 49 states of the Union, resulting in women's adverse health and socioeconomic outcomes (Koski, & Heymann, 2018). Vasudevan and Lau (2019) reported that marriage before 18 years of age determined lower education and increased the likelihood of being forced to have sexual intercourse and continue living in abusive relationships with the offender.

The chapter represents an introduction to the study. It includes background information on the topic of the study, followed by the problem statement. The purpose of the study is presented, followed by the research questions (RQs). Next, the theoretical framework is explored before making a description of the nature of the study. Additionally, this chapter includes the definition of terms necessary to understand this

study as well as the assumptions made. The chapter next describes the scopes and delimitations, followed by the study limitations. Finally, a description of the significance of the study is made before ending the chapter with a summary of its main points.

### **Background**

In the United States, one of the most severe and prevalent public health problems is childhood maltreatment (Van der Kolk, 2017). The U.S. child protective services (CPS) estimations stated that 772,000 children were classified as maltreated and died from abuse and neglect a total of 1,740 children aged 0 to 17 (Leeb, Lewis, & Zolotor, 2011). Finkelhor et al. (2015) provided the statistics about CSA in the United States that justify why CSA is a public health problem in the country. Information on exposure to violence, crime, and sexual abuse among 4000 children 0 to 17 years old using telephone surveillance finding that more than one-third of youth experienced a physical assault in the past year and one in 20 girls 14 to 17 years old experienced sexual assault or abused (Finkelhor et al., 2015).

The U.S. CPS received more than 3 million child abuse or neglect reports representing six complaints per minute (CDC, 2014; Van der Kolk, 2017a). By Townsend & Rheingold (2013), the prevalence rate of child sexual abuse was 7.5% - 11.7% (in boys 3.8% to 4.6%; in girls 10.7% to 17.4%). The direct costs associated with chronic health and mental problems were estimated at 24.4 billion dollars. The indirect costs of mental and health care in adulthood, special education efforts, juvenile delinquency, and lower societal productivity reached 69.7 billion dollars (Van der Kolk, 2017b).

Domhardt et al. (2015) provided information about the protective factors promoting an average level of functioning in child victims of sexual abuse. These factors were education, interpersonal and emotional competence, active coping, control beliefs, optimism, social attachment, external attribution of blame, and most importantly, family and the broader social environment. Lassri et al. (2018) suggested that CSA may lead to elevated levels of self-criticism, linked with reduced satisfaction in romantic relationships, promoting a vicious cycle involving relationship satisfaction and attachment avoidance.

Devries et al. (2018) produced the first globally age-specific and sex-specific prevalence estimates by perpetrator type for physical, emotional, and sexual violence against children. Across a range of ages, for both sexes, the most common perpetrator for physical and emotional violence were the household members (> 50%), followed by student peers. For sexual violence, the most known perpetrator against girls aged 15 -19 years were intimate partners. But there are only a few data regarding sexual violence on other groups of age or for boys (Devries et al., 2018).

Huang and Mossige (2018) examined resilience among young people (aged  $\geq 18$  years) who reported being victims of multiple forms of violence during childhood and adolescence using data from two national youth surveys administered in Norway in 2007 and 2015. Musicaro et al. (2019) provided a framework of prolonged victimization as a precursor to complex post-traumatic social adaptations.

Around the world, child suffer from sexual violence and assault at the hands of their offender, but these incidents are never reported. Everyone is affected differently

after experiencing sexual abuse and current data cannot provide accurate information about victim ability to form healthy relationships in the adulthood (Stevens, 2021). There is a research gap regarding the current relationships between victims who experienced intrafamilial child sexual abuse in childhood and their perpetrators (Eisikovits et al., 2017; Foster, 2017). Another gap of information is understanding the effects of childhood sexual abuse on a survivor's later life (Brazelton, 2015; Karakurt & Silver, 2014). The study results seek to provide valuable information about the survivor relationships to inspire public health policy changes allowing the prevention programs to work with the survivors longer - addressing their changing needs as they age (Musicaro et al., 2019; O'Brien, Jordan, Honeycutt, Wilsnack, & Davison, 2019).

### **Problem Statement**

Research in CSA did not focus on their relationships as young adults. There are barriers involving individual, interpersonal, community, and societal levels to prevent child sexual abuse. Living in unhealthy/abusive intimate relationships as adults is one of the well-described long-term effects of the CSA (Brazelton, 2015; Eisikovits, Tener, & Lev-Wiesel, 2017; Soleimanpour, Geierstanger, & Brindis, 2017). The research identified education, active coping, interpersonal and emotional competence, social attachment, and family and social support as the protective factors (Domhardt et al., 2015). The interpersonal nature of CSA abuse has led researchers to examine how sexual abuse in childhood is associated with the quality of adult relationships. The current study considers whether childhood sexual abuse is linked to positive and negative relationship quality through Self-Report for Sexual Abuse (SALS). In this study, I examined the

influence of some social and ecological factors on the quality of relationships among sexually abused children as young adults. The study examined the relationship among factors from three levels: the individual, interpersonal, and community levels. CSA is associated with maladaptive socioemotional development and coping behaviors (Scoglio et al., 2021; Barker-Collo, Read, & Cowie, 2012; Marriott, Hamilton-Giachritsis & Harrop, 2014).

### **Purpose of the Study**

The purpose of this quantitative, cross-sectional study was to examine whether three types of current relationships in young adults (couple, best friends, and community) depended on a set or profile of independent variables of the abused child among participants in the LONGSCAN studies (Runyan et al., 2014). The presence of sexual abuse, age, frequency of abuse, abusive kinship, race, and sex were the independent variables. This knowledge will assist in the planning and implementing surveillance and support strategies for this population.

### **Research Questions and Hypotheses**

The following RQs were answered in this study:

RQ 1: To what extent does the presence of a set of independent variables (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex) predict in a sexually abused child an inappropriate sexual partner relationship as a young adult (15 to 18 years old)?

H<sub>0</sub> 1: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate sexual partner relationship as a young adult (15 to 18 years old).

H<sub>a</sub> 1: There is a statistically significant relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate sexual partner relationship as a young adult (15 to 18 years old)

RQ 2: To what extent does the presence of a set of independent variables (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex) predict in a sexually abused child an inappropriate relationship with the best friend as a young adult (15 to 18 years old)?

H<sub>0</sub> 2: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate relationship with the best friend as a young adult (15 to 18 years of age).

H<sub>a</sub> 2: There is a statistically relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate relationship with the best friend as a young adult (15 to 18 years of age).

RQ 3 To what extent does the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child an inappropriate community relationship as a young adult (15 to 18 years of age)?



H<sub>0</sub> 3: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate community relationship as a young adult (15 to 18 years of age).

H<sub>a</sub> 3: There is a statistically significant relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate community relationship as a young adult (15 to 18 years of age).

### **Theoretical Framework**

CSA is a global problem, experienced in all societies, and it is hard to document since it usually happens privately (Garcia-Ospina, 2019). This study used the socioecological model (SEM) as the theoretical framework (Bronfenbrenner, 1994). This model suggests that multiple levels influence behavior: intrapersonal, interpersonal, organizational, community, and policy (McKillop, 2019; Plummer & Cossins, 2018). Previous studies have used the SEM model to analyze the importance of social factors in abuse. Another approach points to the child's role in stimulating their maltreatment (Plummer & Cossins, 2018). For example, using the SEM Vasudevan, & Lau (2019) found that being a victim of CSA increases the future maltreatment risk in its different forms. At the societal level, some individuals are less knowledgeable or less comfortable taking actions to prevent child maltreatment (Karakurt, & Silver, 2014). SEM used in public health research on violence and violence prevention, including CSA, allows the examination of relationships between factors within one and between individual, interpersonal, community, and societal levels (CDC, 2015; Cui et al., 2018; McKillop,

2019; Plummer & Cossins, 2018). In this study, I evaluated whether the age of the abuse, the number of times of abuse, the abuser's filial bond, and the race and sex of the abused influence the quality of the relationships they establish during adulthood.

### **Nature of the Study**

The study was a cross-sectional study. A secondary analysis of the data collected by the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN) was conducted.

