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Resilience to Post-Traumatic Stress Symptoms in Child Survivors of Childhood Sexual Abuse

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Resilience to Post-Traumatic Stress Symptoms in
Child Survivors of Childhood Sexual Abuse

by

Caroline Witek, M.S.

A dissertation submitted to the College of Psychology and Liberal Arts of
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We the undersigned committee hereby approve the attached dissertation, "Resilience to Post-Traumatic Stress Symptoms in Child Survivors of Childhood Sexual Abuse," by Caroline Witek.

Vida L. Tyc, Ph.D.
Professor
Clinical Psychology

Richard T. Elmore, Ph.D.
Associate Professor
Clinical Psychology

Catherine Nicholson, Ph.D., BCBA-D
Assistant Professor
Applied Behavior Analysis

Lisa A. Steelman, Ph.D.
Professor and Dean
College of Psychology and Liberal Arts

Abstract

Resilience to Post-Traumatic Stress Symptoms in Child Survivors of Childhood Sexual Abuse

by

Caroline Witek, M.S.

Major Advisor: Vida L. Tyc, Ph.D.

Just as adults may develop post-traumatic stress disorder (PTSD) after being exposed to death, serious injury, or sexual violence, so too may children. Childhood sexual abuse (CSA) is one traumatic event that has been linked to the development of post-traumatic stress symptoms (PTSS) in children. While the literature to date has drawn strong connections between CSA and subsequent psychopathology (including PTSD diagnoses), and explored factors contributing to resilience to psychopathology development, comparatively little research has been conducted on factors that increase child CSA survivors' resilience to post-traumatic stress symptom development. Furthermore, much of the research to date has explored long-term effects of CSA on survivors; those that focused on short-term effects often relied on the information recall ability of adults reflecting on their CSA experience years prior. This research method is limited insofar as adult memories of childhood experiences tend to diminish in clarity over time, and this can lend itself to inaccurate self-report data. The present study sought to build upon the current research on resilience to psychopathology

following CSA. This study was unique in its ability to capture the experiences of CSA survivors in real time during childhood, when memories of the traumatic event and subsequent psychopathology are most salient. Information was provided by both the identified victim and non-offending caregiver, whereas much past CSA research has relied on caregiver report of the identified victim's experience. A review of the existing literature on CSA-related PTSS development is provided.

The present cross sectional study utilized data from clients of Florida Institute of Technology's Family Learning Program (FLP), a sexual abuse treatment program utilizing evidence-based interventions, including Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), for child and adolescent sexual abuse survivors, their siblings, and their non-offending caregivers. The primary goal of this research was to examine characteristics that may distinguish children who report a higher number of PTSS symptoms (suggestive of less resilience) and those who report a lower number of PTSS symptoms (suggestive of more resilience).

A total of 27 children, between the ages of 8-17 years, were enrolled in the study. The mean age of CSA survivors was 13.15 years ($SD=2.52$; range= 9-17 years); 66.7% ($n=18$) of the sample identified as female, and 33.3% ($n=9$) identified as male. In this sample, 44.4% ($n=12$) of children were identified as PTSS Resilient (scores on the CRIES <30) and 55.6% ($n=15$) were PTSS Non-Resilient (scores on the CRIES ≥ 30). Children's resilience to PTSS following CSA was significantly related to parents' marital status (i.e. married) and perceived caregiver belief following CSA disclosure. These results can be used to inform caregivers of modifiable variables that

can enhance their child's quality of life following the trauma of CSA. Identifying factors that protect against the development of pathological symptoms following CSA has implications for enhancing caregivers' and mental health practitioners' abilities to increase children's resilience, fortifying them against trauma symptoms before they may begin to negatively impact their lives long-term.

Table of Contents

Abstract.....	iii
Acknowledgements.....	viii
Dedication.....	ix
Review of the Literature.....	1
Child Sexual Abuse: Definition and Prevalence.....	1
Trauma Framework of CSA Symptomatology.....	5
Short-Term Negative Effects of CSA.....	8
Long-Term Negative Effects of CSA.....	11
Post-Traumatic Stress Disorder (PTSD): Definition and Prevalence.....	15
PTSD in Children.....	17
PTSD vs. Post-Traumatic Stress Symptoms (PTSS).....	20
Overview of Resilience.....	21
Factors Predicting Resilience to PTSD Following Child Maltreatment.....	23
Rationale.....	27
Specific Aims and Hypotheses.....	29
Method.....	31
Participants and Procedure.....	31
Measures.....	32
Demographics.....	32
Adult Identifying Information Form and Identifying Information Child / Adolescent Form.....	32
Children’s Revised Impact of Event Scale (CRIES-13).....	33
Child Behavior Checklist (CBCL)	34
Non-Offending Caregiver (NOC) Intake Interview Form and Child / Adolescent Clinical Intake Interview Form.....	36
Design/Data Analysis.....	37
Results.....	38

Participants.....	38
Resilience to PTSS and Demographics.....	38
Resilience to PTSS and Abuse Variables.....	39
Resilience to PTSS and Individual Psychosocial Variables.....	41
Resilience to PTSS and Environmental Variables.....	43
Discussion.....	44
Impact of Study.....	44
Limitations and Future Directions.....	50
Tables.....	52
References.....	58

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Dedication

I dedicate this work to the clients I treated in the Family Learning Program. Your data helped me grow as a researcher, and your candor helped me grow as both a clinician and person. From the bottom of my heart, thank you. I wish for each and every one of you a full and happy life, free of the struggles you endured at such a young age. Hold your heads high.

A message to all survivors of childhood sexual abuse:

You did not deserve what happened to you.

You were not at fault.

You need not feel ashamed.

You are not alone.

May you have the courage to speak out, seek support, and stand tall. Though we may never meet, know that my heart is with you

Resilience to Post-Traumatic Stress Symptoms in Child Survivors of Childhood Sexual Abuse

Review of the Literature

Child Sexual Abuse: Definition and Prevalence

The concept of child sexual abuse (CSA) has evolved and broadened its parameters with time and research to encompass more than the event of physical sexual contact between an adult and a child. It is a popular misconception in the general public that only this type of event constitutes CSA. Presently, in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), child sexual abuse is defined as, "...Any sexual act involving a child that is intended to provide sexual gratification to a parent, caregiver, or other individual who has responsibility for the child," (American Psychiatric Association, 2013, p. 718). CSA can involve a wide array of behaviors founded in exploitation of a minor. Sexual abuse involving physical contact with a child includes acts such as fondling, genital and anal penetration, intercourse, and sodomy (RAINN, 2016). Behaviors that constitute CSA that do not involve physical contact with the child include exposing oneself to a child, engaging in sexual acts in the presence of a child, exposing a child to pornography, encouraging a child to engage in sexual acts with another child, and exposing a child to sexually obscene information via phone calls, texts, or online (RAINN, 2016).

Broadly, CSA has been found to occur across socioeconomic and ethnic groups, with girls estimated at 2.5 to 3 times more likely to experience it than boys,

and risk for CSA increasing with age (Finkelhor, 1993). However, sexual abuse poses a unique challenge with regard to reporting specific, accurate prevalence rates. As Ceci and Friedman (2000) noted, there is no definitive statistic on the number of children who have experienced CSA in the United States, part of which is due to the primary reliance on received, validated case information from child protection agencies to generate this statistic. Furthermore, accurate data from this source is reliant upon both children's willingness to disclose being sexually abused, and community members' subsequent reports of these disclosures. This is problematic, as children are often reluctant to disclose having been sexually abused for a number of reasons. These reasons include: uncertainty regarding how to verbalize what happened, fear of retribution by the abuser, lack of realization that what has occurred is abuse, being bribed by the abuser to not disclose, guilt over allowing the abuse to occur, dependence on the abuser (e.g. emotional, financial), fear of negative impact on the family unit (e.g. dissolving the family if the abuser is a family member), and uncertainty as to whom it is safe to disclose (Sexual Abuse Education, 2017). Additionally, CSA statistics derived exclusively from child protective services do not necessarily reflect cases reported to other agencies (such as a sheriff's office) (Ceci & Friedman, 2000).

Still, even when a CSA case is reported and subsequently investigated, an additional challenge arises: providing evidence. More often than not, conclusive medical and/or physical evidence is lacking in these cases (Bays & Chadwick, 1993; Berenson, Heger & Andrews, 1991; as cited in London, Bruck, Ceci, & Shuman,

2005). Relatedly, as the present research topic suggests, children often react differently to CSA, exhibiting a variety of psychological symptoms, some of which develop over the course of time. As such, there is not a perfect, universal constellation of sexual abuse-specific psychological symptoms that can be pointed to as conclusive evidence of CSA (Kendall-Tackett, Williams, & Finkelhor, 1993; Pool & Lindsay, 1998; Wood & Wright, 1995; as cited in London, Bruck, Ceci, & Shuman, 2005). This problem of insubstantial evidence renders many CSA allegations labeled unsubstantiated, further negatively impacting the accuracy of CSA rates reported by sources who only take into account substantiated, successfully prosecuted CSA cases. Thus, even when using records from annual child protective services reports, which are often considered some of the most comprehensive reports on the subject, the burden of evidence for determining whether or not CSA has occurred falls largely on children's disclosure, again highlighting the problematic trend of underreporting in CSA.

Bearing the collective prevalence rate limitations in mind, researchers still seek to determine the pervasiveness of CSA. Recently, Stoltenborgh, Van Ljzendoorn, Euser, & Bakermans-Kranenburg (2011) sought to understand the global prevalence of CSA. In a meta-analysis of 217 publications from 1980-2008 (9,911,748 total participants; 331 independent samples involving both self-report and informant studies), the authors found the overall prevalence of CSA was varied: 127 per 1000 individuals (127/1000) reported experiencing CSA in self-report studies, and 4/1000 individuals in informant studies. Self-report measure analysis showed it was more

common for girls to self-report CSA experiences than boys, with rates between 164/1000 (lower limit estimate) and 197/1000 (upper limit estimate) for girls, and between 66/1000 and 88/1000 for boys. Notably, intercontinental differences were found, with lowest CSA rates for both sexes found in Asia, highest rates for girls in Australia, and highest for boys in Africa. The combined prevalence of reported CSA for all analyzed studies ($N = 9,911,748$) was 11.8% (95% CI, $p < .01$). Thus, the results of this study suggest that around the world, more than 1 out of 10 children have likely experienced CSA. Again, this estimate includes only reported incidents of CSA.

