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INCREASING STUDENTS' AND NEW PROFESSIONALS' KNOWLEDGE OF CHILD SEXUAL ABUSE OUTCOMES: AN EVALUATION OF AN ONLINE INTERVENTION

by

Kate Theimer

A DISSERTATION

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INCREASING STUDENTS' AND NEW PROFESSIONALS' KNOWLEDGE OF CHILD SEXUAL ABUSE OUTCOMES: AN EVALUATION OF AN ONLINE INTERVENTION

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University of Nebraska, 2019

Advisor: David J. Hansen

Following disclosure, support from professionals (e.g., mental health clinicians, social workers, health care providers, teachers) can help increase resiliency in youth who experience child sexual abuse (CSA). Particularly, those who respond compassionately and competently, believe and report the abuse, do not blame the victim, and increase the family's protective factors are best suited to decrease negative outcomes. Yet, research shows that many professionals are not adequately prepared to support families due to insufficient knowledge and misinformed beliefs (Pelisoli, Herman, & Dell'Aglio, 2015). Moreover, few assessments measure knowledge specific to the *aftermath* of CSA and few interventions aim to increase professional knowledge on outcomes with the goal of increasing child resiliency. Therefore, the purpose of this project was to (a) develop and evaluate a measure to assess knowledge and beliefs about the consequences of CSA and (b) develop and evaluate an online intervention that provides students and developing professionals with information about CSA outcomes, corrects misperceptions, and empowers adults to increase child resiliency. Two studies were completed to meet these aims.

Findings from Study 1 confirmed that a sample of 143 university students and developing professionals lacked sufficient knowledge about CSA outcomes. The

instrument created was determined to be suitable at measuring CSA knowledge and beliefs. The 408 participants in Study 2 first completed the pre-treatment measure of CSA knowledge, were randomly assigned to the online CSA intervention or the attention control group (training on youth development), then completed the post-treatment measure. A subset of the sample completed the CSA assessment again two weeks after initial participation to measure retention.

Findings showed that the CSA webinar significantly increased participants' knowledge of CSA outcomes and changed unsupportive beliefs. The control group demonstrated a nominal, yet significant, increase from pre- to post-test. Those who received the CSA training held more knowledge and supportive beliefs than those in the control group and this knowledge was broadly retained two weeks after completion of the training. Participants reported the CSA intervention was valuable and increased their motivation to support survivors. While several CSA-related interventions exist for adults, this intervention addressed gaps in current training efforts.

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CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Child sexual abuse (CSA) is a worldwide problem that affects youth of all ages, genders, ethnicities, cultures, and socio-economic circumstances. Based on the number of children impacted, the potential deleterious consequences on the child and family, and the economic burden on society (Fang, Brown, Florence, & Mercy, 2012; Paolucci, Genuis, & Violato, 2001), significant efforts must be in place to protect children from victimization and support children following CSA disclosure. Specifically, professionals and lay adults who interact with youth who have been sexually abused must be competent and informed to ensure they are providing support and increasing child resiliency. Below, the definition, prevalence, and impact of child sexual abuse will be presented, including a discussion on the factors which associate with resilient outcomes. Additionally, the ways in which professionals and other adults interact with CSA survivors as well as current assessments and interventions used in these populations to measure and increase CSA-related knowledge will be discussed.

Definition, Prevalence, and Impact of Child Sexual Abuse

While CSA has been widely studied, definitions vary across countries, states, and organizations as well as in research and clinical endeavors (Haugaard, 2000). Broadly, child sexual abuse can be defined as any inappropriate interaction of a sexual nature between an adult and a child (Haugaard, 2000). Some definitions also include inappropriate sexual interactions between minors, when one minor is exerting power over the other (World Health Organization, 1999). Child sexual abuse includes contact acts, such as fondling or penetration of a youth's private parts, as well as non-contact acts, such as showing pornography to a child. While exact definitions of child sexual abuse

vary, the United States federal government lays a minimum foundation for the legal definition which is outlined in the Child Abuse Prevention and Treatment Act (CAPTA):

Child sexual abuse is "the employment, use, persuasion, inducement, enticement, or coercion of any child to engage in, or assist any other person to engage in, any sexually explicit conduct or simulation of such conduct for the purpose of producing a visual depiction of such conduct; or the rape, and in cases of caretaker or inter-familial relationships, statutory rape, molestation, prostitution, or other form of sexual exploitation of children, or incest with children" (Public Law 111-320; 42 U.S.C. 5101 et seq; 42 U.S.C. 5116 et seq.)

Each U.S. state may build upon this federal definition when determining state law, including descriptions of specific sexually abusive acts, the age of consent, and age difference requirements between the victim and offender. Thus, definitions differ from state to state. Furthermore, legal definitions may differentiate between the terms "child sexual abuse" and "child sexual assault," where child sexual abuse intends to describe victimization perpetrated by a parent or caregiver, and child sexual assault intends to describe victimization by someone not in a caregiving role (Friedenberg, Hansen, & Flood, 2013). For example, the Department of Health and Human Services (DHHS) Children's Bureau describes child sexual abuse as "activities by a *parent or caregiver* such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials" (Child Welfare Information Gateway, 2013, p. 4). However, the terms "child sexual abuse" and "child sexual assault" are often synonymous in clinical and research practices, where clinicians and researchers may not use different terms based on the perpetrator's relationship to the child (Friedenberg et al., 2013). Federal and state definitions of child sexual abuse are more precise so that Child Protective Services (CPS), DHHS, and law enforcement can determine if there is enough evidence to show the alleged sexual act occurred, establish what efforts must be taken to ensure the safety of the child, determine criminal charges against the offender, and establish sentencing of convicted offenders.

Just as the definition of child sexual abuse varies, so do published estimates of the prevalence. Even with significant efforts attempting to capture the occurrence of the problem (U.S. DHHS, 2019), the actual prevalence of child sexual abuse is unknown. This is, in part, because many children never come forward and many children wait prolonged periods of time before disclosing. Using official police and DHHS records (such as those collected from the National Child Abuse and Neglect Data System) to understand the prevalence of child sexual abuse significantly underestimates the true occurrence of the problem because these official records only include abuse incidences that were reported to state and local agencies. Because of this, many estimates of the incidence of child sexual abuse in the literature come from retrospective reports using adults. Yet, reports from different studies can produce vastly different prevalence rates because of varying definitions of the term "child sexual abuse," as described above. Despite these limitations, a recent review of the research on CSA prevalence estimates that "about 1 in 10 children will be sexually abused before they turn 18" (Townsend & Rheingold, 2013, p. 21). When broken down by gender, the review showed that "about 1 in 7 girls and 1 in 25 boys will be sexually abused before they turn 18" (Townsend & Rheingold, 2013, p. 21). Yet, even this prevalence rate only reflects contact offenses (Townsend & Rheingold, 2013). Another widely cited prevalence rate comes from the

Adverse Childhood Experiences Survey. Results showed that, of the adults sampled, 24.7% of women and 16% of men reported having experienced sexual abuse in childhood (Centers for Disease Control and Prevention, Kaiser Permanente, 2016). Sexual abuse in this study was defined as touching or fondling or attempted or completed anal, oral, or vaginal intercourse by an individual at least five years older. Based on these results, the "1 in 4 women and 1 in 6 men reported having experienced sexual abuse in childhood" prevalence rate was popularized in the professional literature and lay community. This prevalence rate showcased the pervasiveness of CSA. Overall, while prevalence rates vary, studies consistently show that child sexual abuse is common and widespread.

Given the large number of children who have experienced CSA, significant research efforts have examined the effect of victimization on children. Exposure to sexual abuse in childhood is associated with a vast array of outcomes, making survivors of CSA a heterogeneous group (Putnam, 2003; Yancey, Hansen, & Naufel, 2011). Research consistently shows that children who are sexually abused are at risk for experiencing mental health, behavioral, social, and physical health problems (Arata, 2002; De Bellis, Spratt, & Hooper, 2011; Kendall-Tackett, Williams, & Finkelhor, 1993; Maniglio, 2009; Paolucci et al., 2001; Putnam, 2003; Tyler, 2002). Mental health symptoms and disorders may include depression, anxiety, posttraumatic stress, and Posttraumatic Stress Disorder (PTSD) as well as suicidal ideation, suicidal behavior, selfharming behavior, and problems with self-esteem (Klonsky & Moyer, 2008; Maniglio, 2009; Paolucci et al., 2001). Some victims may exhibit sexual behavior problems or developmentally-inappropriate sexual behaviors (Kendall-Tackett et al., 1993; Maniglio, 2009). Additionally, some youth are at risk for engagement in risky sexual behavior, such as unprotected sex and having more sexual partners (Maniglio, 2009). Engagement in risky sexual behaviors can associate with contracting sexually transmitted infections and having an unintended pregnancy. Following sexual abuse, youth are also at risk for experiencing conduct or behavioral problems, aggression, substance use and abuse, academic problems, and relationship problems (Maniglio, 2009). Further, victimization is associated with poorer health-related quality of life as sexual abuse can have negative health and neurobiological outcomes. For example, these can include chronic noncyclical pelvic pain, non-epileptic seizures, and dysregulation of the brain's hypothalamic-pituitary-adrenal (HPA) axis (De Bellis et al., 2011; Latthe, Mignini, Gray, Hills, & Khan, 2006; Sharpe & Faye, 2006). Finally, CSA survivors are at increased risk for experiencing subsequent sexual victimization, termed revictimization, in childhood as well as in adulthood (Arata, 2002; Maniglio, 2009).

Despite the potential risk for developing significant and long-lasting problems, some children are highly resilient and do not face substantial problems following sexual abuse (e.g., Domhardt, Münzer, Fegert, & Goldbeck, 2015; Kendall-Tackett et al., 1993; Yancey et al., 2011). For example, some children only experience limited, short-term problems that later go away. And, some youth do not experience any significant negative outcomes and quickly return to pre-abuse functioning. Specifically, studies show that between 10 and 53% of survivors present with no significant symptoms (Domhardt et al., 2015). Additionally, among those who experience clinical problems, studies have found that many children's symptoms decrease over time and most children see improvement in their symptoms when measured 12 and 18 months later (Kendall-Tackett et al., 1993). Although, this is not to say that some children's symptoms do not worsen over time. Even if a child does not present with significant symptoms, the provision of services and mental health treatment can be beneficial (Tavkar & Hansen, 2011). These services may focus on providing education to the child and family to prevent revictimization in the future. Moreover, it is possible for some children to not experience immediate negative outcomes, but develop them later (Mannarino, Cohen, Smith, & Moore-Motily, 1991; Saunders, Kilpatrick, Hansen, Resnick, & Walker, 1999; Widom, 1999). Thus, timely treatment – even with asymptomatic children – may act to enhance coping and further reduce potential negative consequences.

Overall, there is a large range of outcomes for children who experience sexual abuse and there is no one pattern of symptoms exhibited by victims (Domhardt et al., 2015; Hubel et al., 2014; Maniglio, 2009; Marriott, Hamilton-Giachritsis, & Harrop, 2014; Putnam, 2003). Reactions to traumatic events can vary significantly depending on the individual, making survivors of child sexual abuse a heterogeneous group. While some youth show a wide array of debilitating symptoms, others show few clinical symptoms. Or, while some youth show internalizing symptoms, others show externalizing symptoms. Additionally, some survivors experience short-term symptoms while others experience symptoms into adulthood. How sexual abuse affects a child depends on numerous factors which interact with one another. These include risk and protective factors relating to the abuse, child, family, and environment.

Factors Related to Risk and Resiliency

Researchers have attempted to understand why CSA victims are a heterogeneous population and have identified factors which associate with risk and resiliency. Broadly, protective factors are individual, family, and environmental characteristics that modify a child's response to an adverse life event, such as sexual abuse, which typically associates with negative outcomes (Domhardt et al., 2015). One of the most studied protective factors is parental or caregiver support. Parental support has been consistently linked with children's adjustment following sexual abuse (Elliott & Carnes, 2001; Spaccarelli & Kim, 1995; Zajac, Ralston, & Smith, 2015). Children who feel supported and understood by their parents and caregivers are more likely to be resilient and have better outcomes. Further, having someone to talk with and confide in have also shown to be important. This can include family members, supportive adults in the community, and peer-aged friends (Domhardt et al., 2015; Marriott et al., 2014). Other protective factors relating to the family include positive parenting practices, family connectedness, parent education and socioeconomic status, stability in housing and in the family home, and low rates of other adverse events within the family (Domhardt et al., 2015; Marriott et al., 2014). Improving family support and other protective factors relating to the family could decrease the negative consequences associated with child sexual abuse.

Another factor relating to better outcomes is engagement in mental health treatment to process emotions and address the effects of sexual abuse (Kendall-Tackett et al., 1993; Yancey & Hansen, 2010). Research and clinical efforts are dedicated to helping children following sexual victimization, and there are evidence-based mental health treatments for survivors of child sexual abuse (Cohen, Deblinger, Mannarino, & Steer, 2004; Hubel et al., 2014; Ramchandani & Jones, 2003). Effective mental health treatment, such as individual or group therapy, allows children to identify and process their emotions, learn adaptive coping strategies, discuss and improve family relationships, learn developmentally appropriate sexual education, gather information on

safe and unsafe touches and personal space, and acquire skills to prevent revictimization. Treatment should also focus on empowering youth, decreasing the negative effects of sexual abuse, and strengthening and teaching the factors that associate with positive outcomes. For example, the following protective factors have been linked to resilient outcomes (Domhardt et al., 2015; Marriott et al., 2014) and can be strengthened or taught in therapy: understanding and managing emotions, using adaptive coping skills, increasing interpersonal and emotional competence, and improving self-esteem. Additionally, clinical intervention can play a significant role in shaping attribution style, including decreasing feelings of self-blame and guilt and increasing the perspective that the abuse does not have to permeate all areas of life, which can improve optimism and hope (Domhardt et al., 2015; Marriott et al., 2014; Yancey & Hansen, 2010). Therapeutic efforts can also help in reducing stigma around CSA victimization and increasing empowerment and control. Spirituality has also been found to be a protective factor (Domhardt et al., 2015; Marriott et al., 2014); thus, depending on individual needs, therapists may discuss spirituality as a coping mechanism. Finally, treatment efforts can encourage a youth's engagement in clubs, cultural or leisure activities, and religious organizations (when appropriate), all of which have been associated with better outcomes for survivors (Domhardt et al., 2015; Marriott et al., 2014).

Many services for children who have been sexually abused include the child's non-offending parents or caregivers (i.e., caretaking adults who did not perpetrate the abuse). Evidence shows that if a parent receives therapy or counseling following their child's sexual abuse disclosure, it can have positive benefits for the parent as well as the child (Deblinger, Stauffer, & Steer, 2001; Domhardt et al., 2015; Elliott & Carnes, 2001).

This makes sense given the significant importance family support has on improving child outcomes. Additionally, parents can identify and process their own emotions about the abuse, learn coping strategies, and acquire skills in parenting, communication, and problem-solving, all of which can improve outcomes for the parent and child.

Other (often less studied) factors have also shown to associate with better outcomes for children following sexual abuse. These include having higher levels of intelligence, reserved, controlled, and rational personal qualities, and positive school or educational experiences (Domhardt et al., 2015; Marriott et al., 2014). Positive educational experiences include good relationships with teachers, making realistic educational plans for the future, showing more school engagement, having positive feeling towards school, and being enrolled in a safe school. Outcomes may also be influenced by aspects of the abuse, such as the type, severity, frequency, duration, use of force, age when abuse occurred, and relationship to the offender (Yancey & Hansen, 2010).

As can be seen, many co-occurring risk and protective factors are linked with child adjustment. Additionally, immediate and ongoing responses to a child's disclosure or to the news of child sexual abuse can influence victim outcomes (Elliott & Carnes, 2001; Holguin & Hansen, 2001; Lovett, 2004; Ullman, 2003; Yancey & Hansen, 2010). For example, it is common for adults and parents to be highly confused, shocked, angry, sad, and even be in denial that the sexual abuse occurred. These potentially strong emotions may lead to questions about whether the abuse really happened, whose fault it is, and if the child will ever be the same. Thus, responses and reactions to CSA disclosure typically include (a) belief or disbelief of the child's story, (b) attributing

blame toward someone, and (c) making predictions about how the CSA will impact the child. The way a parent or important adult responds to the news of CSA can have significant implications for the victim's recovery because it can influence how the adult treats the child (Holguin & Hansen, 2001; Hopson, 2010; Ullman, 2003). For example, believing a child's disclosure shows support, empathy, and protectiveness. Also, believing a child's report increases the potential for appropriate access to treatment and services. Thus, belief or disbelief of the child's story can have important implications for the youth's recovery. Additionally, blaming the child for the abuse can have significant negative repercussions. For example, blame from others may prompt a child to selfblame and internalize responsibility (Hunter, Goodwin, & Wilson, 1992). Also, those who place blame on the victim are likely not appropriately providing support and compassion to the child. Finally, expecting poor outcomes or believing a child is now permanently damaged reduces optimism and the hope or prospect for resiliency. Expecting the child to experience emotional or behavioral problems can also encourage the child to behave in ways that match the negative expectation, ultimately increasing the adverse effects (similar to a self-fulfilling prophecy; Holguin & Hansen, 2003; Madon, Jussim, & Eccles, 1997). Overall, not believing a child's report, blaming the child, and expecting the child to experience highly negative symptomology following sexual abuse can all have harmful effects on the child (Briggs, Hubbs-Tait, Culp, & Blankemeyer, 1995; Browne & Finkelhor, 1986; Holguin & Hansen, 2003; Kouyoumdjian, Perry, & Hansen, 2005; Yancey & Hansen, 2010).

Interaction with Professionals Following CSA Disclosure

Many of the factors related to risk and resiliency primarily look to aspects related to the individual child and the child's family. However, other important systems exist outside of the child and family, including professionals who interact with children and their families following disclosure of abuse. For example, common professionals who interact with CSA victims include: nurses, physicians, other health care professionals, mental health providers, social workers, teachers, childcare workers, law enforcement, and legal professionals. While identifying professionals who interact with children *after* the disclosure of CSA is the primary concern of the current review and study, in many cases, these professionals also have the potential to identify signs of undisclosed sexual abuse and intervene.

Medical health providers may be involved in the physical examination of victims following disclosure as well as treating physical health needs related to victimization. Even if a medical provider does not participate in services directly related to CSA, studies find that survivors of child sexual abuse utilize health care professionals at a higher rate than those who have not experienced abuse (Arnow, 2004; Springer, Sheridan, Kuo, & Carnes, 2003). Thus, medical providers likely interact with survivors regularly in their practices.

Mental health providers and social workers (particularly those who work with children and families) typically play an active role in clinical assessment, forensic evaluation, intervention, advocacy, and case management services for CSA victims and their families. Some mental health providers and social workers may even work exclusively with victims and families experiencing abuse. Additionally, based on the high frequency of CSA (approximately one in ten youth), professionals primarily working with children (e.g., teachers, childcare workers) have a high probability of interacting daily with those who have experienced sexual abuse. Further, because teachers are viewed as trusted and safe adults, teachers are common recipients of child abuse disclosures. In 2017, education personnel were the most likely source of maltreatment reports to child protection agencies (U.S. DHHS, 2019).

Behind education personnel, legal and law enforcement personnel were the second most likely source of maltreatment reports to child protection agencies (U.S. DHHS, 2019). Furthermore, due to the criminal and legal aspects of child sexual abuse, children who have disclosed abuse likely interact with law enforcement and legal professionals. For example, when abuse allegations are being investigated or criminal charges are being pursued, youth and families often communicate with investigators and attorneys throughout the typically lengthy legal process. Due to the large number of professionals interacting with CSA victims following disclosure, the National Children's Advocacy Center created a multidisciplinary team (MDT) approach to responding to child abuse in 1985 (National Children's Advocacy Center, 2018). This MDT approach teamed up DHHS, law enforcement, forensic interviewers, medical services, family advocacy workers, the district attorney's office, and mental health services in order to reduce the number of times a child has to tell their story and better integrate the professional providers (National Children's Advocacy Center, 2018).

Professionals who interact and work with victims and families could be a factor that associates with outcomes. Professionals who respond supportively and compassionately, believe the child's story and appropriately report the abuse, do not blame the victim, identify and increase the family's protective factors, and have sufficient knowledge and competence to work with CSA survivors could increase resilient outcomes. Thus, professionals working with victims and families (in any capacity) have the opportunity to support CSA survivors and be a positive part of their recovery (Blakely & Ribeiro, 1997; Lentsch & Johnson, 2000; Pelisoli, Herman, & Dell'Aglio, 2015).

Assessment of Professionals' and Lay Adults' CSA Knowledge and Beliefs

Given the amount of time victims and families spend with professionals following disclosure and the important role these professionals play in helping families, research efforts have examined professionals' (e.g., nurses, physicians, general health care professionals, mental health providers, social workers, teachers, childcare workers) competence and knowledge around child sexual abuse. Additionally, assessment efforts have examined certain professionals' preparedness for recognizing signs of sexual abuse and intervening. Broadly, research shows that some professionals may not be adequately prepared to support victims because of insufficient knowledge about CSA and misinformed beliefs (Abeid et al., 2015; Blakely & Ribeiro, 1997; Lentsch & Johnson, 2000; Márquez-Floresa, Márquez-Hernndez, & Granados-Gamez, 2016; McGregor, Glover, Gautam, & Julich, 2010; Pelisoli et al., 2015). Additionally, through clinical experience, we know that many professionals receive minimal, if any, training in the area of CSA and/or have inaccurate knowledge and beliefs about CSA which can be detrimental to a victim's recovery process. Below is a review of the literature on the assessment of professionals' and lay adults' CSA knowledge and beliefs. Several studies include international samples (e.g., Brazil, Australia, Norway, Spain, Tanzania, Canada,

China, Hong Kong), suggesting the assessment of professionals is needed worldwide.

Medical health professionals. Medical health professionals who interact with CSA victims and their families include nurses, physicians, physical therapists, and other health care providers. Blakely and Ribeiro (1997) found that community health and pediatric nurses lacked adequate CSA knowledge. Nurses who had additional training on sexual abuse after graduation scored significantly better on a test of CSA knowledge than those without additional training and most nurses identified the need for further education on CSA (Blakely & Ribeiro, 1997). Studies have identified that nurses know less about topics related to child sexual abuse than physicians, social workers, and psychologists (e.g., Hibbard & Zollinger, 1990; Ribeiro et al., 1994; Thomas & Jamieson, 1995) and that nurses feel less confident in their ability to treat CSA survivors (Ribeiro et al., 1994; Thomas & Jamieson, 1995). However, on measures of beliefs about CSA, nurses generally conveyed empathy and support (Blakely & Ribeiro, 1997).

Lentsch and Johnson (2000) surveyed physicians to assess their knowledge of risk factors for sexual abuse and behaviors which indicate the possible occurrence of sexual abuse as well as determine if they had adequate knowledge regarding normal genitalia anatomy (as abnormal features of genitalia may imply sexual abuse). Results showed that many physicians surveyed did not have adequate knowledge of normal pediatric anatomy, which could hinder the physicians' ability to identify undisclosed sexual abuse (Lentsch & Johnson, 2000). Over 90% of physicians reported that a sexually transmitted disease, simulation of sex acts in young children, and promiscuity were indicators of sexual abuse (Lentsch & Johnson, 2000).

In a different approach to examining health providers' competence in working

with CSA victims, McGregor, Glover, Gautam, and Jülich (2010) surveyed adult CSA survivors and asked them to identify suggestions for how health providers could best assist those with a history of CSA. Results indicated the following knowledge and skills most important for health providers to have, in order: "knowledge of effects of CSA; establishing a relationship with CSA survivors; asking about CSA; responding to disclosure; sensitive provision of medical examinations; and follow-up post examination" (McGregor, Glover, et al., 2010, p. 742). Similarly, Schachter, Radomsky, Stalker, and Teram (2005) surveyed adult survivors of CSA to explore how physical therapists and physicians can be sensitive and compassionate when working with those who have experienced sexual abuse. Results showed that CSA survivors wanted to feel safe during appointments, supported their providers in inquiring about their comfort and sensitivity to examination and touch, and advocated for providers to learn about the effects and prevalence of CSA (Schachter et al., 2005). Results of this study build on findings exploring survivors' views on sensitive practice techniques for physical therapists (Schachter, Stalker, & Teram, 1999; Teram, Schachter, & Stalker, 1999) and dentists (Stalker, Russell, Teram, & Schachter, 2005). Further, perspectives from survivors and health care providers indicate the need for professional training in responding sensitively to CSA disclosures and the need for guidelines on best practices for interacting with CSA survivors (McGregor, Gautam, Glover, & Jülich, 2013; McGregor, Jülich, Glover, & Gautam, 2010).

Mental health professionals and social workers. Findings suggest that mental health professionals and social workers may be misinformed about the current scientific literature on child sexual abuse, even though these professionals typically play a major role when working with families who experience CSA. Pelisoli et al. (2015) sampled mental health providers and university students enrolled in a psychology course from the U.S. and Brazil as well as social workers and medical providers from the U.S. All participants were tested on questions related to CSA-related topics, including prevalence rates, disclosure, repressed memories, and forensic evaluations. Results showed that U.S. doctoral-level psychologists scored higher than Brazilian mental health professionals, U.S. social workers, U.S. nurses, and U.S. physicians. However, the average score on the knowledge test for U.S. psychologists was only 76% correct (Pelisoli et al., 2015). Further, master's level mental health providers in Brazil, U.S. social workers, and U.S. physicians scored higher than first-year university students, but Brazilian bachelor's- and doctoral-level mental health providers and U.S. nurses scores were not significantly higher than first-year university students (Pelisoli et al., 2015).

Conte, Sorenson, Fogarty, and Dalla Rosa (1991) also surveyed mental health and medical health providers on CSA assessment techniques. The study found that professionals overwhelmingly believed certain psychological symptoms to be reliable indicators of sexual abuse, however, the symptoms identified were not supported by empirical research as indicators of abuse. Similarly, Oberlander (1995) surveyed child forensic mental health providers who conduct clinical interviews and assessments of children who allege sexual abuse. Results showed that mental health professionals held a wide array of beliefs about CSA indicators. Davey and Hill (1995) showed that, while psychological, social service, and medical professionals identified having more training than other professionals surveyed, there were significant differences among the professionals in their assessment techniques and in the factors they believed were indicative of sexual abuse. Further, Davey and Hill (1999) found that some of the practices of professionals who interview children about sexual abuse were not consistent with recommendations from the empirical literature. Similarly, Finnilä-Tuohimaa, Santtila, Sainio, Niemi, and Sandnabba (2005) collected data from social workers, child psychiatrists, and psychologists. Findings suggested that these professionals relied less on scientific knowledge when making decisions and many of their CSA-related beliefs were not consistent with scientific evidence.

While different from typical clinicians, Child Advocacy Center (CAC) directors play a significant role in families' lives by leading the organizations that provide integral services to those impacted by abuse (e.g., forensic interview, mental health referral, advocacy services). Wherry, Huey, and Medford (2015) surveyed CAC directors on their "knowledge about PTSD; criteria for referring victims of abuse for treatment; evidencebased treatments for sexually and physically abused children; reliable, valid, and normed measures helpful in assessing abused children; and training needs for staff" (p. 284). The authors were interested in assessing the CAC directors' clinical child abuse knowledge, as these directors supervise clinical program efforts. Additionally, the study aimed to understand directors' understanding of trauma symptoms and empirical treatments, since not all children experience symptoms of trauma and thus may not be good candidates for trauma-focused treatment. Findings suggest that approximately 60% of trauma symptoms were correctly identified and that some symptoms were incorrectly identified as part of a PTSD diagnosis. CAC directors had insufficient knowledge in identifying evidence-based treatments for sexual abuse; however, the majority did correctly identify trauma-focused cognitive behavioral therapy (TF-CBT) as evidenced-based (Wherry et

al., 2015).

Teachers and childcare workers. Studies indicate that teachers and education personnel lack knowledge and training on child sexual abuse. Márquez-Flores, Márquez-Hernández, and Granados-Gámez (2016) found specific deficits of knowledge in the definition of CSA, prevalence rates by gender, and legal consequences of perpetrating sexual abuse among teachers in Spain. Additionally, 80.7% of respondents believed that victims invent false sexual abuse stories; however, approximately 96% of participants correctly disagreed with the statement that over half of reports are fabricated (Márquez-Flores et al., 2016). The vast majority of teachers in the study incorrectly believed most offenders used violence during sexual abuse. Findings also showed that 41.3% of teachers identified that they would not report sexual abuse to authorities if they only *suspected* the abuse was occurring. However, almost all teachers identified that victims were not to blame for the abuse (Márquez-Flores et al., 2016).

Findings from Pereda et al. (2012) also showed a significant deficit in knowledge of the legal consequences of perpetrating sexual abuse. However, the majority of teachers had an accurate understanding of the prevalence rate of CSA. Ribeiro et al. (1994) and Blakely and Ribeiro (1997) found that childcare workers showed a discrepancy in their CSA knowledge and their perceived confidence helping children impacted by sexual abuse; childcare workers tended to be more confident despite deficits in CSA knowledge.

A variety of other studies have examined teachers' (Abrahams, Casey, & Daro, 1992; Kenny, 2001), principals' (Payne, 1991), and school psychologists' (Lusk, Zibulsky, & Viezel, 2014; Zibulsky, Viezel, & Lusk, 2015) knowledge of child

maltreatment as a whole, rather than specifically about child sexual abuse. These studies may still help inform researchers on training needs. For example, Kenny (2001) showed that most teachers described receiving inadequate training in child abuse. In the study, after reading case vignettes representing legally reportable abuse, many teachers identified that they would not make a report. Teachers identified "fear of making an inaccurate report, feeling as though child protective services do not help families, and no apparent physical signs of abuse" as reasons for not reporting suspected abuse (Kenny, 2001, p. 81).