The analysis was used to evaluate in a sexually abused child the association between the age of the abuse, the number of times they were abused, the abuser's filial bond, and the race, and sex of the abused and the quality of the relationships they establish during adulthood. LONGSCAN is a consortium of five longitudinal studies in urban areas (Eastern, Midwest, and Northwest), suburban area (Southwest), and the Southern sample statewide (urban, suburban, and rural communities) including information about the exposures and consequences of child abuse among high-risk children (Runyan et al., 2014). Variables accessed related to the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, sex, and race of sexually abused child based on the on-survey instruments and administrative records (Runyan et al., 2014). I used LONSCAN data collected in 2018 because it was the most recent available data. The study's dependent variable was the quality of the relationship with a romantic partner, best friend, and community members as a young adult. The independent variables were the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, sex, and race. A multiple logistic regression model with a dichotomous response

allowed to study the associations between the dependent and the independent variables (Tapia, 2014; Papalia, Mann, & Ogloff, 2021; Ruiz, & Font, 2020).

### **Definitions**

**Child sexual abuse:** The participation of a child in a sexual activity that he or she does not fully understand, of which he is unable to give informed consent, or for which the child is not prepared according to its development, or that violates the laws or taboos of society (World Health Organization [WHO], 2017; Mathews, & Collin-Vézina, 2019; Runyan et. al, 2014).

**Peer relationship:** Refers to the primary role of the perpetrator with the child victim of maltreatment. This is the relationship of the perpetrator to the child victim (Runyan et. al, 2014).

**Young Adult Community Connectedness:** Refers to the ties, interactions and positive relationships with people, places, and things in an ecological environment of a teenager. (Wu, Outley, Matarrita-Cascante, & Murphrey, 2016; Runyan et. al, 2014).

### **Assumptions**

The sample of this study was based on high-risk children and their families until the child became a young adult. The LONGSCAN studies allowed a comprehensive exploration of child abuse and neglect across various ethnic and social backgrounds representative of the U.S. high-risk children population. LONGSCAN participants were recruited through social service agencies and CPS and identified as "at-risk" youth. To ensure representativeness of the U.S. high-risk children population, LONGSCAN uses a random sampling method for on-survey instruments and administrative records to achieve

an adequate statistical power and ensure that findings were not specific to a unique sample or a unique agency (Runyan et al., 2014). The selection of participants and data collection were conducted following the norms and ethics required for research involving humans. LONGSCAN studies included personal characteristics in an individual potentially modifiable by the interaction with family, friends, or a romantic partner that can determine their capacity to build healthy relationships in adult life (Lauterbach & Armour, 2016; Assink et al., 2019). This study assumed the reliability, validity, and accuracy of the data collected by the LONGSCAN studies.

### **Scope and Delimitations**

This study focused on analyzing sociodemographic factors associated with high-risk children and their families until the child became a young adult in a sexually abused child living in the United States. The analysis was on secondary data collected by LONGSCAN studies 2018. The study population included high-risk children aged four years and older living in the U.S. territory.

### **Limitations**

I used secondary data analysis in which the purpose is different from that of one of the authors who originally collected the data (Runyan et al., 2014). The available data from the LONGSCAN studies limited the analysis, determining that other critical explanatory variable would have been excluded from the analysis (Ruggiano & Perry, 2019). The time of the snapshot is not guaranteed to represent the target population, the design can introduce bias, and the variables' sampling pool can threaten the study outcomes (Frankfort-Nachmias, & Leon-Guerrero, 2015). A significant limitation to this

study concerned the proportion of cases. Out of 963 cases, only 61 disclosed themselves as victims of sexual abuse, while 748 had no complaint of sexual abuse.

In terms of validity, the nature of the study design implies other limitations. A cross-sectional study does not allow establishing a cause-and-effect relationship between two significantly associated variables (Thiese, 2014). At most can suggest an association between the allegedly independent and dependent variables. The study may have been subject to recall bias due to the nature of the data. Some participants might not have recalled adequately some of the information collected by the LONGSCAN, which may have led to misclassification, posing a threat to the study's internal validity. Non-coverage bias, on the other hand, might be threatening external validity. This limitation is associated with the sampling method used by the LONGSCAN studies. The study used five different sites in the United States in data collection for the LONGSCAN: East, Northwest, Midwest, Southwest, and South. On one of the primary instruments provided, participants in the South and Midwest cohort were not scored; therefore, the current study drew from data collected at the East, Northwest, and Southwest sites. It was a limiting factor when testing for sexual abuse cases as it created an even smaller sample size for analysis.

Finally, LONGSCAN participants were recruited through social service agencies and CPS and identified as "at-risk" youth. The original dataset recruited participants by their experiences of child sexual abuse early in life, among other types of abuse, and continued to collect data on young adults. Therefore, it considered an overrepresentation of identified abused children captured in this data set. Despite this limitation, in contrast

with other studies focused on a specific period (typically one year), the dataset offers the opportunity to observe a limited cohort of participants who report on their experience of abuse experience throughout their childhood and adolescence (Simon, Luetzow, & Conte, 2020).

### **Significance**

This study contributed to filling the gap in the literature in terms of the social and ecological factors associated with high-risk child's victims of sexual abuse living in the United States. The results of this study have an impact on social change. They can enhance policymaker's knowledge about the survivor of child sexual abuse abilities to form different healthy relationships as adolescents and young adults (Koss & Gunnar, 2018) because some bonds may be easier to establish than others (Domhardt et al., 2015). Different skills are needed to form different relationships (Knapp et al., 2017).

The findings of this study may contribute to developing public health awareness campaigns promoting clear and positive communication and behaviors by modeling healthy relationships between CSA survivors, their intimate partners, families, friends, and community (McLeigh & Melton, 2019). In addition, study results support modifying current curricula to educate CSA survivors and healthcare providers about the importance of different relationships in different stages of their healing process (McLeigh & Melton, 2019). Currently, most community services provide only short-term support, such as crisis intervention phone lines, individual and group counseling, emergency (medical) services remaining unmet some survivors' needs (Huang & Mossige, 2018; Viergever, Thorogood, van Driel, Wolf, & Durand, 2019). The study results may inspire public

health policy changes providing additional funding allowing the prevention programs to work with the survivors longer - addressing their changing needs as they age (Musicaro et al., 2019; O'Brien, Jordan, Honeycutt, Wilsnack., & Davison, 2019). By improving the effectiveness of current prevention systems, the individual, economic, and societal impact of CSA on individuals, communities, and society may be significantly reduced (Letourneau et al., 2018).

### **Summary**

The chapter introduced the topic of the study. In summary, CSA is a major preventable public health problem often underreported (Letourneau et al., 2018). Every year thousands of children are impacted by sexual abuse in the United States. But there is a misperception regarding the consequences and recovery process of CSA (Bell et al., 2019). Globally, children and adolescents are sexually abused at an alarming rate (WHO, 2017). Meta-analyses of the research are concentrated in North America estimate that childhood sexual abuse affects 18% of girls and almost 8% of boys, including sexual assault or rape (Broaddus-Shea et al., 2021). Someone the child or child's family knows perpetrates 91% of CSA (Gerke et al., 2021; Stoltenborgh et al., 2015). In 2015, in the United States, the economic burden of the total lifetime of CSA was estimated to be at least \$9.3 billion. Still, this estimate could be higher because of underreporting CSA (Letourneau et al., 2018). This study focused on analyzing sociodemographic factors associated with high-risk children and their families until the child became a young adult in a sexually abused child living in the United States. I conducted a secondary data analysis of the LONGSCAN studies. A quantitative cross-sectional design assessed the

association of sociodemographic and ecological factors in a sexually abused child between the age of the abuse, the number of times they were abused, the abuser's filial bond, and the race and sex of the abused, and the quality of the relationships they establish during adulthood. The next chapter will provide a literature review on the topic of this study and its theoretical foundation.



## Chapter 2: Literature Review

### Introduction

Victims of CSA suffer from physical, psychological, and emotional trauma (Lee et al., 2020). Domhardt et al. (2015) provided information about the protective factors promoting an average level of functioning in child victims of sexual abuse. These factors were education, interpersonal and emotional competence, control beliefs, active coping, optimism, social attachment, external attribution of blame, and most importantly, family and the broader social environment. Being a victim of CSA increase the future maltreatment risk in its different forms depending upon its timing, severity, duration, and nature, and upon the child's age that compromise the wellbeing of these population (Vasudevan & Lau, 2019). One of the facts that could confirm that CSA is not perceived as a public health problem is the acceptance of child marriage (Krugman & Poland, 2019). The purpose of this quantitative, cross-sectional study was to examine whether three types of current relationships in young adults (couple, best friends, and community) depended on a set or profile of independent variables of the abused child among participants in the LONGSCAN studies (Runyan et al., 2014).