With regard to country-specific CSA prevalence, one of the most widely recognized, thorough investigations of child maltreatment in the United States comes from the Department of Health & Human Services' annual report, derived from state-level Child Protective Services (CPS) submissions of case-level findings. Notably, these findings include only completed reports that resulted in a disposition (court ruling) during the reporting year (Children's Bureau of the U.S. Department of Health & Human Services, 2017). In their most recent report, the Children's Bureau indicated that of the 794,790 identified children who were reported to have experienced child maltreatment in 2015 and received a child protective services investigation response (forensic evidence gathered, formal determination of CSA occurrence) or alternative response (action focused on family needs without determination of maltreatment, e.g. voluntary acceptance of services from CPS), 8.4% of those children (57,286 children) experienced sexual abuse. This research dubbed sexual abuse the third most common form of child maltreatment, following child neglect (75.3% of child maltreatment

cases; 514,500 children), and child physical abuse (17.2% of child maltreatment cases; 117,772 children). A commonly cited statistic on CSA prevalence comes from the Center for Disease Control's (CDC) 2001 Adverse Childhood Experiences study, a retrospective study on 17,337 members of an adult health maintenance organization attending a primary care facility in San Diego, California over the course of three years (1995-1997) (Dube et al., 2001). This study suggested that one in four girls and one in six boys in the United States were likely to experience sexual abuse before age 18 (Dube et al. 2001).

Trauma Framework of CSA Symptomatology

The topic of CSA and its effects received a significant increase in attention in psychology research in the 1990s and early 2000s. Before delving into the numerous specific disorders and difficulties associated with the experience of CSA, it is helpful to conceptualize these symptoms in terms of thematic domains into which they may fall. In their seminal work categorizing the impact of CSA into a conceptual framework, Finkelhor and Browne (1985) delineated the four common dynamics associated with CSA and related them to common symptomatology. As such, these “traumagenic dynamics” help to explain why survivors experience certain problems (e.g. depression, sexual reactivity, poor self-image) associated with the unique kind of trauma of sexual abuse: traumatic sexualization, betrayal, powerlessness, and stigmatization.

It should be noted that these individual dynamics are not necessarily CSA-specific when compared with other kinds of trauma. For instance, a child who is in a severe motor vehicle accident may experience powerlessness, but not traumatic sexualization, betrayal, or stigmatization. Rather, it is the combination of these dynamics as they occur in a single set of circumstances (CSA) that sets this type of abuse apart from other traumas experienced in childhood (e.g. parental divorce, other forms of child maltreatment). Regarded as a whole, the impact of these dynamics is likely to negatively modify a child's self-concept, worldview, and capacity for experiencing affect.

Traumatic sexualization refers to the way a child's sexuality (e.g. sexual feelings and attitudes) is impacted through sexual abuse. Finkelhor and Brown suggest that when a child is sexually abused, it is in a way that is neither appropriate to development nor interpersonally functional. Traumatic sexualization can occur in a variety of ways, including: exchange of positive reinforcers (e.g. gifts, affection) for sexual behavior, which teaches the child that sexuality can be used to manipulate others; an abuser fetishizing a child's body part, distorting the child's conception of the importance of this body part; transmission of misconceptions and confusion about appropriate sexual behavior and morality; and when the child begins to associate negative, frightening memories with sexual activity. Thus, the child comes away with an incorrect and inappropriate understanding of sexual behavior, confusion about their sexual self-concept, and abnormal, unhealthy emotions associated with sexual

behavior, all of which are likely to follow the child into adulthood if no intervention is provided.

Next, symptoms associated with the traumagenic dynamic of betrayal can develop in a number of ways, including when a child realizes someone they trusted and/or depended upon has harmed or manipulated them, when someone the child loved treated them with compassionless indifference, and when a trusted family member does not believe them when they disclose the abuse. Betrayal can have a significant impact on the child's ability to develop trust in others throughout the lifespan. Powerlessness (disempowerment) occurs when the abuser continually infringes upon the child's will, wants and needs, and self-efficacy via CSA. Symptoms associated with powerlessness can develop in a number of ways, including the repeated violation of the child's body, when the child's efforts to stop the abusive experience are disregarded, and when an adult does not believe a child who discloses sexual abuse. Children in this situation are likely to learn to feel helpless to change their situations. Last, the dynamic of stigmatization refers to the feelings of shame and guilt associated with the abuse. Stigmatization-related symptoms may develop due to factors including the abuser blaming the child for the abuse, the abuser underscoring the importance of secrecy, prior knowledge that the abuse is not normal, reactions of shock or hysteria upon disclosure, and people in the child's life who convey the message that the child is somehow damaged or defective. As such, the child may come to develop a poor sense of self, as well as the core belief "I am bad," (Finkelhor & Brown, 1985).

Short-Term Negative Effects of CSA

In an effort to delineate the short-term effects of CSA, Beitchman, Zucker, Hood, & Akman (1991) completed one of the first meta-analyses of studies conducted between 1966 and 1989. This study examined 42 publications on children and adolescents and their symptomatology following the experience of CSA, and unearthed several key correlations. First, children who have experienced sexual abuse are more likely than those who have not to behave in a developmentally inappropriate sexualized way (e.g. sexual play, masturbation, aggressive sexual behavior, seductive sexual behavior, possessing knowledge of a sexual nature inappropriate to the child's age [for children], and acting out sexually via promiscuity [for adolescents]). Next, higher frequency and duration of sexual abuse, as well as abuse by more than one perpetrator, is linked to a more severe, negative psychological impact. While many studies included in the authors' analysis did not directly examine this issue, those that did found that being abused over the course of one or more years was related to increased identification with the perpetrator, while those who were abused for two or more years exhibited more severe depression than others (Johnston, 1979, and Friedrich et al., 1986, as cited in Beitchman, Zucker, Hood, & Akman, 1991).

It should be noted that the authors highlight that some short-term CSA symptoms are age-specific. For instance, guilt is less likely to be found in preschool-age children than in older children due to emotional developmental differences. Internalizing behavior was found to be associated with being female, a close relationship with the perpetrator, and increased frequency and severity of abuse;

externalizing behaviors were associated with being male, a shorter amount of time having elapsed from the time of abuse to the time of evaluation, and increased duration of abuse during which the perpetrator was someone emotionally close to the boy (Friedrich et al., 1986 as cited in Beitchman, Zucker, Hood, & Akman, 1991). CSA involving physical injury to the child, force, or vaginal, anal, or oral penetration was connected to more severe symptomatology in the child (Elwell & Ephross, 1987, as cited in Beitchman, Zucker, Hood, & Akman, 1991). Additionally, some studies found that greater trauma in the CSA survivor was associated with the perpetrator being a biological father or stepfather, although this relationship may be affected by an interaction of age and sex. Lastly, CSA survivors were found to come from families the study describes as “disturbed,” and characterized as those who have experienced separation/divorce, substance abuse by parents, and psychopathology in the family (Beitchman, Zucker, Hood, & Akman, 1991).

The studies included in this meta-analysis, however, had notable limitations. For instance, 18 out of 42 studies did not have a control group, eight used normal controls only, 13 utilized only clinical sample controls, and studies varied in reliability and validity. A significant limitation of this review was its failure to define “short-term.” The authors did not report the time frame used to evaluate short-term effects in each study, nor did they provide an overall range. Perhaps more importantly, the non-offending caregiver’s information was sometimes the sole source of information used in these studies. That is, the parent reported on the behavior and personal experience of the child. While parent observation can offer valuable insight into a child’s

difficulties from the parent's perspective, it is best used to inform research when used in conjunction with others' observations and/or, ideally, the child's self-report data. In addition, there was little detail on the components of the CSA experience (e.g. frequency, intensity, duration of abuse). Despite these limitations, information from this meta-analysis lends itself to a better understanding of the common short-term symptoms of CSA, delineating the above key findings (Beitchman, Zucker, Hood, & Akman, 1991).

Later studies continue to echo the information presented by Finkelhor and Browne, and Beitchman, Zucker, Hood, and Akman. In a 1998 study exploring psychiatric symptoms of children (ages 6-16) who had disclosed CSA referred from non-clinical settings, McLeer et al. matched participants to a non-abused sample of children on age, race, and socioeconomic status. Broadly, the results of the interview-based study showed 62.8% met criteria for at least one psychiatric diagnosis, while 29.5% met criteria for two or more psychiatric diagnoses. More specifically, children who experienced CSA were at an increased risk for PTSD, as well as symptoms of posttraumatic stress, anxiety, and depression during a two-month period following disclosure of CSA. Putnam (2003) continued the conversation in his literature review, again highlighting PTSD symptoms, internalizing problems, externalizing problems, and sexually inappropriate behaviors as symptoms child CSA survivors may experience.

Long-Term Negative Effects of CSA

The psychological impact of CSA does not stop at short-term psychopathology - CSA has long been linked to long-term difficulties, as well. Following their research on short-term CSA consequences, Beichtman et al. (1992) conducted one of the first large-scale reviews of long-term CSA effects. As defined in this study, symptoms that occurred beyond two years from termination of abuse were considered “long-term effects.” The studies included adult women CSA survivors who were accessed through multiple settings (including undergraduate college classes, community surveys, and outpatient therapy clinics). Results suggested survivors experienced higher rates of sexual disturbance and dysfunction, depression, and re-victimization. CSA was also found to be associated with anxiety, fear, and suicidal ideation and behaviors. These findings were similar to Browne and Finkelhor’s (1986) seminal work on the impact of CSA, which indicated that survivors report long-term CSA effects including all of the above, as well as feelings of isolation, stigma, low self-esteem, and difficulty trusting others.