Law enforcement, legal professionals, and jurors. Due to the legal aspect of CSA, it is also imperative that those associated with the legal system (e.g., law enforcement, attorneys, jurors) have adequate knowledge related to child sexual abuse. Melinder, Goodman, Eilertsen, and Magnussen (2004) examined Norwegian legal professionals' (e.g., judges, police detectives, prosecutors, defense attorneys) knowledge and beliefs on child witnesses in abuse cases. Findings suggested that legal professionals, particularly those who had more experience working with sexual abuse cases, tended to look to the child's emotional and behavioral well-being as a valuable indicator of abuse allegation validity. These misinformed beliefs could be detrimental to appropriately prosecuting offenders. Additionally, Goodman-Delahunty, Martschuka, and Cossins (2017) created a questionnaire that assesses knowledge on features of CSA offences, children's responses to abuse, and children's reliability as witnesses, which are particularly relevant within a legal setting. The authors examined discharged jurors' CSA knowledge and beliefs among an Australian sample and found higher scores on the knowledge assessment were associated with greater perceived credibility of the child

victim in a simulated trial. Also, findings showed that "jurors with greater knowledge about CSA were more likely to convict the [simulated] defendant than jurors who knew less about CSA" (p. 391).

Lay adults and parents. CSA knowledge and beliefs have also been measured in non-professional populations, including parents and lay adults. Gleaning information about public knowledge and opinion of CSA-related issues is valuable as these adults likely interact with children in their daily lives (although potentially not in their professional lives). These adults also have the power to promote resiliency in children with appropriate knowledge about CSA. Calvert and Munsie-Benson (1999) collected information on lay participants' knowledge of offenders, disclosure, validity of allegations, and reporting issues. Gaps in familiarity and awareness of these issues were found in all groups examined; however, significant knowledge deficits were found in males and participants who were single or not married, did not have children, were younger, were of a member of the Latinx ethnic group, and had low income and education levels (Calvert & Munsie-Benson, 1999).

Abeid et al. (2015) surveyed a community sample in rural Tanzania about their knowledge and beliefs of sexual violence toward women and children. The questionnaire assessed knowledge of the causes of sexual violence, outcomes, offenders, and available resources as well as attitudes toward male dominance. Broadly, knowledge scores were significantly higher for men and those with higher education. Attitudes supporting male dominance were primarily endorsed by women (Abeid et al., 2015). Mlekwa, Nyamhanga, Chalya, and Urassa (2016) examined parents' knowledge of CSA prevention and practices for prevention in Shinyanga district, Tanzania. Results showed extremely high levels of knowledge about CSA prevention, although questions may have more accurately reflected *belief* statements regarding CSA prevention and results indicate the answers to the questions may have been too evident. Still, findings showed most participants had poor engagement in behaviors associated with prevention of CSA (Mlekwa et al., 2016).

In a comprehensive review of studies examining parents' knowledge of CSA and CSA prevention (i.e., prevalence, definition, perpetrators, and warning signs of sexual abuse), Babatsikos (2010) found that parents from most studies incorrectly believed strangers were the greatest threat to their children. Two studies showed exception to that finding, both of which had Canadian samples (Hébert, Lavoie, & Parent, 2002; Tutty, 1993). Two studies with samples from China showed a substantial minority of parents did not believe women could perpetrate sexual abuse (Chen, Dunne, & Han, 2007; Chen & Chen, 2005). Additionally, some parents were misinformed about the fact that CSA victims may have no physical evidence of the abuse; this was especially evident in studies in China (Chen et al., 2007; Chen & Chen, 2005) and Hong Kong (Tang & Yan, 2004). Pullins and Jones (2006) showed that parents had limited knowledge of the warning signs of sexual abuse. Further, results showed that more parental knowledge was associated with higher SES, formal CSA prevention training, and knowing someone impacted by CSA (Pullins & Jones, 2006).

Gaps in previous assessment of professionals and lay adults. While important research efforts have examined a variety of professionals (as well as lay adults) about their knowledge around child sexual abuse, gaps in previous assessment exist. Specifically, one area that has not been sufficiently studied is professionals' knowledge of CSA outcomes, despite studies showing that CSA survivors identify this as one of the important factors for professionals to understand (e.g., McGregor, Glover, et al., 2010). Previous questionnaires measuring professionals' and lay adults' CSA knowledge and beliefs have included few questions regarding CSA outcomes and primarily focus on CSA definitions, rates, demographics of victims, prevention techniques, recognition of signs of abuse, reporting issues, offenders, and legal implications (e.g., Martin & Silverstone, 2016; Márquez-Floresa et al., 2016; Pelisoli et al., 2015). The topics described above are unquestionably important for professionals to know, however, accurate facts about CSA outcomes could allow professionals a better understanding of how to respond to and interact with CSA victims in a way that could increase positive outcomes. For example, many people expect CSA survivors to develop overwhelming mental health and behavioral concerns (Cyr et al., 2016; Holguin & Hansen, 2003); yet, children's outcomes are widely heterogeneous and expecting a child to experience negative symptomology can have iatrogenic effects (Browne & Finkelhor, 1986; Holguin & Hansen, 2003; Kouyoumdjian et al., 2005).

Furthermore, existing questionnaires that *do* include some items about CSA outcomes or disclosure issues are intended for specific populations (e.g., legal or forensic settings; Goodman-Delahunty et al., 2017; Pelisoli et al., 2015) and include questions those outside of the field would not need to know to competently work with children and families. An existing well-known questionnaire which specifically measures acceptance of CSA-related myths (Collings, 1997) supports the notion that education is important to reject myths. However, evidence suggests this measure may exhibit a floor effect for some professionals. For example, Rheingold et al. (2015) found very low endorsement of

CSA myths among childcare professionals, suggesting this measure may no longer be an adequate tool to assess current CSA beliefs and attitudes in those highly involved with survivors of CSA. Overall, a review of the literature suggests that an assessment instrument which specifically focuses on lay adults' and professionals' knowledge and beliefs about CSA outcomes could be beneficial. Additionally, few studies measuring CSA knowledge also include some sort of intervention aimed to improve knowledge. Therefore, many barriers exist.

CSA Interventions for Professionals and Lay Adults

As previous research studies have shown, professionals and lay adults lack important knowledge of child sexual abuse which necessitates accessible CSA-related training. Online intervention programs and manuals have been developed to help meet this need.

One online webinar-style training program that has been widely studied is Darkness to Light's *Stewards of Children* (Darkness to Light, 2018; https://www.d2l.org/education/stewards-of-children). *Stewards of Children* promotes that participants will "learn how to prevent, recognize, and react responsibly to child sexual abuse" (Darkness to Light, 2018). The intended audience is anyone who plays a role in a child's life, including parents or grandparents, teachers, coaches, and professionals. This online training program builds on a five-step model: (1) Learn the facts, (2) minimize opportunity, (3) talk about it, (4) recognize the signs, and (5) react responsibly. The intervention includes videos of CSA experts, non-offending caregivers, those in education, youth sports, mentoring, faith communities, child advocacy, and law enforcement, as well as testimonials from real CSA survivors. The videos are accompanied by text on slides that cover the most pertinent material covered. Information is provided on the definition of CSA and commercial exploitation of children, prevalence rates, empowerment skills for preventing sexual abuse, reasons children do not come forward, sex education, signs of abuse, handling disclosure, and reporting issues. During the training, a list of health consequences of CSA (i.e., posttraumatic stress disorder, anxiety and depression, substance abuse, delinquency, suicidal thoughts and suicide) is provided briefly to participants; however, the training does not go into detail or focus on CSA outcomes. The intervention is interactive, including knowledge checks throughout. It takes approximately two hours and costs \$10 USD to complete. In-person trainings may also be available locally. Researchers have evaluated *Stewards of Children* and studies show its effectiveness in increasing CSA knowledge and child-protective behaviors (Derrick, Flynn, & Rodi, 2007; Letourneau, Nietert, & Rheingold, 2016; Rheingold et al., 2015; Townsend & Haviland, 2016).

Another online learning course aimed to increase child abuse knowledge is *Child Victim Web* (Medical University of South Carolina, 2013; http://cv.musc.edu), which is a joint project between the National Children's Alliance, the Dee Norton Child Advocacy Center, and the National Crime Victims Research and Treatment Center at the Medical University of South Carolina. The course is intended for child advocacy and child welfare professionals who work with youth who have experienced trauma or anyone interested in topics related to child victimization. In total, there are eight modules: overview of child victimization, psychological and behavioral impact, social and health consequences, criminal justice and child advocacy, assessment strategies, evidence-based treatment planning, case management skills for treatment success, and evidencesupported treatments. Each module includes a combination of videos, text, and graphics as well as a pre-test and post-test. The content of the course is not specific to child sexual abuse and covers all forms of child victimization, including physical abuse and assault, sexual abuse and assault, neglect, emotional abuse, witnessing domestic violence, witnessing community and school violence, and other potentially traumatic events. The online training course is free to complete and over 6,000 professionals have used *Child Victim Web* since it was created in 2013 (National Children's Alliance, 2014). No information was found online regarding evaluation efforts of the course.

Also created at the Medical University of South Carolina, *TF-CBT Web 2.0* is an online training course for therapists who would like to learn about Trauma-Focused Cognitive Behavioral Therapy (Medical University of South Carolina, 2017; https://tfcbt2.musc.edu). The eleven modules include: foundation of TF-CBT, psychoeducation, parenting skills, relaxation, affect identification and regulation, cognitive coping, trauma narration and processing I and II, in vivo mastery, conjoint parent-child sessions, and enhancing safety and future development. Each module includes a pre-test and post-test, text, and demonstration videos with clients and therapists modeling therapy techniques. The previous version of *TF-CBT Web* was free to complete with funding for the project provided by a grant. With the absence of grant funding for the updated course, *TF-CBT Web 2.0* costs \$35 to complete. No information was found online regarding evaluation efforts of the course.

Other online resources are available for professionals who interact with survivors of CSA. For example, Child Welfare Information Gateway (www.childwelfare.gov) offers access to publications and resources on topics relating to child welfare, including preventing and responding to child abuse and neglect. Additionally, National Children's Alliance provides training and resources for CACs, partners, and parents on addressing youth with problematic sexual behaviors (http://www.nationalchildrensalliance.org/psb). Other websites that provide access to resources and training include *Prevent Child Abuse America* (http://preventchildabuse.org) and *Stop It Now!* (http://www.stopitnow.org); both websites emphasize the prevention of child abuse and neglect.

Manuals and articles targeted for certain professions are also available online which attempt to promote best practices for preventing and reporting child abuse and neglect. For example, *The Role of Educators in Preventing and Responding to Child Abuse and Neglect* (U.S. DHHS, 2003) and *Identifying and Reporting Child Maltreatment* (Cruise, 2010) are both intended for education personnel. Additionally, a report is available for health care providers to meet the needs of women who were sexually abused in childhood, including how to respond to disclosures and promote a safe health care environment (Tudiver, McClue, Heinonen, Scurfield, & Kreklewtz, 2000).

In addition to online training and resources, in-person interventions have been implemented and evaluated. *Prevent It!* is an evidenced-based education program for adults which aims to increase CSA knowledge and change behaviors (e.g., taking specific actions to prevent CSA; Martin & Silverstone, 2016). In the three-hour workshop, trained facilitators accompanied by videos provide (a) general information on CSA (e.g., definitions, rates, offenders), (b) tips for talking with children, (c) information on observing children and adults (e.g., possible signs of CSA, grooming), and (d) preparing for action (e.g., disclosures, reporting, prevention strategies). Evaluation of the workshop showed improvements in CSA knowledge and increased engagement in prevention behaviors (Martin & Silverstone, 2016). Results support the notion that educational training should target adults who frequently interact with children (parents, professionals, and any lay adult) and prevention efforts should not be limited to directly targeting children and parents (Wurtele, 2009). Other programs aimed at abuse prevention for developmental disability service providers, parents, home visitors, and teachers exist (Bowman, Scotti, & Morris, 2010; Hébert et al., 2002; Hans Zollner, Fuchs, & Fegert, 2014) as well as educative information to jurors aimed at reducing bias in CSA cases (Goodman-Delahunty, Martschuka, & Cossins, 2016).

Gaps in previous training programs. While the training efforts described above are necessary and valuable for professionals, some gaps in previous intervention efforts exist. Many of the training programs, manuals, and resources currently available emphasize knowledge and behaviors surrounding the *prevention* of child sexual abuse compared to knowledge and behaviors related to the *aftermath* of victimization. Information on prevention is invaluable to decrease the occurrence of CSA and it is recommended that all professionals working with children and families complete training on CSA prevention. In addition to prevention training, professionals may benefit from comprehensive information on CSA outcomes and, with this knowledge, professionals may be better prepared to interact with CSA survivors in a way that increases resilient outcomes. Furthermore, an intervention program which focuses primarily on CSA outcomes would build on existing trainings and could supplement the brief material presented on CSA outcomes in current interventions. Similarly, many of the trainings emphasize professionals and lay adults learning information and skills for identifying signs ("red flags") of sexual abuse. Again, all adults would benefit from learning this

information to increase disclosure rates and stop future abuse from occurring. A brief intervention aimed to increase adults' knowledge on CSA outcomes would complement current trainings helping adults learn about signs of abuse.

Additionally, several of the intervention efforts above are broadly about child abuse and neglect rather than specifically child sexual abuse. For example, *Child Victim* Web provides an excellent summary of the current empirical research on child abuse and neglect outcomes, however, additional material specific to child sexual abuse may be beneficial to supplement this online course. Similarly, some trainings and resources are targeted toward a single population (e.g., education personnel, therapists, jurors) and, while this is immensely beneficial for those within that targeted population, generalist training for professionals from a variety of disciplines also has significant value. Furthermore, not all trainings and resources are easily accessible to all professionals who may benefit, particularly those without an online component. An online format offers convenience for participants without sacrificing effectiveness (Kenny, 2007; Paranal, Thomas, & Derrick, 2012; Wurtele, 2017). However, lengthy web-based interventions or manuals and technical issues can be barriers (Paranal et al., 2012). Additionally, webbased training and resources do not allow for in-person discussion. Thus, interventions that are engaging, interactive, and do not require large amounts of time or mental vigor (i.e., providing information in lay terms versus technical jargon) could have a widereaching impact.

Finally, few studies have utilized university students pursing education in fields likely to work with children, even though they represent a significant group of adults who may currently or soon interact with children and families through their practica, volunteer experiences, and jobs. Specifically, students majoring in psychology, child, youth, and family studies, sociology, criminal justice, education, and nursing as well as those with a pre-health or pre-law declaration may especially benefit from CSA training.

Purpose of the Present Studies

The primary purpose of this dissertation project was to develop and evaluate an online intervention which provides students and developing professionals with information about CSA outcomes, corrects any misperceptions, and promotes and empowers these new professionals to be a part of victims' recovery. By increasing knowledge and competence and empowering developing professionals, these adults can have a positive influence on victim recovery. To accomplish this primary purpose, two studies were conducted. Study 1, the Measurement Development Study, developed and evaluated an assessment instrument to measure knowledge and beliefs about the consequences of CSA. Study 2, the Intervention Study, developed and evaluated an intervention dedicated to educating adults on CSA outcomes. Assessment of students' and new professionals' knowledge and beliefs of CSA outcomes can provide researchers with a better understanding of what people know about children's outcomes following sexual abuse. Additionally, an intervention can provide education to improve knowledge and beliefs about CSA outcomes. With appropriate knowledge, those interacting with CSA victims and their families *in any capacity* could have a positive influence on victim recovery. The purpose of the measure and intervention currently represent a gap in research and training efforts in the field, which primarily focus on prevention of CSA and reporting issues (e.g., Martin & Silverstone, 2016; Márquez-Floresa et al., 2016; Rheingold et al., 2015).
Measurement Development Study

Aim 1a: Develop a measure that assesses knowledge and beliefs of child sexual abuse outcomes.

Several assessments related to knowledge of CSA have been developed in previous efforts; however, few questionnaires include items related to child sexual abuse outcomes and no assessments have focused solely on knowledge and beliefs about the consequences of child sexual abuse. An assessment measure dedicated to measuring this specific knowledge set is essential for understanding what adults who interact with CSA survivors currently know and believe to be true about the outcomes associated with victimization. The assessment intended to specifically measure the following knowledge areas related to CSA outcomes: the heterogeneity of response to CSA, factors related to resiliency, and common responses to CSA (belief, blame, negative expectations). It also intended to measure the following belief areas: validity of victims' disclosures and expectations for functioning following CSA. Ultimately, the measure addressed the question, "What do people know and believe about CSA outcomes?"

Aim 1b: Evaluate the measure through item analysis.

The assessment measure represents a test of knowledge and a description of beliefs. Evaluation of the measure included item-level analysis to understand what percent of people answered each question correctly or, for the questions measuring beliefs, to examine people's perceptions. This information was then used to create an intervention that aims to increase knowledge and correct unsupportive beliefs. The assessment was different than a conventional measure used in psychological science that typically attempts to measure a construct (e.g., depression). Instead, this measure was similar to an educational test, where the items are each uniquely measuring knowledge of specific information. For this reason, the items may not necessarily "hang together" (e.g., as would be demonstrated via Cronbach's alpha) because correct knowledge on one question on the test may be unrelated to correct knowledge on any other question on the test. The evaluation of the measure was used to inform the creation of the online intervention.

Intervention Study

Aim 2a: Develop an online intervention which will provide students and new professionals with information about CSA outcomes, correct any misperceptions, and promote and empower adults to be a part of victims' recovery.

To develop the intervention, many efforts were taken to (a) determine pertinent content, (b) identify a proven approach to training, and (c) ensure the applicability of the content to various professional disciplines and lay adults. To accomplish this, a comprehensive literature review was completed to understand the current empirical research on the consequences of CSA and factors that associate with outcomes following abuse. The literature review also aided in identifying proven approaches to training. Additionally, current online child abuse-related trainings were examined to determine appropriate content and format for the present training. To develop the intervention, a team of doctoral students, undergraduate research assistants, and licensed psychologists with advanced clinical and research experience in child sexual abuse reviewed the intervention and provided feedback on the content and format. Further, efforts were taken during the review of the intervention to ensure the applicability of the content for a wide audience.

Aim 2b: Evaluate the online intervention.

The evaluation process included a pre-treatment assessment and a post-treatment assessment to measure knowledge and beliefs before and after participation in the online intervention. Additionally, for some participants, a follow-up assessment was completed two weeks after the training to assess retention. The intervention intended to specifically improve knowledge and change misinformed beliefs. A subset of the sample made up the attention control group and received an online training related to child and adolescent development. Knowledge gains of those who completed the primary intervention were compared to those who were in the attention control group to ensure the effectiveness of the intervention. Specifically, it was hypothesized that mean scores on the post-test measure will be higher for the treatment group compared to the attention control group, suggesting that the group who completed the CSA-related training had more knowledge on CSA outcomes compared to those who did not receive the intervention. It was also hypothesized that the intervention group will show a significant increase in scores from pre-test to post-test while the control group will not. Finally, it was hypothesized that the intervention group will retain their knowledge at the follow-up assessment two weeks following their initial completion of the CSA training.

Additionally, evaluation of the online intervention included surveying the participants on the social validity of the intervention, including the usefulness, effectiveness, and value of the provided training.

CHAPTER 2: MEASUREMENT DEVELOPMENT STUDY

Method

Design

The study used item-level analysis to evaluate the Child Sexual Abuse Outcomes Questionnaire (CSA-OQ). The CSA-OQ assessed individuals' knowledge of the outcomes associated with child sexual abuse and beliefs about those who experience sexual victimization in childhood. Item analysis was used to understand what percent of respondents answered each knowledge-based question on the test correctly. Additionally, for the questions measuring participants' beliefs, item-analysis was used to describe respondents' answers.

Participants

Participants were 146 students from the University of Nebraska-Lincoln. Two participants were excluded from final analyses because they did not complete all questions on the CSA-OQ and one participant was excluded for lack of effortful responding (e.g., selected *I don't know* for every available question and received a 0% score on CSA-OQ), leaving 143 total participants. Of the 143 respondents, 96 (67.1%) were female, 45 (31.5%) were male, one (.7%) was non-binary/transmasculine, and one (.7%) did not provide their gender. Participants were 19 to 35 years old (*M* = 20.33, *SD* = 2.40). Of the sample, 72% identified themselves as European American, 7.7% as Latinx or Hispanic, 7.7% as Asian, 5.6% as African American, 2.8% as biracial, 1.4% as Native American, 1.4% as multiracial, .7% as something other than the provided backgrounds, and .7% did not provide their ethnicity. The majority of participants were in their second (39.2%) or third (27.3%) year in college, 14% were in their first year, 13.3% were in their fourth year, 5.6% were in their fifth or more year, and .7% did not provide their year in college.

Psychology was the most common major among the participants (45.5%). Additionally, 11.2% reported having a double major, 7% were majoring in child, youth, and family studies, family science, or a related field, 6.3% in a science field (biological sciences, microbiology, biochemistry, chemistry), 5.6% in a business field (management, advertising and public relations, accounting, business administration), 5.6% reported a pre-health declaration (pre-nursing, pre-medicine, pre-pharmacy), 4.2% were undecided or undeclared, 3.5% were in criminal justice or criminology, and 3.5% were in a health science field (dietetics, nutrition and exercise science, health sciences, nutrition community health and wellness). The remaining participants (representing less than 8% of all participants) were majoring in computer science, education, engineering, political science, communication, broadcasting, and music performance; .7% of participants did not answer the question about their major.

There was a large range of career goals among the respondents. Most participants either identified wanting to go into the medical health field (32.9%) or go into the mental health or social work field or generally a field in psychological science after graduation (30.1%). Others identified wanting to work in business (7.7%), criminal justice/law (6.3%), or education (2.8%). Four participants (2.8%) broadly identified wanting to attend graduate school and two participants (1.4%) identified wanting to conduct research, however, these respondents did not specify the field. Finally, 16 participants (11.2%) were unsure about their plans after graduation and 4.2% did not respond to this question.

When asked if they had experience working directly with children and families, 79 (55.2%) reported no direct experience, 43 (30.1%) reported more than one year of experience, 20 (14%) reported less than one year of experience, and one (.7%) did not answer. For those who reported having more than one year of experience working directly with children and families, participants had a range of 1.5 to 20 years of experience (mean and standard deviation could not be calculated as several participants provided a range; e.g., 2-3 years, 3+ years). For those who reported having less than one year of experience working directly with children and families, participants had a range of 2 to 11 months of experience (M = 5.21, SD = 2.35). Approximately 90% of participants reported that they did not have direct experience working with children and families who have experienced sexual abuse.

Most participants (90.2%) identified never receiving professional training on the topic of child sexual abuse, 6.3% reported receiving in-person training, 4.2% reported receiving online training, and a few participants reported receiving both in-person and online training. Of all respondents, 34 (23.8%) identified having completed a course in college where the topic of child sexual abuse was discussed, while 108 (75.5%) reported that they have never taken a course where the topic of CSA was discussed; 1 (.7%) did not respond to this question.

Measures

Child Sexual Abuse Outcomes Questionnaire. The primary measure was the Child Sexual Abuse Outcomes Questionnaire (CSA-OQ), which was created for this study (Appendix B). The 27-item questionnaire intended to assess knowledge of the outcomes associated with child sexual abuse and beliefs about those who experience sexual victimization in childhood. Specifically, questions concerned the heterogeneity of response to CSA, the factors associated with resilient outcomes, responses to CSA (belief of disclosure, blame toward child or non-offending parent, holding negative expectations for the victim), and how these responses can influence outcomes. Of the 27 questions, the measure included 23 knowledge-based questions with an identified correct answer, one knowledge-based descriptive question, and three belief questions. Of the 23 knowledge-based questions with an identified correct answer, 20 questions had a threechoice answer format: True/False/I don't know. The I don't know option was included to encourage participants to respond based on their current knowledge set and reduce random guessing. Three of the 23 knowledge-based questions with an identified correct answer had a multiple-choice format, where participants could select one (or more) answer they believed to be correct. The one knowledge-based descriptive question ("Name the reasons why some children don't tell about sexual abuse") allows for a range of open-ended answers, as the reasons for children delaying or not disclosing abuse are numerous. The question serves to describe the number and type of answers provided by participants. Of the three belief questions, two questions ("Child sexual abuse victims can never function as they did before the abuse occurred" and "Child sexual abuse victims are permanently damaged") were on a five-point Likert-type scale, where (1) was Strongly Agree and (5) was Strongly Disagree. Agreeing or strongly agreeing to these questions indicates harmful beliefs and negative expectations. The other belief question was primarily descriptive in nature and asked participants to identify the reasons why they would not believe a child's disclosure of sexual abuse; 19 answer options were provided and participants could select as many as they wanted. Many of the 19 answer

options represented harmful and unsupportive beliefs. A team of six doctoral students as well as two licensed psychologists with advanced clinical and research experience in child sexual abuse carefully reviewed the CSA-OQ and provided feedback on the content and format of the questionnaire.

Demographic Questionnaire. This questionnaire asked the participants a variety of demographic questions, including age, gender, ethnicity, major, year in college, and number of children. This questionnaire also asked about the participants' experience working with children and families as well as experience working with child sexual abuse victims. Finally, participants provided their past training and educational experiences in the subject area. The Demographic Questionnaire for the Measurement Development Study can be found in Appendix C.

Procedure

Participants were recruited through the university's psychology department research participation website. Students enrolled in at least one psychology course can view research studies and choose in which studies they would like to participate through this website. Once students chose to participate, they were immediately linked to the online study. Participants were instructed that the study would last 30 minutes and they would subsequently receive one research participation credit for the completion of the study. Participants first read the informed consent form (Appendix A), then completed the CSA-OQ and the Demographic Questionnaire, and finally read the debriefing form. The debriefing form thanked respondents for their participation and provided further information about the purpose of the study. All procedures were approved by the University's Institutional Review Board (IRB). **Results**

Results of the item-level analysis (Thompson & Levitov, 1985) of the CSA-OQ can be found in Table 2.1. There, the number and percentage of participants who answered each question correctly and incorrectly as well as the number and percentage of participants who chose I don't know for each question are provided. First, an analysis of item difficulty, sometimes denoted as a P-value (Crocker & Algina, 1986), shows the percentage of participants who answered the item correctly. The higher the percentage of participants who answered the item correctly, the easier the question (Wood, 1960). Questions that are highly difficult (lower P-values/percentages) indicate a specific lack of knowledge in the population studied. Some studies designate questions as *easy, medium*, or hard difficulty based on their P-values and percentages falling within a certain range (Hingorjo & Jaleel, 2012; Mitra, Haleagrahara, Ponnudurai, & Judson, 2009; Sim & Rasiah, 2006). However, there does not appear to be a universally agreed upon range for these categories of difficulty; instead, researchers and educators have used a set of general guidelines to determine difficulty categories. For the current study, the difficulty index used the following categories: *easy difficulty* (greater than 80% of participants answered item correctly), *medium difficulty* (between 30% and 80% answered item correctly) and *hard difficulty* (less than 30% answered item correctly) (Blackboard, 2018; Mitra et al., 2009).

Of the 23 knowledge-based questions with a single identified correct answer, there were four *easy* questions where more than 80% of participants answered the question correctly. Additionally, there were 17 *medium difficulty* questions and two *hard difficulty* questions. The majority of questions on the CSA-OQ were in the *medium* *difficulty range*. The questions considered most difficult based on the number of participants who answered correctly were about CSA survivors being perceived as blameworthy for the abuse and who is most likely to place blame on children who are victimized. The questions considered to be the easiest were about when children generally come forward following abuse and how receiving blame or receiving therapy following CSA can impact outcomes.