### Literature Search Strategy

Articles related to the quality of relationships in young adults sexually abused as a child were selected using the Boolean approach to a literature search, the medical subject headings (MESH), and free text. The terms used in the search were: *child sexual abuse, sexual abuse, sexual assault, sex offenses, child sexually abused and friend relationships, child sexually abused and romantic partner relationship, child sexually*

*abused and familial bonds, survivor's later life, resilience factors.* The databases searched in the Walden University Library and Pubmed Central library included MEDLINE with text, CINAHL plus with text, and PsycINFO. The search had the text published in scholarly journals between 2000 and 2021 with free access through the Walden Library or Pubmed central library.

### **Theoretical Foundations**

This study used the SEM as the theoretical foundation. Uri Bronfenbrenner initially introduced this model in the 1970s with several revisions in later years. According to Bronfenbrenner's model, factors operate at multiple levels (Bronfenbrenner, 1994). The author presented environmental factors that affect human behavior by levels of influence. The first level, called the microsystem, includes face-to-face interactions with immediate family members. The second involves interactions in various settings, such as school and church. The exosystem involves more complex social systems (employment and economic stability).

Finally, the macrosystem consists of cultural beliefs that also influence the microsystem (Zinzow et al., 2021). Previous studies have used the SEM model to analyze the influence of several factors on CSA. Wilson-James (2021) used the SEM to evaluate the effect of cultural norms on CSA prevention of female adolescents. Bhochhibhoya et al. (2021) used the SEM to investigate risk factors for sexual violence among college students in dating relationships and found female sex as the most prominent factor associated with all types of dating sexual violence. Similarly, Bobchin & Draper (2018) used the SEM to investigate college students' risk factors for campus sexual assault

(CSA). To my knowledge, no studies have tested whether chronically sexually abused children have inappropriate relationships compared with other maltreated children. However, we might expect to see such differences considering that sexually abused children tend to have poorer cognitive abilities and school performance than non-maltreated children (Austin, Lesak, & Shanahan, 2020; Jaffee, & Maikovich-Fong, 2011).

### **Figure 1**

*The Social Ecological Model as a Framework to Analyze Factors Associated With High-Risk Children and Their Families Until the Child Became a Young Adult in a Sexually Abused Child Living in the United States*

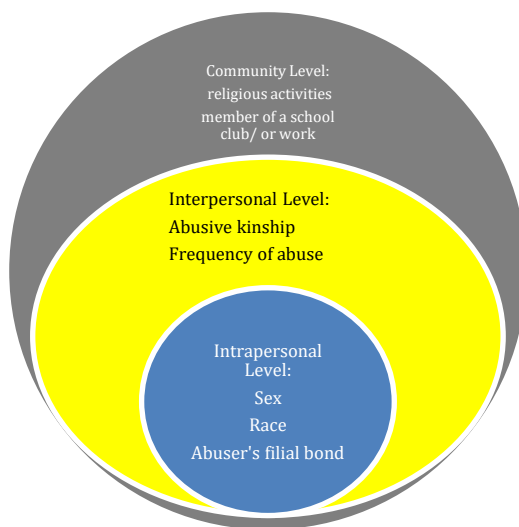


Figure 1 represents the levels at which some of these factors might influence the quality of relationships among sexually abused children in the adulthood. For example, the influence of factors operating at the intrapersonal level such as sex, abuser's filial bond, and race was evaluated. At interpersonal level, the influence of frequency of abuse

and abusive kinship was evaluated. Finally, at the community level, the influence of having a community connection was evaluated.

### **Literature Review Related to Key Variables**

#### **Child Sexual Abuse**

Child sexual abuse (CSA) is a major preventable public health problem often underreported (Letourneau et al., 2018). The WHO (2017) defined CSA as the participation of a child in sexual activity that they do not fully understand they cannot give informed consent. The child is not developmentally ready and cannot consent to or violate laws social taboos of society. Globally, children and adolescents are sexually abused at an alarming rate (WHO, 2017). With variation in estimates across studies, approximately one in four girls and one in thirteen boys experience child sexual abuse at some point in childhood (WHO, 2017). Resilience was found to be based on intrapersonal and interpersonal resources. Originally considered primarily a personal trait, resilience is now considered a dynamic process that encompasses the interactions of individuals with their environments and manifests itself at different times in life (Gunnarsdóttir et al., 2021).

#### ***Child Sexual Abuse in the United States***

Meta-analyses of research's concentrated in North America estimate that childhood sexual abuse affects 18% of girls and almost 8% of boys, including sexual assault or rape (Broaddus-Shea et al., 2021). Someone the child or child's family knows perpetrates 91% of CSA (Gerke et al., 2021; Stoltenborgh et al., 2015). In 2015, in the United States, the economic burden of the total lifetime of CSA was estimated to be at

least \$9.3 billion. Still, this estimate could be higher because of underreporting CSA (Letourneau et al., 2018).

### ***Child Sexual Abuse and Family Relationships***

Abuse can take different forms, such as physical, sexual, and emotional, which has an enormous effect on the mental and physical health, dignity, and future relationships in the individual's life (Radell et al., 2021). Abuse by a parent is likely to be more traumatic than abuse by other people because it involves greater betrayal, loss of trust, and family disruption (Noll, Trickett, & Putnam, 2003). The mother's belief in the sexually abused child and ability to take supportive measures play a vital role in the child's ability to resolve the experience of abuse (Leifer, Kilbane, & Grossman, 2001). Studies have found that mothers who consistently believe, listen to, and support their children dramatically improve outcomes for child victim (Gilligan & Bumby, 2005; Joyce, 1997; Hanson, 2021; Gewirtz-Meydan, 2020).

Shen, Soloski, & Liu (2021) used data from the National Longitudinal Study of Adolescent Health (Add Health), a sample of 1201 female CSA survivors and 6094 peer women without a history of abuse. CSA was found to be a nonsignificant moderator of the relationship between perceived parental attachment during adolescence and adult intimate relational outcomes (Shen, Soloski, & Liu, 2021).

### ***Child Sexual Abuse and Friend Relationships***

There is little evidence derived from prospective longitudinal studies of child sexual abuse (Noll, Trickett, & Putnam, 2000). Developing healthy relationships with others and building healthy sexuality are two of the most important aspects of adolescent

self-concept. In general, children build peer bonds with same-sex peers that exclude the other sex, and parents often constitute primary non-peer attachment figures (Karakurt, & Silver, 2014). The quality of male relationships in childhood affects adolescent sexuality differently for abused and comparison girls (Noll, Trickett, & Putnam, 2000).

To receive social support after a sexual assault, victims often disclose their assault to an informal support provider, for example a friend (Deanee'Johnson, 2016). Although there is extensive research on the informal support provider's social reactions that affect the victim both positively and negatively, there is little research on how the quality of relationships with a friend could be affected (Deanee'Johnson, 2016; Finkelhor et al., 2015; O'Callaghan et al., 2021).

### ***Child Sexual Abuse and Romantic Partner Relationships***

Although the association between childhood sexual abuse and subsequent sexual distortion in their relationships is unequivocal, research in this area has generated inconsistent results (Stock et al., 1997; Kendall-Tackett, Williams, & Finkelhor, 2001). The presence of other sex friendships in adolescence is indicative of social competence rather than interpersonal deficiency (Kendall-Tackett, Williams, & Finkelhor, 2001). Noll, Trickett, & Putnam (2003) reported a shift toward greater gender integration in social networks and a transition from parents to peers as the main sources of support mark the beginning of adolescence. The findings reported by Noll, Trickett, and Pullman (2003) support the notion that CSA may be a risk factor for early and risky sexual activity and adolescent motherhood. Sexually abused participants reported being significantly younger at the age of voluntary intercourse, reported less birth control efficacy, were

younger at the birth of their first child and were more likely to be teen mothers than were comparison participants (Noll, Trickett, & Putnam, 2003).

Fitzgerald (2021) used data from the LONGSCAN, a sample of 313 racially diverse adolescents and based on structural equation modeling and it was found that anger mediates the relationship between physical and sexual abuse to conflict. These findings are consistent with the notion that abused children may struggle in romantic relationships in young adulthood. Addressing mental health problems in adolescence may be a point of intervention (Fitzgerald, 2021).

### ***Child Sexual Abuse and Community Relationships***

Bhochhibhoya et al. (2021) used the SEM to investigate risk factors for sexual violence among college students in dating relationships and found female sex as the most prominent factor associated with all types of dating sexual violence. Similarly, Bobchin, & Draper, (2018) used the SEM to investigate risk factors for campus sexual assault (CSA) among college students. Sieben et al. (2021) evaluated the differences in the prevalence of individual adverse childhood experiences between Asians/Pacific Islanders (APIs) and Whites in Minnesota men college students. APIs were more likely to report being physically abused (adj. OR = 2.04), verbally abused (adj. OR = 1.25), and raped (adj. OR = 1.75) compared to Whites. Stratification by sex showed that API men were more likely to have been sexually abused compared to white men, with additional ACEs differing significantly by sex and race.