More recently, in a large-scale study on adult survivors of CSA, Pérez-Fuentes et al. (2013) interviewed 34,000 household-residing adults ages 18 and over during a survey in 2004-2005 using the Alcohol Use Disorder and Associated Disabilities Interview Schedule – DSM-IV (AUDADIS-IV) version. CSA prevalence was found to be 10.14%, and more common in women (75.2% of reported CSA survivors) than men (24.8%). The results suggest that adults who experience CSA are at a significantly higher risk for developing a psychiatric disorder in their lifetime (OR = 2.98, 95% CI:

2.63, 3.37), including mood disorders (Axis I diagnosis per Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition [DSM-IV] criteria) and suicide attempts, than those who do not. After adjusting for sociodemographic characteristics, risk factors, and other comorbid psychiatric disorders, CSA was found to be significantly associated with major depressive disorder (MDD), bipolar disorder, panic disorder, PTSD, attention-deficit/hyperactivity disorder (ADHD), conduct disorder, and suicide attempts. It was suggested that development of a mood disorder in adulthood was associated with the CSA survivor symptoms of guilt, academic problems, and behavioral problems. Higher frequency of abuse was strongly associated with a higher likelihood of having a psychiatric disorder. The study also found that adult CSA survivors often experienced sexual difficulties, relationship dissatisfaction, and distrust of others. Relatedly, there was an association between CSA and an increased probability of being widowed, separated, or divorced. However, this study was limited in that it was based on self-report, a problem many large-scale quantitative studies encounter.

In an effort to better understand the relationship between CSA disclosure and subsequent emotional and behavioral problems, Broman-Fulks et al. (2007) used data from a nationally representative sample of adolescents (National Survey of Adolescents) ages 12-17 years. After analyzing disclosure data from 35-minute structured interviews, researchers found no relationship between latent CSA disclosure and substance use problems or PTSD risk. Those who disclosed CSA to their mothers showed reduced short-term risk for PTSD and delinquency at the time of interview.

Time elapsed between abuse termination and time of interview varied due to the random nature of the study. Those who reportedly disclosed within one month of onset of abuse showed reduced risk for major depressive difficulties and delinquency at the time of interview.

It should be noted that Broman-Fulks et al.'s (2007) results are specific to those who experienced sexual *assault*. "Sexual assault" was defined in this study as, "...(a) Vaginal or anal penetration by an object, finger, or penis; (b) oral-genital contact; (c) touching of the respondent's breasts or genitalia; or (d) respondents' touching of another person's genitalia." To be included in this study, the incidents of relevance were required to be categorized as "sexual assault," a term whose criteria are more stringent than the broader label of child "sexual abuse." Whether the study's results can be generalized to accurately understand the effects of CSA disclosure on mental health remains to be investigated; this is a worthwhile query, as more general, non-contact CSA (e.g. exposure to pornography) can have a significant negative impact on a child's mental health and development.

Hillberg, Hamilton-Giachritsis, and Dixon (2011) conducted a large-scale, recent review of CSA studies conducted between 1989-2009 seeking to explore the association between CSA and mental health difficulties. Seven studies involving adults 18 and over with a CSA history were included in the meta-analyses. CSA was stringently defined as, "an act in which the child/children are used to provide sexual gratification for the perpetrator/perpetrators including inappropriate sexual touching, invitations, and/or exhibitionism, inappropriate non-penetrative sexual interaction

(digital penetration, fondling, and/or masturbation), attempted or actual anal and/or vaginal penetration, incest, coerced or forced penetration,” (Hillberg, Hamilton-Giachritsis, and Dixon, 2011, p. 39). The results were consistent with prior findings and found that CSA increased an individual’s susceptibility to physical, behavioral, and psychological difficulties in adulthood as compared to non-abused individuals, with pathology defined according to the DSM-IV criteria.

Even more recently, Fergusson, McLeod, and Horwood (2013) conducted a longitudinal study on the effects of CSA. Participants in the study were 900 members of the Christchurch Health and Development Study (CDHS) birth cohort, a longitudinal study of 1,265 children in the Christchurch region, born within four months of each other, in 1977. Participants were studied at birth, 4 months, 1 year, each year until age 16, and at ages 18, 21, 25, and 30 via interview, parent interview, standardized testing, teacher report, and records from official data. The researchers adjusted for confounding covariates including sociodemographic factors, family functioning factors, and child factors. Overall, CSA was found to be significantly associated with increased rates of major depression, anxiety disorders, suicidal ideation, suicide attempts, alcohol dependence, and illicit drug dependence during the period from 18-30 years. More specifically, there was an increased risk for mental health problems in adulthood (age 18-30 years). Increased rates of PTSD symptoms, decreased self-esteem, and decreased life satisfaction were found at age 30. Higher rates of contact with hospitals and doctors for physical illness were reported at age 30. Higher rates of sexual risk-taking were reported to age 30. Individuals aged 25-30

years showed higher rates of welfare dependence. Other findings include a higher number of sexual partners, younger age of sexual activity onset, dependence on welfare, and increased amount of medical care sought for physical health problems.

Existing research indicates there is a growing body of literature on the long-term outcomes associated with CSA. Although methodologies may differ, overall findings suggest that mood disorders, sexual problems, behavior problems, and negative self-perception are long-term effects often reported by CSA survivors. More research is needed to study the relationship CSA and PTSD, as it is one of the most frequently experienced difficulties of child CSA survivors (Paolucci, Genuis, & Violato, 2001).

Post-Traumatic Stress Disorder (PTSD): Definition and Prevalence

In the DSM-5, PTSD is categorized as a trauma-related disorder, with some stipulations based on age (American Psychiatric Association, 2013). For individuals older than six years, a diagnosis of PTSD first requires the individual to be exposed to actual or threatened death, serious injury, or sexual violence, with the following symptoms lasting more than one month: a) One or more intrusive psychological symptoms must be present and involve recurrently reliving the event (e.g. intrusive, distressing memories; distressing dreams related to the trauma; flashbacks; distress when exposed to internal or external cues symbolizing and/or resembling some component of the trauma; and physiological reactions to these cues); b) Additionally, one or more avoidant symptoms must be present, which include avoiding thoughts and

feelings associated with the trauma, and avoiding external reminders that cause an individual to recall the trauma; c) Two or more specific symptoms of negative changes in cognitions and emotions associated with the trauma must be present (e.g. failure to remember the trauma, wrongly blaming oneself for the trauma); d) Changes in arousal and reactivity must also be present (e.g. hypervigilance, concentration difficulties). For children six years and younger, intrusive memories may or may not cause distress and may instead appear as repetitive, trauma-themed play, and negative cognitive symptoms may present as temper tantrums.

Additionally worthy of consideration is that PTSD was previously categorized as a diagnosis within the anxiety disorders cluster (American Psychiatric Association, 2000). This former categorization is important to keep in mind, as many previous studies on CSA effects conducted based on DSM-IV and DSM-IV-TR criteria cite “anxiety disorders” as associated with CSA. Thus, while previous studies may not specifically cite PTSD as an effect of CSA, the disorder fell under the anxiety disorders umbrella at the time of research, which was, indeed, often a specifically cited effect.

The DSM-5 estimates that in the United States, 8.7% of individuals are likely to meet the DSM-IV criteria for PTSD by age 75 (lifetime risk), with a 12-month prevalence of 3.5% among adults (American Psychiatric Association, 2013). It also indicates that those who have experienced rape, along with survivors of both military combat and captivity and politically- and ethnically-related captivity and genocide, are populations at the highest risk for PTSD development. Prevalence estimates suggest

that anywhere from one-third to one-half of the individuals exposed to these traumas are likely to develop PTSD (American Psychiatric Association, 2013). Although the DSM-5 indicates the above symptoms are to be expected in individuals over six years of age, research indicates the presentation of PTSD symptoms in children can differ based on the child's age group (e.g. young child, school age, adolescence).

PTSD in Children

Though commonly associated with adults, particularly those in the military who experienced and/or directly witnessed a trauma during war, there is no adult-specific age limit regarding who may be susceptible to PTSD. In fact, it is possible for PTSD to occur at any time after age one year (American Psychiatric Association, 2013). There is also no situational specificity for a PTSD diagnosis beyond the previously delineated parameters regarding what qualifies as traumatic. Hamblen and Barnett (2016) of The National Center for PTSD, in association with the U.S. Department of Veterans Affairs, note that similar to traumatic situations that spark the onset PTSD in adults, any event that threatens physical harm or threatens a child's life can also lead to PTSD. These events can include motor vehicle accidents, violent crimes, natural or manmade disasters, and child maltreatment (e.g. physical abuse and sexual abuse and/or violence). Witnessing violence or learning about violence happening to someone close to a child can also lead to PTSD.

With regard to PTSD prevalence in children, The National Comorbidity Survey – Adolescent Supplement (NCS-A) is of considerable utility (Merikangas et

al., 2010). The NCS-A is a nationally representative survey conducted face-to-face by trained lay-interviewers with adolescents ages 13-18 years in the mainland United States. The survey sought to assess the prevalence of DSM-IV mental disorders (including mood disorders, anxiety disorders, behavior disorders, eating disorders, and substance use disorders) using an altered format of the World Health Organization Composite International Diagnostic Interview, a self-report measure among a sample of 10,123 adolescents. The participant mean age was 15.2 years, with 51.3% male participants, and 48.7% female. With regard to race, 65.6% of the sample was non-Hispanic white, 15.1% non-Hispanic black, 14.4% Hispanic, and 5.0% other. Of the adolescents interviewed, one in three (31.9%) met criteria for an anxiety disorder, with all disorder subtypes being more common in females. Moreover, more females than males met criteria for PTSD (Females: 8.0%, SE = 0.7, Males: 2.3%, SE = 0.4%). PTSD prevalence was also observed to increase with age: 3.7% of adolescents ages 13-14 years (SE = 0.5), 5.1% ages 15-16 years (SE = 0.5), and 7.0% ages 17-18 years (SE = 0.8) met DSM-IV criteria for PTSD, resulting in a total PTSD prevalence of 5.0% in adolescents ages 13-18. Prevalence rates of anxiety disorders, under which PTSD was classified in the DSM-IV, were found to be higher for adolescents whose parents were divorced or separated. Although not statistically significant, these results shed light on a population (children/adolescents) whose mental health requires further study by the scientific community.