Table 2.1

Responses to CSA-OQ			
	Number Correct (%)	Number Incorrect (%)	Number I don't know (%)
1. Almost all child victims experience a similar set of symptoms following sexual abuse. (False)	73 (51%)	45 (31.5%)	25 (17.5%)
2. The majority of children immediately tell an adult after they experience sexual abuse. (False)	140 (97.9%)	2 (1.4%)	1 (.7%)
3. During medical exams, most victims have physical or medical evidence of the sexual abuse. (False)	57 (39.9%)	51 (35.7%)	35 (24.5%)
4. Children are usually thought to be innocent in sexual abuse and blame is rarely placed on child sexual abuse victims. (False)	19 (13.3%)	111 (77.6%)	13 (9.1%)
5. You can commonly tell if a child has been sexually abused just by looking at them. (False)	128 (89.5%)	5 (3.5%)	10 (7%)
6. Unfortunately, 30-50% of children's allegations of sexual abuse are made up and these false allegations can cause significant negative effects for the alleged offender. (False)	67 (46.9%)	26 (18.2%)	50 (35%)
7. It is easy to predict in what ways sexual abuse will impact a child. (False)	113 (79%)	21 (14.7%)	9 (6.3%)
8. Non-offending parents of sexual abuse victims are sometimes blamed for the abuse. (True)	103 (72%)	12 (8.4%)	28 (19.6%)
9. If a child reports sexual abuse but does not exhibit any emotional or behavioral problems, it may be a sign the child fabricated or made up the sexual abuse. (False)	103 (72%)	15 (10.5%)	25 (17.5%)
10. There are effective mental health treatments for victims of child sexual abuse. (True)	108 (75.5%)	10 (7%)	25 (17.5%)
11. Most children have been found to react similarly to traumatic events. (False)	58 (40.6%)	49 (34.3%)	36 (25.2%)
12. Children often lie about being sexually abused. (False)	83 (58%)	28 (19.6%)	32 (22.4%)
13. Parental support has been consistently linked with the child's adjustment following sexual abuse. (True)	101 (70.6%)	9 (6.3%)	33 (23.1%)
14. Some children may not experience immediate negative effects from sexual abuse. (True)	114 (79.7%)	9 (6.3%)	20 (14%)
15. You can tell if a child has experienced sexual	100 (69.9%)	20 (14%)	23 (16.1%)

16. If a parent receives therapy or counseling	129 (90.2%)	3 (2.1%)	11 (7.7%)
following their child's sexual abuse disclosure, it can			
have positive benefits for the parent as well as the			
child. (True)			
17. When a child is sexually abused, parents	78 (54.5%)	33 (23.1%)	32 (22.4%)
sometimes place blame on the victim. (True)			
18. Select the reasons why you might not believe a	See Table 2.2		
child's disclosure of sexual abuse			
19. Child sexual abuse victims can never function as	Strongly Agree		9 (6.3%)
they did before the abuse occurred.	Agree		28 (19.6%)
5	I'm not sure		37 (25.9%)
	Disagree		58 (40.6%)
	Strongly Disa	gree	11 (7.7%)
20. Name the reasons why some children don't tell	Responses var	ried	× /
about sexual abuse.	- I		
21. Select the true statement(s).	62(43.4%)	81 (56.5%)	
(Older children [e.g., adolescents] are more likely to			
be blamed for experiencing sexual abuse [compared			
to vounger children])			
22. Select the true statement(s).	40 (28%)	103 (72%)	
(Males tend to place blame onto child sexual abuse	(_0,0)		
victims more than females)			
23. Child sexual abuse victims are permanently	Strongly Agre	e	13 (9.1%)
damaged.	Agree		42 (29 4%)
	I'm not sure		44 (30.8%)
	Disagree		36 (25.2%)
	Strongly Disa	eree	8 (5.6%)
24. What is "grooming" as it relates to child sexual	96 (67.1%)	47 (32.9%)	0 (010/1)
abuse? (Grooming is a process where perpetrators			
attempt to gain trust and compliance of a child in			
order to abuse the child)			
25 Employee and a full of the statements			
25. Evaluate each of the following statements:	93 (65%)	50 (35%)	
(a) Some victims of child sexual abuse are highly	93 (65%)	50 (35%)	
(a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms	93 (65%)	50 (35%)	
(a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse.	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience 	93 (65%)	50 (35%)	
(a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse.(b) Some victims of child sexual abuse experience very serious mental health consequences due to the	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. 	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show 	93 (65%)	50 (35%)	
 25. Evaluate each of the following statements: (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). 	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show 	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems). 	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems). (All True) 	93 (65%)	50 (35%)	
 (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems). (All True) 26. Child sexual abuse victims who are blamed for 	93 (65%) 130 (90.9%)	50 (35%) 3 (2.1%)	10 (7%)
 25. Evaluate each of the following statements: (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems). (All True) 26. Child sexual abuse victims who are blamed for the abuse may experience worse outcomes. (True) 	93 (65%) 130 (90.9%)	50 (35%) 3 (2.1%)	10 (7%)
 25. Evaluate each of the following statements: (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems). (All True) 26. Child sexual abuse victims who are blamed for the abuse may experience worse outcomes. (True) 27. Expecting a child will experience highly negative 	93 (65%) 130 (90.9%) 91 (63.6%)	50 (35%) 3 (2.1%) 8 (5.6%)	10 (7%) 44 (30.8%)
 25. Evaluate each of the following statements: (a) Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse. (b) Some victims of child sexual abuse experience very serious mental health consequences due to the abuse. (c) Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety). (d) Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems). (All True) 26. Child sexual abuse victims who are blamed for the abuse may experience worse outcomes. (True) 27. Expecting a child will experience highly negative symptomology following sexual abuse can have 	93 (65%) 130 (90.9%) 91 (63.6%)	50 (35%) 3 (2.1%) 8 (5.6%)	10 (7%) 44 (30.8%)

One knowledge-based question did not have a single identified correct or incorrect answer. This question was "Name the reasons why some children don't tell about sexual abuse." This question was intended to be descriptive in nature, allowing the author to understand what individuals know about the reasons children do not tell. Because there are numerous reasons children do not tell, a participant who has more knowledge in this area may be able to identify more answers compared to someone with limited knowledge. The number of answers provided ranged from 0 to 12 (M = 3.05; SD = 1.65). A little over one-third of participants provided three answers to this question, which was the most common number of answers provided and 92.4% provided between one and five reasons. Answers provided by the respondents were largely consistent with the empirical literature on why children do not come forward after they experience CSA.

The CSA-OQ included three questions which measured participants' beliefs related to child sexual abuse outcomes. On the item "Child sexual abuse victims can never function as they did before the abuse occurred," 9 (6.3%) strongly agreed with the statement, 28 (19.6%) agreed with the statement, 37 (25.9%) were unsure whether they disagreed or agreed with the statement, 58 (40.6%) disagreed with the statement, and 11 (7.7%) participants strongly disagreed with the statement. On the item "Child sexual abuse victims are permanently damaged," 12 (9.1%) strongly agreed with the statement, 42 (29.4%) agreed with the statement, 44 (30.8%) were unsure whether they disagreed or agreed with the statement, 36 (25.2%) disagreed with the statement, and 8 (5.6%) participants strongly disagreed with the statement. A third question asked participants to identify the reasons why they would not believe a child's disclosure of sexual abuse; 19 answer options were provided and participants could select as many as they wanted.

Table 2.2

|--|

	Percent
The child's history of delinquency or behavior problems	39.9%
The child's sexual promiscuity	22.4%
The child has a pattern of regularly telling lies	66.4%
The child waited days or months to tell about the alleged abuse	6.3%
The alleged abuse occurred one or more years ago	9.8%
The child only disclosed very minimal details	13.3%
The child disclosed an overly detailed account of abuse	4.9%
The child's family is poor	2.8%
The child's family is wealthy	2.8%
The child is very young	4.2%
The child is a teenager	2.8%
The child is constantly alleging abuse against people	47.6%
Parts of the child's disclosure included information you know to be false	49.7%
The child could gain something from the accusation of abuse (e.g., they would be removed from the foster home they don't like)	39.2%
The child's parents are going through a divorce and the accused offender is one of the parents	10.5%
The accused offender is someone very close to the child (e.g., family)	2.8%
The accused offender is a professional	2.1%
The accused offender is known to be trustworthy and credible	6.3%
No matter what, I would believe the child's disclosure	39.9%

The most common responses included "The child has a pattern of regularly telling lies" (66.4%) and "Parts of the child's disclosure included information you know to be false" (49.7%). Less than 40% of participants only selected the option, "No matter what, I would believe the child's disclosure." Results are shown in Table 2.2.

Overall, calculated out of 23 items that have a correct vs. incorrect answer for 143 participants who completed all questions on the CSA-OQ, scores on the test ranged from 6 to 23 (26%-100%; M = 14.59 [63.42%], SD = 3.39). Respondents only received points for questions they answered correctly. They did not receive points for incorrect answers or for answering *I don't know*. Based on 10-point increments, 1 respondent received a score in the 20-29% range, 10 participants scored in the 30-39% range, 16 scored in the

40-49% range, 20 scored in the 50-59% range, 36 scored in the 60-69% range, 42 in the 70-79% range, 13 scored in the 80-89% range, and 5 participants scored in the 90-100% range (1 person received a 100%). Percentage scores appeared to be relatively normally distributed but skewed slightly toward the higher end of scores.

Brief Discussion

The CSA-OQ intends to assess knowledge of the outcomes associated with child sexual abuse and beliefs about those who experiences sexual victimization in childhood. Specifically, questions concerned the heterogeneity of response to CSA, the factors associated with resilient outcomes, responses to CSA (belief of disclosure, blame toward child or non-offending parent, holding negative expectations for the victim), and how these responses can influence outcomes. Through item-analysis, most questions on the CSA-OQ were in the *medium-difficulty* range, which is the ideal range for test questions (Blackboard, 2018). Questions that were considered the most difficult addressed (a) the notion that some CSA survivors are perceived as blameworthy by others and (b) who is most likely to place blame on children who are victimized. On the other hand, the questions considered to be the easiest were about when children generally come forward following abuse and how receiving blame or receiving therapy following CSA can impact outcomes. The average score on the CSA-OQ was 63.42%, representing that, on average, participants lacked knowledge about CSA outcomes. Only 18 (12.59%) of the college students sampled scored above an 80% on the assessment. Almost 70% of participants scored between a 50% and 79% on the CSA-OQ. While there were four questions that were considered *easy* for the majority of participants, a subset of the sample answered these questions incorrectly, suggesting it may still be beneficial to include these questions on the CSA-OQ. Thus, all questions on CSA-OQ were kept for the assessment portion of the Intervention Study.

Results from the knowledge-based questions suggested the participants significantly lacked important knowledge of CSA outcomes. Further, evaluation of the belief-related questions showed that many participants reported unsupportive beliefs. For example, on the item "Child sexual abuse victims can never function as they did before the abuse occurred," over 50% of respondents answered that they agreed, strongly agreed, or were unsure. This suggests many participants are not aware of the heterogeneity of response to CSA, including that some children show resilient outcomes despite the experience of sexual abuse. Similarly, on the item "Child sexual abuse victims are permanently damaged," almost 70% of participants answered they agreed or strongly agreed with the statement or were unsure whether they disagreed or agreed with the statement. Holding the belief that CSA survivors are damaged (as well as being unsure) may influence how adults interact with children following abuse and could lead to poorer outcomes (Briggs et al., 1995; Browne & Finkelhor, 1986; Holguin & Hansen, 2003; Kouyoumdjian et al., 2005). Broadly, the belief that CSA victims can never function as they did before or are permanently damaged strongly contradicts the message of hope and resiliency many advocates and experts in the field encourage (National Children's Advocacy Center, 2017). Thus, results from the evaluation of the CSA-OQ suggest that the participants in the sample (college students) lacked important knowledge about CSA outcomes and held misinformed and unsupportive beliefs. An intervention aimed specifically to educate students and developing professionals on these issues is needed.

CHAPTER 3: INTERVENTION STUDY

Method

Design

To evaluate the intervention, the study used a pre-test/post-test experimental twogroup design. A subset of participants also completed a follow-up assessment. Respondents were randomly assigned to one of two conditions: the CSA Outcomes Intervention group or the attention control group. A 2:1 random assignment ratio was used, with more participants completing the CSA Outcomes Intervention. This randomization ratio was used because (a) the CSA Outcomes intervention was thought to be more valuable to participants, (b) responses to the Social Validity Questionnaire based on the CSA Intervention were more valuable for the research aims, and (c) recruitment methods allowed an adequate sample size with enough power to justify a 2:1 allocation.

Participants

Participants were 408 students from the University of Nebraska-Lincoln. Of the 408 respondents, 330 (80.9%) were female, 75 (18.4%) were male, and 3 (.7%) identified as non-binary. Participants were 19 to 43 years old (M = 20.31, SD = 2.07). Of the sample, 74.3% identified themselves as European American or White, 9.6% as Asian, 5.9% as Latinx or Hispanic, 4.4% as African American or Black, 3.4% as biracial, 1.2% as multiracial, .5% as Native American, and .7% as something other than the provided backgrounds. Most individuals reported that they did not have any children (98.3%), 2 participants (.5%) reported that they had 1 child, and 5 participants (1.2%) did not answer this question. The majority of participants were in their second (32.4%) or third (28.9%)

year in college, 20.6% were in their fourth year, 12.3% were in their first year, 4.7% were in their fifth or more year, and 1.2% did not provide their year in college.

Psychology was the most common major among the participants (36%). Additionally, 11% reported a pre-health declaration (e.g., pre-nursing, pre-medicine, prepharmacy), 9.3% reported having a double major, 8.3% were majoring in a business field (e.g., management, advertising and public relations, accounting, business administration), 7.4% were in a science field (e.g., biological sciences, biochemistry, chemistry), 6.6% were majoring in child, youth, and family studies or human development and family science, 3.7% were undecided or undeclared, 3.4% were majoring in education, 2.5% were in criminal justice or criminology, and 2.5% were in a health science field (e.g., dietetics, nutrition and exercise science, health sciences, nutrition community health and wellness). The remaining participants (representing 6.2% of all respondents) reported majoring in either sociology, computer science, speech pathology, English, communication, music performance, athletic training, engineering, political science, fashion, global studies, agricultural leadership, art, French, or geography; 2.7% of participants did not answer the question about their major.

There were a range of cumulative GPAs reported (M = 3.34, SD = .52). GPAs were reported on a 4.0 scale; 6.1% reported a GPA of 2.5 or lower, 16.9% described a GPA between 2.6 and 3.0, 31.3% reported a GPA between 3.01 and 3.5, 35% described a GPA between 3.51 and 4.0, 3.6% either did not know their GPA or answered "not applicable," and 3.9% left this question blank.

Most participants either identified wanting to go into the medical or health care field following graduation (32.1%) or go into the mental health field, social work field, or

generally a field in psychology after graduation (26.2%). Others identified wanting to work in business (7.6%), education (4.9%), or the criminal justice or law field (4.7%). Further, a small portion of participants reported wanting to attend graduate school but did not specify the field (2%), complete research but did not specify the field of study (.7%), or work with animals in some capacity (.5%). Some participants described several possible career tracks spanning the broad categories above (4.9%) and other participants described a career not fitting into one of the above career tracks (4.2%). Finally, several respondents were unsure about their career plans (8.8%) and few did not respond (3.4%).

When asked if they had experience working directly with children and families, 180 (44.1%) reported no direct experience, 170 (41.7%) reported more than one year of experience, 53 (13%) reported less than one year of experience, and 5 (1.2%) did not answer. For those who reported having more than one year of experience working directly with children and families, participants had a range of 1 to 13+ years of experience. For those who reported having less than one year of experience working directly with children and families, participants had a range of 1 to 11 months of experience. Means and standard deviations are not reported as many participants gave approximations (e.g., 3-4 years, 5+ years) when answering these questions. Very few respondents described having experience working directly with survivors of child sexual abuse. Specifically, 95.6% of participants reported that they did not have direct experience working with children and families who had experienced sexual abuse, 2.2% described that they had less than 1 year of experience working with children and families who had experienced CSA (range of 1-8 months of experience), and 1% reported having more than 1 year experience (range of 1-7 years of experience); 1.2% did not answer.

Most participants (82.8%) identified never receiving prior professional training on the topic of child sexual abuse. However, 6.9% reported having online training, 6.1% reported having in-person training on CSA, and 2.9% reported having both in-person and online training; 1.2% did not respond. Of all participants, 125 (30.6%) identified having completed a college course where the topic of child sexual abuse was discussed, while 278 (68.1%) reported that they have never taken a course where the topic of CSA was discussed and 5 (1.2%) did not respond to this question.

Participant flow is shown in Figure 3.1. Of the 602 students initially screened for eligibility, 194 individuals were excluded because they declined to participate (n = 2), did not meet inclusion criteria (n = 174), or left the study prior to randomization (n = 18). Of those who did not meet the inclusion criteria (n = 174), most were excluded because their duration of participation was less than 35 minutes (n = 140). These participants were excluded as it was deemed impossible to complete the online training and the pre-test and post-test questionnaires in less than 35 minutes. Further, of those who did not meet inclusion criteria, some participants were excluded because their duration of participation exceeded 24 hours (n = 31) and they were assumed to have walked away from the study at some point during participation. Also, one person did not meet the age requirement. Finally, two participants did not meet the inclusion requirement because they were determined to have an invalid pattern of responding on the questionnaires (e.g., answered *I don't know* for all answer options, showing lack of effortful responding on all questionnaires). This left 408 participants to be included in the study and to be randomized to the CSA intervention or the attention control training.



Figure 3.1. Participant flow

Between those who were included and excluded, the groups did not differ on almost all demographic variables, ps > .05 (gender, age, ethnicity, year in college, major, GPA, career goal, experience working with children and families, experience working with children and families who have experienced CSA, and prior professional training). However, the groups did statistically differ in regards to number of children, F(1, 488) =4.13, p < .05, Mse = .17. Most (98.3%) of those in the included group had zero children and two participants had one child (M = 0, SD = .07). In the excluded group, of those who provided an answer to this question, 98.9% had zero children, however, one person reported having nine children (M = .1, SD = .97). The majority of excluded participants (55.2%) did not answer this question, as they were presumed to have left the study prior to completing the end demographic questionnaire. This statistical difference found between the groups is likely not meaningful as more than half of the respondents (107) in the excluded group did not answer this question and one respondent answered that they had nine children, conflating the mean number of children for this group. Additionally, the groups statistically differed in regards to whether respondents reported having taken a college course where the topic of CSA was discussed, $X^2(1) = 5.32$, p < .05. In the included group, approximately 30% (125 participants) identified having taken a course where the topic of CSA was discussed. In the excluded group, 18.6% (16 participants) reported having taken a course where the topic of CSA was discussed. Thus, those included in the study were more likely to have identified taking a college course where CSA was discussed.

Of the 408 respondents who were randomized, 273 were randomly assigned to the CSA intervention and 135 were randomly assigned to the attention control (2:1

randomization). Of the 273 respondents in the CSA intervention group, 216 (79.1%) were female, 55 (20.1%) were male, and 2 (.7%) identified as non-binary. These participants were 19 to 43 years old (M = 20.34, SD = 1.99). Of the intervention group, 74.7% identified themselves as European American or White, 10.6% as Asian, 4.8% as African American or Black, 4.4% as Latinx or Hispanic, 3.3% as biracial, 1.5% as multiracial, and .7% as Native American.

Of the 135 respondents in the attention control group, 114 (84.4%) were female, 20 (14.8%) were male, and 1 (.7%) identified as non-binary. These participants were 19 to 42 years old (M = 20.24, SD = 2.21). Of the attention control group, 73.3% identified themselves as European American or White, 7.4% as Latinx or Hispanic, 7.4% as Asian, 3.7% as African American or Black, 3.7% as biracial, .7% as multiracial, and 2.2% as something other than the provided backgrounds.

Between the CSA intervention group and the attention control group, the conditions did not differ on any of the demographic variables described in detail above, ps > .05 (gender, age, and ethnicity) as well as on any other demographic variable collected, ps > .05 (number of children, year in college, major, GPA, career goal, experience working with children and families, experience working with children and families, experience working with children work).

As can be seen in the participant flow chart in Figure 3.1, five participants of the 408 who were randomized were lost to "follow-up," meaning they did not complete the post-treatment assessment in full. This included two participants in the intervention group and three participants in the control group. This left 403 total participants to be

utilized for post-treatment analyses, including 271 in the CSA intervention group and 132 in the attention control group.

To understand how the respondents were recruited, one question at the end of the study asked if the participant was completing the study for Sona Research Credits. Out of the 403 participants who completed the study in full, 400 (99.3%) reported completing the study for Sona Research Credits. Out of the 602 participants who were initially enrolled in the study, 484 (80.4%) respondents identified completing the study via Sona, 5 (.8%) reported not completing the study via Sona, and 113 (18.8%) did not respond to this question (they were presumed to have left the study before this point). Therefore, the overwhelming majority of participants were recruited through Sona, the Psychology Department's Research Participation website.

After completion of the study, participants could opt to be contacted to complete a two-week follow-up assessment. A link to complete the follow-up assessment was sent to 136 individuals two weeks after their initial completion of the study and 67 participants completed the follow-up measures in full. Participants were 19 to 31 years old (M = 20.81, SD = 2.18). The majority of the follow-up participants identified as female (83.6%), while 14.9% identified as male and 1.5% identified as non-binary. Also, 74.6% of the respondents identified as European American or White, 7.5% as Asian, 6% as African American or Black, 6% as bi-racial, 3% as Latinx or Hispanic, 1.5% as multiracial, and 1.5% as Native American. Of those who completed the follow-up, 46 (68.7%) participants previously completed the CSA training and 21 (31.3%) participants previously completed the attention control training during initial study completion.

The follow-up participants had a similar demographic make-up in regards to age, gender, and cultural background to the full sample of 408 participants and appear to be a generally representable sub-sample. The 67 participants who completed the follow-up assessment were slightly older (M = 20.78, SD = 2.18) than the 341 participants who did not complete the follow-up assessment (M = 20.22, SD = 2.03), F(1, 406) = 4.13, p < .05, Mse = 4.24. There were no differences between those who completed the follow-up measures and those who did not in terms of gender or ethnic background (all ps > .05). **Measures**

Initial Demographic Questionnaire. This questionnaire collected participants' age, gender, and ethnicity. It was used to gather preliminary demographic data on participants in the case that some respondents left the study before completion. This allowed the researchers to compare participants who completed the study to those who dropped out based on basic demographic information, including age, gender, and ethnicity. The Initial Demographic Questionnaire for the Intervention Study can be found in Appendix E. Of note, during the follow-up assessment, participants were asked their age and gender identity (same formatting as the Initial Demographic Questionnaire, without the question on ethnic background; found in Appendix N).

Child Sexual Abuse Outcomes Questionnaire. The primary measure was the Child Sexual Abuse Outcomes Questionnaire (CSA-OQ; Appendix B). Participants completed this 27-item questionnaire at a pre-treatment and post-treatment time point to assesses knowledge of the outcomes associated with child sexual abuse and beliefs about those who experience sexual victimization in childhood. A subset of the sample completed this measure during the two-week follow-up assessment. This measure was described previously in Study 1.

Child and Adolescent Development Test. Created for this study, this 12-item measure assessed knowledge specific to the attention control training, including questions on child and adolescent cognitive, emotional, social, and sexual development (see Appendix F). Two questions were related to what the current research literature suggests on how adults can best communicate issues of sex and sexual development with children, as this was a portion of the attention control training. Nine questions were in a *True/False/I don't know* format and three questions were in a multiple-choice format. This brief measure was administered twice to all participants regardless of the training they received, once prior to the webinar and once following the webinar. A subset of the sample completed this measure during the two-week follow-up assessment.

Social Validity Questionnaire. This 9-item questionnaire measured the participants' thoughts on the importance and validity of the intervention they received. Questions measured whether the training addressed valuable topics, the training was useful to the participant professionally and personally, and the training increased the participant's knowledge. Additionally, questions measured whether the online training was an effective way to learn the material as well as if the training increased the participant's interest in issues related to CSA, motivation to support children following CSA, and interest in participating in training opportunities related to CSA. Questions were on a five-point Likert-type scale, where (1) was *Strongly Disagree* and (5) was *Strongly Agree*. The Social Validity Questionnaire can be found in Appendix G.

CSA History Questionnaire. This four-item questionnaire measured respondents' own history of sexual abuse and sexual assault. It was first created for a CSA-related study using undergraduate students by the author (Theimer & Hansen, 2017). Two questions, "Have you experienced sexual abuse as a child or adolescent?" and "Have you experienced sexual assault as an adult?," were answered in a *Yes* or *No* format. Respondents were also asked if they personally know someone who has experienced sexual abuse as a child or adolescent and if they know someone who has experienced sexual abuse or assault, a secondary question then appeared asking the respondent's relationship to the victim (e.g., immediate family member, extended family member, close friend, acquaintance). The CSA History Questionnaire can be found in Appendix H.

End Demographic Questionnaire. This questionnaire asked the participants a variety of demographic questions, including year in college, major, GPA, and number of children (Appendix I). Respondents provided their career plans in an open-ended answer format. This questionnaire also asked about the participants' experience working with children and families as well as experience working with child sexual abuse victims. Participants provided their past training and educational experiences in the subject area. Finally, one question asked whether they were recruited from Sona or an e-mail to understand how participants were recruited.

Follow-Up Participation Questions. Every participant was asked if researchers could contact them for a brief follow-up assessment that should take no more than 15 minutes to complete. Participants were notified here that, in addition to being entered

into a raffle for their completion of the current study, they would have the opportunity to enter a second raffle following their completion of the follow-up assessment. Participants answered *Yes* or *No* to whether researchers could contact them for a followup assessment. If respondents answered *Yes*, they were then asked to create a 6-digit Unique Identifier, which was used to link their results from the current study to their results in the follow-up assessment. Participants entered the last two letters of their first name (i.e., given name), the day of the month they were born (two digits), and the last two letters of the city they were born, without any spaces. The Follow-Up Participation Questions can be found in Appendix J.

Separate Contact Information Form. After the completion of the study, participants were given the option to provide their name and e-mail address on a separate form (Appendix K) to be entered to win one of two available \$50 Amazon gift cards and to officially opt to be contacted for the follow-up assessment. Names and contact information were not tied to participants' data in any way, as the form was administered through a separate Qualtrics survey from the study. The Separate Contact Information Form administered at the end of follow-up assessment only included the option to be entered into the raffle (Appendix O).

Materials

CSA Outcomes Intervention. Broadly, research shows that many professionals and lay adults are not be adequately prepared to support victims because of insufficient knowledge about CSA and misinformed beliefs (Abeid et al., 2015; Blakely & Ribeiro, 1997; Lentsch & Johnson, 2000; Márquez-Floresa et al., 2016; McGregor, Glover, et al., 2010; Pelisoli et al., 2015). Thus, empirical assessment of individuals' knowledge and beliefs and effective interventions are key to providing those interacting with CSA survivors with proper training to best support children and families.

To develop the intervention, many efforts were taken to (a) determine pertinent content, (b) identify a proven approach to training, and (c) ensure the applicability of the content to various professional disciplines and lay adults.

A comprehensive literature review was completed to understand the current empirical research on the consequences of sexual victimization in childhood and the factors which associate with risk and resiliency following sexual abuse. This literature review was used to determine the content and organization of the intervention. Furthermore, the author completed numerous online trainings which aim to increase adults' knowledge of child abuse to understand what content was absent from these interventions that could be helpful for lay adults and professionals to know. Particularly, no interventions specifically focused on the consequences of child sexual abuse, which represented a gap in current training efforts. For the interventions that did include information on the consequences of victimization, an examination of the content provided and how the content was presented to the participant was undertaken. This was used to determine what factors could be enhanced for the development of a new training specifically targeted to increase knowledge of CSA outcomes.

Additionally, a literature review was completed to determine the format of the intervention. Studies have shown that online trainings are convenient and accessible and have the potential for reaching a wide audience (Kenny, 2007; Paranal et al., 2012; Wurtele, 2017). Previous research also shows online interventions are effective and useful for increasing knowledge in the area of child sexual abuse (Kenny, 2007; Paranal

et al., 2012; Wurtele, 2017). Furthermore, from the author's own experience completing online trainings, interactivity and multi-media displays (e.g., videos, text, images) were important for increasing engagement. Thus, it was determined that an online intervention which was interactive and engaging had the ability to reach a wide audience and be an effective way of increasing knowledge. Articulate Storyline 360 e-learning software was used to create the online training in a webinar-style format. The innovative, awardwinning technology is used worldwide to create e-learning courses, ensuring high production value of the webinars created. Articulate Storyline 360 is responsive to viewing webinars on any mobile device, tablet, or computer and allows for touch-screen interaction if that option is available to the user. Articulate has worked with 78,000 organizations to provide e-learning courses to 83 million learners (Articulate Global Inc., 2019).

To further develop the 30-minute intervention, a team of six doctoral students as well as two licensed psychologists with advanced clinical and research experience in child sexual abuse carefully reviewed the training and provided feedback on the content and format. Further, extra efforts were taken by the team to ensure the applicability of the content for a wide audience, to ensure succinctness of the intervention to reduce the time burden on participants while still providing comprehensive information, and to ensure clarity of the content by eliminating technical language and jargon and using lay terms.

The primary goal of the online intervention was to increase knowledge and correct misinformed beliefs specifically related to CSA outcomes. Thus, based on a review of the empirical literature, examination of previous trainings, and consultation with CSA experts, the most relevant and pertinent content was determined, including the heterogeneity of response to CSA, the factors related to resiliency, common responses to CSA (belief, blame, negative expectations), and how people's responses to CSA may influence victim recovery. To ensure the adults completing the online training had foundational knowledge in topics related to child sexual abuse in addition to understanding the consequences of victimization, information was also provided on the definition and prevalence of child sexual abuse as well as mandatory reporting laws.

Near the beginning of the training, a slide sharing local providers and resources in the community was included so that participants could easily access assistance if they felt upset or distressed by the information. While the training material was not expected to introduce negative emotions, due to the sensitive nature, these resources were included to ensure accessibility to local care. A slide on providing national resources was provided in a popular online training on CSA prevention (Darkness to Light, 2018) and was deemed appropriate to include here. Also, participants could access the websites of these local providers and resources by clicking on the word, "RESOURCES," which was at the top right corner of the entire training.

The intervention used audio, text, professional stock photos, and interesting visual aids to convey this information and increase learning (Clark & Mayer, 2016). Moving graphics synced to the audio were used on every slide to increase attention to and learning of the information, per cognitive theory of multimedia learning (Clark & Mayer, 2016). Evidence-based ways to present audio were utilized, including using a human voice with quality recording equipment as well as using conversational style language and tone rather than a more formal, academic style of language (Clark & Mayer, 2016).

Respondents were required to click an arrow on each slide to go to the next page to ensure they were interacting with the webinar throughout. Participants could not go to the next slide until the audio was finished for each slide, thus, respondents could not skip through the training. However, at any time, respondents could click a back arrow to go to previous slides. The presentation used a professionally designed template with striking, but not overwhelming, colors and fonts that were consistent throughout the entire webinar. All professional photos that were used represented individuals from various ages, genders, and ethnic backgrounds and each photo was specifically chosen to match the audio and text on the slide. A variety of individual slide templates were used to increase visual interest. At two points during the training, participants were asked to answer "knowledge checks" to confirm participants were attending to the material and to increase interactivity. Participants could not move forward without answering each of the "knowledge check" questions. Overall, the intervention was designed to maximize learning and maintain attention grounded in evidence-based e-learning methods (Clark & Mayer, 2016).