## **Factors Influencing Child Sexual Abuse**

### ***Sex and Race***

Several factors affecting child sexual abuse rates have been identified in several studies. The study by Lamoureux et al. (2012) found that female adult's survivors of CSA were at increased risk of interpersonal functioning, social adjustment, and psychological stress difficulties and had fewer resiliency resources. Meta-analyses of research's concentrated in North America estimate that childhood sexual abuse affects 18% of girls and almost 8% of boys, including sexual assault or rape (Broaddus-Shea et al., 2021). As it was above mentioned, the study of Sieben et al. (2021) evaluated the differences in the prevalence of individual adverse childhood experiences between Asians/Pacific Islanders (APIs) and Whites in Minnesota men college students. Stratification by sex showed that API men were more likely to have been sexually abused compared to white men, with additional ACEs differing significantly by sex and race.

### ***Age***

Different definitions regarding what constitutes sexual abuse can result in fluctuating assumptions about the effect of early sexual trauma on later sexual distortion. Furthermore, many studies lack details about the characteristics of abuse, such as the perpetrator's identity, age at onset, and duration, even in the face of growing empirical evidence suggesting that these variables are significant predictors of outcomes (Noll, Trickett, & Putnam, 2003; Collin-Vézina et al., 2015; Alaggia, Collin-Vézina, & Lateef, 2019). For example, in a New Zealand birth cohort study, Fergusson et al. (1996) found that increasing levels of childhood CSA exposure assessed by retrospective reports at age



18 were associated with an increased risk of psychiatric disorder at 18 years. Wyatt et al. (1992) found that in a community sample of women, those sexually abused as girls were more likely to report shorter-term relationships and a higher number of sexual partners. McElvaney et al. (2020) found a significant relationship between age at the time of abuse and age at the time of disclosure ( $\chi^2(16) = 261.434, p < 0.05$ ), making it more likely to occur count within the developmental period which they were abused.

### **Summary**

This chapter starts with a brief description of the public health issue that was addressed in this study followed by an explanation of the strategy that was used to conduct the literature search. Then, the chapter describes how the SEM was used as the theoretical foundation to conduct this study. A brief description of child sexual abuse is then provided, which included the definition, and possible demographic risk factors impacting their future relationships.

The epidemiology of child sexual abuse in the United States is outlined in this chapter with emphasis in sociodemographic factors associated with high-risk children and their families until the child became a young adult in a sexually abused child living in the United States. Additionally, this chapter mentions the existing sex, and racial/ethnic disparities within this U.S. population. More specifically, it shows how female women sexually abused as girls are more likely to report shorter-term relationships and a higher number of sexual partners compared to their counterparts (Noll, Trickett, & Putnam, 2003; McElvaney et al., 2020). These facts supported that children of all ages need should be the target for prevention efforts in this abused population.

The chapter also makes a description of several factors (sex, age, race) that were identified as influencing in sexually abused children their relationships with a friend, romantic partner, and family as young adults. Based on the studies analyzed in this literature review, age of abuse is an influencing factor in CSA disclosure, making the life stage of the victim/survivor a critical consideration (Collin-Vézina et al., 2015; McElvaney et al., 2020; Alaggia, Collin-Vézina, & Lateef, 2019).

For sex, more studies reported that an association between being sexually abused as a girl represented a higher risk of inappropriate relationships with the community as a young adult rather than as a man (Deanee'Johnson, 2016; Finkelhor et al., 2015). In the sexually abused studies, participants were significantly younger at the age of voluntary intercourse, had less birth control practice, were younger at the birth of their first child, and were more likely to be teen mothers than were comparison participants (Noll, Trickett, & Putnam, 2003).

Still, many studies lack details about the characteristics of abuse, such as the perpetrator's identity, age at onset, and duration, even in the face of growing empirical evidence suggesting that these variables are significant predictors of outcomes (Noll, Trickett, & Putnam, 2003; Collin-Vézina et al., 2015). This study assessed the influence of sociodemographic factors associated with high-risk sexually abused children and their families until they became young adults.

## Chapter 3: Research Method

### **Introduction**

Being a victim of CSA increase the future maltreatment risk in its different forms depending upon its timing, severity, duration, and nature, and upon the child's age that compromise the wellbeing of these population (Vasudevan & Lau, 2019). But little is known about the factors influencing the quality of the relationships they establish during adulthood. The purpose of this quantitative, cross-sectional study was to examine whether three types of current relationships in young adults (romantic partner, best friends, and community) depended on a set or profile of independent variables of the abused child among participants in the LONGSCAN studies (Runyan et al., 2014).

This chapter discusses the rationale for using a quantitative analysis of secondary cross-sectional data in this study. The methodology is described as well as the study population, the employed sampling and sampling procedures, the procedures for recruitment and data collection, the procedures for accessing the dataset, and instrumentation and operationalization of the construct. Additionally, the threats to validity and ethical procedures are discussed, followed by a summary of the chapter.

### **Research Design and Rationale**

As stated, the study evaluated to what extent does the presence of several sociodemographic and ecological factors in a sexually abused child influence the quality of romantic partner, family, and friend relationships as a young adult. The independent variables of this study were the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex. The dependent variable of the study was the quality

of romantic partner, best friend, and community relationships as a young adult. A secondary analysis of cross-sectional data from the LONGSCAN studies was conducted. The analysis was used to analyze how different factors operating at a given time may influence the quality of romantic partner, family, and friend relationships as a young adult using data collected during the year 2018.

## **Methodology**

### **Study Population**

Sexually abused children's participants in the LONGSCAN studies represented the target population of this study. The LONGSCAN studies followed 1354 high-risk children aged 4 years and older living in the U.S. territory and their families until the child became a young adult. This number (1354) represents the size of the target population of this research study.

### **Data Sources**

Data collected by the 2018 LONGSCAN studies were analyzed to answer the RQs. This study used data collected for the nationwide LONGSCAN. The LONGSCAN Assessments is a consortium of five longitudinal studies (five pooled cohort samples), including information about the exposures and consequences of child abuse among high-risk children recruited through social service agencies and CPS and identified as "at-risk" youth. The original dataset recruited participants by their experiences of child sexual abuse early in life, among other types of abuse, and continued to collect data on young adults.

## **Sampling and Sample Size**

This study included all sexually abused children's participants in the nationwide LONGSCAN studies. The study excluded participants with missing data for any factor evaluated in the study (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex).

G Power 3.1.9.2 was employed to calculate the minimum sample size required to reach a power of 0.95, with a significance level ( $\alpha$ ) of 0.05 and an effect size equivalent to an odds ratio of 2.15 for an independent variable with a binomial distribution. This program showed that the minimum sample size required to comply with these parameters was 100 participants.

The choice of this effect size ( $OR = 2.15$ ) was based on the results obtained by Fleming et al. (1999), who found significant associations between reporting CSA and experiencing domestic violence, rape, sexual problems, low self-esteem, and problems with intimate relationships ( $OR = 2.15$ ; 95% CI: 1.24 - 3.71) in Australian women. Similarly, Bhochhibhoya (2021) found negative binomial regression for experiencing unwanted sexual contacts, attempted, and completed rapes among female college students in dating relationships ( $OR = 3.15$ ; 95% CI: 1.80 - 5.51).

## **Procedure for Recruitment, Participation and Data Collection**

In the LONGSCAN face-to-face interviews were conducted separately with child and caregiver participants approximately every two years beginning at child age 4. Beginning at child age 12, interviews were completed using an audio computer self-

assisted interview (A-CASI) format. Caregivers provided consent for their participation and that of the child. Youth provided assent for their participant (Runyan et al., 2014).

### **Gaining Access to the Dataset**

I received the permission to get access to the LONGSCAN dataset from the NDACAN Archiving Assistant. The signed Data Use Agreement was presented.