Despite the study's reliance on self-reported retrospective recall of symptoms, it provided a springboard with regard to PTSD statistics in older children (Merikangas

et al., 2010). However, there are currently no definitive, large-scale studies on the prevalence of PTSD in children younger than 13 years in the United States. Results of Hébert, Lavoie, and Blais's 2014 study on adolescent resilience to PTSD following CSA suggest that 25.5% of teenagers who experienced CSA display symptoms of PTSD, which is much higher than statistics found in teenagers who have not experienced CSA (estimates range from 6.3% for girls and 3.7% for boys in the general population, to 14% of teenagers in general). The large PTSD prevalence rate in young people who have experienced CSA highlights the need for further investigation into both risk and protective factors for this mental health condition.

Importantly, Kaminer, Seedat, and Stein (2005) reported that directly applying adult PTSD criteria when attempting to diagnose a child may result in a misdiagnosis of post-traumatic stress reactions in some children. First, as multiple criteria require the individual to communicate internal states and experiences, this may become problematic for children who lack the mental development and ability to accurately express themselves. This would require behavioral observations and inferences on the part of the clinician to determine whether these symptoms are present. Next, while children who have experienced trauma are likely to display certain key symptoms of PTSD (e.g. avoidance, intrusion), there are additional common symptoms to take into account: developmental regression, development of new fears and/or resurfacing of old fears, increased frequency of accidents and reckless behavior, separation anxiety, and physical symptoms including stomach and headaches. Also, post-traumatic

anxiety may be manifested in young children via symptoms ADHD, including hyperactivity, easy distractibility, and increased impulsivity.

Additionally, there is the question of quantity versus severity when it comes to pediatric PTSD. In a study of children ages 7-14 years who experienced a trauma and had symptoms of PTSD (assessed using the Clinician-Administered PTSD Scale for Children), Carrion, Weems, Ray, and Reiss (2002) found that while some children did not meet the full, three-cluster criteria necessary for a PTSD diagnosis as delineated by the DSM-IV, there was no significant difference in impairment and distress in children with subthreshold PTSD symptoms who met requirements for only two clusters. That is, the results of that study suggest that even if children do not meet the full PTSD criteria following a trauma, they may experience a negative impact on functioning similar to children who do meet that criteria – a lack of an official PTSD diagnosis does not necessarily mean a child is not as severely impaired or distressed as a child with that diagnosis (Carrion, Weems, Ray, & Reiss, 2002). Although it is important to keep vigilant to potential over-diagnosing, research has long suggested that only the minority of adults develop symptoms that meet full PTSD diagnosis criteria following traumatic events, and that subthreshold symptoms of PTSD are often clinically significant (Carlier & Gersons, 1995; McLaughlin et al., 2015; Naylor et al., 2013).

PTSD vs. Post-Traumatic Stress Symptoms (PTSS)

Bearing in mind the variations in trauma reactions by age (and a number of other characteristics), as well as the impact that subthreshold PTSD symptoms can

have on daily functioning, studying this trauma exclusively in children who meet full PTSD criteria fails to encompass the holistic extent of CSA's psychological impact. Particularly when it comes to understanding potential buffers to trauma symptom development, it is important to capture a variety of clinically significant post-trauma psychopathology and examine the shades of gray, now that an understanding of black and white has been established on this topic. Notably, it would be inaccurate to label this subthreshold symptom cluster "PTSD." Instead, researchers developed a new term to categorize the subthreshold PTSD symptom experience: post-traumatic stress symptoms (PTSS). The concept has been applied to a variety of trauma-related studies, including post-traumatic symptomatology in families of childhood cancer survivors, post-traumatic growth and depressive symptoms, and the psychosocial functioning of law enforcement (Kazak, A. et al., 2004; Morrill et al., 2008; Maia et al., 2007).

Overview of Resilience

Although stereotypically a field whose efforts are directed toward identifying psychopathology, there has been a trend toward positive psychology that includes the multifaceted topic of resilience. In a review of recent literature on resilience from 2006 until July 2010, Herrman et al. (2011) undertook the task of identifying the paramount studies that sought to understand resilience, its definition, and its contributing factors. Predictably, a large group of researchers were unable to come to an agreement on a single definition of resilience. Some view resilience as an

individual's character trait, while others conceptualize it as an active process.

However, several key themes are drawn from the current resilience literature. The fundamental definition of resilience involves the ability to positively adapt to one's situation. In the mental health field, then, resilience generally refers to the ability to either sustain or regain one's mental health and adjust in the face of adversity.

Adversity includes childhood difficulties (e.g. sexual abuse), as well as other negative life events, such as poor parenting, poverty, homelessness, traumatic events, natural disasters, violence, war, and physical illness.

Prati and Pietrantonio (2009) conducted a meta-analytic review of studies examining how personal factors including optimism, social support, and coping strategies impact post-traumatic growth. The authors found that religious coping and positive reappraisal coping (large effect size); social support, social support coping, spirituality, and optimism (moderate effect size); and acceptance coping (small effect size) had a positive impact on post-traumatic growth. With regard to environmental-systemic factors, social support (i.e. family relationships, peer relationships, supportive teachers) was positively correlated with resilience (Herrman et al., 2011). More specifically, for maltreated children, secure attachment to one's mother, stable family, a good, secure relationship with a non-offending caregiver, positive parenting skills, and a lack of maternal depression and substance abuse have been shown to be connected to resilience (defined as fewer behavioral problems and increased psychological well-being). Larger-scale environmental factors connected to resilience include community factors like attending a good school, having community resources,

opportunities to engage in sports and artistic activities, cultural factors, and no exposure to violence (Luthar & Cicchetti, 2000; Cicchetti & Rogosch, 2007; as cited in Herrman et al., 2011). Although beyond the scope of the present study, other research suggests biological and genetic factors play a role in resilience; harsh early environments may impact brain structure development, function, and neurobiology, subsequently making individuals more or less vulnerable to psychopathology (Luthar & Brown, 2007; Cicchetti & Curtis, 2006; Curtis & Nelson, 2003; as cited in Herrman et al., 2011). As one might expect, the literature suggests children are most likely to display resilience when positive factors from each of these different domains (personal, environmental-systemic, and biological factors) combine to fortify the child and encourage the development of hardiness (Herrman et al., 2011).

Factors Predicting Resilience to PTSD Following Child Maltreatment

Despite the undeniable adversity presented by CSA, not all children who have been sexually abused necessarily develop some form of psychopathology. In fact, Finkelhor and Berliner (1995) suggest that up to 40% of child CSA survivors who participated in 29 research studies showed few or no psychiatric symptoms. However, there is significant debate regarding what can be concluded from this data, as there was variation between studies on the frequency, intensity, and duration of the abuse experienced by participants, validity of the measures used, and in the evaluation of coping styles (e.g. avoidance leading to symptom suppression). These limitations did not allow the researchers to differentiate truly resilient children from children who

were simply asymptomatic at the time of assessment. Furthermore, research on child CSA survivors that does not provide longitudinal data on the participants may miss delayed expression of symptoms. This is important, as one widely cited longitudinal study on this population suggested 10-20% of children who experienced CSA began to present symptoms within the first 12 to 18 months following the incident (Kendall-Tackett, Williams, & Finkelhor, 1993). Furthermore, it has been suggested that this deterioration tends to occur more often in children who had few initial psychiatric symptoms (Gomes-Schwartz et al., 1991, as cited in Finkelhor & Berliner, 1995).

In their 2011 review of 27 research publications on protective factors associated with resilience to adverse outcomes following child maltreatment, Afifi & MacMillan defined resilience by its indicators: high competence and high functioning after experiencing child maltreatment. Similar to resilience to adversity in general, having a stable family environment (e.g. stable, supportive caregivers, good parental relationships, family cohesiveness, etc.) and supportive other relationships (e.g. good peer relationships, social support from outside the family, etc.) were consistently associated with resilience following child maltreatment. Related factors included satisfaction with emotional support from caregivers at disclosure, less conflict with mothers, trusting others, empowerment, and adaptive coping strategies (e.g. less drug use). Individual-level characteristics found to be correlated with resilience to child maltreatment included certain personality traits (e.g. ego resilience and ego overcontrol [impulse mastery]), positive sense of self-esteem, easy temperament, possession of daily living skills, and average or above average IQ.

Now that the peer-reviewed literature has provided a foundation of CSA-related symptomatology and evidence-based treatments for psychopathology have been developed, a closer examination of what can be done to prevent the development of long-term CSA-related psychopathology is warranted. A study by Ruggerio et al. (2004) focused on the impact of CSA disclosure on development of PTSS with a nationally representative sample of adult women ($N=3,220$). Of the women in the study, 288 (8.9%) endorsed a minimum of one CSA event involving forcible sexual penetration. After controlling for demographic and rape characteristics, women who disclosed beyond one month from the time of abuse demonstrated a significantly higher prevalence of PTSD and major depressive episodes in the last year, as compared to women who did not disclose and women who disclosed within a month of the event. This suggests individuals may have some degree of control over PTSS development in the form of disclosure: A CSA survivor who chooses to disclose CSA soon after the event (i.e. <1 month) is significantly less likely to develop PTSD and/or a major depressive episode. That is, the sooner the disclosure, the lower the survivor's risk for experiencing CSA-associated mental health difficulties.

A 1995 study by Spaccarelli and Kim measured resilience and its correlates in 43 CSA survivors via self-administered, computerized interviews (Checklist of Sexual Abuse and Related Stressors [C-SARS]). Participants for the study were girls ages 10-17 years recruited from a nonprofit clinic in Phoenix, Arizona. The median age was 14 years, and most participants identified as Caucasian (74%), with a minority of the sample identifying as Hispanic (19%) and Black (5%). Non-offending caregivers were

also recruited. Resilience was defined as “maintenance of social functioning at a level comparable to nonclinical, non-abused youths,” and “absence of clinical levels of clinical symptomatology, specifically anxiety, depression, and aggressive behaviors,” (Spaccarelli & Kim, 1995, p. 1178). A supportive relationship with a non-offending parent or caregiver was found to be related to maintaining one’s school performance, involvement in activities, and maintenance of relationships with peers following abuse. While active coping (e.g. seeking out support and solving problems) was not related to resilience, resilience was associated with a smaller likelihood of using aggressive control of others to cope. Overall, the two most significant predictors of resilience following sexual abuse were the relationship with the non-offending caregiver, and abuse-related factors including not experiencing multiple types of unwanted or inappropriate sexual contact, and not experiencing penetration of the anus or genitals.