Prior to the start of the Intervention Study, a team of three research assistants completed the online CSA intervention to provide detailed feedback on the ease of use, formatting, and content. The feedback also ensured no technical difficulties occurred while viewing the webinar and that there were no concerns about how to navigate through the training. A summary of the intervention content, the outline and script, a link to the webinar in video-format, as well as the webinar slides can be found in Appendix P.

Understanding the consequences associated with sexual abuse allows all professionals and lay adults to better identify symptoms, have a more comprehensive

understanding of the impact of sexual abuse, and interact with children in an empathetic and supportive manner. Thus, the information in the training was developed to be broad enough that professionals from many disciplines, as well as any adult, can apply it when working and interacting with children and families. As described above, previous research has studied a variety of populations including nurses, physicians, general health professionals, mental health providers, social workers, teachers, and daycare workers (e.g., Abeid et al., 2015; Márquez-Floresa et al., 2016). This study aimed to utilize University of Nebraska-Lincoln students majoring in psychology or taking psychology courses, those majoring in child, youth, and family studies, sociology, criminal justice, education, and nursing as well as those with a pre-medicine declaration. These groups represent developing professionals who will likely interact with CSA victims and families in some capacity through their careers. These individuals also have a high possibility of currently interacting with victims and families through their jobs, internships, volunteer work, and practica. While previous studies have targeted specific groups of individuals (e.g., physicians, social workers), this project aimed to provide information that is broadly applicable to a range of various disciplines as well as all lay adults. This notion embodies the belief that all adults and all professionals have the opportunity to support CSA survivors and be a positive part of their recovery. A person's knowledge and beliefs inform how they interact with children and families; thus, accurate knowledge and informed beliefs could increase competence and positively impact survivors, associating with more resilient outcomes for children.

Attention control training. Participants in the attention control group received a 30-minute online training about child and adolescent development. Content covered

cognitive, emotional, social, and sexual development of children and adolescents as well as skills for talking to children and adolescents about sex in a developmentally appropriate manner. This topic was chosen because it did not overlap with the material in the CSA Outcomes Intervention in any way, but participants may still find the content useful and valuable for them personally and professionally. Additionally, this topic was chosen in the hope that, although one of the pre- and post-test measures was about sexual abuse, the study materials would feel somewhat cohesive, given that the training covered children and adolescents and how to talk about sex with youth. The webinar followed a lifespan approach to youth development, beginning with infancy and ending with adolescence.

With exception to the content, the attention control training mirrored the format of the CSA intervention in every way possible (e.g., template, colors, and fonts used, number and format of slides, number of words per slide, number of words in the script presented via audio and amount of information provided overall, and outline of slides) and was facilitated through Articulate Storyline 360. Thus, the attention control webinar used the same evidence-based principles to increase e-learning (Clark & Mayer, 2016). The summary, outline, script, video link, and slides of the attention control training can be found in Appendix Q.

Procedure

Participants were recruited in three ways, (a) through the Psychology Department's Subject Pool using Sona, (b) through in-person solicitation of the study (i.e., notifying students in key undergraduate psychology courses that the study was available via Sona), and (c) through e-mail recruitment. Using Sona, participants selfselected to participate in this online study after viewing other available studies. The inclass solicitation aimed to increase awareness of the study to audiences who may be interested. Additionally, because not all potential participants may be a part of the Psychology Department's Subject Pool and cannot be recruited using Sona, the researchers reached out to advisors of the following majors: child, youth, and family studies, psychology, sociology, criminal justice, education, and nursing as well as those with a pre-medicine declaration. The researchers asked the major advisors to send the recruitment e-mail to the students in the major. Thus, some participants self-selected to participate in this online study after receiving an e-mail from their major advisor inviting them to participate. As noted prior, almost all participants were recruited via Sona.

From both Sona and the e-mail, participants were invited to follow a link to the online study administered through Qualtrics. Participants read the informed consent form (Appendix D) and completed the Initial Demographic Questionnaire. Then, they completed the CSA-OQ and the Child and Adolescent Development Test as the pre-treatment assessments. Participants were told that the purpose of this research project was to (a) understand students' and new professionals' knowledge and beliefs about child sexual abuse outcomes and (b) evaluate an online training on child and adolescent experiences. Next, the participants were randomly assigned to either complete an online intervention about child sexual abuse outcomes or an online training about child and adolescent development. Those receiving the online intervention about child sexual abuse outcomes were the treatment group. Those receiving the online training about child and adolescent development made up the attention control group. Both online

interventions took approximately 30 minutes to complete and were in the form of an Articulate Storyline 360 e-learning webinar.

Then, all participants completed the CSA-OQ and the Development Test again, the post-treatment assessments, as well as the Social Validity Questionnaire and the CSA History Questionnaire. Next, the participants completed a final demographic questionnaire. After completion of the questionnaires, individuals were debriefed with more specific information about the purpose of the study, including that some participants received an online training on CSA outcomes and some received a training on child and adolescent development. Finally, the participants were asked to complete the Follow-Up Participation Questions and were notified that the study had ended. On the final Qualtrics page, respondents were informed that they had the option to provide their name and e-mail address to be entered to win an incentive for completing the study and/or to be contacted for a follow-up assessment. Therefore, if the participant chose, they clicked a link on the final page of the study which took them to a separate form. The participant's name and e-mail address were not tied to their answers in the study in any way. Respondents who signed up for the study using Sona automatically received three research participation credits following completion.

To measure maintenance effects, an anonymous link to a follow-up assessment was e-mailed two-weeks after initial participation to all participants who elected to be contacted for a follow-up assessment (Appendix L). The e-mail was sent through an account designated for use only for the study and the assessment was administered through Qualtrics. For those who clicked on the link, participants were first shown a new Informed Consent Form (Appendix M), specific to the procedures of the follow-up assessment. Respondents were then asked to provide their "unique identifier." This unique identifier linked their answers during initial participation to their answers in the follow-up assessment. Participants did not have to remember this identifier from two weeks prior as they were asked to answer the same questions they used to create the identifier and enter that information on the webpage. The unique identifier was formed by entering the last two letters of their first name, the day of the month they were born, and the last two letters of the city where they were born.

Next, participants completed basic demographic information, including their age and gender, the CSA-OQ, and Child Development Assessment. Respondents then received a debriefing form, which included that the follow-up assessment aimed to measure participants' retention of learning several weeks following completion of an online intervention. On the final Qualtrics page, the participant was notified that the follow-up assessment had ended and by clicking the link to a separate webpage, they had the option to provide their name and e-mail address to enter a raffle to win an additional \$50 Amazon gift card for completing the follow-up assessment. The participant's name and e-mail address were not tied to their answers in the follow-up assessment or full study in anyway. All procedures were approved by the university's IRB.

Results

Analyses included descriptive, bivariate, and multivariate data analyses, all conducted using SPSS version 24.

Participant Sexual Abuse and Assault History

Of the 403 participants who completed all aspects of the study, 53 (13.2%) identified themselves as having experienced sexual abuse as a child or adolescent.
Further, 196 (48.6%) participants described that they personally knew someone who has experienced sexual abuse as a child or adolescent and 120 participants described the person they know as a "close friend."

Similarly, 64 (15.9%) participants identified themselves as having experienced sexual assault as an adult. Approximately half (51.9%; 209 participants) reported personally knowing someone who has experienced sexual assault as an adult and 154 participants described the person they know as a "close friend." Of note, there were no differences in abuse and assault history between those in the CSA intervention group and the attention control group, p > .05.

CSA-OQ Pre-Test

To understand the overall sample's CSA knowledge and beliefs prior to randomization, results of the CSA-OQ pre-test assessment were analyzed for all included participants in the sample (post-test results will be described by group). Calculated out of 23 items that have a correct vs. incorrect answer, scores on the test ranged from 1 to 23 (4%-100%; M = 14.48 [62.95%], SD = 3.87) for the 408 participants who completed all questions on the CSA-OQ pre-test. Based on 10-point increments, 1 participant received a score within the 0-9% range, 1 respondent scored in the 10-19% range, 8 respondents scored in the 20-29% range, 39 scored in the 30-39% range, 36 scored in the 40-49% range, 63 scored in the 50-59% range, and 19 participants scored in the 90-100% range (1 person received a 100%). Scores skewed slightly toward the higher end of scores. Of note, the CSA-OQ pre-test scores did not differ between the CSA intervention group and the control group, F(1, 406) = .13, p > .05, Mse = 14.99. The intervention group had a mean of 14.43 (SD = 3.91). The control group had a mean of 14.58 (SD = 3.81).

One knowledge-based question did not have a single identified correct or incorrect answer. This question was "Name the reasons why some children don't tell about sexual abuse." This question was intended to be descriptive in nature, allowing the author to understand what individuals know about the reasons children do not tell. The number of answers provided ranged from 0 to 13 (M = 2.94, SD = 1.55). Approximately 30% of participants provided three answers to this question, which was the most common number of answers provided. Answers provided by the respondents were consistent with the empirical literature on why children do not come forward after they experience sexual abuse, such as embarrassment, fear of what would happen if they disclosed, they were threatened by the offender, they had a close relationship with the offender and did not want them to get in trouble, and the child did not understand it was sexual abuse. At the pre-test, the average number of reasons provided did not differ between the intervention group and the control group, F(1, 406) = .52, p > .05, Mse = 2.4. The intervention group had a mean of 2.9 (SD = 1.51). The control group had a mean of 3.02 (SD = 1.62).

The CSA-OQ included three questions which measured participants' beliefs related to child sexual abuse outcomes. On the item "Child sexual abuse victims can never function as they did before the abuse occurred," where 1 is the minimum rating (*strongly agree*) and 5 is the maximum rating (*strongly disagree*), participants had an average rating of 3.2 (SD = .99). To describe this response pattern categorically, 17 (4.2%) strongly agreed with the statement, 89 (21.8%) agreed, 125 (30.6%) were unsure

whether they disagreed or agreed, 151 (37%) disagreed, and 26 (6.4%) participants strongly disagreed with the statement.

On the item "Child sexual abuse victims are permanently damaged," where 1 is the minimum rating (*strongly agree*) and 5 is the maximum rating (*strongly disagree*), participants had an average rating of 2.85 (SD = 1.08). To describe this response pattern categorically, 38 (9.3%) strongly agreed with the statement, 134 (32.8%) agreed with the statement, 110 (27%) were unsure whether they disagreed or agreed, 103 (25.2%) disagreed, and 23 (5.56%) participants strongly disagreed with the statement.

A third question asked participants to identify the reasons why they would not believe a child's disclosure of sexual abuse; 19 answer options were provided and participants could select as many as they wanted. Results are shown in Table 3.1. The most common responses included, "The child has a pattern of regularly telling lies" (63.2% of participants chose this answer), "The child is constantly alleging abuse against people" (51.2%), "Parts of the child's disclosure included information you know to be false" (47.5%), and "The child's history of delinquency or behavior problems" (39%). The fifth most common response was, "No matter what, I would believe the child's disclosure" (38%). There were no differences between the CSA intervention group and the attention control group on any of the pre-test belief-related questions, ps > .05.

CSA-OQ Post-Test

Of note for the following analyses, there was no need to add control variables to any of the models, as randomization was proven to be effective. As described, there were no differences between the intervention and control group on any demographic variable or on any aspect of the CSA-OQ pre-test.

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Intervention group CSA-OQ post-test. Calculated out of 23 items that have a correct vs. incorrect answer for 271 participants in the intervention group who completed all questions on the CSA-OQ post-test, scores on the test ranged from 5 to 23 (22%-100%; M = 19.12 [83.12%], SD = 3.52). Based on 10-point increments, 0 participants received a score within the 0-19% range, 2 respondents scored in the 20-29% range, 2 scored in the 30-39% range, 9 scored in the 40-49% range, 7 scored in the 50-59% range, 23 scored in the 60-69% range, 49 in the 70-79% range, 63 in the 80-89% range, and 116 participants scored above in the 90-100% range (37 people received a 100%). Scores skewed toward the higher end of scores.

One knowledge-based question ("Name the reasons why some children don't tell about sexual abuse") did not have a single identified correct or incorrect answer and was primarily intended to be descriptive in nature. However, because there are numerous reasons children do not tell, a participant who has more knowledge in this area may be able to identify more answers compared to someone with limited knowledge. For the intervention group at post-test, the number of answers provided ranged from 1 to 11 (M = 3.12, SD = 1.74); 37% of participants provided four of more answers and 30.3% provided three answers. Answers provided were largely consistent with the empirical literature on why children do not come forward after they experience CSA (e.g., fear, embarrassment).

The CSA-OQ included three questions which measured participants' beliefs related to child sexual abuse outcomes. On the item "Child sexual abuse victims can never function as they did before the abuse occurred," participants had an average rating of 3.98 (SD = 1.03). Described by response category, 5 (1.8%) strongly agreed with the

statement, 29 (10.7%) agreed, 28 (10.3%) were unsure whether they disagreed or agreed, 113 (41.7%) disagreed, and 96 (35.4%) strongly disagreed.

On the item "Child sexual abuse victims are permanently damaged," participants had an average rating of 3.77 (SD = 1.14). To describe this categorically, 9 (3.3%) strongly agreed with the statement, 43 (15.9%) agreed, 32 (11.8%) were unsure whether they disagreed or agreed, 105 (38.7%) disagreed, and 82 (30.3%) strongly disagreed.

A third question asked participants to identify the reasons why they would not believe a child's disclosure of CSA. Results are shown in Table 3.1. The most common response was, "No matter what, I would believe the child's disclosure" (71.2%). Other common responses included, "The child has a pattern of regularly telling lies" (26.2%), "The child is constantly alleging abuse against people" (19.6%), "Parts of the child's disclosure included information you know to be false" (19.9%), and "The child's history of delinquency or behavior problems" (17%).

Table 3.1

and Follow-up							
	Total	Inton	uantian (Co	atrol Cro	
	Sample	Intervention Group			Col	Control Group	
	Dra Taat	Dra Taat	Post-	Follow-	Dra Tast	Post-	Follow
	Ple-lest	Pre-rest	Test	T.L.	Pre-rest	Test	T.L.

Reasons Not to Believe a Child's Disclosure: Answer Selections on CSA-OQ Pre-Test, Post-Test,

	Due Test	Dre Test	Post-	Follow-	Dra Taat	Post-	Follow
	Ple-Test	Pre-rest	Test	Up	Pre-rest	Test	-Up
The child's history of							
delinquency or behavior	39%	$41\%^{2}$	$17\%^{12}$	15.2%	36.4%	31.1% ¹	9.5%
problems							
The child's sexual	15 204	17 704	8 50/	Q 704	10.6%	8 20/	0.5%
promiscuity	13.270	17.7%	0.370	0.770	10.070	0.370	9.5%
The child has a pattern of	63 7%	61 30/2	26 20% 12	28 30%	67 4%	11 70 6 ¹	17 6%
regularly telling lies	03.270	01.570	20.270	20.370	07.470	41.770	47.070
The child waited days or							
months to tell about the	6.1%	6.3%	8.1%	10.9%	6.1%	3%	0%
alleged abuse							
The alleged abuse							
occurred one or more	7.4%	8.1%	7.7%	13%	6.1%	3%	0%
years ago							

The child only disclosed very minimal details	14%	14.8%	8.9%	8.7%	12.9%	6.8%	4.8%
The child disclosed an							
overly detailed account of	6.1%	6.6%	4.1%	6.5%	5.3%	2.3%	0%
abuse	2.00/	2 70/	5 00/1	9.70/	4 50/	Q 0/1	00/
The child's family is poor	5.9%	5.7%	5.9%	8.1%	4.3%	.8%	0%
wealthy	3.4%	3.7%	2.5%	4.3%	3%	.8%	0%
The child is very young	8.8%	7.4%	5.9%	13%	12.1%	3%	0%
The child is a teenager The child is constantly	5.1%	5.2%	6.3% ¹	4.3%	5.3%	$1.5\%^{1}$	0%
alleging abuse against	51.2%	52.8% ²	19.6%12	32.6%	47%	32.6%1	47.6%
disclosure included	47 50/	44.20/	10.00/	01 70/	520/	26.50	22.20
information you know to	47.5%	44.3%	19.9%	21.7%	55%	26.5%	33.3%
be false							
The child could gain							
something from the							
accusation of abuse (e.g.,	26 50/	26.0%	16 204	21 704	21 804	17 404	22.804
they would be removed	30.3%	30.9%	10.2%	21.770	34.070	1/.470	23.070
from the foster home they							
don't like)							
The child's parents are							
going through a divorce	0.6%	11 /1%	6.6%	10.0%	6 1%	30/2	0%
and the accused offender	9.070	11.470	0.0%	10.970	0.1 70	570	070
is one of the parents							
The accused offender is							
someone very close to the	6.9%	7.4%	7%	10.9%	6.1%	3%	0%
child (e.g., family)							
The accused offender is a	6 10%	6.6%	5 20%	130/	6 1%	3 8%	0%
professional	0.470	0.070	J.270	1370	0.1 70	5.070	070
The accused offender is							
known to be trustworthy	9.1%	8.5%	8.1%	15.2%	$10.6\%^{4}$	$6.1\%^4$	4.8%
and credible							
No matter what, I would							
believe the child's	38%	37.3% ³	71.2% ¹³	69.6%	39.4%	54.5% ¹	42.9%
disclosure							

¹ indicates a significant difference in the CSA-OQ post-test response pattern between the intervention group and the control group, p < .05² indicates the intervention group experienced a greater decreased probability of selecting this answer

option from pre-test to post-test than the control group, p < .05

³ indicates the intervention group experienced a greater increased probability of selecting this answer option from pre-test to post-test than the control group, p < .05

⁴ indicates the control group experienced a greater decreased probability of selecting this answer option from pre-test to post-test than the intervention group, p < .05

Attention control group CSA-OQ post-test. Calculated out of 23 items that have a correct vs. incorrect answer for 132 participants in the attention control group who completed all questions on the CSA-OQ post-test, scores on the test ranged from 2 to 23 (9%-100%; M = 15.52 [67.46%], SD = 3.84). Based on 10-point increments, 1 participant received a score within the 0-9% range, 0 respondents scored in the 10-19% range, 1 respondent scored in the 20-29% range, 9 scored in the 30-39% range, 11 in the 40-49% range, 13 in the 50-59% range, 25 in the 60-69% range, 43 in the 70-79% range, 21 in the 80-89% range, and 8 participants scored in the 90-100% range (1 person received a 100%). Scores skewed slightly toward the higher end of scores.

On the question "Name the reasons why some children don't tell about sexual abuse," the number of answers provided ranged from 0 to 8 (M = 2.69, SD = 1.51) for the control group at post-treatment; 41.6% of participants provided 2 or less answers to this question and 31.1% provided 3 answers. Reasons provided were largely consistent with the literature on why children do not come forward after CSA (e.g., embarrassment).

On the item "Child sexual abuse victims can never function as they did before the abuse occurred," participants had an average rating of 3.21 (SD = 1.04). To describe this response pattern categorically,7 (5.3%) strongly agreed with the statement, 32 (24.2%) agreed, 26 (19.7%) were unsure whether they disagreed or agreed, 60 (45.5%) disagreed, and 7 (5.3%) participants strongly disagreed.

On the item "Child sexual abuse victims are permanently damaged," participants had an average rating of 3 (SD = 1.03). Described by response category, 9 (6.8%) strongly agreed with the statement, 38 (28.8%) agreed, 33 (25%) were unsure whether they disagreed or agreed, 48 (36.4%) disagreed, and 4 (3%) strongly disagreed.

A third question asked participants to identify the reasons why they would not believe a child's disclosure of sexual abuse. Results are shown in Table 3.1. The most common response was, "No matter what, I would believe the child's disclosure" (54.5%). Other common responses included, "The child has a pattern of regularly telling lies" (41.7%), "The child is constantly alleging abuse against people" (32.6%), and "The child's history of delinquency or behavior problems" (31.1%).

Comparison between the groups on CSA-OQ post-test. Using a 2-between groups (BG) ANOVA, the CSA-OQ post-test results were compared between the intervention group and control group to evaluate the CSA webinar. Consistent with the hypothesis, mean scores on the post-test CSA-OQ were significantly higher for the treatment group compared to the attention control group, F(1, 401) = 87.66, p < .001. The intervention group had a mean of 19.12 (SD = 3.52; average of 83.12% correct) and the control group had a mean of 15.52 (SD = 3.84; average of 67.46% correct) on the post-test measure. This suggests that the group who completed the CSA-related training had more knowledge on CSA outcomes compared to those who did not receive the intervention.

As described, while the question "Name the reasons why some children don't tell about sexual abuse," was primarily descriptive in nature, a participant who has more knowledge may be able to identify more answers compared to someone with limited knowledge. The intervention group provided more answers to this question at post-test compared to the attention control group, F(1, 401) = 5.88, p < .05, Mse = 2.77. On average, the intervention group provided 3.12 (SD = 1.74) answers while the attention control group provided 2.69 (SD = 1.51) answers at post-test.

For the three belief-questions on the CSA-OQ post-test, various analyses were used to compare differences in participants' answers between the two groups. For two questions, participants were asked to rate their level of agreement to a statement. First, to compare the responses between the groups in a continuous manner, a BG ANOVA was completed for the item "Child sexual abuse victims can never function as they did before the abuse occurred." At post-test, the intervention group had a higher average rating (M = 3.98, SD = 1.03) compared to the control group (M = 3.21, SD = 1.04), F(1, 401) =49.35, p < .001, Mse = 1.07. Further, the conditions were compared in a categorical fashion. To more efficiently compare post-test categorical response patterns, responses were grouped by whether the participant indicated any level of disagreement (*disagree* and *strongly disagree* grouped together, representing a more supportive belief) and any level of agreement/unsureness (strongly agree, agree, and I'm not sure grouped together, representing a less supportive belief). On this item, there were significant differences in the pattern of responses between the intervention and control group at post-test, $X^{2}(1) =$ 28.59, p < .001. As shown in Figure 3.2, at post-test, those in the intervention group tended to disagree with this statement, whereas those in the control group appeared to be equally as likely to disagree as to agree/be unsure.

On the post-test item "Child sexual abuse victims are permanently damaged," the intervention group had a higher average rating (M = 3.77, SD = 1.14) compared to the control group (M = 3, SD = 1.03), F(1, 401) = 42.76, p < .001, Mse = 1.22. Comparing responses categorically, there were significant differences in the pattern of responses between the intervention and control group, $X^2(1) = 32.25$, p < .001. Shown in Figure

3.3, at post-test, those in the intervention group tended to disagree with this statement,

whereas those in the control group were more likely to agree/be unsure.



Figure 3.2. Relationship between group assignment and answer to "child sexual abuse victims can never function as they did before the abuse occurred" at post-test



Figure 3.3. Relationship between group assignment and answer to "child sexual abuse victims are permanently damaged" at post-test

A third question asked participants to identify the reasons why they would not believe a child's disclosure of sexual abuse; 19 answer options were provided and participants could select as many as they wanted. Using Chi-Square analyses, the pattern of responses was different between the intervention and control group at post-test for following answer options: "The child's history of delinquency or behavior problems," $X^{2}(1) = 10.41$, p < .001; "The child has a pattern of regularly telling lies," $X^{2}(1) = 9.88$, p < .01; and "The child is constantly alleging abuse against people," $X^2(1) = 8.29$, p < .01. A higher percent of the control group selected these answer choices at post-test. Also, the pattern of responses was different for: "No matter what, I would believe the child's disclosure," $X^{2}(1) = 10.96$, p < .001; "The child's family is poor," $X^{2}(1) = 5.82$, p < .05; and "The child is a teenager," $X^2(1) = 4.73$, p < .05. A higher percent of the intervention group selected these answer choices at post-test. Results are shown in Table 3.1. For two answer options described above ("The child's family is poor" and "The child is a teenager"), it was unexpected that a larger percent of those in the intervention group selected these responses, as selection of these responses represents a misinformed belief regarding why one does not believe a child's disclosure of CSA.

CSA-OQ Pre-Test to Post-Test

To further evaluate the intervention, analyses were run to see how the treatment group's and control group's CSA-OQ mean scores changed from pre-test to post-test using 2-within groups (WG) ANOVAs. It was hypothesized that the CSA intervention group would show a significant increase in scores from pre-test to post-test, representing increased knowledge about CSA outcomes, while the control group would not show an increase. In partial support of the hypothesis, there was a significant increase from CSA- OQ pre-test scores (M = 14.44 [62.76%], SD = 3.92) to post-test scores (M = 19.12[83.12%], SD = 3.52) for the CSA intervention group, F(1, 270) = 388.04, p < .001, Mse = 7.66. Contrary to the hypothesis, there was also a significant increase from CSA-OQ pre-test scores (M = 14.5 [63.04%], SD = 3.77) to post-test scores (M = 15.52 [67.46%], SD = 3.84) for the attention control group, F(1, 131) = 19.33, p < .001, Mse = 3.52. While this increase for the control group was significant, it was small (approximately one-point increase from pre-test to post-test and approximately 4% increase). The CSA intervention group had an almost five-point increase (also a 20.36% increase) from pre-test to post-test on the CSA-OQ.

To understand how assessment period (pre-test vs. post-test) interacted with condition (intervention group vs. control group), a 2x2 Mixed Groups (MG) Factorial ANOVA was performed, allowing for all variables to be in one model. Table 3.2 shows the means for the conditions of the design. There was an interaction between condition and CSA-OQ assessment period, F(1, 401) = 94.68, p < .001, Mse = 6.31. Both conditions showed an increase in CSA-OQ scores from pre-test to post-test (using LSD = .49). There was a main effect for treatment condition, F(1, 401) = 25.47, p < .001, Mse = 21.82, with overall higher CSA-OQ scores for the intervention group compared to the control group. This result was descriptive for scores at post-test, however, at pre-test, there was no difference in CSA-OQ scores between the intervention and control group. There was a main effect of assessment period, F(1, 401) = 228.53, p < .001, Mse = 6.31, with overall higher CSA-OQ scores at post-test. While this was true for both conditions, the CSA intervention group had an average increase of 4.68 points while the control group had an average increase of 1.02 points.

	Time of CSA-		
Condition	Pre-Test M	Post-Test M	Marginal M
CSA Intervention Group	14.44	19.12	16.78
Control Group	14.50	15.52	15.01
Marginal	14.46	17.94	

Main Effects and Interaction between Condition and Time of CSA-OQ Assessment

Further, relative amount of pre-post change between the groups was examined using a 2-BG ANOVA. The average increase in score from CSA-OQ pre-test to post-test was significantly larger for the treatment group compared to the control group, F(1, 401)= 94.68, p < .001. As described, the intervention group had a mean increase of 4.68 (*SD* = .24) points and the control group had a mean increase of 1.02 (*SD* = .23) points. Thus, while both groups showed an increase in scores from pre-test to post-test, this analysis showed that the intervention group had a significantly larger increase in scores from pretest to post-test compared to the control group.

Using an ANCOVA analysis, post-test scores were compared between the groups using pre-test scores as a covariate. While the groups had no significant differences in their pre-test scores, this analysis was completed as an added measure to ensure the proper comparison of the post-test scores by holding the pre-test scores constant between the groups. Holding the CSA-OQ pre-test scores constant, those in intervention group had significantly higher post-test scores than those in the control group, F(2, 400) = 150.95, p < .001, Mse = 9.15.

On all the *True/False* questions on the pre-test and post-test CSA-OQ,

participants could opt to select the answer option, *I don't know*. The number of *I don't know* responses was examined from pre-test to post-test for each group, with the expectation that those with more knowledge about CSA outcomes would select *I don't know* less often on the post-test measure. For the intervention group, there was a significant decrease in the number of *I don't know* responses from pre-test (M = 4.13, SD = 3.69) to post-test (M = 1.1, SD = 1.88), F(1, 270) = 191.69, p < .001, Mse = 10.64. For the control group, there was also a significant decrease in the number of *I don't know* responses from pre-test (M = 4.36, SD = 3.6) to post-test (M = 2.93, SD = 3.24), F(1, 270) = 33.66, p < .001, Mse = 3.98. However, the intervention group had significantly less *I don't know* responses on the post-test CSA-OQ (M = 1.1, SD = 1.88) compared to the control group (M = 2.93, SD = 3.24), F(1, 402) = 51.13, p < .001, Mse = 5.8. Of note, there were no differences in the number of *I don't know* responses between the groups on the pre-test CSA-OQ, F(1, 401) = .34, p > .05, Mse = 13.38.

For the number of *I don't know* responses, to understand how assessment period (pre-test vs. post-test) interacted with condition (CSA intervention group vs. control group), a 2x2 MG Factorial ANOVA was performed, allowing for all variables to be in one model. Table 3.3 shows the means for the conditions of the design. There was an interaction between condition and assessment period, F(1, 401) = 20.12, p < .001, Mse = 5.66. Both conditions showed a decrease in *I don't know* responses from pre-test to posttest (using LSD = .47). There was a main effect for treatment condition, F(1, 401) = 13.68, p < .001, Mse = 13.53, with overall less *I don't know* responses for the intervention group compared to the control group. However, at pre-test, there was no

difference in the number of *I don't know* responses between the intervention and control group. There was a main effect of assessment period, F(1, 401) = 155.36, p < .001, *Mse* = 5.66, with overall less *I don't know* responses at post-test. While this was true for both conditions, the CSA intervention group had an average of 1.1 *I don't know* responses at post-test while the control group had an average 2.93 *I don't know* responses.

Further, a BG ANOVA was completed to understand if the treatment condition associated with the number of times participants' answers changed from an *I don't know* selection on the pre-test to a correct answer selection on the post-test. This analysis was only completed for CSA-OQ items which allowed participants to select the option *I don't know* (all true/false questions). Results showed that those in the intervention group had more changes from *I don't know* on the pre-test to the correct answer on the post-test compared to the control group, F(1, 401) = 16.04, p < .001, Mse = 7.88. On average, the intervention group had 3.28 (SD = 3.11) *I don't know* selections on the pre-test change to a correct answer on the post-test (range of 0-16) whereas this occurred an average of 2.04 (SD = 2.04) times for the control group (range of 0-10).