### **Operationalization of the Variables**

The quality of the sexual partner, best friend, and community relationship was the dependent variable defined as follows: Adequate=0; Inadequate=1. [Quality of the sexual partner and best friend relationships: It was considered adequate if obtains between 3 and 5 points in the variable in the answer to the question satisfaction with the relationship, and inadequate in any other case. Quality of community relationships: It will be considered adequate if have attended religious and (or) spiritual services or activities at least 2-3 times a month and (or) have been a member of a club at school or at work in the last year]. There were six independent variables in this study: presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, sex, and race. The following operational definitions were used:

- Presence of sexual abuse [Yes=1, No=0; it is considered Yes in case it has been the object of any of the consigned minor or major abuses, No in another case]

- Age of abuse [No=0,  $\leq 5 =1$ , 9-12=2, 13-16=3,  $\geq 17=4$  (year of age). It will be considered in the age group to which it belonged when the first sexual abuse occurred]

- Frequency of abuse [No=0, 1-10, 11-20, 21-30, 31 and more; according to the number of times the abused reports having been sexually abused]

- Abusive kinship [ No=0, Mother=1, Father=2, Girlfriend/boyfriend=3, Other=4, Someone else=5. According to degree of kinship or relationship with the abused]

- Sex [Male=1, Female=2]

- Race [Other = 0, White = 1, Black = 2]

### **Data Analysis Plan**

The purpose of this study was to answer the following RQs:

RQ 1: To what extent does the presence of a set of independent variables (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex) predict in a sexually abused child an inappropriate sexual partner relationship as a young adult (15 to 18 years old)?

H<sub>0</sub> 1: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate sexual partner relationship as a young adult (15 to 18 years old).

H<sub>a</sub> 1: There is a statistically significant relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate sexual partner relationship as a young adult (15 to 18 years old)

RQ 2: To what extent does the presence of a set of independent variables (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex) predict in a sexually abused child an inappropriate relationship with the best friend as a young adult (15 to 18 years old)?

H<sub>0</sub> 2: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate relationship with the best friend as a young adult (15 to 18 years of age).

H<sub>a</sub> 2: There is a statistically relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate relationship with the best friend as a young adult (15 to 18 years of age).

RQ 3 To what extent does the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child an inappropriate community relationship as a young adult (15 to 18 years of age)?

H<sub>0</sub> 3: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate community relationship as a young adult (15 to 18 years of age).

H<sub>a</sub> 3: There is a statistically significant relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate community relationship as a young adult (15 to 18 years of age).

SPSS software (version 25) was used to conduct descriptive statistics for the variables the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex. The current study considered whether child sexual abuse is related to the quality of positive and negative relationships through Self-Report for Sexual Abuse



(SALS), including the self-reported social relationship, affective relationship, and friendship.

The Multiple Logistic Regression Model with dichotomous response was used to answer questions 1 to 3 (RQ1 – RQ3). Before applying the model, the absence of collinearity was verified using the Correlation Matrix ( $CCont < 0.8$ ). The model allows estimating the pure effect of each independent variable on the response (quality of the relationship with a partner, friend, or social relationships), controlling for the rest. In addition, the Hosmer and Lemeshow statistics verified if the model fits to the data. In all tests used a significance level of 5%. Before running each model, it was necessary to filter the sample by the possession or not of the explored condition. Interpretation of results was based on odd ratios values from logistic regressions along with the corresponding 95% confidence intervals (CI) and  $p$ -values.

### **Validity**

The LONGSCAN study was designed based on the ecological theory of abuse, which holds that there are potentially multiple explanatory factors associated with child maltreatment that can occur in one or several domains (English, & Graham, 2000; Runyan et al., 2014). LONGSCAN strategy allowed an exploration of a variety of critical issues related to child abuse and neglect on a combined sample of sufficient size, statistical power, and flexibility. The consortiums introduced the child self-report to capture each participant's comprehensive history of abuse, avoiding the bias of parent or caregiver (Knight et al., 2000; Runyan et al., 2014). The children in the study represented a continuum of "risk" levels, from at risk (not maltreated but in danger of being abused),

to maltreated and in treatment. To represent crucial periods in children's development, the authors selected age-specific data collection points. In addition, the authors expressed that the LONGSCAN design can replicate and extend findings across a variety of social, ethnic, and economic subgroups (Runyan et al., 2014). But the LONGSCAN presented analytic challenges. The longitudinal nature of the data affects the assumption of independent observations required for most statistical analyses. In longitudinal studies, missing data can occur for some respondents and variations in the age of children at each assessment, age at the study enrollment, and the timing between visits. Another challenge came from the different target populations and sampling procedures used among the five research sites. Each study site, the cohort should be considered a convenient sample of this area in the USA. The way children have recruited results in heterogenous samples affects the aggregation of data. The repeated measurements and the site-to-site sample variability make the statistical analyses challenging (English, & Graham, 2000; Runyan et al., 2014).

### **Ethical Procedure**

The data that I analyzed in this study was collected by LONGSCAN authors. I received the permission of the authors (the LONGSCAN Investigator Group) to use these data. The LONGSCAN Investigator Group is part of the University of North Carolina School of Medicine, Chapel Hill, NC. It was initiated in 1991 with grants from the National Center on Child Abuse and Neglect to a coordinating center at the University of North Carolina at Chapel Hill and five data collection sites (Runyan et al., 2014).

Additionally, before starting such studies, an Institutional Review Board (IRB) approved the study (Runyan et al., 2014).

The data was analyzed ethically and responsibly in accordance with the guidelines of the American Psychological Association (American Psychological Association, 2017). Data cleansing, organization, and analysis was not conducted until approval was received from Walden University's Institutional Review Board (IRB).

### **Summary**

This chapter discusses the cross-sectional quantitative nature of this study. The data source used for the analysis is described here, as well as the way the minimum sample size required was calculated. Independent and dependent variables are defined, followed by the data analysis plan, which includes the RQs and the statistical tests that will be used to answer those questions. Finally, the validity of the LONGSCAN data is discussed followed by the ethical procedure associated with the use of this database.

## Chapter 4: Results

### **Introduction**

The interpersonal nature of child sexual abuse has led researchers to examine how childhood sexual abuse is associated with the quality of adult relationships. The current study considered whether child sexual abuse is related to the quality of positive and negative relationships through Self-Report for Sexual Abuse (SALS). This quantitative study aimed to examine whether three types of current relationships (couple, best friends, and community) depend on a set or profile of variables of the abused (presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex).

The study investigated three RQs. The purpose of the first question was to investigate whether the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predicted the quality of couple's relationship as a young adult (15 to 18 years old). The second question of the study analyzed if these set of variables had an influence on the quality of a relationship with the best friend as a young adult. The third RQ of this study analyzed whether these set of variables related to sexual abuse predict the quality of community relationships as a young adult. Finally, the purpose of the three RQs was to analyze if there was significant influence of the set of variables mentioned above on the quality of relationships through three multivariate statistical models.

This chapter presents a brief description of how the data was collected followed by a descriptive statistic of the sample. Then, the chapter presents an evaluation of the

assumptions of logistic regressions followed by the findings obtained from the statistical analyses associated to the RQs.

### **Data Collection**

In this study, I conducted secondary analysis of data collected in the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN) dataset. LONGSCAN Assessments is a consortium of five longitudinal studies including information about the exposures and consequences of child abuse among high-risk children (Runyan et al., 2014). It was initiated in 1991 at the University of North Carolina at Chapel Hill including five data collection sites in urban areas (Eastern, Midwest, and Northwest), suburban area (Southwest), and the Southern sample is statewide and includes subjects from urban, suburban, and rural communities. The LONGSCAN goal was to follow the 1300 children and their families until the children became young adults. It is a combined sample of sufficient size allowing a comprehensive exploration of child abuse and neglect across a variety of ethnic and social backgrounds. Children were enrolled when they were 4 years old or younger and participants at each site were followed through the age of 18. The evaluations were conducted for ages 4, 6, 8, 12, 14, 16, and 18. The data were collected based on survey instruments and administrative records (Runyan et al., 2014).

### **Results**

#### **Statistical Analysis**

SPSS software (version 25) was used to conduct descriptive statistics for the variables the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex. The current study considered whether child sexual abuse is related to the

quality of positive and negative relationships through Self-Report for Sexual Abuse (SALS), including the self-reported social relationship, affective relationship, and friendship.

The Multiple Logistic Regression Model with dichotomous response was used to answer questions 1 to 3 (RQ1 – RQ3). Before applying the model, the absence of collinearity was verified using the Correlation Matrix ( $CCont < 0.8$ ). The model allows estimating the pure effect of each independent variable on the response (quality of the relationship with a partner, friend, or social relationships), controlling for the rest. In addition, the Hosmer and Lemeshow statistics verified if the model fits to the data. In all tests used a significance level of 5%.

Before running each model, it was necessary to filter the sample by the possession or not of the explored condition. Therefore, the first model only analyzed the relationship quality with the sexual partner (if it appeared in adults with partners), which was the case with each model evaluated. The second model only analyzed the relationship quality with friends (if it occurred in adults with friends). The third model only analyzed relationship quality with the community (if it appeared in adults with community connectors). Statistical tables presented the information in a summarized and self-explained way.