Marriot, Hamilton-Giachritsis, and Harrop (2014) provided a more detailed look at the literature involving resilience to psychopathology development following CSA. The authors reviewed 50 studies between 1991-2010 that met the study’s criteria (i.e. participants had a CSA history, the study sought to measure resilience/positive outcomes in CSA survivors, was written in English, and was published in a peer-reviewed journal). Factors associated with resilience to psychopathology development after CSA include inner resources (e.g. external attributional style, adaptive abuse reaction, positive self-esteem) positive family relationships (positive relationships with members, family stability), social (friendships with peers, well-timed utility of social

support) and community resources, and some abuse-related factors. Interestingly, this study found no significant differences between sex or ethnicity when it comes to resilience. Younger age of CSA onset was associated with more negative outcomes, with older children displaying more resilience.

Rationale

The overarching intention of this research was to identify characteristics that may set PTSS-resilient children apart from PTSS non-resilient children. Identifying PTSS-enhancing and resilience-enhancing factors following CSA has implications for refining caregivers' and mental health practitioners' understanding of a CSA survivor's needs, and allows for targeted early intervention. Access to this information could provide caregivers and professionals in the survivor's life insight into the child's difficulties, foresight into potential future difficulties, and the opportunity to proactively address the child's needs in order to circumvent symptom magnification. The objective is to intervene before trauma symptoms begin to severely negatively impact survivors' lives long-term. The data collected at the Family Learning Program (FLP) intake presented the opportunity to obtain information chronologically closer to the CSA event(s) than past CSA studies. Obtaining information closer in time to the traumatic event, and retrieving information from the CSA survivor and another adult familiar with the individual (ideally, a caregiver), serves to enhance the accuracy and reliability of the account.

Researchers have provided evidence for a clearly overwhelming number of factors that may factor into PTSS development. Within the CSA literature reviewed

here, the variables that influence or are influenced by an individual's CSA experience, as reported by most survivors, can be categorized as: characteristics of the abuse incident(s) (e.g. frequency/duration/type of CSA), personal characteristics of the survivor (e.g. how the person handles stress, time/experience of disclosure), and the way in which the survivor's social world (e.g. friends, family, caregivers) responds to the survivor. Each of these domains was addressed in this study and represented by the study objectives. The first objective of this study was to compare PTSS-resilient children to PTSS non-resilient children on objective abuse variables. Variables assessed were: 1) relationship to perpetrator (i.e. intrafamilial abuse vs. extrafamilial abuse); 2) frequency of abuse (i.e. once [single victimization] or more than once [polyvictimization]); and 3) type of abuse (i.e. contact vs. non-contact CSA).

The second objective was to compare PTSS-resilient children to PTSS non-resilient children on individual psychosocial variables. Variables assessed were: 1) internalizing and/or externalizing problem behaviors that fall in the clinical range [i.e. a CBCL Internalizing and/or Externalizing scale scores ($T = >64$)], and 2) time of disclosure (i.e. prompt [<1 month from onset of abuse] or delayed [>1 month from onset of abuse]). This information was gathered from the NOC Clinical Intake Interview.

The third objective was to compare PTSS-resilient children to PTSS non-resilient children on modifiable environmental variables. Variables assessed were: 1) perceived belief upon disclosure (i.e. reported belief vs. reported disbelief of confidant); 2) perceived family response (reported unsupportive vs. other [e.g.

supportive response, neutral response, family unaware, or unsure]); 3) social support (i.e. reported one or more hours spent with friends on average per week vs. reported no time spent with friends on average per week); and 4) contact with perpetrator (i.e. no reported contact with perpetrator at time of FLP intake vs. reported continued contact with perpetrator at time of FLP intake).

SPECIFIC AIMS AND HYPOTHESES

Aim 1: To compare PTSS-resilient children to PTSS non-resilient children on objective abuse variables.

Hypothesis 1.1: Child CSA survivors whose identified perpetrators were within their biological family (intrafamilial abuse) will report higher rates of PTSS, as compared to those whose identified perpetrators were not within the biological family (extrafamilial abuse).

Hypothesis 1.2: Child CSA survivors who report experiencing more than one incident of CSA (polyvictimization) will report higher rates of PTSS, as compared to those who experienced only one incident of CSA (single victimization).

Hypothesis 1.3: Post-traumatic stress symptoms will be positively associated with both non-contact (i.e. no physical touching) and contact (i.e. physical touching) forms of child sexual abuse. There will be no differences in children's post-traumatic symptom scores based on type of contact form of abuse.

Aim 2: To compare PTSS-resilient children to PTSS non-resilient children on individual psychosocial variables.

Hypothesis 2.1: Child CSA survivors who report clinical internalizing and/or externalizing problem behavior [$T \geq 64$ on Child Behavior Checklist (CBCL) scales] will report higher rates of PTSS, as compared to those whose symptoms fall into the sub-clinical or non-clinical categories ($T \leq 63$ on CBCL scales). Girls will more commonly exhibit internalizing behavior problems, while boys will more commonly exhibit externalizing behavior problems.

Hypothesis 2.2: Child CSA survivors who report a delayed initial CSA disclosure (i.e. greater than one month from onset of abuse, per the NOC Clinical Intake Interview) will report higher rates of PTSS, as compared to those who report non-delayed disclosure (i.e. up to one month from onset of abuse, per the NOC Clinical Intake Interview).

Aim 3: To compare PTSS-resilient children to PTSS non-resilient children on environmental variables.

Hypothesis 3.1: Child CSA survivors who perceive the individual to whom initially disclosed did not believe their CSA account will report higher rates of PTSS, as compared to those who perceive the individual they disclosed to believed the CSA account upon initial disclosure.

Hypothesis 3.2: Child CSA survivors who perceive their family response to the disclosure to be mostly unsupportive will report higher rates of PTSS, as compared to those who perceive a different family response (i.e. unknown, neutral, mostly supportive, family is unaware of event).

Hypothesis 3.3: Child CSA survivors who spend no time with friends on a weekly basis will report higher rates of PTSS, as compared to those who spend at least one hour per week with friend(s) on a weekly basis.

Hypothesis 3.4: Child CSA survivors who report continued contact with the perpetrator at the time of FLP intake will report higher rates of PTSS, as compared to those who report no contact with the perpetrator.

Method

Participants and Procedure

Participants in this study included English-speaking children (between the ages of 8-17 years at the time of the assessment) and their parents/caregivers who completed an initial intake and assessment process in the Family Learning Program (FLP) from January 2014 until August 2018. The information retrieved from this archival data provided the basis for this study. At the time of intake, children completed a Children's Revised Impact of Event Scale-13 (CRIES-13). Parents and caregivers completed a Child Behavior Checklist (CBCL) and a Non-Offending Caregiver (NOC) Clinical Intake Interview Form, and Identifying Information Form. These measures are described below. It should be noted that FLP serves individuals in the community with varied personal backgrounds; for instance, some participants come from nuclear families, while others are in the dependency system. Thus, the caregiver providing information at intake was sometimes a non-traditional figure, such as a foster parent or Dependency Case Manager (DCM) assigned to the child.

Information was accessed via the FLP electronic health record, implemented in 2014. FLP is a Sexual Abuse Treatment Program (SATP) housed in Florida Institute of Technology (FIT), funded by the Florida Department of Health (DOH), that provides Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) to children and adolescents who have experienced sexual abuse, as well as their family members.

Informed consent was obtained at the time of intake, prior to client interviews. Participants completed a consent form denoting their agreement to use data collected during treatment for academic research purposes, as FLP is housed within an academic institution. Approval was obtained from the Florida Institute of Technology Institutional Review Board and the Florida Department of Health Institutional Review Board.

Measures

Demographics

Adult Identifying Information Form and Identifying Information Child / Adolescent Form

Participant demographics were obtained from the Identifying Information Adult Form (NOC) and Identifying Information Child / Adolescent Form, both of which are used to collect basic information on clients prior to intake. Demographic variables obtained included child age, gender, socioeconomic status (SES), marital status of parents, and race/ethnicity.

Children’s Revised Impact of Event Scale (CRIES-13)

The CRIES-13 is a brief, 13-item, child-friendly self-report measure administered at intake for FLP services, and was the primary outcome measure used in this study. The CRIES-13 lists symptoms that commonly follow a traumatic event, and respondents are prompted to select the frequency of those symptoms on a four-point scale: Not at all (0 points), Rarely (1 point), Sometimes (3 points), or Often (5 points). Total scores on the CRIES-13 range from 0 to 65. This instrument is designed to screen children ages 8-17 who are at risk for PTSD, and measures the impact of traumatic events on current functioning. This measure assesses children’s functioning on multiple common domains of PTSD symptoms, and has three subscales: Intrusion (intrusive symptoms), Avoidance (avoidant symptoms), and Arousal (arousal symptoms). The CRIES-13 has been found to have sufficient face validity, construct validity, and predictive validity to successfully screen for PTSD in children, particularly when the cutoff score is raised in order to maximize sensitivity and minimize inaccurate diagnoses (Perrin, Meiser-Stedman, & Smith, 2005).

Consistent with prior research (Perrin, Meiser-Stedman, & Smith, 2005) and FLP policy, the cutoff score for risk of PTSD in children is a score of 30. On the CRIES-13, a score of 30 or above indicates a potential PTSD diagnosis. For purposes of this study, resilience is defined as the failure to meet a cutoff score of 30 or above on the CRIES-30. Children who scored between 0-29 were categorized “PTSS-Resilient,” and those who scored 30 or above were categorized “PTSS Non-Resilient.”