Table 3.3

	Time of A		
Condition	Pre-Test M	Post-Test M	Marginal <i>M</i>
CSA Intervention Group	4.13	1.1	2.62
Control Group	4.36	2.93	3.65
Marginal	4.2	1.7	

Number of I Don't Know Responses: Main Effects and Interaction between Condition and Time of Assessment

A BG ANOVA was completed to understand if the treatment condition associated with the number of times participants' answers changed from an incorrect answer selection on the pre-test to a correct answer selection on the post-test. Results showed that those in the intervention group had more changes from an incorrect answer at pre-test to the correct answer at post-test compared to the control group, F(1, 401) = 79.65, p < .001, Mse = 8.63. On average, the intervention group had 5.74 (SD = 3.25) incorrect selections on the pre-test change to a correct answer on the post-test (range 0-15) whereas this occurred an average of 2.95 (SD = 2.16) times for the control group (range 0-11).

Next, for the question "Name the reasons why some children don't tell about sexual abuse," WG ANOVA analyses were run to determine how the number of answers changed from pre-test to post-test for each group. There was an increase in the number of answers provided from pre-test (M = 2.9, SD = 1.52) to post-test (M = 3.12, SD = 1.74) for the intervention group, F(1, 270) = 5.65, p < .05, Mse = 1.1. There was a significant decrease in the number of answers provided from pre-test (M = 2.98, SD = 1.6) to post-test (M = 2.69, SD = 1.51) for the control group, F(1, 131) = 7.07, p < .01, Mse = .82.

A 2x2 MG Factorial ANOVA was performed to determine how the number of answers provided to this question changed from pre-test to post-test for each group, with all variables in one model. Table 3.4 shows the means for the conditions of the design. There was an interaction between treatment condition and assessment period, F(1, 401) =11.45, p < .001, Mse = 1.01. The control group showed a decrease in the number of responses from pre-test to post-test while the intervention group showed an increase (using LSD = .2). There was no main effect for treatment condition, F(1, 401) = 1.29, p> .05, Mse = 4.16. However, at post-test, the intervention group had significantly more

	Time of A		
Condition	Pre-Test M	Post-Test M	Marginal M
CSA Intervention Group	2.9	3.12	3.01
Control Group	2.98	2.69	2.84
Marginal	2.93	2.98	

Number of Responses to "Name the reasons why some children don't tell about sexual abuse:" Main Effects and Interaction between Condition and Time of Assessment

responses. There was no main effect of assessment period, F(1, 401) = .294, p > .05, Mse= 1.01. The number of responses provided by the intervention group increased whereas the number of responses by the control group decreased from pre-test to post-test.

A 2x2 MG Factorial ANOVA with a continuous outcome was run for the question, "Child sexual abuse victims can never function as they did before the abuse occurred" (see Table 3.5). There was an interaction between condition and assessment period, F(1, 401) = 35.53, p < .001, Mse = .57. The intervention group showed an increase in ratings from pre-test to post-test while the control group did not (LSD = .15). There was a main effect for treatment condition, F(1, 401) = 22.84, p < .001, Mse = 1.46, with higher ratings for the intervention group compared to the control group. However, at pre-test, there was no difference in ratings between the groups. There was a main effect of assessment period, F(1, 401) = 53.32, p < .001, Mse = .57, with overall higher CSA-OQ scores at post-test. However, this was only true for the intervention group. The control group did not have a significant increase in ratings from pre-test to post-test.

	Time of CSA-C		
Condition	Pre-Test M	Post-Test M	Marginal M
CSA Intervention Group	3.23	3.98	3.61
Control Group	3.14	3.21	3.18
Marginal	3.2	3.73	

Main Effects and Interaction between Condition and Time for Question: "Child sexual abuse victims can never function as they did before the abuse occurred"

Additionally, for the question, "Child sexual abuse victims can never function as they did before the abuse occurred" a repeated measures binary logistic regression was conducted to compare how answers for each group changed in probability from pre-test to post-test (i.e., calculation of an odds ratio of selecting any level of disagreement vs. any level of agreement/unsureness with both condition and time of assessment as possible explanatory variables). Table 3.6 shows the probabilities for the conditions of the design. Results showed that the change in probability from pre- to post-test was significantly different between conditions, Wald $X^2 = 19.63$, p < .001. The treatment group had a higher probability of selecting any level of disagreement than the control group (over time). Also, those at pre-test had a lower probability of selecting any level of disagreement than those at post-test (across conditions). Overall, the intervention group experienced greater increased probability of selecting any level of disagreement from pre-test to post-test than the control group. Specifically, the treatment group had a 32.4% increase in the probability of selecting *disagree/strong disagree* from pre-test to post-test while the control group had a 9.86% increase.

	Time of CSA-OQ Assessment			
Condition	Pre-Test %	Post-Test %	Total %	
CSA Intervention Group	44.65%	77.12%	60.89%	
Control Group	40.9%	50.76%	45.83%	
Total %	42.78%	63.94%		

Probability of Selecting Any Level of Disagreement to "Child sexual abuse victims can never function as they did before the abuse occurred"

A 2x2 MG Factorial ANOVA with a continuous outcome was run for the question, "Child sexual abuse victims are permanently damaged." Table 3.7 shows the means for the conditions of the design. There was an interaction between treatment condition and assessment period, F(1, 401) = 43.39, p < .001, Mse = .66. The intervention group showed an increase in ratings from pre-test to post-test while the control group did not (using LSD = .16). There was a main effect for treatment condition, F(1, 401) = 13.92, p < .001, Mse = 1.71, with overall higher ratings for the intervention group compared to the control group; however, this result was only descriptive for ratings at post-test. At pre-test, there was no difference in ratings between the intervention and control group. There was a main effect of assessment period, F(1, 401) = 75.78, p < .001, Mse = .66, with overall higher CSA-OQ scores at post-test. This was only true for the CSA intervention group. The control group did not have a significant increase in ratings from pre-test to post-test.

	Time of CSA-C		
Condition	Pre-Test M	Post-Test M	Marginal M
CSA Intervention Group	2.84	3.77	3.31
Control Group	2.87	3	2.94
Marginal	2.85	3.52	

Main Effects and Interaction between Condition and Time for Question: "Child sexual abuse victims are permanently damaged"

Additionally, for the question, "Child sexual abuse victims are permanently damaged" a repeated measures binary logistic regression was run to compare how answers for each group changed in probability from pre-test to post-test. Table 3.8 shows the probabilities for the conditions of the design. Results showed that the change in probability from pre- to post-test was significantly different between conditions, *Wald X*² = 40.3, p < .001. The treatment group had a higher probability of selecting any level of disagreement than the control group (over time). There was no difference in the probability of selecting any level of disagreement at pre-test versus post-test (across conditions; p = .085); however, this result was only descriptive for the control group. Overall, the intervention group experienced greater increased probability of selecting *disagree* from pre-test to post-test than the control group. Specifically, the treatment group had a 39.48% increase in the probability of selecting *disagree* from pre-test to post-test while the control group had a 6.07% increase.

	Time of CSA-OQ Assessment				
Condition	Pre-Test %	Post-Test %	Total %		
CSA Intervention Group	29.52%	69%	49.26%		
Control Group	33.33%	39.4%	36.37%		
Total %	31.43%	54.2%			

Probability of Selecting Any Level of Disagreement to "Child sexual abuse victims are permanently damaged"

Repeated measures binary logistic regression analyses were run for each of the answer options participants could select for the question, "Why might you not believe a child's disclosure of sexual abuse" to compare how answers for each group changed in probability from pre-test to post-test. Ideally, the intervention group would show a decrease from pre-treatment to post-treatment in the percentage of participants who selected each of the unsupportive beliefs, however, the inclusion of this question on the CSA-OQ was intended to primarily be descriptive in nature to broadly understand the reasons participants gave for why they may not believe a youth's disclosure rather than a specific outcome measure of the intervention. Thus, no hypotheses were made for this question on the CSA-OQ. The percentage of participants in each group who selected each of the answer options at post-test is shown in Table 3.1.

Results showed that the change in probability from pre- to post-test was significantly different between conditions for the following answer options: "The child's history of delinquency or behavior problems" (*Wald X*² = 14.25, p < .001), "The child has a pattern of regularly telling lies" (*Wald X*² = 4.13, p < .05), and "The child is constantly

alleging abuse against people" (*Wald* $X^2 = 13.17$, p < .001). For each of these, the intervention group experienced greater decreased probability of selecting this answer option from pre-test to post-test than the control group. Also, for the response option, "No matter what, I would believe the child's disclosure" (*Wald* $X^2 = 18.3$, p < .001), the intervention group experienced greater increased probability of selecting this answer option from pre-test to post-test than the control group. For the answer option, "The accused offender is known to be trustworthy and credible" (*Wald* $X^2 = 4.43$, p < .05), the control group experienced greater decreased probability of selecting this response from pre-test to post-test than the intervention group.

Exploratory Analyses

Relationship between participant characteristics and pre-test CSA-OQ scores. Correlation and ANOVA analyses were conducted to determine if any participant characteristics (e.g., gender, age, year in college, major, CSA history) associated with higher scores on the pre-test CSA-OQ. The following pre-test results include both the intervention and control group combined – the intervention and control group did not differ on any participant characteristics. Participant age was not significantly associated with pre-test CSA-OQ, r = .293, p > .05, though it was marginally significant (p = .052), trending toward older individuals having higher pre-test scores. There were significant differences in pre-test CSA-OQ scores based on the participant's identified gender, F(2, 405) = 3.67, p < .05, Mse = 14.77. Pairwise comparisons using LSD (with a minimum mean difference = .92) revealed that females (M = 14.65, SD = 3.75) had higher average scores on the pre-test compared to males (M = 13.57, SD = 4.2). Also, those who identified as non-binary (M = 18, SD = 4.58) had

higher average scores on the pre-test compared to both females and males. However, this last result should be interpreted with extreme caution, as there were a very small number of individuals who identified as non-binary in the sample.

Due to the small number of participants in several of the ethnic/racial categories, participants were grouped by whether they were a member of the majority group (i.e., European American or White) or a member of a minority group (i.e., Latinx, African American or Black, Asian or Pacific Islander, Native American) for exploratory analyses. This was completed to better understand how ethnic background associated with pre-test scores, as the results using small comparison groups would have needed to be interpreted with extreme caution due to the small number of participants in some of the ethnic groups. Participants who identified being a member of a minority ethnic group (M = 13.5, SD = 4.04) had lower pre-test scores than those identifying as a member of the majority ethnic group (M = 14.82, SD = 3.76), F(1, 406) = 9.31, p < .01, Mse = 14.67.

The participant's year in college associated with their pre-test score, with significant mean differences appearing between some of the years, F(4, 298) = 6.2, p < .001, Mse = 14.21. Pairwise comparisons using LSD (with a minimum mean difference = 1.18) revealed that those in their 4th year of college (M = 16.06) scored higher than any other year, including those in their 1st year (M = 12.88), 2nd year (M = 14.27), 3rd year (M = 14.25), and 5th+ year (M = 14.05). Those in their 2nd or 3rd year also scored higher than those in their 1st year in college.

A participant's cumulative GPA was related to their pre-test CSA-OQ score, r = .218, p < .001. Those with a higher GPA had a higher pre-test score. Participants who identified taking a college course where the topic of CSA was discussed (M = 15.66, SD

= 3.4) had higher CSA-OQ pre-test scores than those who reported no CSA-related course history (M = 13.91, SD = 3.95), F(2, 400) = 18.45, p < .01, Mse = 14.39.

Participants who reported experiencing CSA had higher scores on the pre-test CSA-OQ (M = 15.47, SD = 4.01) than those who denied ever experiencing CSA (M = 14.3, SD = 3.83), F(1, 401) = 4.23, p < .05, Mse = 14.82. Further, those who reported personally knowing someone who had experienced CSA had higher pre-test scores (M = 15.16, SD = 3.74) than those who identified not knowing someone with a CSA history (M = 13.79, SD = 3.87), F(1, 401) = 12.95, p < .01, Mse = 14.51. Similarly, participants who reported experiencing sexual assault had higher scores on the pre-test CSA-OQ (M = 15.38, SD = 4.01) compared to than those who denied ever experiencing sexual assault (M = 14.28, SD = 3.82), F(1, 401) = 4.33, p < .05, Mse = 14.82. Those who reported personally knowing someone who had experienced sexual assault had higher pre-test scores (M = 15.28, SD = 3.85) than those who denied knowing someone with a sexual assault history (M = 13.57, SD = 3.69), F(1, 401) = 20.54, p < .001, Mse = 14.25.

There was no relationship between participants' pre-test CSA-OQ score and the number of children they reported, r = -.03, p > .05. There were no differences in pre-test CSA-OQ score based on the participant's major, career goal, prior CSA-related training, experience working with children and families, and experience working with sexual abuse victims (all ps > .05). Though, there were few (n = 13) participants who identified having prior experience working directly with survivors of CSA.

Relationship between participant characteristics and pre- to post-test CSA-OQ changes. Analyses were run to determine if any participant characteristics associated with higher increases in scores from pre-treatment to post-treatment assessment for each group.

For the intervention group, participant age, number of children, and GPA were not associated with amount of change from the CSA-OQ pre-test to the post-test and there were no differences in the amount of pre-test/post-test change based on the participant's identified gender, ethnic background, year in college, major, career goal, experience working with families or with CSA victims, prior CSA-related training, child sexual abuse or adult sexual assault history, or personal relationship with a victim of sexual abuse or assault (all ps > .05). For those in the intervention group, there was a significant difference in the amount of change from pre-test to post-test CSA-OQ between participants who identified taking a college course where the topic of CSA was discussed (M = 3.89, SD = 3.36) and those who did not (M = 4.99, SD = 4.08), F(1, 269)= 4.34, p < .05, Mse = 15.127. Those without prior CSA-related coursework had a higher increase in score from pre-test to post-test. As described before, those who identified completing a college course where CSA was discussed also had higher pre-test scores, indicating this group may have had more knowledge about CSA to begin with and, therefore, may have experienced less knowledge gain. Based on these results, prior college coursework in CSA will be used in further exploratory analyses.

For the control group, participant age, number of children, and GPA were not associated with the amount of change from the CSA-OQ pre-test to the post-test and there were no differences in the amount of pre-test/post-test change based on the participant's identified gender, ethnic background, course history, major, career goal, experience working with families or with CSA victims, prior CSA-related training, child sexual abuse or adult sexual assault history, or personal relationship with a victim of sexual abuse or assault (all *ps* > .05). For the control group, participants' year in college associated with amount of change from pre- to post-test, F(4, 127) = 3.1, p < .05, Mse = 6.61). Pairwise comparisons (LSD = 1.41) revealed that those in their 1st year of college (M = 3.29, SD = 3.45) had more improvement than any other year in college (all others had a mean improvement of less than .84 points).

Mixed factorial exploratory analyses. MG Factorial ANCOVAs were used for further exploratory data analyses. Key stratification variables were determined based on the literature (e.g., education, past training experiences) as well as from the above exploratory analyses and these variables were used as covariates in the model.

Above exploratory analyses revealed that those who had not completed a college course where the topic of CSA was discussed had significantly more gains from CSA-OQ pre-test to post-test for the intervention group. Also, when combining both conditions together, those who completed a college course where CSA was discussed had higher pre-test CSA-OQ scores. Thus, whether or not the participant completed a CSA-related college course was used as a covariate in a MG factorial ANCOVA. When controlling for prior college course history, there was an interaction between treatment condition and CSA-OQ assessment period, F(1, 400) = 91, p < .001, Mse = 6.26. Both groups showed an increase in CSA-OQ scores from pre-test to post-test (using LSD = .49). There was a main effect for treatment condition, F(1, 400) = 29.95, p < .001, Mse = 21.07, with overall higher CSA-OQ scores for the intervention group compared to the control group. However, at pre-test, there was no difference in CSA-OQ scores between the intervention and control group. There was a main effect of assessment period, F(1, 400) = 51.53, p < 0.000.

.001, Mse = 6.26, with overall higher CSA-OQ scores at post-test. This was descriptive for both conditions when controlling for prior college course history. Results were similar to the MG ANOVA where college course history was not used as a covariate.

Above exploratory analyses also revealed that, for the control group, those in their 1st year of college had more improvement from pre- to post-test CSA-OQ than any other year in college. Additionally, on the pre-test, those in their 4th year of college scored higher than any other year and those in their 2nd or 3rd year scored higher than those in their 1st year. Thus, year in college was used as a covariate in a MG factorial ANCOVA. When controlling for year in college, there was an interaction between treatment condition and CSA-OQ assessment period, F(1, 400) = 67.3, p < .001, Mse = 6.22. Both groups showed an increase in CSA-OQ scores from pre- to post-test (LSD = .49). There was a main effect for treatment condition, F(1, 400) = 25.36, p < .001, Mse = 21.41, with overall higher CSA-OQ scores for the intervention group compared to the control group. This result was only true for scores at post-test. At pre-test, there was no difference in scores between the groups. There was a main effect of assessment period, F(1, 400) =67.3, p < .001, Mse = 6.22, with overall higher CSA-OQ scores at post-test. This was descriptive for both conditions when controlling for year in college. Results were similar to the MG ANOVA where year in college was not used as a covariate in the model.

While participant GPA associated with pre-test scores among the entire sample, GPA did not associate with the amount of change from pre-test to post-test CSA-OQ for either group. To further understand GPA's role in CSA-OQ scores, it was used as a covariate in the model. When controlling for GPA, there was an interaction between treatment condition and CSA-OQ assessment period, F(1, 373) = 93.09, p < .001, Mse = 6. Both groups showed an increase in scores from pre- to post-test (using LSD = .48). There was a main effect for treatment condition, F(1, 373) = 23.27, p < .001, Mse = 19.72, with overall higher CSA-OQ scores for the intervention group compared to the control group. Though, at pre-test, there was no difference in CSA-OQ scores between the intervention and control group. There was a main effect of assessment period, F(1, 373) = 11.6, p < .001, Mse = 6, with overall higher CSA-OQ scores at post-test. This was descriptive for both conditions when controlling for GPA. Results were similar to the MG ANOVA where GPA was not used as a covariate in the model.

Similar to the above exploratory analyses, the following variables were added to the model as covariates (each was related to the pre-test CSA-OQ score, but not to pretest/post-test change score) and the inclusion of the covariate did not change the pattern of results from the model with no covariate added: child sexual abuse history, adult sexual assault history, knowing someone who is a victim of CSA, knowing someone who is a victim of sexual assault as an adult, age, gender, and ethnicity.

Prior training experiences and experience working with victims was not associated with pre-test scores or with pre-test/post-test change. While initial exploratory analyses do not provide evidence that these variables should be controlled for, they were used as covariates in the model based on prior literature. The inclusion of each of these variables in separate models did not change the pattern of results with no covariate added.

Exclusion of high scorers on pre-test. Exploratory analyses were run to determine if excluding those who scored high on the pre-test would change the findings in any way. As described in sections above, 19 of the 408 participants scored in the 90-100% range (one person received a 100%) on the CSA-OQ pre-test. As it may be

possible that these individuals were unable to significantly increase their scores from pretest to post-test due to their pre-test scores "hitting the ceiling," additional pre-test/posttest comparison analyses were run excluding those who scored in the 90-100% range on the pre-test. Using the 403 participants who completed both the pre-test and post-test, this left 258 participants in the intervention group (13 excluded for scoring above a 90%) on the pre-test) and 127 participants in the control group (5 excluded for scoring above a 90% on the pre-test) for additional analyses. Incidentally, the one person who received a 100% on the pre-test was already excluded from pre-test/post-test analyses because they did not complete the post-test CSA-OQ measure (leaving 18 total participants excluded from these additional analyses rather than 19). For 258 participants in the intervention group, there was a significant increase from CSA-OQ pre-test scores (M = 14.08, SD =3.67) to post-test scores (M = 18.96, SD = 3.52), F(1, 257) = 404.21, p < .001, Mse =7.59. There was also a significant increase from CSA-OQ pre-test scores (M = 14.22, SD = 3.56) to post-test scores (M = 15.31, SD = 3.74) for the control group, F(1, 126) =21.28, p < .001, Mse = 3.52. While this increase for the control group was significant, it was small (approximately 1-point increase from pre- to post-test). The intervention group had an almost 5-point increase from pre- to post-test. These results were very similar to the results including those who scored above 90% on the pre-test.

Additionally, excluding the 18 participations who scored above a 90% on the pretest, the amount of pre-post change between the groups was examined using a 2 BG ANOVA. The average increase in score from CSA-OQ pre-test to post-test was significantly larger for the treatment group compared to the control group, F(1, 383) =7.75, p < .001. The intervention group had a mean increase of 4.88 (SD = 3.9) points and the control group had a mean increase of 1.09 (SD = 2.65) points. Thus, while both groups showed an increase in scores from pre-test to post-test, this analysis showed that the intervention group had a significantly larger increase in scores from pre- to post-test compared to the control group when excluding those who scored above 90% on the pre-test. These results were, again, similar to the results which included participants who scored above 90% on the pre-test.

CSA-OQ subscale of key items. For exploratory purposes, a subscale was created from the CSA-OQ which included four "key items" believed to capture the CSA-OQ's most important take away points in which participants may be particularly misinformed prior to the training. The subscale comprised one question on the heterogeneity of response to trauma, one question related to blame victims may face following disclosure, and two questions about belief of a child's disclosure. At pre-test, for the entire sample, scores on the 4-item subscale of key items ranged from 0 to 4 (M =1.4, SD = 1.12). There was not a significant difference in pre-test scores on this subscale between the groups, F(1, 406) = .07, p > .05, Mse = 1.23. The intervention group's posttest score (M = 2.71, SD = 1.17) on this subscale was higher than the control group's score (M = 1.57, SD = 1.09), F(1, 401) = 115.42, p < .001, Mse = 2.7. A 2x2 MGFactorial ANOVA was performed to understand how subscale scores increased from pretest to post-test for the groups. There was an interaction between treatment condition and assessment period, F(1, 401) = 79.23, p < .001, Mse = .75. Only the intervention group showed an increase in CSA-OQ scores from pre-test to post-test (using LSD = .17). There was a main effect for treatment condition, F(1, 401) = 31.39, p < .001, Mse = 1.78, with overall higher subscale scores for the intervention group compared to the control

group. This result was only true for scores at post-test. There was a main effect of assessment period, F(1, 401) = 126.1, p < .001, Mse = .75, with higher scores at post-test. However, the control group did not increase from pre-test to post-test.

Child and Adolescent Development Test

Development pre-test. To understand the overall sample's knowledge of child and adolescent development prior to randomization, results of the development pre-test assessment were analyzed for all included participants in the sample. Calculated out of 12 items which have a correct vs. incorrect answer, scores on the test ranged from 1 to 12 (8%-100%; M = 7.18 [59.84%], SD = 1.98) for 408 participants who completed all questions on the development pre-test. Scores skewed slightly toward the higher end of scores. Of note, the development pre-test scores did not differ between the CSA intervention group and the control group, F(1, 406) = .2, p > .05, Mse = 3.93.

Development post-test. Calculated out of 12 items for 132 participants who were assigned to the control group, scores on the development post-test ranged from 2 to 12 (17%-100%; M = 9.27 [77.21%], SD = 2.13). For 271 participants who were assigned to the intervention group, scores on the development post-test ranged from 2 to 12 (17%-100%; M = 7.6 [63.31%], SD = 1.93). Using a 2-BG ANOVA, mean scores on the development post-test were significantly higher for the control group compared to the treatment group, F(1, 401) = 61.97, p < .001. The intervention group had a mean of 7.6 (SD = 1.93) and the control group had a mean of 9.27 (SD = 2.13) at post-test.

Development pre-test to post-test comparison for each group. To further evaluate the control training, an analysis was run to see how both the control and the treatment group's mean scores changed from the development pre-test to post-test using a 2-WG ANOVA. There was a significant increase from development pre-test scores ($M = 7.2 \ [60\%], SD = 1.99$) to post-test scores ($M = 9.27 \ [77.25\%], SD = 2.13$) for the control group, F(1, 131) = 134.31, p < .001, Mse = 2.09. There was also a significant increase from development pre-test scores ($M = 7.15 \ [59.58\%], SD = 1.98$) to post-test scores ($M = 7.6 \ [63.33\%], SD = 1.93$) for the intervention group, F(1, 270) = 17.8, p < .001, Mse = 1.54. While this increase for the intervention group was significant, it was small (less than a half-point increase from pre-test to post-test).

To understand how assessment period (pre-test vs. post-test) interacted with condition (CSA intervention group vs. control group) for the development test, a 2x2 MG Factorial ANOVA was performed, allowing for all variables to be in one model. Table 3.9 shows the means for the conditions of the design. There was an interaction between treatment condition and development test period, F(1, 401) = 67.45, p < .001, Mse = 1.72. Both conditions showed an increase in development test scores from pre-test to post-test (using LSD = .37). There was a main effect for treatment condition, F(1, 401) = 21.12, p < .001, Mse = 6.19, with overall higher development test scores for the control group compared to the intervention group. However, at pre-test, there was no difference in development test scores at post-test. While this was descriptive for both conditions, the control group had an average increase of 2.07 points while the intervention group had an average increase of .45 points.

	Time of A		
Condition	Pre-Test M	Post-Test M	Marginal M
CSA Intervention Group	7.15	7.6	7.38
Control Group	7.2	9.27	8.24
Marginal	7.16	8.14	

Main Effects and Interaction between Condition and Time of Development Test

Social Validity Questionnaire

Intervention group. Results from the Social Validity Questionnaire for the intervention group are presented in Table 3.10. Most participants *agreed* or *strongly agreed* that they learned something from the CSA training (91.9%) and that the training increased their knowledge (92.6%). Further, the majority of respondents identified that the CSA training was valuable and useful to them – most participants *agreed* or *strongly agreed* that the training addressed valuable topics (98.2%) and that the training was useful to them professionally (85.3%) and personally (83.4%). A little under 85% of participants *agreed* or *strongly agreed* that the online training was an effective way to learn the material. The CSA training appeared to increase interest and motivation around the topic of sexual abuse. Specifically, most respondents *agreed* or *strongly agreed* that the training increased their interest in issues related to child sexual abuse (67%), the training increased their motivation to support children following child sexual abuse (91.8%), and the training increased their interest in participating in training opportunities related to child sexual abuse (69.1%).

· ~ · · · ·	Frequency (%) of Response Options					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
I learned something from this training.	2 (.7%)	3 (1.1%)	19 (7%)	148	99	271
				(54.6%)	(36.5%)	
This training addressed valuable	1 (.4%)	0 (0%)	4	111	155	271
topics.			(1.5%)	(41%)	(57.2%)	
This training was useful to you	2 (.7%)	7 (2.6%)	31	114	117	271
professionally (e.g., in your current or			(11.4%)	(42.1%)	(43.2)	
future job).						
This training was useful to you	1 (.4%)	7 (2.6%)	37	136	89 (33%)	270
personally (e.g., in personal life or			(13.7%)	(50.4%)		
based on your personal interests).						
This training increased your	1 (.4%)	3 (1.1%)	16	151	100	271
knowledge.			(5.9%)	(55.7%)	(36.9%)	
The online training was an effective	2 (.7%)	10	30	141	87	270
way to learn the material.		(3.7%)	(11.1%)	(52.2%)	(32.2%)	
This training increased your interest in	5 (1.9%)	10	74	117	64	270
issues related to child sexual abuse.		(3.7%)	(27.4%)	(43.3%)	(23.7%)	
This training increased your	1 (.4%)	4 (1.5%)	17	118	131	271
motivation to support children			(6.3%)	(43.5%)	(48.3%)	
following child sexual abuse.						
This training increased your interest in	2 (.7%)	14	68	108	79	271
participating in training opportunities		(5.2%)	(25.1%)	(39.9%)	(29.2%)	
related to child sexual abuse.						

Table 3.10Social Validity Questionnaire: Results for the Intervention Group

Control group. Results from the Social Validity Questionnaire for the attention control group are presented in Table 3.11. Most participants *agreed* or *strongly agreed* that they learned something from the child and adolescent development training (90.1%) and that the training increased their knowledge (88.6%). Further, the majority of respondents identified that the child development training was valuable and useful to them – most participants *agreed* or *strongly agreed* that the training addressed valuable topics (94.7%) and that the training was useful to them professionally (75.7%). Most (78%) participants *agreed* or *strongly agreed* that the online training was an effective way to learn the material. A little over 60% of respondents *agreed* that the training increased their interest in issues related to CSA. Also, most participants *agreed* or *strongly agreed* that the training increased their

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	Frequency (%) of Response Options							
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total		
I learned something from this training.	0 (0%)	2 (1.5%)	11	91	28	132		
c c			(8.3%)	(68.9%)	(21.2%)			
This training addressed valuable	0 (0%)	0 (0%)	7	71	54	132		
topics.			(5.3%)	(53.8%)	(40.9%)			
This training was useful to you	1 (.8%)	5 (3.8%)	21	61	44	132		
professionally (e.g., in your current or			(15.9%)	(46.2%)	(33.3%)			
future job).								
This training was useful to you	0 (0%)	8 (6.1%)	24	77	23	132		
personally (e.g., in personal life or			(18.2%)	(58.3%)	(17.4%)			
based on your personal interests).								
This training increased your	0 (0%)	7 (5.3%)	8	84	33 (25%)	132		
knowledge.			(6.1%)	(63.6%)				
The online training was an effective	0 (0%)	8 (6.1%)	21	71	32	132		
way to learn the material.			(15.9%)	(53.8%)	(24.2%)			
This training increased your interest in	0 (0%)	14	36	63	19	132		
issues related to child sexual abuse.		(10.6%)	(27.3%)	(47.7%)	(14.4%)			
This training increased your	0 (0%)	3 (2.3%)	16	70	43	132		
motivation to support children			(12.1%)	(53%)	(32.6%)			
following child sexual abuse.								
This training increased your interest in	0 (0%)	13	38	58	23	132		
participating in training opportunities		(9.8%)	(28.8%)	(43.9%)	(17.4%)			
related to child sexual abuse.								