### **Descriptive Statistics**

Table 1 shows the distribution of the independent variables investigated according to sexual abuse during childhood. Thus, of the 963 children studied, 16% did not record any results, and only 61 (6.3%) were abused, while 748 (77.7%) did not present any abuse.

**Table 1**

*Frequency Distribution of the Sample According to the Presence of Sexual Abuse in Childhood*

Presence of sexual abuse	Number	Percentage
Yes	61	6.3
No	748	77.7
Missing	154	16.0
Total	963	100.0

Table 2 shows the distribution of the sample by the age of abuse. There were 61 abused in childhood, with the highest number of children were six years of age or older (39 recorded; 4.0% of all children) and 63.9% of all abused children. The remaining 22 abused children were 5 years of age or less at the time of the abuse, representing 2.3 % of the total of children investigated and 36.1% of abused children.

**Table 2**

*Frequency Distribution of the Sample According to the Age of Abuse*

Age of abuse	Number	Percentage
≤ 5	22	2.3
> 5	39	4.0
No	748	77.7
Missing	154	16.0
Total	963	100.0

Table 3 shows the distribution of the sample according to the frequency of abuse. The highest number of children suffered abuse between 1 to 10 times (n=46; 4.8%) and 75.4% of abused children. Fifteen of the abused occurred with a frequency greater than ten times, representing 1.6% of the investigated sample and 24.6% of the abused child.

**Table 3***Frequency Distribution of the Sample According to the Frequency of Abuse*

Frequency of abuse	Number	Percentage
No	748	77.7
1-10	46	4.8
>10	15	1.6
Missing	154	16.0
Total	963	100.0

Table 4 shows the distribution of the type of abuser. Abusers not linked to maternal or paternal figures represent the primary type of abuser, with 38 (3.9% of the sample) and 60.7% of all abused.

**Table 4***Frequency Distribution of the Sample According to the Abusive Kinship*

Abusive kinship	Number	Percentage
No	748	77.7
Parents	23	2.4
No parents	38	3.9
Missing	154	16.0
Total	963	100.0

Table 5 shows the distribution of participants by race. There was a predominance of white children, representing 51.4% of the total number studied, followed by blacks with 28.2 and other races with 4.4. The race was not recorded in 16% of the children.



**Table 5***Frequency Distribution of the Sample According to Race*

Race	Number	Percentage
White	495	51.4
Black	272	28.2
Other	42	4.4
Missing	154	16.0

The distribution of the sample according to the sex of the child is presented in Table 6. It shows a predominance of males with 665, for 69.1%, while females represent 30.9%.

**Table 6***Frequency Distribution of the Sample According to Sex*

Sex	Number	Percentage
Male	665	69.1
Female	298	30.9

**Statistical Assumptions**

Multivariate logistic regressions assume little or no multicollinearity among independent variables. This assumption is met because all independent variables in this study are categorical. Additionally, no detection of outliers is necessary due to the same reason. Other assumption such as: that the dependent variable should be dichotomous and that the observations should be independent from each other have also been met.

## **Inferential Statistics**

### ***Research Question 1***

The age of the abuse, the number of times they were abused, the abuser's filial bond, and the race, and sex of the abused influence the quality of the loving bonds that they establish during adulthood.

RQ (1): To what extent does the presence of a set of independent variables (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex) predict in a sexually abused child an inappropriate sexual partner relationship as a young adult (15 to 18 years old)?

RQ (1) H<sub>0</sub>: There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate sexual partner relationship as a young adult (15 to 18 years old).

RQ (1) H<sub>a</sub>: There is a statistically significant relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate sexual partner relationship as a young adult (15 to 18 years old)

The matrix of correlations between independent variables (Table 7) demonstrates the independence of all pairs of variables by computing correlation coefficients lower than the present value (Coef. Cont. <0.80), a figure required to affect the estimates of the parameters of the logistic function. It calls for the use of the Multiple Logistic Regression Model with a dichotomous response.

**Table 7**

*Collinearity Analysis for Statistical Model 1: Correlation Matrix Between Independent Variables*

	Presence of sexual abuse	Age of abuse	Frequency of abuse	Abusive kinship	Race	Sex
Presence of sexual abuse	-	-0.083	-0.198	-0.620	0.021	0.110
Age of abuse	-0.083	-	-0.103	-0.514	-0.031	-0.033
Frequency of abuse	-0.198	-0.103	-	-0.209	-0.060	-0.047
Abusive kinship	-0.620	-0.514	0.209	-	0.084	-0.065
Race	0.021	-0.031	-0.060	0.084	-	0.081
Sex	0.110	-0.033	-0.047	-0.065	0.081	-

*Note.*  $n = 439$ .

The Hosmer and Lemeshow X2 statistic adjust the model to the data, which yielded a value of 2.823, for an associated probability of 0.727, which was not significant, so it stated that it fits the data. The Logistic Regression Model explores the influence of variables related to sexual abuse in childhood on the quality of couple relationships in adulthood by the enter method. At the same time, it is not intended to establish a prognosis. Thus, when analyzing Table 8, none of the variables were significant, verified by computing an associated highest probability than the present significance level ( $p \geq 0.05$ ) and the confidence intervals containing 1. It means that with the information provided by the study, there is not enough evidence to affirm that any of these negatively influence the quality of relationships during adulthood. Therefore, the

variables investigated are not related to the quality of couple relationships in abused children.

**Table 8**

*Results of Logistic Regression With Dichotomous Response (Model 1)*

Variable	B	SE	Wald	df	p	95% CI		
						Lower	OR	Upper
Presence of sexual abuse	.742	1.387	.286	1	.593	.139	2.101	31.870
Age of abuse	-.175	.632	.077	1	.782	.243	.839	2.894
Frequency of abuse	-.340	.319	1.138	1	.286	.381	.711	1.330
Abusive kinship	.403	1.009	.159	1	.690	.207	1.496	10.799
Race	-.160	.290	.302	1	.582	.482	.852	1.506
Sex	.116	.291	.160	1	.689	1.123	0.636	1.985
Constant	1.854	.287	41.699	1	.000	.157		

### ***Research Question 2***

The age of the abuse, the affiliation with the abuser, the frequency with which the abuser abused, the race, and sex of the abused influence the quality of relationships with friends as a young adult.

RQ (2): To what extent does the presence of a set of independent variables (the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex) predict in a sexually abused child an inappropriate relationship with the best friend as a young adult (15 to 18 years old)?

RQ (2)  $H_0$ : There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate relationship with the best friend as a young adult (15 to 18 years of age).

RQ (2)  $H_a$ : There is a statistically relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate relationship with the best friend as a young adult (15 to 18 years of age).

Model 2 showed the analysis of possible collinearity or redundant information between independent variables (Table 9). Note that all the contingency coefficients are lower than the present value ( $p < 0.8$ ). Therefore, the model can include all selected variables since the effect of the dependency is not large enough to affect the transpositions and inversions of matrices that are carried out to estimate the parameters of the Logistics function.

**Table 9**

*Collinearity Analysis for Statistical Model 2: Correlation Matrix Between Independent*

*Variables*

	Presence of sexual abuse	Age of abuse	Frequency of abuse	Abusive kinship	Race	Sex
Presence of sexual abuse	-	-.250	-.220	-.450	-.007	.113
Age of abuse	-.250	-	.044	-.597	-.033	-.028
Frequency of abuse	-.220	.044	-	-.266	-.020	-.051
Abusive kinship	-.450	-.597	-.266	-	.073	-.047
Race	-.007	-.033	-.020	.073	-	.052
Sex	.113	-.028	-.051	-.047	.052	-

*Note.*  $n = 798$ .

The Hosmer and Lemeshow statistic  $X^2$  fit the model to the data, which yielded a value of 4,087, for an associated probability of 0.537, which was not significant, indicating that the model fits the data. The Logistic Regression model explores the influence of variables related to sexual abuse in childhood on the quality of relationships with friends in young adulthood using the enter method. At the same time, it is not intended to establish a forecast. Thus, when analyzing Table 10, the only significant variable was the sex of the abused ( $p = .000$ ), whose OR was 3,635. It means that women abused as girls were almost four times more likely to have an inappropriate relationship with friends during adulthood than their male counterparts. The remaining variables were not significant, verified by computing an associated probability higher than the current level of significance ( $p \geq .05$ ) and the confidence intervals that contain 1. The information

provided by the study doesn't offer evidence that these negatively influence the quality of relationships during adulthood, except for the female sex. Therefore, most of the variables investigated are not related to the quality of relationships with friends in abused children.