Child Behavior Checklist (CBCL)

The CBCL is a questionnaire aimed to better understand a child's emotional and behavioral functioning, designed for parent or guardian completion. Some research suggests the CBCL provide a reliable, accurate assessment capable of capturing the child's experience. In 2012, Rosner, Arnold, Groh, & Hagle set out to examine the utility of the CBCL in diagnosing youth PTSD. Data came from 36 children and adolescents who experienced trauma and resided in foster care at the time of the study; foster parents completed the CBCL, and the CSA survivors were screened for PTSD, interviewed using the Clinician Administered PTSD Scale of Children and Adolescents (CAPS-CA). The researchers found the CBCL PTSD scale scores were not significantly correlated with PTSD symptom frequency and severity. It was suggested the CBCL be used in conjunction with an instrument more apt to assess childhood PTSD.

On the other hand, there is research touting the CBCL's validity in PTSD identification using the PTSD, Dissociation, and PTSD/Dissociation scales. One recent study examined CBCL data for a sample of 239 neglected children and adolescents, age 6-18 years. For convergent validity, researchers compared the CBCL data for children 12 years and under to Trauma Symptoms Checklist for Young Children and the Child Dissociation Checklist. Results indicated the PTSD and Dissociation Scales might be useful in understanding trauma symptoms in neglected children; there was convergent validity between these scales (Milot, Plamondon, Éthier, Lemelin, St-Laurent, & Rousseau, 2013).

An additional body of research focuses on the utility of CBCL scales other than the PTSD Scale in understanding trauma symptom development. Recently, in a 2016 study of children and adolescents who experienced trauma, Voelkl-Kernstock, Skala Klomfar, & Kothgassner used the German version of the CBCL to compare and contrast the functioning of children age 11-18 years ($N=41$) diagnosed with PTSD to those not diagnosed with PTSD. The Internalizing scale assesses internalizing behaviors such as social withdrawal, somatic complaints, and behaviors related to anxiety and depression. The Externalizing scale assesses externalizing behaviors related to delinquency and aggression. The authors found participants with PTSD reported significantly more problems on the “Internalizing” and “Externalizing” scales than their non-PTSD counterparts. They also found children rated their Externalizing behaviors with higher problem estimation than their parents did, which may suggest parents experience difficulty recognizing their child’s symptoms.

Although the CBCL’s PTSD-related scales seem suited for the purposes of this study, the mixed body of literature on the scales’ ability to accurately assess PTSS suggests that this measure will not be the best method of assessing risk for PTSD development. Instead, the Internalizing and Externalizing CBCL scales were used to obtain data on participants’ behavioral functioning as related to PTSS. Both scales have the same clinical cutoff score ($\geq 97^{\text{th}}$ percentile; $T = \geq 64$) (Pandolfi, Magyar, & Dill, 2012). The CBCL was also used for data on peer socialization, to better understand the impact of social functioning on PTSS development. The variable was evaluated categorically; a child’s reported “Time Spent with Friends” per week will be

coded as 1 (zero hours per week on average) or 2 (one or more hours per week on average).

Non-Offending Caregiver (NOC) Intake Interview Form and Child / Adolescent Clinical Intake Interview Form

When conducting an intake, FLP clinicians use a standard intake template to ensure consistent report information and quality across individuals. The NOC Clinical Interview Form provides guidance on what information to gather during intake. In order to maintain its funded status and meet Sexual Abuse Treatment Program (SATP) guidelines, FLP clinicians are required to obtain certain information. This regulation helps to ensure critical information is standard and documented in every report. The following variables were obtained from the NOC Clinical Interview Form: 1) frequency of CSA (categorical variable – single or polyvictimization); 2) type of abuse (categorical variable – contact or non-contact abuse); 3) relationship to perpetrator (categorical variable – intrafamilial or extrafamilial perpetrator); 4) survivor’s present contact with perpetrator (categorical variable – no contact vs. some contact with perpetrator); time of disclosure (categorical – prompt [up to one month from onset of abuse] or delayed [more than one month from onset of abuse]); 5) caregiver belief (categorical variable – reported belief vs. reported disbelief); and 6) perceived family support (categorical variable - reported unsupportive vs. other [e.g. supportive response, neutral response, family does not know, or unsure]).

Design/Data Analysis

This study utilized a cross-sectional design. Information was entered into a HIPAA-compliant database and all personal identifying information was de-identified with minimal risk of breaching confidentiality. Descriptive statistics, including means, standard deviations, and frequencies were calculated for patient demographics, the primary outcome (PTSS scores), and other abuse variables. As the variables used in this study are categorical, chi-square tests were used to assess the relationship between resilience and some categorical variables. Given the limited sample size, some cells in the cross-tabulations were smaller than five and violated the assumptions for chi-square analyses, requiring that a Fisher's Exact test be conducted. When possible, the association between demographic variables and PTSS outcomes, as well as abuse, psychosocial, and environmental variables, were examined. The difference between resilient and non-resilient groups on age was evaluated using an independent t-test. As this was an exploratory study, all analyses were considered significant at the $p < .05$ level. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) –version 25.0.

Results

Participants

A total of 27 participants were enrolled in this study. Female participants comprised 66.7% of the sample ($n=18$), and 33.3% identified as male ($n=9$). Participants had a mean age of 13.15 years, with a standard deviation of 2.52. Regarding participant race, 14 (51.9%) of the participants identified as Caucasian, 6 (22.2%) as African American, 3 (11.1%) as Asian, 3 (11.1%) as Hispanic, and 1 (3.7%) as Other. The majority ($n=24$) of participants elected not to report SES; of those who did so, the relationship between resilience and SES was not significant, $X^2(2, n=3) = 3.00, p = 0.22$ (see Table 3). One (3.7%) caregiver reported a family SES of <\$10,000 per year, one reported \$10,000-\$19,999 per year, and one reported \geq \$50,000 per year. Data regarding parents' marital status was available from nineteen participants; of those 19 participants, 5 (18.5%) identified as married, and 14 (51.9%) identified as not married. Demographic information is presented in Table 1.

Resilience to PTSS and demographics

Resilience was evaluated in terms of meeting or exceeding the CRIES-13 recommended cutoff score (≥ 30) for PTSS symptomatology that may indicate a potential PTSD diagnosis. In this sample of children, 15 (55.6%) participants' scores fell in the PTSS Non-Resilient category (score ≥ 30), while 12 (44.4%) participants' scores fell in the PTSS-Resilient category (score < 30). Frequencies for demographic

variables across the resilience groups are presented in Table 3. Chi Square tests of independence and Fisher's Exact tests were conducted to examine the relationship between resilience and participant demographic variables. An independent-samples t-test was conducted to compare age between the resilient ($n=12$) and non-resilient ($n=15$) groups. There was not a significant difference in age between the resilient group ($M=13.92$ years $SD=2.54$) and the non-resilient group ($M=12.53$, $SD=2.42$); $t(25) = 1.45$, $p = 0.16$. There was no significant association between resilience and gender, (Fisher's exact test, $p > .05$), or race, $\chi^2(1, N=27) = 0.03$, $p = 0.86$. For the nineteen participants who provided data on parent marital status, there was a significant relationship between resilience and marital status (Fisher's exact test, $p=0.045$). Children whose parents were married were more likely to display resilience to PTSS.

Resilience to PTSS and abuse variables

Data on the frequency of abuse variables is presented in Table 2, and their relationship to resilience is indicated in Table 4. Of the 24 participants who provided data regarding CSA abuse type (i.e. contact, non-contact), 100% of respondents reported the child CSA survivor experienced contact abuse, with none reporting solely non-contact abuse (see Table 2). Of the 24 participants in the contact abuse group, 11 (45.8%) participants who experienced contact abuse fell into the resilient category, while 13 (54.2%) fell into the non-resilient category (see Table 4). Therefore, a chi-

square analysis was conducted to examine differences in the proportion of participants who experienced contact abuse only between the resilient and non-resilient groups. Results showed that these frequencies were not significantly different, $\chi^2 (1, n=24) = 0.17, p=0.68$; see Table 4).

Twenty-two ($n=22$) participants provided data on abuse frequency; within this group, 4 (18.2%) survivors reported experiencing the CSA event only once (single victimization), and 18 (81.8%) reported experiencing CSA more than one time (polyvictimization). No significant association was found between resilience and abuse frequency (Fisher's exact test, $p=.09$) (see Table 4). Data on perpetrator relationship to the CSA survivor was available for 24 participants; 12 participants (50%) reported the perpetrator was a member of the survivor's biological family, and the remaining 12 participants (50%) reported the perpetrator was not a member of the biological family. The relationship between resilience and the survivor's relationship to the perpetrator was not significant, $\chi^2 (1, n=24) = 0.17, p = 0.68$, suggesting similar outcomes in resilience following CSA, regardless of whether the perpetrator is a biological family member (see Table 4).

Twenty-one ($n=21$) respondents provided information on the survivor's contact with the perpetrator since the initial time of disclosure. Of these 21 respondents, 7 (33.3%) reported contact between the survivor and perpetrator since disclosure, while the majority ($n=14, 66.7%$) reported no contact with the perpetrator since disclosure. The relationship between resilience and contact with the perpetrator post-disclosure was not significant (Fisher's Exact, $p>.05$). This suggests that

survivors who have and have not had contact with their perpetrators were similarly likely to display resilience following a CSA event (see Table 4).

Resilience to PTSS and individual psychosocial variables

Frequencies for the individual psychosocial variables in the total sample are shown in Table 2 and for the two resilience groups in Table 4. Data from 22 respondents in this study was available for the CBCL Internalizing Problems and Externalizing Problems scales. Responses from this group indicated 12 children (54.5%) displayed internalizing behaviors in the clinical range, while 10 children (45.5%) displayed internalizing behaviors that fell into the non-clinical range. Regarding externalizing behaviors, 6 (27.3%) children fell into the clinical range, and 16 (72.7%) fell into the non-clinical range. The relationship between resilience and CBCL Internalizing Problems was not found to be significant (Fisher's Exact test $p>.05$); nor was the relationship between resilience and CBCL Externalizing Problems (Fisher's Exact test, $p>.05$). These data suggest that engaging in internalizing or externalizing behaviors is not related to resilience to PTSS following CSA (see Table 4).