 Table 3.11

 Social Validity Questionnaire: Results for the Control Group

motivation to support children following CSA (85.6%) and the training increased their interest in participating in training opportunities related to CSA (61.3%). These interesting findings are explored further in the discussion.

Two-Week Follow-Up

After completion of the study, participants could opt to be contacted to complete a two-week follow-up assessment. A link to complete the follow-up assessment was sent to 136 individuals two weeks after their initial completion of the study and 67 participants completed the follow-up measures in full. On average, the follow-up assessment was completed 17.51 (SD = 6.21) days after initial completion. Most respondents (86.6%) completed the follow-up assessment within 21 days of initial completion.

Comparison of CSA-OQ across three time points. A 2x3 MG Factorial ANOVA was run for the 67 individuals who completed the follow-up measures in full to see if there were any differences in CSA-OQ scores across the three time points of the study for the intervention and control group. Of note, all 67 participants who completed the follow-up measures in full also completed the pre-test and post-test CSA-OQ in full. Table 3.12 shows the means for the conditions of the design. There was an interaction between treatment condition and CSA-OQ assessment period, F(2, 130) = 10.38, p < 10.38.001, Mse = 3.95. Both groups showed an increase from pre-test to post-test and there was no significant difference between post-test and follow-up CSA-OQ scores for either group (using LSD = .97). There was also a significant increase from pre-test to follow-up for both groups. There was no main effect for treatment condition, F(1, 65) = 2.35, p > 2.35.05, Mse = 18.71, however, at both post-test and follow-up, the intervention group's scores were significantly higher than the control group's scores. There was no difference in scores between the groups at pre-test. There was a main effect of assessment period, F(2, 130) = 37.84, p < .001, Mse = 3.95, with overall higher CSA-OQ scores at post-test and follow-up compared to at pre-test.

Table 3.12

Main Effects and Interaction between Condition and Time of CSA-OQ Assessment (Pre-Test, Post-Test, and Follow-Up)

	Time of			
Condition	Pre-Test M	Post-Test M	Follow-Up M	Marginal M
CSA Intervention Group	15.74	20.15	19.52	18.47
Control Group	16.48	17.52	18.38	17.46
Marginal	15.97	19.33	19.16	
A 2x3 MG Factorial ANOVA was performed to determine how the number of answers provided to the question, "Name the reasons why some children don't tell about sexual abuse," changed from pre-test to post-test to follow-up for each group. Table 3.13 shows the means for the conditions of the design. There was an interaction between treatment condition and assessment period, F(2, 130) = 3.12, p < .05, Mse = 1.22. The control group showed a decrease in the number of responses from pre-test to post-test and from pre-test to follow-up while the intervention group showed no difference from pre-test to post-test and pre-test to follow-up (using LSD = .54). However, the intervention group did show a decrease from post-test to follow-up. There was no main effect for treatment condition, F(1, 65) = .05, p > .05, Mse = 4.47. Though, the intervention group provided more reasons at post-test compared to the control group. There was no main effect of assessment period, F(2, 130) = 2.23, p > .05, Mse = 1.22.

A 2x3 MG Factorial ANOVA with a continuous outcome was run for the question, "Child sexual abuse victims can never function as they did before the abuse occurred." Ratings were compared in a continuous manner (where 1 is *strongly agree*

Table 3.13

Number of Responses to "Name the reasons why some children don't tell about sexual abuse:" Main Effects and Interaction between Condition and Time of Assessment (Pre-Test, Post-Test, and Follow-Up)

	Time of CSA-OQ Assessment			
Condition	Pre-Test M	Post-Test M	Follow-Up M	Marginal M
CSA Intervention Group	3.43	3.87	3.2	3.5
Control Group	3.81	3.24	3.24	3.43
Marginal	3.55	3.67	3.21	

and 5 is *strongly disagree*, and higher ratings mean more supportive beliefs). Table 3.14 shows the means for the conditions of the design. There was an interaction between treatment condition and assessment period, F(2, 130) = 4.83, p < .05, Mse = .55. The intervention group showed an increase in ratings from pre-test to post-test and there were no differences between post-test and follow-up ratings (LSD = .36). The control group showed no differences between the ratings from pre-test to post-test to follow-up. There was no main effect for treatment condition, F(1, 65) = 2.514, p > .05, Mse = 1.75. Though, the treatment group had higher ratings at both post-test and follow-up compared to the control group. There was a main effect of assessment period, F(2, 65) = 9.05, p < .001, Mse = .55, with overall higher ratings at post-test and follow-up compared to pretest. However, the control group did not have a significant increase in ratings from pre-test to follow-up.

Additionally, for the question, "Child sexual abuse victims can never function as they did before the abuse occurred" a repeated measures binary logistic regression was run to compare how answers for each group changed in probability from pre-test to post-

Table 3.14

Main Effects and Interaction between Condition and Time for Question: "Child sexual abuse victims can never function as they did before the abuse occurred" (Pre-Test, Post-Test, and Follow-Up)

	Time of CSA-OQ Assessment			
Condition	Pre-Test M	Post-Test M	Follow-Up M	Marginal M
CSA Intervention Group	3.35	4.09	4.28	3.91
Control Group	3.52	3.48	3.76	3.59
Marginal	3.4	3.9	4.12	

test to follow-up. There was not a significant interaction, showing no differences in the change in probability of selecting *disagree/strongly disagree* over time between the two conditions, *Wald* $X^2 = 3.81$, p > .05. Results are shown in Table 3.15.

A 2x3 MG Factorial ANOVA with a continuous outcome was run for the question, "Child sexual abuse victims are permanently damaged." Table 3.16 shows the means for the conditions of the design. There was an interaction between treatment condition and assessment period, F(2, 130) = 4.11, p < .05, Mse = .67. Both groups showed an increase in ratings from pre-test to post-test and there were no differences between post-test and follow-up ratings (LSD = .4). There was no main effect for treatment condition, F(1, 65) = .29, p > .05, Mse = 1.9. However, the intervention group had higher ratings at follow-up compared to the control group. There was a main effect of assessment period, F(2, 65) = 14.79, p < .001, Mse = .67, with overall higher ratings at post-test and follow-up compared to pre-test. This was only true for the intervention group. While the control group increased from pre- to post-test, their follow-up ratings slightly (non-significantly) decreased from post-test and this slight decrease meant that there were no differences between the pre-test and the follow-up ratings.

Table 3.15

Time of CSA-OQ Assessment Condition Pre-Test % Post-Test % Follow-Up % Total % **CSA** Intervention Group 56.52% 80.43% 89.13% 75.36% Control Group 66.67% 61.9% 76.19% 68.25% Total % 61.6% 71.17% 82.66%

Probability of Selecting Any Level of Disagreement to "Child sexual abuse victims can never function as they did before the abuse occurred"

Additionally, for the question, "Child sexual abuse victims are permanently damaged" a repeated measures binary logistic regression was run to compare how answers for each group changed in probability from pre-test to post-test to follow-up. There was not a significant interaction, showing no differences in the change in probability of selecting disagree over time between the two conditions, *Wald X*² = 2.81, p > .05. Results are shown in Table 3.17.

Table 3.16

Time of CSA-OQ Assessment Condition Pre-Test M Post-Test M Follow-Up M Marginal M CSA Intervention Group 2.85 3.98 3.89 3.57 **Control Group** 3.24 3.67 3.48 3.46 2.97 Marginal 3.88 3.76

Main Effects and Interaction between Condition and Time for Question: "Child sexual abuse victims are permanently damaged" (Pre-Test, Post-Test, and Follow-Up)

Table 3.17

Probability of Selecting Any Level of Disagreement to "Child sexual abuse victims are permanently damaged"

	Time of CSA-OQ Assessment			
Condition	Pre-Test %	Post-Test %	Follow-Up %	Total %
CSA Intervention Group	32.61%	76.09%	73.91%	60.87%
Control Group	42.86%	76.19%	61.9%	69.32%
Total %	37.74%	76.14%	67.91%	

Repeated measures binary logistic regression analyses were run for each of the answer options participants could select for the question, "Why might you not believe a child's disclosure of sexual abuse" to compare how answers for each group changed in probability across the three time points. Results showed that the change in probability across time points was not significantly different between the conditions for any of the answer options, all ps > .05. The percentage of participants in each group who selected each of the answer options at follow-up is shown in Table 3.1.

Comparison of development test across three time points. To understand how assessment period (pre-test vs. post-test vs. follow-up) interacted with condition (CSA intervention group vs. control group) for the development test, a 2x3 MG Factorial ANOVA was performed. Table 3.18 shows the means for the conditions of the design. There was an interaction between treatment condition and development test time period, F(2, 130) = 3.75, p < .05, Mse = 1.12. The control group showed an increase from pretest to post-test and there were no differences between post-test and follow-up scores (LSD = .52). The intervention group showed no increase from pre-test to post-test or from post-test to follow-up. There was a main effect for treatment condition, F(1, 65) =7.1, p < .05, Mse = 4.93, with overall higher development test scores for the control group compared to the intervention group. This result was descriptive for scores at posttest and follow-up. At pre-test, there was no difference in development test scores between the intervention and control group. There was a main effect of assessment period, F(2, 65) = 11.24, p < .001, Mse = 1.12. The control group showed an increase from pre-test to post-test and from pre-test to follow-up. There was no difference between post-test and follow-up scores. The intervention group showed no differences

between pre-test and post-test scores or post-test and follow-up, but showed an increase

from pre-test to follow-up scores.

Table 3.18

Main Effects and Interaction between Condition and Time of Development Test (Pre-Test, Post-Test, and Follow-Up)

	Time of Assessment			
Condition	Pre-Test M	Post-Test M	Follow-Up M	Marginal M
CSA Intervention Group	8.11	8.33	8.63	8.36
Control Group	8.43	9.71	9.62	9.25
Marginal	8.21	8.76	8.94	

CHAPTER 4: DISCUSSION

Foundational Knowledge of CSA Outcomes

Findings from the CSA-OQ pre-test measure were similar to the results of the CSA-OQ completed by participants in the Measurement Development Study, which showed that respondents lacked important knowledge of CSA outcomes and held misinformed beliefs. This finding was consistent with the current literature (Abeid et al., 2015; Blakely & Ribeiro, 1997; Lentsch & Johnson, 2000; Márquez-Floresa et al., 2016; McGregor, Glover, et al., 2010; Pelisoli et al., 2015). Less than 5% of the 408 participants received a score in the 90-100% range, which signifies that very few respondents held first-rate knowledge. Participants in the study strongly matched the intended population, with most identifying pursuing careers in the medical or health care field, mental health field, social work field, or generally a field in psychology, K-12 education, and the criminal justice or law field. These career paths were ideal as many individuals in these fields may come into contact with children, adolescents, families, or parents who have been directly impacted by CSA. Thus, to best support survivors and their families, it imperative that more than just a small minority of developing professionals and college educated individuals in these fields hold proper knowledge in the outcomes related to sexual abuse.

Some participants were more likely to have a higher score on the CSA-OQ pretest. For example, females, those with a history of sexual abuse or assault, and those who identified personally knowing someone with a sexual abuse or assault history all had higher CSA-OQ pre-test scores. It is possible this was due to feeling more connected to the test material due to prior experience or knowledge in the area. For example, someone

who has experienced sexual abuse or assault may have a greater knowledge set of the outcomes following victimization, including how survivors are a heterogeneous group, that blame is sometimes placed on victims, and that the vast majority of allegations are true. In this sample, 13.2% of respondents identified themselves as having experienced sexual abuse as a child or adolescent and 15.9% identified themselves as having experienced sexual assault as an adult. This increased knowledge may also exist for those who have supported a friend or family member following their disclosure (Pullins & Jones, 2006), whether that be because they heard this information from the survivor or they sought out knowledge to best support their loved one. In this study, 48.6% of participants described that they personally knew someone who has experienced child sexual abuse and 51.9% reported personally knowing someone who had experienced sexual assault as an adult. For both, most described this person as a "close friend." Females *report* child sexual abuse at higher rates than males (Townsend & Rheingold, 2013), yet, females may feel more connected to the material even without a history of abuse with the knowledge that females tend to report being victims of sexual violence at higher rates. It is possible these factors account for the finding that females had more knowledge at pre-test.

Additionally, the study took place around the time of the viral #MeToo movement (becoming widespread beginning in October 2017), which aimed to support healing in survivors and interrupt global sexual violence with community-based action (Me Too, 2018). During this time, many females felt empowered to share their story of sexual abuse, assault, and harassment on social media (or to simply share a #MeToo hashtag without disclosure of a specific event) to highlight the significant scale of the problem

and de-stigmatize survivors (Me Too, 2018). This global conversation around sexual violence, which primarily involved females speaking out as survivors and advocates for the cause, could have also influenced females scoring higher on the pre-test CSA measure. Similarly, though while less associated with child sexual abuse, the trademarked and viral Time's Up movement, gaining popularity in January 2018 by those in the entertainment industry, shed light on sexual assault and harassment as well as generally unsafe or discriminatory environments in the workplace for women (Time's Up, 2019). This continued the global conversation of sexual harassment and assault of women. Thus, overall, these widespread movements regarding the sexual victimization of females which encouraged conversations and knowledge of the widespread problem, may have had some role in females scoring higher on the pre-test scale. Few prior studies have reported on the association between gender and knowledge of CSA-related issues, however, Calvert and Munsie-Benson (1999) found that males demonstrated less knowledge. On the other hand, Pelisoli and colleagues (2015) showed that females scored lower than males on a CSA test. Yet, when controlling for age, experience, and education level, this finding was no longer significant (Pelisoli et al., 2015).

Other demographic factors also associated with increased CSA-OQ pre-test scores. Those in their 4th year of college, those with higher GPAs, and those who reported taking a college course where the topic of CSA was discussed all had higher pretest scores. These factors all relate to level of education, which has been shown to be associated with higher CSA-related knowledge in other studies (Abeid et al., 2015; Babatsikos, 2010; Calvert & Munsie-Benson, 1999; Pelisoli et al., 2015). Finally, when minority ethnic groups were clustered together, those who identified as White or European American had higher scores than those who identified as a member of a minority ethnic group. While there is little literature surrounding knowledge of CSA outcomes based on ethnic group membership, Calvert and Munsie-Benson (1999) found those identifying as Latinx reported less knowledge on a CSA test. These findings may be due to the broad and numerous barriers ethnic minorities face, particularly in regards to discrimination, socioeconomic status, educational attainment, and physical and mental health care access (American Psychological Association [APA], 2019).

On the CSA-OQ, many participants held misinformed beliefs about CSA when tested prior to treatment, particularly regarding resiliency. For example, approximately 70% of respondents strongly agreed, agreed, or were unsure on the item, "Child sexual abuse victims are permanently damaged." Holding the unsupportive belief that youth are permanently damaged, or even being unsure about this belief, promotes the idea that survivors cannot be resilient and will always be marred in some way. This may associate with how individuals treat youth following a disclosure, encouraging the child to behave in ways that match the negative expectation (similar to a self-fulfilling prophecy; Holguin & Hansen, 2003; Madon et al., 1997). It also goes against the idea that appropriate treatment and support exist to increase resiliency.

Further, many participants responded with misinformed reasons why they might not believe a child's disclosure of abuse. It is important to note that all adults in the state of Nebraska are mandated reporters of child abuse (even when they only have suspicions; Nebraska DHHS, 2019) and not reporting abuse could result in a child continuing to be abused, a child thinking no one will believe them if they want to disclose again, and/or negative legal or professional repercussions for the non-reporting adults. Additionally, disbelief of a child's disclosure increases negative outcomes (Hopson, 2010; Ullman, 2003) and may decrease the chances of mental health treatment. Thus, it is imperative for public safety and the health of survivors that allegations of sexual abuse be believed and reported. Overall, results of the pre-test measure strongly support the notion that training is needed to increase knowledge and promote supportive beliefs.

Evaluation of the CSA Intervention

Importantly, scores on the CSA-OQ significantly increased from pre-treatment to post-treatment for the intervention group. The average score on the post-test was 83.12%, representing a 20.36% (or 4.68-point) increase from pre-test to post-test. Additionally, 42.8% of respondents who received the CSA training received a 90-100% score on the post-test measure. This starkly contrasts with the 4.66% who scored in the 90-100% range on the pre-treatment measure (includes the overall sample). The participants who completed the CSA webinar also had significantly higher post-treatment CSA-OQ scores compared to the control group.

For the intervention group, those who had not completed a college course where the topic of CSA was discussed had significantly more gains from pre-test to post-test. This subgroup also had significantly lower pre-test scores. Thus, without any foundational knowledge from a college course, it is believed that this subgroup could increase their knowledge more. When controlling for prior course history, the study's findings did not change, suggesting that participants with or without prior coursework related to CSA can benefit from the webinar. A variety of other variables were used as covariates in the model and results stayed consistent with the study's primary findings on the CSA-OQ, showing no variables reported on by participants confounded the study's results. Similarly, when excluding those who scored in the 90-100% range on the pre-test (with the notion they may have not been able to improve their scores very much), all findings remained consistent. The results suggest that the CSA webinar increased participants' knowledge of the array of outcomes following victimization and the factors that influence outcomes when measured immediately following the training. Findings also showed that those who received the CSA training had more knowledge than those in the control group.

Further, for the intervention group, the number of *I don't know* responses decreased from pre- to post-treatment, with the average number of *I don't know* responses changing from approximately four at pre-test down to one at post-test. The intervention group also had less *I don't know* responses at post-treatment compared to the control group, representing more confidence in answer choices for this condition. Moreover, the treatment group had more *I don't know* responses change to correct responses compared to the control group and had more incorrect responses change to correct responses. This demonstrates the positive change the CSA training had on participants' knowledge set.

There was a small, but significant, increase in CSA-OQ scores from pre-test to post-test for the control group. For the control group, the average score on the post-test was 67.46%, representing a 4% (or a 1.02-point) increase from pre-test and post-test. With this being said, the intervention group had a significantly larger increase in scores from pre-test to post-test compared to the control group (20.36% increase for the intervention group vs. a 4% increase for the control group). At post-test, only 6.06% of the control group scored in the 90-100% range, as compared to 42.8% of those in the treatment group. Overall, at post-test, those in the intervention group demonstrated

significantly more knowledge in the area of CSA outcomes compared to the control group.

While the control group's increase was small, it is important to discuss why an increase occurred. Methodologically, the large sample size allowed the small change the control group showed from pre- to post-test to represent a significant difference. Further, the control group may have had a small, but significant, increase due to more thought being placed into post-treatment answers, despite that no information in the control training would have provided them with an increased knowledge set relevant to the questions. For example, if a participant was on the fence about an answer choice on the pre-test, they may have selected the answer option, *I don't know*. When asked the same question again, they may place continued thought into their response and lean against selecting, I don't know. This notion is supported by the findings that both groups showed a significant decrease in the number of *I don't know* responses from pre-treatment to post-treatment. The control group tended to answer one less question I don't know at post-treatment compared to pre-treatment. This could represent the average one-point increase the control group demonstrated. For the control group, those in their 1st year of college had significantly more gains from pre-test to post-test compared to any other year (although, the study's primary results did not change when year in college was added as a covariate to the model). Yet, it should be noted that those in their 1st year also had lower scores than those in their 2nd, 3rd, and 4th year of college when measured at pre-test. Thus, it is possible that those in the 1st year of college experienced this phenomenon to a greater degree – without foundational knowledge, they may have been less likely to

answer items correctly at pre-test, but with further critical thought when asked again, they were able to make *minor* corrections to their original answers.

It is possible that for some participants, the discussion of child and adolescent development could have inadvertently encouraged the respondents to think critically about how children are affected by adverse circumstances. Further, the attention control group received information about how to discuss sex in a developmentally appropriate manner with children and adolescents. While there was no information regarding child sexual abuse in the control training and the tips for discussing sex with kids were broad (e.g., use anatomically correct names for body parts), the connection between discussion of sex with youth could have unintentionally increased thought about issues related to child sexual abuse. While this is impossible to fully determine, it should be noted that the topic of the attention control webinar was thoughtfully chosen so that the CSA-OQ preand post-test measures would not stand out harshly to the control group who completed a webinar on an entirely different topic (but a topic that included children and adolescents). This was intended to reduce the chances participants in the attention control group would determine their condition.

Just as all participants completed the CSA-OQ at pre- and post-test, all participants also completed an assessment of child and adolescent development before and after their randomly assigned webinar. This was intended to measure knowledge gains targeted at those who completed the attention control training. This allowed the researchers to ensure the attention control webinar was similar to the CSA intervention in all ways except content, with the control group also increasing their knowledge on content related to the training they received. Those in the control group had significantly higher development post-test scores. Just as for the CSA-OQ measure, both conditions showed an increase in scores from pre-test to post-test. However, the control group had an average increase of 2.07 points while the intervention group had an average increase of .45 points. The control group retained the knowledge they gained when measured approximately two weeks following initial participation. Overall, the attention control training served its purpose of being a similarly impactful intervention, but with a different topic, so as to have a comparison group for the intervention. This was confirmed by the findings from the Social Validity Questionnaire, which showed that participants in the control group found the online training about child and adolescent development valuable and effective.

Four questions on the CSA-OQ did not have an identified single correct answer, including one knowledge-based question and three belief-based questions. When asked to name the reasons why some children do not tell about sexual abuse (a knowledge-based descriptive question), the number of responses provided by the intervention group increased from pre-test to post-test whereas the number of responses by the control group decreased. Thus, those in the treatment condition appeared to have more knowledge on the numerous reasons children do not come forward. Knowing the many reasons children delay or completely avoid disclosure helps developing professionals and lay adults better understand the difficulties and complexities of disclosing sexual abuse, including how disclosure can drastically change the child's and many other people's daily lives (Ullman, 2003). For example, after disclosure, a child whose offender is their father may result in their parents divorcing, moving homes, increased financial stress with the loss of a parent's salary, ongoing and frequent communication with investigators and attorneys,

increased emotional distress of the non-offending parent, and so on. Thus, understanding the complexities and difficulties associated with disclosing abuse allows adults to be more empathetic, understanding, and supportive, which can increase positive outcomes in youth (Hopson, 2010; Ullman, 2003; Yancey & Hansen, 2010).

Misinformed beliefs also decreased for the intervention group. For the beliefrelated questions, "Child sexual abuse victims can never function as they did before the abuse occurred," and "Child sexual abuse victims are permanently damaged" the intervention group experienced greater increased probability of selecting any level of disagreement from pre-test to post-test than the control group. At post-test, the treatment condition was also more likely to disagree to these statements compared to the control. The differences were the most striking for the item, "Child sexual abuse victims are permanently damaged." Specifically, for the treatment group, less than 30% of respondents disagreed to the statement at pre-test compared to approximately 70% disagreeing to the statement at post-test. No changes were found for the control group. These findings demonstrate a significant shift from a generally unsupportive idea to a supportive belief across assessment periods for those who completed the CSA webinar. Overall, the intervention was effective at changing participants' beliefs. The powerful and reassuring belief that youth can be resilient following sexual abuse is important to increasing positive outcomes (Holguin & Hansen, 2003; Kouyoumdjian et al., 2005). For example, sharing that one aspect of the child's life does not have to define them, while not minimizing the real and important consequences associated with abuse, empowers children and their families to seek supportive care to cope. Similarly, sharing that while the abuse is part of the child's story (one cannot erase this from existence), a child and

their family can write their narrative going forward with the help from supportive professionals, friends, and family members who can help increase positive coping skills.

The CSA intervention was also effective at changing viewpoints related to why one may not believe a child's disclosure. The goal of asking participants to select the reasons they may not believe a child's disclosure was intended to be primarily descriptive in nature to best understand why adults sometimes consider children's allegations untrue (Goodman-Delahunty et al., 2017; Pelisoli et al., 2015). However, after completing the CSA webinar, ideally a lesser percent of the intervention group would select some of the common reasons for not believing a child's disclosure. The intervention group did experience greater decreased probability of selecting several answer options from pre-test to post-test than the control group. Also, the intervention group experienced greater increased probability of selecting the answer option, "no matter what, I would believe the child's disclosure" from pre-test to post-test compared to the control group (71.2% of participants in the treatment condition selected this response at post-test). As stated, taking a child's disclosure seriously and reporting it to appropriate authorities is imperative for a child's health and well-being (Hopson, 2010; Ullman, 2003). Believing a child also communicates support, care, and understanding to the youth and can increase resiliency (Hopson, 2010; Ullman, 2003; Yancey & Hansen, 2010).

Importantly, when measuring retention, findings showed that participants in both groups retained the knowledge they learned. There were no differences in CSA-OQ post-test scores and follow-up scores for the intervention group (or the control). As measured by the CSA-OQ total score, those who completed the CSA training held significantly more knowledge than the control group when measured right after the training and when

measured approximately two weeks after the training. Though, the intervention group did see a decrease in the number of reasons provided for why children do not disclosure CSA from post-test to follow-up. Yet, this difference was very slight and both groups at all three time points provided, on average, at least three answers to this question, representing that knowledge in the reasons children do not disclose may be more common and, therefore, less impacted by any intervention.

When measured continuously, level of disagreement was retained on the questions, "Child sexual abuse victims can never function as they did before the abuse occurred" and "Child sexual abuse victims are permanently damaged." Those in the intervention group continued to have higher levels of disagreement to these statements at follow-up, as well. Interestingly, though, change in probability of selecting any of the answer options to the question, "Why might you not believe a child's disclosure of sexual abuse" was not significant across the three time points. While a nonsignificant result would suggest that no changes were experienced for either group from post-test to follow-up, showing retention of changed beliefs (since several of the answer options were chosen at a lower frequency from pre-test to follow-up for the intervention group according to pre-test/post-test analyses), the result did not show changes across the three time points. This null finding is believed to be due to a lack of sufficient power based on the small number of participants in the follow-up who selected each of the reasons why they may not believe a child's disclosure.

Results from the CSA-OQ measure showed the effectiveness of the online training at increasing knowledge that could promote supportive behaviors following a child's disclosure of CSA. Findings from the Social Validity Questionnaire confirmed

participants' belief in the value, applicability, and effectiveness of the intervention. An overwhelming majority described that they learned something from the CSA training and that the training increased their knowledge. Notably, over 98% of respondents reported that the training addressed valuable topics, indicating the usefulness of the training. Further, most responded that the training was useful to them both professionally and personally, suggesting the versatile utility of the intervention. A little over two-thirds of the participants agreed that the training increased their interest in issues related to child sexual abuse and the training increased their interest in participating in training opportunities related to child sexual abuse. These numbers were higher than expected, as it is likely many people identify CSA as a challenging subject matter to learn about and, thus, may not be interested in pursuing further education in the subject matter, despite its value. On the other hand, these questions may also not account for the few that already had a strong interest in the topic and who felt the training did not further increase their strong interest. Finally, and importantly, an overwhelming majority believed the online training increased their motivation to support children following child sexual abuse. This increased motivation coupled with an increased knowledge aids adults in best supporting CSA survivors and increasing resiliency.

Interestingly, more than half of the participants in the control group also reported that the training they received increased their interest in the issue of CSA, their motivation to support survivors, and their interest in participating in CSA-related training. Given that the control group's webinar did not cover the topic of child sexual abuse, it was speculated that participants answered these questions about the study as a whole, not specific to the online training they received. For example, some participants may have found that answering important questions about the outcomes of sexual abuse (both before and after completing their webinar) coupled with learning about child and adolescent development broadly increased their interest in CSA.

Overall, findings suggest that the CSA webinar increased participants' knowledge of aspects related to the aftermath of child sexual abuse, such as the heterogeneity of response, the helpful and harmful responses others may have to a youth's disclosure, and the importance of believing a child. Those who received the CSA training had more knowledge than those in the control group and this increased knowledge was broadly retained when measured approximately two weeks after completion of the online CSA training. Similarly, developing professionals demonstrated more supportive beliefs following completion of the training and beliefs were broadly retained two weeks later.

Strengths of the Intervention that Address Gaps in Current Training Efforts

The CSA intervention addressed several gaps in current training efforts. For example, many of the training programs, manuals, and resources currently available do not emphasize knowledge and behaviors related to the *aftermath* of sexual victimization in children. Thus, the training developed here could be a beneficial complement to invaluable interventions which focus on prevention and learning signs of sexual abuse (Darkness to Light, 2018; Martin & Silverstone, 2016). With this added knowledge, professionals may be better prepared to interact with CSA survivors in a way that increases resilient outcomes. Further, the training was focused and specific, in that it only covered the topic of child sexual abuse outcomes (rather than child abuse and neglect more broadly, including physical and emotional abuse and neglect). This allows for specialized training in one area. Yet, the online intervention was also wide-reaching, offering value to adults and developing professionals from a variety of disciplines (Wurtele, 2009) rather than targeting a single population (e.g., education personnel). To further increase accessibility to all professionals who may benefit, the brief and easy-to-use online training format offered significant convenience. Online trainings have been proven to be an effective way to provide education in the subject matter (Kenny, 2007; Paranal et al., 2012; Wurtele, 2017) and the webinar was thoughtfully created to be engaging and interactive (Clark & Mayer, 2016) as well as appropriate for all professional audiences (e.g., no use of technical jargon).