**Table 10**

*Results of Logistic Regression With Dichotomous Response (Model 2)*

Variable	B	SE	Wald	df	p	95% CI		
						Lower	OR	Upper
Presence of sexual abuse	.855	1.341	.406	1	.524	.170	2.350	32.566
Age of abuse	-.302	.806	.140	1	.708	.152	.708	3.587
Frequency of abuse	-.341	.309	1.214	1	.271	.388	.711	1.304
Abusive kinship	.378	1.008	.141	1	.708	.202	1.459	10.513
Race	-.191	.285	.447	1	.504	.473	.826	1.445
Sex	1.291	.287	20.280	1	.000	2.073	3.635	6.374
Constant	3.027	.274	121.711	1	.000	.048		

### ***Research Question 3***

The age of the abuse, the affiliation with the abuser, the frequency with which the abuser abused, the race, and sex of the abused influence the quality of relationships with community as young adults.

RQ (3) To what extent does the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child an inappropriate community relationship as a young adult (15 to 18 years of age)?

RQ (3)  $H_0$ : There is no relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate community relationship as a young adult (15 to 18 years of age).

RQ (3)  $H_a$ : There is a statistically significant relationship between the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex in a sexually abused child and an inappropriate community relationship as a young adult (15 to 18 years of age).

Model 3 showed the analysis of possible collinearity or redundant information between independent variables (Table 11). The contingency coefficients are lower than the present value ( $p < 0.8$ ); therefore, the model can include the selected variables since the dependency effect is not significant enough to affect the transpositions and inversions of matrices carried out to estimate the parameters the Logistics function.



**Table 11**

*Collinearity Analysis for Statistical Model 3: Correlation Matrix Between Independent Variables*

	Presence of sexual abuse	Age of abuse	Frequency of abuse	Abusive kinship	Race	Sex
Presence of sexual abuse	-	-.185	-.306	-.744	.056	.045
Age of abuse	-.185	-	.033	-.377	-.046	-.046
Frequency of abuse	-.306	.033	-	.034	-.024	-.071
Abusive kinship	-.744	-.377	.034	-	.003	-.068
Race	.056	-.046	-.024	.034	-	.023
Sex	.045	-.046	.071	.003	.023	-

*Note.*  $n = 578$ .

The Hosmer and Lemeshow  $X^2$  statistic adjust the model to the data, which yielded a value of 0.837, for an associated probability of 0.933, which was not significant, so it stated that it fits the data.

The Logistic Regression model was used to explore variables related to sexual abuse in childhood on the quality of relationships with the community in adulthood, using the enter method. However, it is not intended to establish a prognosis. Thus, when analyzing Table 12, most of the variables were not significant, verified by computing an associated probability higher than the pre-established level of significance ( $p \geq .05$ ) and the confidence intervals contain 1. It means that, with the information provided by the study, there is insufficient evidence to affirm that any of these variables negatively influence the quality of relationships with the community during adulthood. In sex,

women have an increased risk of inappropriate relationships with the community, almost twice compared to men (1.801).

**Table 12**

*Results of Logistic Regression With Dichotomous Response (Model 3)*

Variable	B	SE	Wald	df	p	95% CI		
						Lower	OR	Upper
Presence of sexual abuse	.347	1.062	.107	1	.744	.176	1.415	11.340
Age of abuse	.076	.346	.048	1	.827	.548	1.079	2.124
Frequency of abuse	-0.040	.028	1.983	1	.159	.909	.961	1.016
Abusive kinship	-.510	.634	.646	1	.421	.173	.601	2.082
Race	.308	.218	1.994	1	0.158	.887	1.361	2.086
Sex	.588	.256	5.294	1	0.021	1.091	1.801	2.971
Constant	1.174	.179	43.125	1	.000	3.236		

### Summary

The results obtained in this research study are in this chapter. First, I assessed to what extent does the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child an inappropriate sexual partner relationship as a young adult. The results indicated that none of these factors predicted an inappropriate sexual partner relationship as a young adult. None of the variables were

significant when all variables were analyzed together in a multiple logistic regression model with a dichotomous response. Therefore, the variables investigated are not related to the quality of couple relationships in abused children.

The results showed that the female sex in a sexually abused child is a predictor of an inappropriate relationship with the best friend as a young adult. Finally, I evaluated to what extent does the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child an inappropriate community relationship as a young adult. The results showed that the female sex in a sexually abused child was a predictor of an inappropriate community relationship as a young adult.

In the next chapter, I will provide an interpretation of the findings of this study. I will also discuss the limitations of the research and recommendations for future research. Additionally, I will mention the implications for social change, followed by the conclusions of the study.

## Chapter 5: Discussion, Conclusions, and Recommendations

### Introduction

Child sexual abuse (CSA) is a major preventable public health problem often underreported (Letourneau et al., 2018). The WHO (2017) defined CSA as the participation of a child in sexual activity that they do not fully understand they cannot give informed consent. The child is not developmentally ready and cannot consent to or violate laws social taboos of society. Globally, children and adolescents are sexually abused at an alarming rate (WHO, 2017). With variation in estimates across studies, approximately 1 in four girls and 1 in thirteen boys experience child sexual abuse at some point in childhood (WHO, 2017). Meta-analyses of research's concentrated in North America estimate that childhood sexual abuse affects 18% of girls and almost 8% of boys, including sexual assault or rape (Broaddus-Shea et al, 2021). The literature is inconsistent regarding the relationship between age at the time of abuse and time to the disclosure of CSA and the factors that influence early exposure (McElvaney et al., 2020).

Someone the child or child's family knows perpetrates 91% of CSA (Gerke et.al, 2021; Stoltenborgh et.al, 2015). In 2015, in the United States, the economic burden of the total lifetime of CSA was estimated to be at least \$9.3 billion. Still, this estimate could be higher because of underreporting CSA (Letourneau et.al, 2018).

The purpose of this quantitative, cross-sectional study was to examine whether three types of current relationships in young adults (couple, best friends, and community) depended on a set or profile of independent variables of the abused child among participants in the LONGSCAN studies (Runyan et al., 2014). The presence of sexual

abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex were the independent variables.

The analyses conducted in this study revealed that among the independent variables included, only sex was able to predict, in a sexually abused child, an inappropriate relationship as a young adult. Finally, the analysis showed that the female sex in a sexually abused child is a predictor of an inappropriate relationship with the best friend and community relationship as a young adult. This study represents the first we know of to evaluate whether the age of the abuse, the number of times they were abused, the abuser's filial bond, and the race and sex of the abused influence the quality of the relationships they establish during adulthood.

### **Interpretation of the Findings**

#### **Research Question 1**

One purpose of the study was to investigate whether the age of the abuse, the number of times they were abused, the abuser's filial bond, and the race and sex of the abused influence the quality of the loving bonds that they establish during adulthood. This study revealed that none of these independent variables were able to predict, in a sexually abused child, an inappropriate sexual partner relationship as a young adult within this population ( $p \geq 0.05$ ). However, the results of this study differ from other authors, and this may be partly due to the diverse nature of CSA experiences, circumstances of abuse, and potential moderator and mediating (Lewis et.al, 2016). Very few studies have investigated the long-term consequences of physical, sexual, or emotional childhood abuse (Lewis et.al, 2016).

Over the past decade, research reported evidence that CSA may be linked to increased sexual dysfunction with a decreased sexual satisfaction in adulthood and higher sexual compulsivity and risky sexual behaviors (Bigras et al, 2021). In addition, between CSA and adult sexual well-being, some studies found no significant association. Konya et al. (2020) reported that female survivors of sexual abuse might find it challenging to create healthy sexual intimacy such as emotional and sexual conflict. These finding related to sex is consistent with several studies (Kim et al. 2009; Knapp et al, 2017). Coping strategies have been revealed as one of the determinants of resiliency among female adult survivors of CSA. One of the specific risk factors for revictimization in CSA victims is maladaptive coping strategies (Scoglio et al., 2019).

This study also exposed that the age of abuse was not predictive of inappropriate sexual intimacy. The demographic analysis provided in the study among the U.S. nationally representative sample of 13,052 children and adolescents, ages 0–17 years, found sexually assaulted and abused children were more likely to be women (Gewirtz-Meydan, & Finkelhor, 2020). It found that boys allegedly have a high rate of being victims of sexual violence by an acquaintance and especially from another minor (Gewirtz-Meydan, & Finkelhor, 2020). Bornstein, Hahn, & Haynes (2010) described a variety of behaviors that constitute positive socioemotional development in an adolescent child's emotional self-regulation skills, the process in which a child processes information about others around them, positive communication, and positive relationships.