In order to examine the relationship between gender and CBCL Internalizing Problems and Externalizing Problems scores, a Fisher's Exact test was conducted. Data for this test was available from 22 participants. Of the participants who identified as female, their scores on CBCL Internalizing Problems were evenly split, with 7

(50% of females) scoring in the clinical range, and the other 7 (50%) scoring in the non-clinical range. In the male group, 5 (62.5% of males) scored in the clinical range on internalizing problems, and 3 (37.5% of males) scored in the non-clinical range. Regarding externalizing problems, females were again split between clinical ($n=5$, 35.7% of females) and non-clinical scores ($n=9$, 64.3% of females); the majority of males' externalizing behavior scores fell into the non-clinical range ($n=7$, 87.5% of males), with only one (12.5% of males) scoring in the clinical range. Based on these data, no significant relationship was found between gender and internalizing or externalizing problems, per the CBCL scales (Fisher's Exact tests, $p>.05$). This suggests boys and girls in this sample were equally likely to display both clinical and non-clinical internalizing and externalizing behaviors.

For comparative purposes only, an independent samples t-test was conducted to examine the differences in CBCL Total Score between the two resilience groups. Participants were split evenly between the resilient group ($n=10$, $M=71.00$, $SD=17.38$) and the non-resilient group ($n=10$, $M=58.0$, $SD=13.75$) and the results were not significant, $t(18)= 1.86$, $p=0.08$. Though not statistically significant, survivors in the resilient category had a higher mean CBCL score than their non-resilient group counterparts, indicating a greater number of behavior problems for CSA survivors who display resilience following CSA.

Twenty-one of this study's 27 participants provided data on time of disclosure following the onset of CSA (i.e. ≤ 1 month [prompt] or >1 month [delayed]). Of these 21 participants, 2 (9.5%) reported engaging in prompt disclosure, while the majority

($n=19$, 90.5%) reported delayed disclosure. Resilience to PTSS following CSA was not significantly associated with time of disclosure, (Fisher's Exact, $p>.05$).

Resilience to PTSS and environmental variables

Descriptive data regarding frequencies for environmental variables for the total sample is presented in Table 2, and these variables are examined alongside resilience in Table 4. Seventeen respondents provided data regarding perceived caregiver belief following CSA disclosure. Of these 17 individuals, 12 (70.6%) reported their parents totally believed their account, 2 (11.8%) indicated the caregiver had at least some disbelief about the account, and 3 (17.6%) reported they were unsure whether their caregiver(s) believed them or not. For analyses, "Unsure" responses were combined with the "Some Disbelief" responses. Results showed a significant relationship between resilience and caregiver belief following disclosure (Fisher's exact test, $p=.03$) All participants in the Resilient group reported they thought their caregivers fully believed their CSA account upon disclosure. This suggests children who perceived their caregiver(s) believed their account upon disclosure were more likely to display resilience to PTSS following CSA (see Table 4).

Sixteen ($n=16$) respondents in this sample provided data on the survivor's perception of their familial support following CSA disclosure. Of these 16 respondents, 9 (56.3%) indicated their families were totally supportive of them following disclosure, while 7 (43.8%) reported a mixed supportive/unsupportive

response. Using available data from 16 participants, the relationship between resilience and perceived family support in the wake of CSA disclosure was not found to be significant (Fisher's Exact, $p > .05$). Data regarding time spent with friends (i.e. less than or more than one hour per week spent with friends outside of school) was provided for 23 participants. Within this group of 23, 14 (60.9%) reported spending less than one hour per week with friends, and 9 (39.1%) reported spending one or more hours per week with friends. No significant association between resilience and time spent with friends was found, (Fisher's Exact test, $p > .05$). This suggests that individuals who spend less than an hour with friends per week and those that spend an hour or more are similarly likely to display resilience to PTSS following CSA.

Discussion

Impact of Study

Child sexual abuse has long been linked to both short-term and long-term mental health problems, including symptoms of PTSS (Beitchman et al., 1992; Beitchman, Zucker, Hood, & Akman, 1991; Friedrich et al., 1986, and Johnston, 1979, as cited in Beitchman, Zucker, Hood, & Akman, 1991). More recently, researchers have taken to expanding the literature to include not only CSA effects, but also factors affecting positive psychological growth following a CSA experience (Prati and Pietrantonio, 2009). Approximately 44% of this study sample was identified as resilient on the basis of the CRIES-13 measure and somewhat buffered against their current stressors. Examination of the existing literature on resilience or short-term CSA

effects is necessary to help contextualize the present CSA resilience statistics. In fact, this finding is consistent with Finkelhor and Berliner's 1995 meta-analysis of studies on CSA symptoms. In this review, 40% of child CSA survivors in 29 different research studies demonstrated few or no psychiatric symptoms. Noted throughout the literature review, however, is the challenging nature of child maltreatment data. CSA often goes unreported, delayed disclosure is more common than prompt disclosure, and data collection is non-uniform. These challenges, along with the unique design of the present study (e.g. new variables, data collection during childhood instead of retrospective adult recall, etc.), make meaningful comparisons difficult. Identification of increasingly specific factors that may enhance a child's resilience following the trauma of CSA is a natural next step. What follows are implications for not only informing and empowering caregivers and service providers of CSA survivors, but also offering the survivor an opportunity to take back control of a portion of their lives in the midst of the inevitable chaos following CSA disclosure.

Of note is that some of the same variables that have been demonstrated to impact resilience after an extended period of time following CSA were found to also influence resilience in the present study. More specifically, using our assessment measures administered closer in time to the traumatic event than most past CSA effect researchers were able, it demonstrated themes of perceived caregiver beliefs of the child's CSA account upon disclosure and resilience again emerged. In support of Spaccarelli & Kim's (1995) findings on interpersonal factors impacting resilience following CSA, the present study found a significant relationship between resilience

and a child's perception that their parents wholly believe their CSA account upon disclosure. CSA disclosure is a memorable event in a child's life. Particularly for those whose disclosure is delayed, the initial disclosure is a vulnerable moment during which children overcome the fear and effects of whatever grooming the perpetrator utilized to keep this child compliant, and speak about what is often the most traumatic event of the child's life to date. An important part of the post-traumatic growth process is allowing a child to communicate honestly with those closest to her/him, and these results suggest caregivers have the power to significantly impact a child's resilience simply by responding to CSA disclosure in an accepting, validating manner that communicates the caregiver believes the child's account.

Perhaps less within the control of the caregiver, another factor found to be significantly related to children's resilience following CSA was parent marital status. Beitchman, Zucker, Hood, & Akman (1991) noted CSA survivors in their study came from families the authors referred to as "disturbed," which encompassed families identified as separated or divorced. Herrman et al. (2011) found resilience to be significantly related to a stable family environment. In this study, of the participants whose parents' marital status was provided, all ($n=5$) children whose parents were married were identified as resilient, while 8 (of 14) children whose parents were not married were identified as non-resilient. Of course, this does not mean that staying married to a spouse ensures a child will not develop PTSS following trauma. Rather, perhaps it should be conceptualized as another factor that may promote an atmosphere

of safety and stability – key for the wellbeing of a child who has just experienced a trauma.

Similar to the findings on caregiver belief, the present study revealed a trend between resilience and perceived family support following CSA disclosure. Of the participants who provided data on perceived family support, the majority (77.8%) of children classified as resilient perceived their families as supportive following disclosure, with 22.2% perceiving their family's reaction as either mixed or unsupportive. Additionally, the majority of children in the non-resilient category (71.4%) perceived their families' reactions as either mixed or unsupportive. These trends are consistent with Herrman et al.'s (2011) study that further evidenced the impact of social support, particularly family relationships, on resilience following trauma, as well as Afifi & MacMillan's (2011) work highlighting the importance of a stable family environment (e.g. supportive caregivers, good parental relationships). So, it follows that with effective psychoeducation on how to best support a child who has disclosed a CSA experience, caregivers may have a significant impact on a child's recovery following this trauma.

As Spaccarelli & Kim (1995) noted, multiple instances of unwanted or inappropriate sexual contact is related to non-resilience. Although results were not significant, the present study found trends in the data regarding resilience and number of CSA incidents. Of the individuals who provided data on frequency of abuse, every participant in the Non-Resilient group reported experiencing polyvictimization, and the single victimization group was comprised of only resilient participants. Given this

information, if a child is provided proper psychoeducation on identification of grooming indicators (and actual abuse behaviors) prior to a traumatic event, and encouraged to talk to an adult when that happens, it may increase the likelihood of prompt disclosure by the child, hopefully putting a stop to the abuse before another incident takes place. Furthermore, if the child discloses promptly, and particularly if the child is met with perceived belief, this enhances the child's chances of being resilient to PTSS. Providing children age-appropriate psychoeducation with regard to this situation is within the power of the caregiver.

While Friedrich et al. (1986; as cited in Beitchman, Zucker, Hood, & Akman, 1991) drew a significant association between externalizing behaviors and being male, the present study was unable to duplicate that finding. Contrary to this study's hypothesis, there was not a significant relationship between gender and externalizing or internalizing behaviors; males and females within this study were similarly likely to exhibit symptoms of either behavior set. Moreover, the relationship between level of internalizing or externalizing behavior (i.e. clinical or non-clinical score) was not significantly related to resilience. While small groups likely impacted the power of these analyses to an extent, another factor important to keep in mind is that these assessments are based on parent or caregiver report. The Family Learning Program serves children from diverse family situations. For instance, while a biological mother who spends much of her day with her child is likely to be more accurate in her CBCL responses, a DCM assigned to a child's case in the dependency system may complete the same CBCL, though with far less experiences from which to draw her/his

conclusions. Thus, caregiver experience with, and bias toward, the CSA survivor during the CBCL must be taken into account when conceptualizing these non-significant results.

Ruggerio et al. (2004) found a significant relationship between time of disclosure and resilience, reporting that a CSA survivor who discloses the CSA experience within a month of the event is significantly less likely than a delayed discloser to develop PTSD or a major depressive episode. Of course, that study was able to draw data from a nationally representative sample of adult women who experienced CSA ($n=3,220$), increasing the chances of a more accurate result. Contrary to this study's hypothesis, there was no significant relationship between prompt disclosure and increased resilience to PTSS in child CSA survivors. In the present study, only 2 of 21 participants who provided information on time of disclosure reported prompt disclosure, while 19 reported delayed disclosure. As Ceci and Friedman (2000) noted, there are no definitive statistics regarding child maltreatment, which occurs for many reasons. One common reason for this is that child maltreatment often goes unreported. Children often fear disclosure due to threats and emotional manipulation by the perpetrator. However, the present study's group sizes are small and limit meaningful conclusions. Unfortunately, until our culture reaches a point that empowers maltreated children to feel important enough to disclose their trauma experiences regularly, CSA statistics are unlikely to prove accurate enough to draw meaningful conclusions, even with sample sizes that may exceed that of the current study.