Summary of Study's Strengths

There were several strengths of the research. The project began with a Measurement Development Study to assess whether CSA-related knowledge was lacking among students and developing professionals and to ensure that an intervention was needed. Further, this initial study allowed for the creation of a new test of knowledge and beliefs that could be used to evaluate the intervention. Next, many efforts were taken to develop the trainings. This included understanding and applying the current literature on online learning methods to create the webinars (Clark & Mayer, 2016). The author also completed various online trainings in the area of CSA to understand how the topic is typically discussed and how these webinars are generally formatted. Completing several CSA-related webinars also allowed the researcher to determine a user-friendly design. Significant piloting of the CSA intervention and the attention control training were completed with research assistants to confirm there were no technical difficulties with the audio or visual graphics of the webinars and to check for clarity of content. For the Intervention Study, all participants were randomly assigned to either the treatment or to the attention control training. Random assignment ensures that the two conditions were the same in all ways except for the manipulation and findings confirmed that random assignment worked. The attention control condition allowed the researchers to compare knowledge gains between those who received the CSA intervention and those who received training in a different topic. This also helps rule out other confounding reasons for why participants may increase their knowledge from pre-test to post-test. Additionally, the inclusion of a two-week follow-up allowed for the measure of shortterm knowledge retention.

Finally, few studies evaluating online interventions around the topic of child abuse have utilized university students pursuing careers in fields likely to work with children (Kenny, 2007), even though they represent a large group of trainees and developing professionals who may currently or very soon interact with families who experience sexual abuse through their practica, volunteer experiences, and jobs. While only a small percentage of respondents described having previous experience working directly with survivors of CSA, the vast majority of the sample identified having career plans in which they will likely interact with individuals impacted by CSA in some capacity (e.g., medical, mental health, education, and legal professions). Research on CSA-related training efforts has specifically noted the importance of interventions for pre-professionals interested in a career as a mental health provider, teacher, child care provider, physician, nurse, lawyer, or a member of law enforcement (Wurtele, 2009). Overall, the final sample matched the intended population and was large enough to ensure there was enough power to perform the data analyses.

Limitations and Suggestions for Future Research

Despite the strengths of the study, some limitations exist. First, the study sample was primarily female and European American, limiting the ability to generalize the findings to more diverse groups. Further research on the intervention's effectiveness with a more heterogeneous sample, particularly with regards to gender (more males and gender non-conforming individuals) and ethnic identity (more individuals who identity as non-European American), would clarify whether the webinar has broad utility. With that said, the predominately female sample may be largely representative of the population of interest (e.g., those working with children and families in fields such as mental health, social work, education, and nursing), which tends to predominantly female (APA, 2018; Snyder, de Brey, & Dillow, 2019). Next, while use of a university sample was a strength in reaching a broad group of developing professionals, this added to the sample's homogeneity, particularly in aspects of age and educational attainment. Thus, evaluating the online intervention with professionals currently working in their prospective fields with varying years of experience, advanced trainees (e.g., graduate students), and other lay adults would provide more information on the training's clinical utility.

While the study utilized a two-week follow-up to measure short-term retention of knowledge and changed beliefs, long-term follow-up analysis was not completed. In future evaluations of the webinar, multiple follow-up analyses could be completed at varying time points, such as one-month, six-months, and one-year following completion of the intervention. This would allow researchers to further understand the training's ability to change and retain knowledge over a longer span of time. Follow-up assessments could also gauge whether participants actually used the knowledge in their

professional and personal lives, whether the knowledge changed their behaviors, and whether they sought out more training in the subject matter. Finally, while the online intervention allowed for convenience and was developed to be engaging and interactive (Clark & Mayer, 2016), some individuals may prefer in-person training for a more discussion-based learning experience (Paranal et al., 2012). More research on how students and professionals prefer to learn the content could be completed to better understand learning preferences as well as the pros and cons of each format (Paranal et al., 2012). In addition to keeping the online format, the intervention could be transformed into an in-person training, which could be provided through local organizations (e.g., training opportunity for community members held at a Child Advocacy Center or for foster parents through foster care and state agencies). The inperson training could also be provided to targeted groups of professionals, such as mental health workers, social workers, health care providers, teachers and educational personnel, members of law enforcement, and legal professionals working in family law at their respective offices. Evaluation similar to the current study (e.g., pre-/post-/follow-up tests, social validity questions) would be needed to ensure the in-person format increased knowledge and individuals found the training valuable. These results could be compared to findings from the online version to understand if learning differs between the formats.

Conclusion

Support from professionals who interact with CSA survivors and their families (e.g., health care professionals, mental health providers, social workers, teachers, childcare workers, law enforcement, legal professionals) can help reduce negative outcomes following disclosure (Pelisoli et al., 2015). Particularly, professionals who respond supportively and compassionately, believe the child's story and appropriately report the abuse, do not blame the victim, identify and increase the family's protective factors, and have sufficient knowledge and competence working with CSA survivors could increase resilient outcomes. Yet, research shows that some professionals may not be adequately prepared to support families because of insufficient knowledge about CSA and misinformed beliefs (e.g., Abeid et al., 2015; Pelisoli et al., 2015). Findings from the Measurement Development Study confirm this for a sample of students and developing professionals at a Midwestern university. To meet this need, an online intervention was developed and evaluated to increase knowledge of CSA outcomes, correct any misperceptions, and promote and empower these developing professionals to be a part of victims' recovery. This CSA intervention was compared to an attention control training on child and adolescent development. Findings from the sample of university students showed that the CSA webinar increased participants' knowledge of aspects related to the aftermath of child sexual abuse and changed unsupportive beliefs. Those who received the CSA training had more knowledge and held more supportive beliefs than those in the control group and this increased knowledge was broadly retained when measured approximately two weeks after completion of the online CSA training. Findings also suggested that participants found the CSA Outcomes Intervention valuable and applicable and increased their motivation to support survivors after disclosure. While several CSArelated interventions currently exist for professionals and lay adults, this intervention addressed several gaps in current training efforts.

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APPENDIX A





DEPARTMENT OF PSYCHOLOGY

Participant Informed Consent Form

Title: Assessment of Young Adults' Knowledge and Beliefs about Child Sexual Abuse Outcomes

Purpose:

This research project is to understand young adults' and young professionals' knowledge and beliefs about child sexual abuse outcomes. You are invited to participate in this study because you are a UNL student enrolled in an undergraduate psychology course and are 19 years or older.

Procedures:

You will be asked to answer questions measuring your knowledge of and beliefs about child sexual abuse. You will also answer demographic questions and questions about your work and training experiences. The survey will last for approximately 30 minutes and will be conducted online through a Qualtrics survey. Possible outlets of dissemination may include presentations at professional meetings and/or publication in scientific journals.

Benefits:

Although your participation in this research may not benefit you personally, this study aims to further inform the field of psychology regarding young adults' and professionals' knowledge and perceptions of child sexual abuse and to inform intervention and training.

Risks and/or Discomforts:

It is possible that you might experience some emotional distress when answering questions about child sexual abuse. Should you feel uncomfortable during any part of the study, you may stop at any time without penalty. If you wish to stop the study at any time, you may do so without harming your relationship with the researchers or the university. If you feel upset or distressed after completing this study and would like assistance, please contact the following providers. In some cases, psychological treatment is available on a reduced or sliding fee scale.

Psychological Consultation Center University of Nebraska-Lincoln 325 Burnett Hall Lincoln, NE 68588 402-472-2351 Counseling and Psychological Services University of Nebraska-Lincoln 1500 U Street Lincoln, NE 68588 402-472-7450 Voices of Hope 2545 N Street Lincoln, NE 68510 402-476-2110

Confidentiality:

All records of this study will be kept strictly confidential. No names or any other personally identifiable information (including email or IP addresses) will be linked to the data you provide in this survey. Any results of this study will discuss group findings and will not include any information that can identify any individual respondent personally. Research records will be stored securely in protected files; and only researchers and individuals responsible for research oversight will have access to these records. All survey data will be collected through Qualtrics, a secure online survey software for which UNL has a site license. Qualtrics is designed in a way that data transmission is meaningless without the interpretation of the user's account. Qualtrics adheres to industry standards in regard to data security, using Transport Layer Security (TLS) encryption. Data will be encrypted while in transit.

Compensation:

You will receive one research credit through Sona for participating in this project.



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Opportunity to Ask Questions:

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

Freedom to Withdraw:

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy:

You are voluntarily making a decision whether or not to participate in this research study. Your selection of "I agree to participate" below certifies that you have decided to participate having read and understood the information presented. You may print a copy of this consent form to keep.

Voluntary Consent to Participate

I have read and understand the above information. *This question is required.

□ I agree to participate.

 \Box I choose not to participate.

Name and phone number of investigators:

Kate Theimer, M.A., Principal Investigator	Office: (402) 472-2619
David J. Hansen, Ph.D., Secondary Investigator	Office: (402) 472-2619

APPENDIX B

Child Sexual Abuse Outcomes Questionnaire (CSA-OQ)

Instructions: Please answer the following questions. It is okay to answer "I don't know" if you are unsure of your response. The terms "children" and "child" refer to youth 18 years old and under.

- 1. Almost all child victims experience a similar set of symptoms following sexual abuse.
 - a. True
 - b. False
 - c. I don't know
- 2. The majority of children immediately tell an adult after they experience sexual abuse.
 - a. True
 - b. False
 - c. I don't know
- 3. During medical exams, most victims have physical or medical evidence of the sexual abuse.
 - a. True
 - b. False
 - c. I don't know
- 4. Children are usually thought to be innocent in sexual abuse and blame is rarely placed on child sexual abuse victims.
 - a. True
 - b. False
 - c. I don't know
- 5. You can commonly tell if a child has been sexually abused just by looking at them.
 - a. True
 - b. False
 - c. I don't know

- 6. Unfortunately, 30-50% of children's allegations of sexual abuse are made up and these false allegations can cause significant negative effects for the alleged offender.
 - a. True
 - b. False
 - c. I don't know

- 7. It is easy to predict in what ways sexual abuse will impact a child.
 - a. True
 - b. False
 - c. I don't know
- 8. Non-offending parents of sexual abuse victims are sometimes blamed for the abuse.
 - a. True
 - b. False
 - c. I don't know
- 9. If a child reports sexual abuse but does not exhibit any emotional or behavioral problems, it may be a sign the child fabricated or made up the sexual abuse.
 - a. True
 - b. False
 - c. I don't know

- 10. There are effective mental health treatments for victims of child sexual abuse.
 - a. True
 - b. False
 - c. I don't know
- 11. Most children have been found to react similarly to traumatic events.
 - a. True
 - b. False
 - c. I don't know
- 12. Children often lie about being sexually abused.
 - a. True
 - b. False
 - c. I don't know
- 13. Parental support has been consistently linked with the child's adjustment following sexual abuse.
 - a. True
 - b. False
 - c. I don't know
- 14. Some children may not experience immediate negative effects from sexual abuse.
 - a. True
 - b. False
 - c. I don't know

- 15. You can tell if a child has experienced sexual abuse by his or her demeanor.
 - a. True
 - b. False
 - c. I don't Know
- 16. If a parent receives therapy or counseling following their child's sexual abuse disclosure, it can have positive benefits for the parent as well as the child.
 - a. True
 - b. False
 - c. I don't know
- 17. When a child is sexually abused, parents sometimes place blame on the victim.
 - a. True
 - b. False
 - c. I don't know

- 18. Check the reasons why you might not believe a child's disclosure of sexual abuse:
 - a. The child's history of delinquency or behavior problems
 - b. The child's sexual promiscuity
 - c. The child has a pattern of regularly telling lies
 - d. The child waited days or months to tell about the alleged abuse
 - e. The alleged abuse occurred one or more years ago
 - f. The child only disclosed very minimal details
 - g. The child disclosed an overly detailed account of abuse
 - h. The child's family is poor
 - i. The child's family is wealthy
 - j. The child is very young
 - k. The child is a teenager
 - 1. The child is constantly alleging abuse against people
 - m. Parts of the child's disclosure included information you know to be false
 - n. The child could gain something from the accusation of abuse (e.g., they would be removed from the foster home they don't like)
 - o. The child's parents are going through a divorce and the accused offender is one of the parents
 - p. The accused offender is someone very close to the child (e.g., family)
 - q. The accused offender is a professional
 - r. The accused offender is known to be trustworthy and credible
 - s. No matter what, I would believe the child's disclosure

- 19. Child sexual abuse victims can never function as they did before the abuse occurred.
 - a. Strongly Agree
 - b. Agree
 - c. I'm not sure
 - d. Disagree
 - e. Strongly Disagree
- 20. Name the reasons why some children don't tell about sexual abuse.
 - a. ___
- 21. Select the true statement(s):
 - a. Younger children are more likely to be blamed for experiencing sexual abuse (compared to older children)
 - b. Older children (e.g., adolescents) are more likely to be blamed for experiencing sexual abuse (compared to younger children)
 - c. Children of any age are rarely, if ever, blamed for their sexual abuse
 - d. Younger children have the same likelihood of being blamed for their sexual abuse as older children
- 22. Select the true statement(s):
 - a. Males tend to place blame onto child sexual abuse victims more than females
 - b. Females tend to place blame onto child sexual abuse victims more than males
 - c. Females and males tend to place blame on child sexual abuse victims at the same frequency
 - d. People (whether male or female) do not tend to place blame on child sexual abuse victims
- 23. Child sexual abuse victims are permanently damaged.
 - a. Strongly Agree
 - b. Agree
 - c. I'm not sure
 - d. Disagree
 - e. Strongly Disagree

- 24. What is "grooming" as it relates to child sexual abuse?
 - a. Grooming is a process where perpetrators attempt to remove physical evidence of sexual abuse by making the victim bathe or shower
 - b. Grooming is a process where perpetrators attempt to gain trust and compliance of a child in order to abuse the child
 - c. Grooming is when perpetrators attend to a victim's appearance so they do not appear disheveled or distressed following abuse

- d. Grooming is when perpetrators attend to their own appearance so they look more attractive
- 25. Evaluate each of the following statement(s):
 - a. Some victims of child sexual abuse are highly resilient and show few mental health symptoms following abuse.
 - i. True False I don't know
 - b. Some victims of child sexual abuse experience very serious mental health consequences due to the abuse.
 - i. True False I don't know
 - c. Following sexual abuse, some victims show internalizing symptoms (e.g., depression, anxiety).
 - i. True False I don't know
 - d. Following sexual abuse, some victims show externalizing symptoms (e.g., behavioral problems).
 - i. True False I don't know
- 26. Child sexual abuse victims who are blamed for the abuse may experience worse outcomes.
 - a. True
 - b. False
 - c. I don't know
- 27. Expecting a child will experience highly negative symptomology following sexual abuse can have harmful effects on the child.
 - a. True
 - b. False
 - c. I don't know

[End of questionnaire]

APPENDIX C

Measurement Development Study Demographic Questionnaire

Gender:

- □ Male
- □ Female
- \Box Other (please specify): _____

Age: _____

How would you describe yourself? (Check all that apply)

- \Box White / European American
- □ Hispanic / Latino
- □ Black / African American
- □ Asian / Pacific Islander
- □ Native American
- □ Other

Number of children:

Year in college:

- \Box 1st year
- \square 2nd year
- \Box 3rd year
- \Box 4th year
- \Box 5th + year

Major: _____

What do you want to do for your career after graduation?

Do you have experience working directly with children and families?

- □ No
- Yes, less than one year of experience
 If YES... How many months of experience? ______
- Yes, more than one year of experience
 If YES... How many years of experience?
- If YES... now many years of experience?
- If YES... Briefly describe your experience:

Do you have experience working directly with children and families who have experienced sexual abuse?

- □ No
- Yes, less than one year of experience
 If YES... How many months of experience?
- □ Yes, more than one year of experience

If YES... How many years of experience?

If YES... Briefly describe your experience:

Have you ever received professional training on the topic of child sexual abuse? (Check all that apply)

- □ No
- \Box Yes, in-person training
- \Box Yes, online training

If YES... What organization(s) did you receive the training through?

Have you ever taken a course where the topic of child sexual abuse was discussed?

□ No

□ Yes

If YES... What was the name of the course(s)?

APPENDIX D





DEPARTMENT OF PSYCHOLOGY

Participant Informed Consent Form

Title: Online Training about Child and Adolescent Experiences

Purpose:

The purpose of this research project is to (a) understand students' and new professionals' knowledge and beliefs about child sexual abuse outcomes and (b) evaluate an online training. You are invited to participate in this study because you are a UNL student and are 19 years or older.

Procedures:

You will be asked to answer questions measuring your knowledge of and beliefs about child sexual abuse as well as questions on child development. Then, you will complete an online training about child and adolescent experiences. You will also answer demographic questions, brief questions about your history of sexual abuse as a youth and sexual assault as an adult, and questions about your work and training experiences. The study will last for approximately 1 to 1.5 hours and will be conducted online through a Qualtrics survey. Following participation, you will be asked if you would like to be contacted for a follow-up assessment. Possible outlets of dissemination may include presentations at professional meetings and/or publication in scientific journals.

Benefits:

The online training intends to provide participants with valuable information that could be relevant to current and future professional endeavors. This study also aims to further inform the field of psychology regarding adults' knowledge and perceptions of child sexual abuse and to inform intervention and training.

Risks and/or Discomforts:

It is possible that you might experience some emotional distress when answering questions about child sexual abuse, learning about child sexual abuse, and answering brief questions about your history of sexual abuse as a youth and sexual assault as an adult. Should you feel uncomfortable during any part of the study, you may stop at any time without penalty. If you wish to stop the study at any time, you may do so without harming your relationship with the researchers or the university. If you feel upset or distressed after completing this study and would like assistance, please contact the following providers. In some cases, psychological treatment is available on a reduced or sliding fee scale.

Psychological Consultation Center University of Nebraska-Lincoln 325 Burnett Hall Lincoln, NE 68588 402-472-2351 Counseling and Psychological Services University of Nebraska-Lincoln 1500 U Street Lincoln, NE 68588 402-472-7450 Voices of Hope 2545 N Street Lincoln, NE 68510 402-476-2110





DEPARTMENT OF PSYCHOLOGY

Confidentiality:

All records of this study will be kept strictly confidential. No names or any other personally identifiable information (including email or IP addresses) will be linked to the data you provide in this survey. Any results of this study will discuss group findings and will not include any information that can identify any individual respondent personally. Research records will be stored securely in protected files; and only researchers and individuals responsible for research oversight will have access to these records. All survey data will be collected through Qualtrics, a secure online survey software for which UNL has a site license. Qualtrics is designed in a way that data transmission is meaningless without the interpretation of the user's account. Qualtrics adheres to industry standards in regard to data security, using Transport Layer Security (TLS) encryption. Data will be encrypted while in transit.

Compensation:

Participants will be entered into a raffle to win one of two \$50 Amazon gift cards by providing their name and e-mail address at the completion of the study. The odds of winning this raffle are approximately 0.5%. If you signed up for this study using Sona, you will receive three research credits through Sona for participating in this project.

Opportunity to Ask Questions:

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

Freedom to Withdraw:

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy:

You are voluntarily making a decision whether or not to participate in this research study. Your selection of "I agree to participate" below certifies that you have decided to participate having read and understood the information presented. You may print a copy of this consent form to keep.

Voluntary Consent to Participate

I have read and understand the above information. *This question is required.

- \Box I agree to participate.
- \Box I choose not to participate.

Name and phone number of investigators:

Kate Theimer, M.A., Principal Investigator	Office: (402) 472-2619
David J. Hansen, Ph.D., Secondary Investigator	Office: (402) 472-2619

APPENDIX E

Intervention Study Initial Demographic Questionnaire

Gender:

- □ Male
- □ Female
- □ Transgender (please specify): _____
- □ Non-binary
- \Box Other (please specify): _____

Age: _____

How would you describe yourself? (Check all that apply)

- \Box White / European American
- □ Hispanic / Latino
- □ Black / African American
- □ Asian / Pacific Islander
- \Box Native American
- □ Other

APPENDIX F

Child and Adolescent Development Assessment

Instructions: Please answer the following questions. It is okay to answer "I don't know" if you are unsure.

- 1. Cognitive, emotional, social, and sexual development are all independent of each other.
 - a. True
 - b. False
 - c. I don't know
- 2. Interactions with the outside world as well as one's thoughts, emotions, and behaviors influence changes in the brain.
 - a. True
 - b. False
 - c. I don't know
- 3. Infants are completely unable to manage their emotions.
 - a. True
 - b. False
 - c. I don't know
- 4. Infants are biologically equipped for social communication.
 - a. True
 - b. False
 - c. I don't know
- 5. A five-year-old child who is curious about others' private parts and plays "doctor" with peers is exhibiting clear signs of sexual behavior problems.
 - a. True
 - b. False
 - c. I don't know
- 6. Preadolescents have increasing abilities to accurately evaluate how much control they have during stressful situations.
 - a. True
 - b. False
 - c. I don't know
- 7. The function of friendships stays the same from childhood to preadolescence.
 - a. True
 - b. False
 - c. I don't know

- 8. With kids, discussing issues related to sex when they are naturally observed in everyday life (e.g., a friend's mother is pregnant) can feel more natural and effortless.
 - a. True
 - b. False
 - c. I don't know
- 9. Adolescents tend to focus on short-term consequences rather than long-term consequences.
 - a. True
 - b. False
 - c. I don't know
- 10. Select the true statement(s):
 - e. Experts suggest hiding your discomfort when taking to kids about sex.
 - f. Experts suggest using anatomically correct names for the genitals with children, such as using the correct names for the penis and vagina.
 - g. Experts suggest not discussing sex with children until after puberty.
 - h. Experts suggest using language that's developmentally appropriate for a 4th grader when discussing sex with children of all ages.
- 11. Select the true statement(s):
 - a. On average, males begin puberty before females begin puberty.
 - b. On average, females begin puberty before males begin puberty.
 - e. Only males experience a growth spurt in puberty.
 - f. Only females experience a growth spurt in puberty.
- 12. At approximately what age range do individuals experience <u>rapid</u> improvements in executive functioning?
 - e. Infancy (approximately ages 0-2 years)
 - f. During preschool/early schooling (approximately ages 3-5 years)
 - g. During middle school (approximately ages 11-14 years)
 - h. During high school (approximately ages 15-17 years)

APPENDIX G

Social	Validity	Question	inaire
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Please rate your agreement to the following statements.

1.	I learned some	ething from this	s training.		
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
2.	This training a	addressed valua	ble topics.		
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
3.	This training v	was useful to yo	ou professional	<i>ly</i> (e.g., in your	current or future job).
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
4.	This training v personal intere	was useful to yo ests).	ou personally (e	e.g., in personal	l life or based on your
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
U		0		C	
5.	This training i	ncreased your l	knowledge.		
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
6.	The online tra	ining was an ef	fective way to I	learn the mater	ial.
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
7.	This training i	ncreased your i	interest in issue	s related to chi	ld sexual abuse.
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
8.	This training i	ncreased your i	motivation to su	upport children	following child sexual
	abuse.				
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
9.	This training i related to child	ncreased your i d sexual abuse.	interest in partic	cipating in trair	ing opportunities
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree

APPENDIX H

CSA History Questionnaire

Did you ever experience sexual abuse as a child or adolescent? Yes or No

Do you personally know someone who has experienced sexual abuse as a child or adolescent? Yes or No

- If Yes, these options will appear:
 - My relation to this person (click all that apply if you know more than one person):
 - Immediate family member (e.g., parents and siblings)
 - Extended family member (e.g., grandparent, aunt, uncle, cousins)
 - Close friend (non-family)
 - Acquaintance
 - Other

Have you ever experienced sexual assault as an adult? Yes or No

Do you personally know someone who has experienced sexual assault as an adult? Yes or No

- If Yes, these options will appear:
 - My relation to this person (click all that apply if you know more than one person):
 - Immediate family member (e.g., parents and siblings)
 - Extended family member (e.g., grandparent, aunt, uncle, cousins)
 - Close friend (non-family)
 - Acquaintance
 - Other

APPENDIX I

Intervention Study End Demographic Questionnaire

Number of children:

Year in college:

- \Box 1st year
- \Box 2nd year
- \Box 3rd year
- \Box 4th year
- \Box 5th + year

Major: _____

Current Cumulative GPA (out of 4.0 scale):

What do you want to do for your career after graduation?

Do you have experience working directly with children and families?

- □ No
- Yes, less than one year of experience
 If YES... How many months of experience?
- Yes, more than one year of experience
 If YES... How many years of experience?

If YES... Briefly describe your experience: _____

Do you have experience working directly with children and families who have experienced sexual abuse?

- □ No
- Yes, less than one year of experience
 If YES... How many months of experience?
- □ Yes, more than one year of experience
 - If YES... How many years of experience?

If YES... Briefly describe your experience:

Have you ever received professional training on the topic of child sexual abuse? (Check all that apply)

□ No

- \Box Yes, in-person training
- \Box Yes, online training

If YES... What organization(s) did you receive the training through?

Have you ever taken a course where the topic of child sexual abuse was discussed?

□ No

□ Yes

If YES... What was the name of the course(s)? _____

Are you completing this study for Sona research credit? For example, answer YES if you signed up to complete this study through Sona and will receive research credit following completion of the study.

□ Yes

 \square No

APPENDIX J

Intervention Study Follow-Up Participation Questions

Can the researchers contact you for a brief follow-up assessment that should take no more than 15 minutes? After completion of the follow-up assessment, you will have the opportunity to be entered into an **additional** raffle to win a \$50 Amazon gift card.

□ YES

□ NO

IF YES...

In the box below, please create a "unique identifier" by entering the **last two letters of your first name** (i.e., given name), the **day of the month you were born** (two digits), and the **last two letters of city you were born**. Do not put any spaces between the letters and numbers in the "unique identifier."

For example: Ka<u>te</u> was born on November <u>20</u> in Oma<u>ha</u>. Kate's "unique identifier" would be: <u>te20ha</u>

For example: Ju<u>an</u> was born on June <u>05</u> in Linco<u>ln</u>. Juan's "unique identifier" would be: <u>an05ln</u>

Create your "unique identifier" here:

Reminder: Enter the last two letters of your first name (i.e., given name), the day of the month you were born (two digits; 01-31), and the last two letters of city you were born **without any spaces in-between**. The "unique identifier" should have 6 total letters/numbers.

APPENDIX K

Intervention Study Separate Follow-Up Contact Form

Name: _____

E-mail Address: _____

- Please check this box if you wish to enter a raffle to win a \$50 Amazon gift card as a form of compensation for completing this study. Two Amazon gift cards will be raffled. Winners will be contacted after the study ends data collection via the email address provided.
- □ Please check this box if you wish to be contacted for a brief follow-up assessment. Participants who complete the follow-up assessment will have the opportunity to be entered into an **additional** raffle to win a \$50 Amazon gift card.

APPENDIX L

Follow-Up Assessment E-mail to Participants

Dear [Participant's Name],

Recently you participated in a research study where you completed an online training about child and adolescent experiences. During that study, you agreed to be contacted for a follow-up assessment.

The follow-up assessment should take no more than 15 minutes to complete. As a form of compensation, you will have the opportunity to be entered into an **additional** raffle to win a \$50 Amazon gift card by providing your name and e-mail address at the completion of the follow-up assessment.

Please use this link to complete the follow-up assessment: https://ssp.qualtrics.com/jfe/form/SV_5AXp25qcq6AFQxL

Your participation is greatly appreciated. Please let me know if you have any questions.

Thank you,

Kate Theimer, M.A. Principal Investigator







DEPARTMENT OF PSYCHOLOGY

Participant Informed Consent Form

Title: Online Training about Child and Adolescent Experiences (Follow-Up Assessment)

Purpose:

The purpose of this follow-up assessment is to (a) understand students' and new professionals' knowledge and beliefs about child sexual abuse outcomes and (b) evaluate an online training. You are invited to participate in this follow-up assessment because you are a UNL student, you are 19 years or older, and you completed initial procedures of the study titled, "Online Training about Child and Adolescent Experiences."

Procedures:

You will be asked to answer questions measuring your knowledge of and beliefs about child sexual abuse as well as questions on child development. You will also answer demographic questions. The follow-up assessment will take approximately 15 minutes and will be conducted online through a Qualtrics survey. Possible outlets of dissemination may include presentations at professional meetings and/or publication in scientific journals.

Benefits:

The follow-up assessment aims to further inform the field of psychology regarding adults' knowledge and perceptions of child sexual abuse and to inform intervention and training.

Risks and/or Discomforts:

It is possible that you might experience some emotional distress when answering questions about child sexual abuse. Should you feel uncomfortable during any part of the study, you may stop at any time without penalty. If you wish to stop the study at any time, you may do so without harming your relationship with the researchers or the university. If you feel upset or distressed after completing this study and would like assistance, please contact the following providers. In some cases, psychological treatment is available on a reduced or sliding fee scale.

Psychological Consultation Center	Counseling and Psychological Services	Voices of Hope
University of Nebraska-Lincoln	University of Nebraska-Lincoln	2545 N Street
325 Burnett Hall	1500 U Street	Lincoln, NE 68510
Lincoln, NE 68588	Lincoln, NE 68588	402-476-2110
402-472-2351	402-472-7450	

Confidentiality:

All records of this study will be kept strictly confidential. No names or any other personally identifiable information (including email or IP addresses) will be linked to the data you provide in this survey. Any results of this study will discuss group findings and will not include any information that can identify any individual respondent personally. Research records will be stored securely in protected files; and only researchers and individuals responsible for research oversight will have access to these records. All survey data will be collected through Qualtrics, a secure online survey software for which UNL has a site license. Qualtrics is designed in a way that data transmission is meaningless without the interpretation of the user's account. Qualtrics adheres to industry standards in regard to data security, using Transport Layer Security (TLS) encryption. Data will be encrypted while in transit.