**Research Question 2**

A second purpose of this study was to investigate whether the age of the abuse, the affiliation with the abuser, the frequency of abuse by the abuser, the race, and sex of the abused influence the quality of relationships with friends as a young adult. This study exposed that the only significant variable was the sex of the abused. The Logistic Regression model showed that women abused as girls were almost four times more likely to build inappropriate relationship with a friend ( $OR=3,635$ ; 95% CI: 2.073 – 6.374,  $p = 0.000$ ). Chartier et al., (2001), using data from the Ontario Health Survey Mental Health Supplement, found a significant gender interaction by CSA whereby severe CSA was associated with a higher risk for social phobia in females than males. Few studies incorporate male CSA victims, leaving much to learn about outcomes for sexually abused boys. Other studies comparing male and female effects of sexual abuse tend to show mixed evidence of gender differences (Gershon, Minor, & Hayward, 2008; Gewirtz-Meydan, & Finkelhor, 2020). Sumner et al. (2015) reported that experiencing trauma in childhood can contribute to biological changes, increasing the risk of developing chronic diseases or other psychological changes like low self-esteem and poor social relations.

**Research Question 3**

The last purpose of this study was to analyze whether the age of the abuse, the abuser's affiliation, the frequency of abuse, the race, and sex of the abused, influence the quality of relationships with the community as young adults. This study revealed that the age of the abuse, the affiliation with the abuser, how often the abuser abused, and the race did not predict inappropriate relationships with the community as a young adult. Logistic

Regression analysis showed the age of the abuse, the affiliation with the abuser, the frequency with which the abuser was abused, and the race does not predict the quality of relationships with the community as young adults. In the model, only the sex showed significant differences. Be sexually abused as a girl posed an increased risk of inappropriate relationships with the community as a young adult, almost twice compared to men ( $OR=1,801$ ; 95% CI: 1.091 – 2.971,  $p = 0.021$ ). Child sexual victimization is considered a significant stressor (Deanee'Johnson, 2016; Finkelhor et al., 2015). The Wyatt & Newcomb (1990) study considered the age of abuse and affiliation with the abuser as mediators of abuse that influence psychological, sexual, and relationship problems among the abused. Research in CSA did not focus on the quality of their relationships as young adults. Compared to adult victimization, CSA is associated with maladaptive socioemotional development and coping behaviors (Barker-Collo, Read, & Cowie, 2012; Johnson & Lynch, 2013; Marriott, Hamilton-Giachritsis & Harrop, 2014).

### **Interpreting the Results in the Context of the Socioecological Model**

This study used the SEM as theoretical framework. Sexual abuse is very complex and disrupts all levels of the ecological system of each victim. This model suggests that when sexual abuse occurs, changes occur within the individual, the family, the support network, and beyond to accommodate this non-normative event of violence and mistrust. Sexual abuse affects every victim and family throughout life. Researchers have established a correlation between CSA and other negative lifetime consequences (Chapman et al., 2011; Dube et al., 2001; Roxburgh & Macarthur, 2014). Without intervention, these victims may be more susceptible to adult mental health problems and



other adverse behavioral health problems such as the early onset of alcohol use and abuse, early smoking, prescription drug misuse, sexual risk-taking behaviors, and increased risk of suicide, among others (McKillop, 2019).

In this study I analyzed the influence on the quality of relationships of factors that may have an effect at one or more of the above-mentioned levels of influence. For example, at the intrapersonal level I assessed the influence of factors such as the age of the abuse, the number of times they were abused, the abuser's filial bond, and the race and sex. At the interpersonal level the relationships with family members, friends, and romantic partners were assessed. At the community level, I assessed the influence of some factors used in this study to predict the quality of relationships with community members.

Findings of this study suggest that sex was the only factor operating at the intrapersonal level that had an influence on the quality of relationships among young adults' victims of child sexual abuse in the LONGSCAN cohort. Age, race, and the abuser's filial bond did not predict the quality of relationships within this population.

### **Limitations of the Study**

This study was limited by the data available, among other limitations. First, I used secondary data analysis in which the purpose is different from that one of the authors who originally collected the data (Runyan et al., 2014). Therefore, the analysis was limited by the available data from the LONGSCAN studies; other critical explanatory variables might have been excluded from the analysis (Ruggiano & Perry, 2019). The time of the snapshot is not guaranteed to represent the target population, the design can

introduce bias, and the sampling pool of the variables can threaten the study outcomes (Frankfort-Nachmias, & Leon-Guerrero, 2015). A significant limitation to this study concerned the proportion of cases. Out of 963 cases, only 61 disclosed themselves as victims of sexual abuse, while 748 had no complaint of sexual abuse. Second, in terms of validity, the nature of the study design implies other limitations. Because this was a cross-sectional design, implying that no conclusions can be made about causality between variables. The sequence of events cannot be demonstrated in a cross-sectional study, it does not allow establishing a cause-and-effect relationship between two variables that are significantly associated (Thiese, 2014). At most can suggest an association between the allegedly independent and dependent variables. The study may have been subject to recall bias due to the nature of the data. Some participants might not have recalled adequately some of the information collected by the LONGSCAN, which may have led to misclassification, posing a threat to the study's internal validity.

The study used five different sites in the United States in data collection for the LONGSCAN: East, Northwest, Midwest, Southwest, and South. On one of the primary instruments provided, participants in the South and Midwest cohort were not scored; therefore, the current study drew from data collected at the East, Northwest, and Southwest sites. It was a limiting factor when testing for sexual abuse cases as it created an even smaller sample size for analysis. Finally, LONGSCAN participants were recruited through social service agencies and CPS and identified as "at-risk" youth. The original dataset recruited participants by their experiences of child sexual abuse early in life, among other types of abuse, and continued to collect data on young adults.

Therefore, there was an overrepresentation of identified abused children captured in this data set.

### **Recommendations**

The current study was designed to contribute to the literature focused on the longitudinal effects of child sexual abuse as a young adult. Future research is needed to understand the socio-emotional development and coping behaviors of a sexually abused child.

Longitudinal studies are essential to better understanding the long-term effects of sexual abuse rather than focusing on the actual impacts. Using an ecological model to understand the interconnection between levels is an appropriate beginning to recognize that victims of child sexual abuse may first be victimized by their abuser and second, by society if a case of a sexually abused child is not adequately investigated.

An essential part of survival and life is using personal, innate, or acquired resources throughout life. Future studies should further explore how young adults perceive their well-being and well-functioning to advance understanding of the consequences of child sexual abuse among young adults. Furthermore, to better understand gender patterns, future studies should explore how men and women who experience child sexual abuse develop coping mechanisms.

Consequently, public health initiatives and policies must create conditions with various resources that help young adults who have suffered child sexual abuse live entirely rather than survive.

### **Implications**

This study has implications for social change. Given the complexity of risk and protective factors associated with CSA, the public health system prevention efforts should focus on personal, familial, community, and societal levels as defined in the social-ecological model. I evaluated to what extent does the presence of sexual abuse, age of abuse, frequency of abuse, abusive kinship, race, and sex predict in a sexually abused child an inappropriate romantic partner, friend, and community relationship as a young adult. The results showed that the female sex in a sexually abused child was a predictor of an inappropriate friend and community relationship as a young adult. This suggests that more interventions targeting a sexually abused child should be elaborated with the aim of detect this event. These interventions should be implemented to have an impact for positive social change at different levels. At the intrapersonal level, intervention should emphasize on a child that can be potentially victim of sexual abuse since they are less likely to disclose this event. At the intrapersonal level, the future interventions should target the family members rising awareness about the risk of the child to be sexually abused. Finally, at the community level, the future interventions must target the public awareness campaign promoting clear and positive communication and behaviors by modeling healthy relationships between CSA survivors, their families, friends, and community.

Promoting social positive change is essential to work from a knowledge base developed by systematic research in prevention and health promotion within public health. This quantitative study suggests that collecting data from a sexually abused child

is difficult but necessary to support the well-being of the young adult. In addition, this study results may be used to modify current curricula to educate CSA survivors and healthcare providers about the importance of relationships in different stages of their healing process.

### **Conclusions**

In this study, I investigated the influence of several factors on the quality of relationships in a sexually abused child as young adult from the LONGSCAN studies. Findings of this study show that female sex within CSA is a predictive factor of inappropriate relationships with a friend and the community. Sexual abuse is a problem that mainly affects the victim at the interpersonal level, but the implications within each level of the ecological system affect the other. There is a serious concern with the rising trends of mental health problems. Sexual victimization is a vicious cycle that follows an individual throughout their lifetime. Persistent intrapersonal issues level affects the response at the macro-levels and affect the socioemotional development of the child victim of sexual abuse. These results should be taken in consideration by public health professional to implement interventions intended to increase awareness within the American society.

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