Limitations and Future Directions

Notably, this study was retrospective and based on an archival dataset, such that variables included in our analyses were restricted to those obtained as part of a larger study. As such, data from the majority of participants eligible to be included in this study included demographic variables; abuse, individual and psychosocial, and environmental variables were not always available for analysis. As a number of variables regarding children's CSA experiences were not consistently collected at intake, it was not possible to draw meaningful conclusions regarding resilience and variables beyond demographics. Studying resilience as it specifically relates to characteristics of a child's CSA survival experience is an important direction for future research.

Next, although a limitation in many prior studies examining the impact of CSA, the proposed study does not include a control group of children who reported never experiencing CSA. This does not allow for the determination of meaningful conclusions about the nature of resiliency factors as they relate specifically to a CSA survivor population (Finkelhor, 1994). Some of information obtained in this study relies on parent report; based on many variables that characterize a parent-child relationship (e.g. time spent together, parent perception of the child), a particular parent may or may not provide an objectively accurate representation of the child's functioning. Also, because FLP serves a sizeable amount of children from the dependency system, guardians are asked to complete the CBCL. The quality of

information provided by some guardians may vary based on the quality/quantity of time spent together in a guardian-child relationship (e.g. DCM, new foster parent).

The sample size for this study was small and limited in diversity, which limits its representativeness and generalizability to the larger population. It is likely that the small sample size restricts the range of our measures and the resulting variance needed to examine relationships and meaningful differences between resilient and non-resilient children. The results from this study, therefore, should be interpreted with caution. A truer test of the study hypotheses would require larger and more diverse sample sizes. In addition, the data was obtained at a single point in time, which limits the evaluation of posttraumatic symptoms over time; this is important, as while some symptoms may occur immediately, others may develop over time. Thus, this study does not capture PTSS development longitudinally following CSA - this should be the focus of future research.

Table 1
Child Demographic Information

Variable	<i>Total sample (N=27)</i>
	M (SD)
Age	13.15 (2.52)
	<i>n (%)</i>
Gender	
Female	18 (66.7%)
Male	9 (33.3%)
Race	
Caucasian	14 (51.9%)
African American	6 (22.2%)
Asian	3 (11.1%)
Hispanic	3 (11.1%)
Other	1 (3.7%)
Socioeconomic Status	
< \$10,000/year	1 (3.7%)
\$10,001-\$19,999/year	1 (3.7%)
≥ \$50,000/year	1 (3.7%)
Missing	24 (88.9%)
Parent Marital Status	
Married	5 (18.5%)
Not Married	14 (51.9%)
Missing	8 (29.6%)

Note. Some caregivers elected not to disclose SES upon intake. As such, SES frequencies are not representative of the total sample.

Table 2 (cont. next page)*Descriptive Statistics – Child Resilience, Abuse, Individual Psychosocial, and Environmental Variables*

Variable	<i>n</i> (%)	<i>Total sample (N=27)</i>
PTSS Resilience		
PTSS-Resilient	12 (44.4%)	
PTSS Non-Resilient	15 (55.6%)	
Abuse Type		
Contact Abuse	24 (88.9%)	
Non-Contact Abuse	0 (0.0%)	
Missing	3 (11.1%)	
Abuse Frequency		
Single Victimization	4 (14.8%)	
Polyvictimization	18 (66.7%)	
Missing	5 (18.5%)	
Relationship to Perpetrator		
Intrafamilial (biological)	12 (44.4%)	
Extrafamilial	12 (44.4%)	
Missing	3 (11.1%)	
Contact with Perpetrator		
Contact Since Disclosure	7 (25.9%)	
No Contact Since Disclosure	14 (51.9%)	
Missing	6 (22.2%)	
CBCL Internalizing		
Clinical Range (T \geq 64)	12 (44.4%)	
Non-Clinical Range (T<64)	10 (37.0%)	
Missing	5 (18.5%)	
CBCL Externalizing		
Clinical Range (T \geq 64)	6 (22.2%)	
Non-Clinical Range (T<64)	16 (59.3%)	
Missing	5 (18.5%)	
Time of Disclosure		
Prompt	2 (7.4%)	
Delayed	19 (70.4%)	
Missing	6 (22.2%)	

Perceived Caregiver Belief	
Total Belief	12 (44.4%)
Some Disbelief	3 (11.1%)
Unsure	2 (7.4%)
Not Applicable	2 (7.4%)
Missing	8 (29.6%)
Perceived Family Support	
Supportive	9 (33.3%)
Mixed Supportive/Unsupportive	7 (25.9%)
Missing	11 (40.7%)
Time Spent with Friends	
< 1 hour/week	14 (51.9%)
≥ 1 hour/week	9 (33.3%)
Missing	4 (14.8%)

Note. Some caregivers elected not to provide information on all variables, and not all participants' Clinical Intake Interview Forms included all data required for analyses. Missing values are labeled "Missing" in the frequency table.

Table 3
Relationship between Resilience and Child Demographic Variables

Variable	Resilience		<i>Sample N=27</i>		
	Resilient (n=12)	Non-Resilient (n=15)			
	M (SD)	M (SD)	<i>t</i>	<i>p</i>	
Age	13.92 (2.54)	12.53 (2.42)	1.45	0.16	
	<i>n (%)</i>	<i>n (%)</i>	Total	X^2	<i>p</i>
Gender				---	1.00 ^F
Female	8 (29.6%)	10 (37.0%)	18		
Male	4 (14.8%)	5 (18.5%)	9		
Race**				0.03	0.86
Caucasian	6 (22.2%)	8 (29.6%)	14		
Non-Caucasian	6 (22.2%)	7 (25.9%)	13		
Socioeconomic Status				3.00	0.22
< \$10,000/year	1 (33.3%)	0	1		
\$10,001-\$19,999/year	0	1 (33.3%)	1		
≥ \$50,000/year	0	1 (33.3%)	1		
Parent Marital Status				---	0.045 ^{F *}
Married	5 (26.3%)	0 (0.00%)	5 (26.3%)		
Not Married	6 (31.6%)	8 (42.1%)	14		

Note. Some caregivers elected not to disclose SES upon intake. Additionally, data on marital status was not reported for all participants. As such, SES and Parent Marital Status frequencies are not representative of the total sample.

^F Analyzed using Fisher's Exact test.

**p*<.05

**For analyses, race was identified as Caucasian vs. Non-Caucasian.

Table 4 (cont. next page)*Relationships between Resilience and Objective Abuse, Psychosocial, and Environmental Variables*

Variable	Resilience		Sample (N=27)		
	Resilient (n=12)	Non-Resilient (n=15)			
	M (SD)	M (SD)	<i>t</i>	<i>p</i>	
CBCL Total Score*	71.00 (17.38)	58.0 (13.75)	1.86	0.08	
Abuse Type**	<i>n</i> (%)	<i>n</i> (%)	Total	X ²	<i>p</i>
Contact Abuse	11 (45.87%)	13 (54.2%)	24	0.17	0.68
Non-Contact Abuse	0 (0.00%)	0 (0.00%)	0		
Abuse Frequency				---	0.09 ^F
Single Victimization	4 (18.2%)	0 (0.00%)	4		
Polyvictimization	7 (31.8%)	11 (50.0%)	18		
Relationship to Perpetrator				0.17	0.68
Intrafamilial (biological)	6 (25.0%)	6 (25.0%)	12		
Extrafamilial	5 (20.8%)	7 (29.2%)	12		
Contact with Perpetrator				---	1.00 ^F
Contact Since Abuse	3 (14.3%)	4 (19.0%)	7		
No Contact Since Abuse	7 (33.3%)	7 (33.3%)	14		
CBCL Internalizing				---	0.23 ^F
Clinical Range (T≥64)	7 (31.8%)	5 (22.7%)	12		
Non-Clinical Range (T<64)	3 (13.6%)	7 (31.8%)	10		

^F Analyzed using Fisher's Exact test.

*For descriptive purposes only, CBCL Total Scores between the Resilient and Non-Resilient groups were compared using an independent-samples t-test.

**A chi-square analysis was conducted to examine the differences in proportions of participants who experienced contact abuse between the Resilient and Non-Resilient groups.

Table 4

CBCL Externalizing				---	1.00 ^F
Clinical Range (T \geq 64)	3 (13.6%)	3 (13.6%)	6		
Non-Clinical Range (T<64)	7 (31.8%)	9 (40.9%)	16		
Time of Disclosure				---	1.00 ^F
Prompt	1 (4.8%)	1 (4.8%)	2		
Delayed	8 (38.1%)	11 (52.4%)	19		
Perceived Caregiver Belief				---	0.03 ^{F***}
Total Belief	8 (47.1%)	4 (23.5%)	12		
Some Disbelief *****	0 (0.00%)	5 (29.4%)	5		
Perceived Family Support				---	0.13 ^F
Supportive	7 (43.8%)	2 (12.5%)	9		
Unsupportive*****	2 (12.5%)	5 (31.3%)	7		
Time Spent with Friends				---	0.20 ^F
<1 hour/week	8 (34.8%)	6 (26.1%)	14		
\geq 1 hour/week	2 (8.7%)	7 (30.4%)	9		

Note. Some caregivers elected not to provide information on all variables, and not all participants' Clinical Intake Interview Forms included all data required for analyses.

^F Analyzed using Fisher's Exact test.

*** $p < .05$

****For analyses, "Some Disbelief" responses were combined with "Unsure" responses and compared to "Total Belief" responses for the Perceived Caregiver Belief analysis; "Unsupportive" responses were combined with "Mixed" responses and compared to "Supportive" responses for the Perceived Family Support analysis

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