DEPARTMENT OF PSYCHOLOGY

Compensation:

Participants will be entered into a raffle to win a \$50 Amazon gift card by providing their name and email address at the completion of the follow-up assessment. The odds of winning this raffle are approximately 0.7%.

Opportunity to Ask Questions:

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the follow-up assessment. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

Freedom to Withdraw:

Participation in this follow-up assessment is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy:

You are voluntarily making a decision whether or not to participate in this follow-up assessment. Your selection of "I agree to participate" below certifies that you have decided to participate having read and understood the information presented. You may print a copy of this consent form to keep.

Voluntary Consent to Participate

I have read and understand the above information. *This question is required.

□ I agree to participate.

 \Box I choose not to participate.

Name and phone number of investigators:

Kate Theimer, M.A., Principal Investigator	Office: (402) 472-2619
David J. Hansen, Ph.D., Secondary Investigator	Office: (402) 472-2619

APPENDIX N

Follow-Up Assessment Demographic Questionnaire

Gender:

- □ Male
- □ Female
- □ Transgender (please specify): _____
- □ Non-binary
- □ Other (please specify): _____

Age: _____

APPENDIX O

Follow-Up Assessment Separate Contact Form

Name: _____

E-mail Address: _____

Please check this box if you wish to entered into an additional raffle to win a \$50 Amazon gift card as a form of compensation for completing the follow-up assessment. The winners will be contacted after the study ends data collection via the e-mail address provided.

APPENDIX P

CSA Outcomes Intervention Summary, Outline, Script, Video Link, and Screenshots

Summary of Main Topics:

- The vast array of outcomes associated with victimization
- The general factors related to resiliency, meaning the factors which associate with better outcomes for survivors
- Common responses people have to child sexual abuse disclosures and how people's responses (such as blaming the victim or believing the victim) may influence outcomes

Outline:

- Slide 1 Welcome
- Slide 2 Providers and Resources
- Slide 3 Purpose of Training
- Slide 4 Benefits of Training
- Slide 5 Agenda
- Slide 6 Definition of Child Sexual Abuse
- Slide 7 Prevalence
- Slide 8 Mandatory Reporting
- Slide 9 Negative Consequences
- Slide 10 Resilient Outcomes
- Slide 11 Outcomes Vary
- Slide 12 Factors Related to Resiliency
- Slide 13 Factors Related to Resiliency: Parental Support
- Slide 14 Factors Related to Resiliency: Mental Health Treatment and Services
- Slide 15 Other Factors Related to Resiliency
- Slide 16 Responses to Child Sexual Abuse
- Slide 17 Delayed Disclosure
- Slide 18 Delayed Disclosure: Grooming
- Slide 19 (Believing a Child) False Accusations are Rare
- Slide 20 (Believing a Child) Using Emotions as Evidence of Sexual Abuse
- Slide 21 Victim Blaming
- Slide 22 Negative Expectations
- Slide 23 Conclusion
- Slide 24 Thank You and Return to Study Questions

Script:

Slide 1 – Welcome

- Welcome! Today you will complete a 30-minute webinar that aims to educate university students and new professionals on a variety of important topics related to child sexual abuse.
- Educating adults on issues related to child sexual abuse is a necessary and

essential step in keeping children safe. Additionally, training can help adults to respond to children in a supportive and protective manner when sexual abuse is disclosed.

• Please click the arrow to go to next slide.

Slide 2 – Providers and Resources

- Some may find the discussion of this topic upsetting. If you feel distressed after completing this study and would like assistance, please contact the following providers:
 - Counseling and Psychological Services
 - Is a mental health clinic for students located on UNL's campus
 - o The Psychological Consultation Center
 - Is a mental health clinic for community members, including students, located on UNL's campus
 - Finally, Voices of Hope
 - Is a service provider for those who have experienced relationship violence, sexual assault, and related forms of abuse
 - You can reach Voices of Hope staff on their office line or through a 24-hour crisis line
- You can also find links to these providers by clicking the word "Resources" located near the upper-right part of the screen.
- Please click the arrow to go to next slide.

Slide 3 – Purpose of Training

- The primary purpose of this training is to educate students and new professionals from an array of disciplines to increase their competence in working with children and families who have experienced sexual abuse
- The following information is broad enough that professionals from many disciplines as well as any adult can apply it when working and interacting with children and families.
- However, the information provided is not intended to be comprehensive and will not cover all aspects related to child sexual abuse.
- For example, the current training is not aiming to help identify signs of undisclosed abuse, discuss offenders, learn how to conduct therapy with survivors, or even necessarily prevent abuse from occurring.
- While these topics are *invaluable* for all adults to understand, they are outside of the limited scope of the brief training provided today. Other online and in-person resources are available if you are interested.
- Overall, equipped with proper training (including the information provided today), it is our belief that professionals interacting with survivors of child sexual abuse *in any capacity* have the opportunity to support children and be a positive part of their recovery.

Slide 4 – Benefits of Training

- There are many benefits to completing this training, but...
- You may ask yourself, "does this training really apply to me?"

- The answer is yes! This training applies to everyone!
- If you plan to work in a job, volunteer position, or practicum placement:
 - \circ ... with youth,
 - \circ ... with adults who are parents to youth, or
 - ...with adults who may have experienced abuse as a child... this information applies to you.
- Training may especially benefit those who to plan to go into:
 - A Mental Health, Social Work, Psychology, or Helping Profession
 - Such as Mental Health Practitioners, Social Workers, or Counseling, School, and Clinical Psychologists
 - As well as anyone working in a religious or faith-based organization
 - Those who plan to go into a Medical Profession
 - Such as nurses, physicians, physician assistants, and other general health professionals
 - Those who plan to go into Education
 - Such as teachers and childcare workers
 - Those who plan to go into Law Enforcement
 - o As well as those in a Legal Profession
 - Such as Attorneys, Paralegals, or Legal Aids
 - This training may also benefit those from other professions not described here
- Additionally, outside of the mentioned professions above, many people, at some point in their lives, will encounter children, whether it be their own children, friends' children, neighbors, or family members. Therefore, even if you do not plan to go into any of these professions, the following information could be beneficial for you and applied in non-professional settings.

Slide 5 – Agenda

- To reach the goal of providing information to improve competence of those who encounter and work with sexual abuse survivors, you will receive information on:
 - The definition and prevalence of child sexual abuse
 - The vast array of outcomes associated with victimization
 - The general factors related to resiliency, meaning the factors which associate with better outcomes for survivors
 - Finally, we will cover the common responses people have to child sexual abuse disclosures and how people's responses (such as blaming the victim or believing the victim) may influence outcomes
- Throughout this training, it is our goal is to promote and empower *all adults and all professionals* to be a positive part of survivors' recovery
- This means that with this knowledge, YOU can increase resiliency and encourage continued recovery in those who have experienced sexual abuse.

Slide 6 – Definition of Child Sexual Abuse

• Defining child sexual abuse is not always straightforward as there are many different definitions used across states and organizations as well as in research

and clinical endeavors.

- Broadly, child sexual abuse can be defined as any inappropriate interaction of a sexual nature between an adult and a child.
- Some definitions also include inappropriate sexual interactions between minors, when one minor is exerting power over the other.
- Sexual abuse includes contact acts, such as fondling, as well as non-contact acts, such as being shown pornography.
- Again, exact definitions of child sexual abuse vary. The federal government lays a minimum foundation for the legal definition, described on the screen.
- Then, each state may build upon this federal definition, including descriptions of specific sexually abusive acts, the age of consent, and age difference requirements between the victim and offender. Thus, definitions differ from state to state.
 - For example, in Nebraska the age of consent is 16.
- Child sexual abuse is a serious crime and precise legal definitions help to determine potential criminal charges for the offender.

Slide 7 – Prevalence

- Child sexual abuse affects youth of all ages, genders, ethnicities, backgrounds, cultures, and socio-economic circumstances.
- The actual prevalence of child sexual abuse is unknown. Many children never come forward and many children wait prolonged periods of time before disclosing.
- Reports from different studies can produce vastly different prevalence rates.
 - Yet, currently, it's estimated that...
 - "About 1 in 10 children will be sexually abused before they turn 18"
 - And, when broken down by gender, "About 1 in 7 girls and 1 in 25 boys will be sexually abused before they turn 18"
 - These numbers only reflect contact offenses.
 - Another prevalence rate that is commonly described is that "1 in 4 women and 1 in 6 men report that they were sexually abused as children." This prevalence rate comes from the Adverse Childhood Experiences Survey
- While these prevalence rates vary, they tell us that child sexual abuse is a common occurrence.

Slide 8 – Mandatory Reporting

- Nebraska state law **requires** <u>any person</u> who has reasonable cause to believe a child has been abused or neglected to report the information to law enforcement or to the Department of Health and Human Services (DHHS) hotline.
- This includes if a person observes conditions that reasonably would result in child abuse or neglect.
- Every adult in Nebraska is a mandated reporter of child abuse.
- The Nebraska Child Abuse & Neglect Hotline is 1-800-652-1999

Slide 9 – Negative Consequences

• Exposure to sexual abuse in childhood is associated with a vast array of outcomes

- Understanding the consequences associated with sexual abuse allows professionals to better identify symptoms, have a more comprehensive understanding of the impact of sexual abuse, and interact with children in an empathetic and supportive manner.
- Children who are sexually abused may be at-risk for experiencing mental health, behavioral, social, and physical health problems
 - Mental Health Symptoms and Disorders may include...
 - Depression
 - Anxiety
 - Posttraumatic Stress Disorder (PTSD).
 - Symptoms of PTSD include
 - Re-experiencing the abuse through thoughts or nightmares
 - Avoiding thoughts or experiences associated with the abuse
 - Negative mood or thoughts due to the abuse and
 - Increased reactivity due to the abuse
 - Other mental health symptoms may include
 - Suicidal ideation, suicidal behavior, self-harming behavior, and
 - Problems with self-esteem
- Some children may also engage in...
 - Sexual behavior problems, developmentally-inappropriate sexual behaviors, and
 - Risky sexual behavior, such as unprotected sex and having more sexual partners
 - Engagement in risky sexual behaviors can associate with contracting sexually transmitted infections and having an unintended pregnancy
- Children are also at-risk for experiencing:
 - Conduct or behavioral problems, and aggression
 - Substance use and abuse
 - Academic problems and
 - Relationship problems.
- Victimization is also associated with...
 - Poorer health-related quality of life because sexual abuse can have negative health and neurobiological outcomes.
- Finally, children are at increased risk for
 - Experiencing subsequent sexual victimization, termed "Revictimization," in child- and adulthood
- Child sexual abuse is unquestionably a momentous public health problem and combatting the sexual abuse of children should be a global priority.

Slide 10 – Resilient Outcomes

• Despite the potential risk for developing significant and long-lasting problems, some children are highly resilient and do not face substantial problems following sexual abuse.

- For example, some children only experience limited, short-term problems that later go away.
- And, some youth do not experience any significant negative outcomes and quickly return to pre-abuse functioning
- Specifically, studies show that between 10 and 53% of survivors present with no significant symptoms.
- Additionally, among those who experience clinical problems, studies have found that many children's symptoms decrease over time and most children see improvement in their symptoms when measured 12 and 18 months later. Although, this is not to say that some children's symptoms do not worsen over time.
- Even if a child does not present with significant symptoms, the provision of services and mental health treatment can be beneficial. These services may focus on providing education to the child and family to prevent revictimization in the future.
- Moreover, it is possible for some children to not experience immediate negative outcomes at first, but develop them later. Thus, timely treatment even with asymptomatic children may act to enhance coping and further reduce potential negative consequences.

Slide 11 – Outcomes Vary

- Overall, there is a large range of outcomes for children who experience sexual abuse and there is no one pattern of symptoms exhibited by victims.
- Reactions to traumatic events can vary significantly depending on the individual.
- This makes survivors of child sexual abuse a diverse group.
- Thus, it is impossible to tell if children have experienced sexual abuse by their demeanor.
- So, why do some kids experience certain negative consequences and some don't?
 - Why does one person develop PTSD while another develops academic problems?
 - Or, why does one person develop depression, anxiety, and substance abuse while another does not develop any significant symptoms?
- How sexual abuse affects a child depends on numerous factors which interact with one another. These include risk and protective factors relating to...
 - \circ The abuse
 - \circ The child
 - \circ The family and
 - The environment... which will be described in detail in the next slides.
- Despite these clues as to why abuse impacts children differently, it can be difficult to predict in what ways sexual abuse will impact an individual child because these factors are not definite, certain, or fixed and the combination of co-occurring risk and protective factors is infinite.

Slide 12 – Factors Related to Resiliency

• We will now focus on discussing the factors which associate with better outcomes in children who have experienced sexual abuse.

- Protective factors are individual, family, and environmental characteristics that modify a child's response to an adverse life event, such as sexual abuse, which typically associates with negative outcomes.
- These protective factors are invaluable for adults and professionals to understand because they can more easily
 - (a) identify those protective factors in children and families
 - \circ (b) encourage the utilization of protective factors once identified, and
 - (c) strengthen or build up those factors when working with children and families.

Slide 13 – Factors Related to Resiliency: Parental Support

- The first and most studied protective factor is parental or caregiver support.
- Parental support has been consistently linked with children's adjustment following sexual abuse. Children who feel supported and understood by their parents and caregivers are more likely to be resilient and have better outcomes.
- Having someone to talk with and confide in as well as feeling cared for has also shown to be important. This can include either family members, other supportive adults in the community, and peer-aged friends.
- Other protective factors relating to family include...
 - Positive parenting practices
 - Family connectedness
 - Parent education and socioeconomic status
 - Stability in housing and in the family home, and
 - Low rates of other adverse events within the family.
- Improving family support and other variables relating to the family could decrease the negative consequences associated with child sexual abuse.

Slide 14 – Factors Related to Resiliency: Mental Health Treatment and Services

- Another factor relating to better outcomes is engagement in mental health treatment to process emotions and address the effects of sexual abuse.
- Research and clinical efforts are dedicated to helping children following sexual victimization and there are effective mental health treatments for survivors of child sexual abuse.
- Effective mental health treatment, such as individual or group therapy and counseling, allows children to identify and process their emotions, learn adaptive coping strategies, discuss and improve family relationships, learn developmentally appropriate sexual education, gather information on safe and unsafe touches and personal space, and acquire skills to prevent revictimization.
- Treatment should also focus on empowering youth, decreasing the negative effects of sexual abuse, and strengthening and teaching the factors that associate with positive outcomes.
- For example, the following protective factors have been linked to resilient outcomes and can be strengthened or taught in therapy:
 - Understanding and managing emotions
 - Using adaptive coping skills
 - Reducing stigma

- o Increasing interpersonal and emotional competence
- Improving self-esteem
- Shaping attribution style, including not blaming themselves and viewing the abuse as something that does not have to permeate all areas of life, which can improve optimism and hope
- Giving meaning to their story
- Increasing engagement in clubs, cultural or leisure activities, and religious organizations, when appropriate
- $\circ \quad \mbox{Valuing individual spirituality, and} \\$
- $\circ \quad \text{Increasing empowerment and control}$
- Many services with children who have been sexually abused include the child's non-offending parents or caregivers. Non-offending parents and caregivers are adults who did not perpetrate the abuse. Evidence shows that if a parent receives therapy or counseling following their child's sexual abuse disclosure, it can have positive benefits for the parent as well as the child.
- This makes sense given the significant importance family support has on improving child outcomes. Additionally, parents can identify and process their own emotions about the abuse, learn coping strategies, acquire skills in parenting, communication, and problem-solving... which all can improve outcomes for the parent and child.

Slide 15 – Other Factors Related to Resiliency

- Other (often less studied) factors have also shown to associate with children having better outcomes following sexual abuse. Child-Related factors include having...
 - Higher levels of intelligence
 - Reserved, controlled, and rational personal qualities and
 - Positive school or educational experiences. These include good relationships with teachers, making realistic educational plans for the future, showing more school engagement, having positive feeling towards school, and being enrolled in a safe school.
- Aspects relating to the abuse that occurred can also influence outcomes. This includes the type, severity, frequency, duration, use of force, age when abuse occurred, and relationship to the offender.
- Of note, there are numerous other protective factors reported in the literature.

Slide 16 – Responses to Child Sexual Abuse

- Just as previously discussed, that protective factors are linked with child adjustment, people's immediate and ongoing responses to a child's disclosure or to the news of child sexual abuse can influence victim outcomes.
- For example, it is common for adults and parents to be highly confused, shocked, angry, sad, and even be in denial that the sexual abuse occurred.
- These potentially strong emotions may lead to questions such as...
 - Did the abuse really happen?
 - Could the accused offender really have done this?
 - \circ Whose fault is it?
- Did my child do something to provoke the abuse?
- Is it my fault as a trusted adult in the child's life?
- Why didn't the child come forward sooner? and
- Will the child ever be the same?
- Processing these questions is important and the way an adult ultimately answers these questions can have significant implications for the victim's recovery because it can influence how the adult treats the child. Thus, next we will provide you with information on:
 - Why children do not tell right away
 - Why children should be believed
 - Why children and non-offending parents should not be blamed
 - \circ Why, with appropriate support and treatment, children can be resilient, and
 - How certain responses to abuse can be detrimental to child recovery

Slide 17 – Delayed Disclosure

- It is important to understand that the majority of children DO NOT immediately tell an adult after they experience sexual abuse. In fact, many children wait prolonged periods of time and some never tell.
- There are many reasons why some children don't tell about sexual abuse.
 - They may feel guilty, like they did something to deserve it or were responsible for it happening.
 - They might be too young to understand what happened or too young to effectively disclose what occurred.
 - They may have been coerced into keeping the secret by threats from the offender.
- Also, children don't tell because
 - They may be worried about how others will respond.
 - For example, they may fear that they will get in trouble, won't be believed, will be blamed, or their parents will be mad
 - They may also feel ashamed about what happened.
 - And, they may fear the many changes that will occur if they tell, such as potentially separating their family, sending someone to jail, or having to go through an ongoing legal process. They may fear the disruption is may cause to their family.

Slide 18 – Delayed Disclosure: Grooming

- Another important element of sexual abuse that relates to why children do not tell is grooming.
 - Grooming is a process where perpetrators attempt to gain trust and compliance of a child in order to abuse the child.
 - This includes preparing not only the child, but potentially significant adults, family members, and the environment as well.
 - "Specific goals include gaining access to the child, gaining the child's compliance, and maintaining the child's secrecy to avoid disclosure." (Craven, Brown, & Gilchrist, 2006, p. 297)

- First, the offender develops a relationship with the youth and their family and gains their trust. Offenders may then find opportunities to be alone with the youth. They often make children feel special by giving them gifts, treats, special privileges, or attention. Over time, offenders typically progress from affectionate nonsexual touches (such as hugging or tickling) to sexual touches. This desensitizes the child to touch. After the sexual abuse, offenders often threaten the child, including that the offender might hurt someone or that no one will believe the child if they tell. They often make the child feel as if it is their fault.
- Not all sexual abuse survivors experience grooming. However, because the majority of children are abused by someone they know and could easily identify, many offenders will use grooming tactics to prevent disclosure.

Slide 19 – (Believing a Child) False Accusations are Rare

- Some people, including family members, friends, other adults, and professionals will question whether the abuse actually happened.
- It may be especially difficult to believe when the accused offender is someone close to the family and someone the family trusts.
- However, the fact is, children rarely lie about being sexually abused.
- Estimates show that between 96-98% of allegations are true
- Unfortunately, despite the extremely low rate of false reports, sexual abuse can be difficult to prove in the court of law. Many people, including jurors, assume that there will be physical or medical evidence to scientifically and objectively prove or reject the allegations of sexual abuse. However, during medical exams, most victims do not have physical or medical evidence of the sexual abuse, possibility because of a delay in disclosing the abuse. Additionally, most forensic examinations neither confirm nor disprove a child's allegation (Goodman-Delahunty, Martschuk, & Cossins, 2017), thus relying on these examinations to determine whether someone believes a child is illogical.
- Additionally, some people who are skeptical fear that children make up abuse and these false allegations will cause significant negative effects for the alleged offender.
- Again, youth rarely make up false allegations of sexual abuse and,
- no matter the circumstance, *any* disclosure or suspicion of child abuse should be reported to police or the Child Abuse Hotline.
- From there, highly trained forensic interviewers use legally sound procedures to gather precise information in an unbiased manner. Many efforts are in place to ensure interviews are not suggestive ...and to minimize the need for repeated interviews.

Slide 20 – (Believing a Child) Using Emotions as Evidence of Sexual Abuse

- Some may not believe a child's report of sexual abuse if they are not exhibiting any emotional or behavioral problems.
- For example, people may begin to doubt that sexual abuse occurred if the child generally is acting "normal" rather than highly distressed.
- Or, people may not believe a child if they are not emotionally reactive when

talking about or reporting the sexual abuse. People may believe a child fabricated or made up the abuse because the child is able to talk about it in a neutral manner without crying, becoming upset, displaying fear, or showing strong emotions.

- However, studies show that children are just as likely to exhibit relaxed or neutral emotions and behaviors when reporting abuse as they are negative emotions
- Thus, it is important to believe a child regardless of their emotional expression or regardless of their emotional or behaviorial state.
- You cannot tell if a child has been sexually abused just by looking at them, especially by just observing their emotions and behaviors.
- Believing a child's disclosure shows support, empathy, and protectiveness. Also, believing a child's report ensures appropriate access to treatment and services. All of which can have important implications for the youth's recovery.

Slide 21 – Victim Blaming

- Following the news of child sexual abuse, a <u>common</u> response is to blame the victim for the abuse. This includes non-offending parents, family members, and other adults close to the child. This may be surprising to many, yet significant research demonstrates that people perceive youth as having contributed to their victimization.
- Certain children are more likely to experience blame.
 - For example, older children (like adolescents) are more likely to be blamed for experiencing sexual abuse compared to younger children
 - Also, males tend to place blame onto child sexual abuse victims more than females
- Youth who are blamed for the abuse may experience worse outcomes
- For example, blaming the child may prompt them to self-blame and internalize responsibility. Also, when those close to the youth blame them, it may be expected that they are also not appropriately providing support and compassion to the child.
- Non-offending parents of sexual abuse victims are also sometimes blamed for the abuse.
- Blaming non-offending parents can also be harmful. Parents may already be experiencing distress and feelings of guilt and being blamed by others could intensify these feelings.

Slide 22 – Negative Expectations

- Because of the many harmful outcomes associated with sexual abuse as well as the strong emotional distress adults may be feeling when they hear about the sexual abuse, many people fear that the child will never be the same, is ruined, or is permanently damaged.
- However, as discussed earlier, many children do return back to the level of functioning they were at before the abuse occurred, especially when treatment and other protective factors are in place.
- While it is not uncommon to hold negative expectations for the child due to the sexual abuse, doing so can have adverse repercussions.
- For example, believing a child is now permanently damaged or expecting poor

outcomes reduces optimism and the hope or prospect for resiliency.

- Increasing resiliency and abolishing the "damaged child" mentality or outlook should be a priority for all adults interacting with children who have experienced sexual abuse
- Additionally, expecting the child to experience emotional or behavioral problems can impact how one interacts with the child. This can then encourage the child to behave in ways that match the negative expectation (similar to a self-fulfilling prophecy).
- Overall, expecting a child will experience highly negative symptomology following sexual abuse can have harmful effects on the child.

Slide 23 – Conclusion

- In review, we hope you learned
 - The definition and prevalence of child sexual abuse
 - The vast array of outcomes associated with victimization
 - The factors related to better outcomes for survivors
 - The common responses people have to child sexual abuse disclosures and how people's responses may influence child outcomes
- Throughout this training, it was our goal is to promote and empower *all adults and all professionals* to be a positive part of survivors' recovery
- We hope you found this information valuable
- Please click the arrow to go to the next page

Slide 24 – Thank You and Instructions

- Thank you for participating!
- To finish the study, please exit this training and return to the Qualtrics webpage

YouTube Link of webinar in video-format: https://youtu.be/UCmnhSxfvnM © 2019 Kate Theimer

Screenshots of CSA webinar begin on next page.











all adults and all professionals to be a positive part of survivors' recovery.





To finish the remainder of the study, exit this window and return to the Qualtrics survey.

APPENDIX Q

Child and Adolescent Development Training (Attention Control) Summary, Outline, Script, Video Link, and Screenshots

Summary of Main Topics:

- Cognitive, emotional, social, and sexual development of children and adolescents
 - Age 0-2
 - Age 3-7
 - Preadolescence
 - Adolescence
- Skills for talking to children and adolescents about sex

Outline:

- Slide 1 Welcome
- Slide 2 Providers and Resources
- Slide 3 Purpose of Training
- Slide 4 Benefits of Training
- Slide 5 Agenda
- Slide 6 Age 0-2: Cognitive, Emotional, and Social Development
- Slide 7 Age 0-2: Cognitive, Emotional, and Social Development
- Slide 8 Age 0-2: Sexual Development
- Slide 9 Age 3-7: Cognitive, Emotional, and Social Development
- Slide 10 Age 3-7: Cognitive, Emotional, and Social Development
- Slide 11 Age 3-7: Sexual Development
- Slide 12 Age 8-12 (Preadolescence): Cognitive, Emotional, and Social Development
- Slide 13 Age 8-12 (Preadolescence): Cognitive, Emotional, and Social Development
- Slide 14 Age 8-12 (Preadolescence): Sexual Development
- Slide 15 Sexual Behavior Problems
- Slide 16 Female Puberty
- Slide 17 Male Puberty
- Slide 18 Adolescence (12-early 20s): Cognitive, Emotional, and Social Development
- Slide 19 Adolescent Sexual Development
- Slide 20 Talking to Kids about Sex
- Slide 21 Talking to Kids about Sex, Cont.
- Slide 22 Talking to Kids about Sex, Cont.
- Slide 23 Conclusion
- Slide 24 Thank You and Return to Study Questions

Script:

Slide 1 – Welcome

- Welcome! Today you will complete a 30-minute webinar that aims to educate university students and new professionals on a variety of important topics related to child and adolescent development.
- Education on these topics could help adults garner a greater understanding of how children and adolescents typically develop.
- Please click the arrow to go to next slide.

Slide 2 – Providers and Resources

- If you feel upset or distressed after completing this study and would like assistance, please contact the following providers:
 - Counseling and Psychological Services
 - Is a mental health clinic for students located on UNL's campus
 - The Psychological Consultation Center
 - Is a mental health clinic for community members, including students, located on UNL's campus
 - Finally, Voices of Hope
 - Is a service provider for those who have experienced relationship violence, sexual assault, and related forms of abuse
 - You can reach Voices of Hope staff on their office line or through a 24-hour crisis line
- Please click the arrow to go to next slide.

Slide 3 – Purpose of Training

- The primary purpose of this training is to educate students and new professionals from an array of disciplines to increase their knowledge of child and adolescent development.
- The following information is broad enough that professionals from many disciplines as well as any adult can apply it when working and interacting with children and families.
- However, the information provided is not intended to be comprehensive and will not cover all aspects related to child and adolescent development.
- Specifically, the current training is not aiming to be an assessment or diagnostic tool for determining if a child is moving through developmental milestones in a normative way.
- Other online and in-person resources are available if you are interested.
- Overall, equipped with proper training in child and adolescent development (including the information provided today), it is our belief that those interacting with youth and their parents *in any capacity* have the opportunity to better provide positive support.

Slide 4 – Benefits of Training

- There are many benefits to completing this training, but...
- You may ask yourself, "does this training really apply to me?"

- The answer is yes! This training applies to everyone!
- If you plan to work at a job, volunteer position, or practicum placement:
 - \circ ... with youth or
 - \circ ...with adults who are parents to youth... this information applies to you.
- Training may especially benefit those who plan to go into a profession where interaction with children and adolescents or parents is common.
- For example:
 - A Mental Health, Social Work, Psychology, or Helping Profession
 - Such as Mental Health Practitioners, Social Workers, or Counseling, School, and Clinical Psychologists
 - As well as anyone working in a religious or faith-based organization
 - Those who plan to go into a Medical Profession
 - Such as nurses, physicians, physician assistants, and other general health professionals
 - Those who plan to go into Education
 - Such as teachers and childcare workers
 - \circ $\;$ Those who plan to go into Law Enforcement
 - o As well as those in a Legal Profession
 - Such as Attorneys, Paralegals, or Legal Aids
 - \circ $\,$ This training may also benefit those from other professions not described here
- Additionally, outside of the mentioned professions above, many people, at some point in their lives, will encounter children, whether it be their own children, friends' children, neighbors, or family members. Therefore, even if you do not plan to go into any of these professions, the following information could be beneficial for you and applied in non-professional settings.

Slide 5 – Agenda

- To reach the goal of providing information to improve the knowledge set of those who encounter children and adolescences, you will receive information on:
 - Cognitive, emotional, social, and sexual development of children and adolescents.
 - The information will be presented in a lifespan approach, meaning we will first discuss young children
 - Ages 0-2... then we will discuss children
 - Ages 3 to 7 years old. Next, we will cover
 - Preadolescence. Then, we will discuss...
 - Adolescent development.
 - The lifespan approach also emphasizes how events and processes that occur in early development can influence later development.
 - As mentioned, in addition to learning about cognitive, emotional, and social development, we will be discussing child and adolescent sexual development.
 - Consistent with discussing sexual development through the life span, at the end of the webinar,

- Skills for talking to children and adolescents about sex... will be covered.
- Throughout this training, it is our goal to promote and empower *all adults and all professionals* to be a positive support for children, adolescents, and their parents or caregivers. Knowledge in child and adolescent development could help you provide this positive support.

Slide 6 – Age 0-2: Cognitive, Emotional, and Social Development

- Before we begin, while the material has been broken into seemingly distinct periods of development (i.e., Ages 0-2, Ages 3-7) in this presentation, there are no *set* periods of development. Researchers tend to group individuals by ages to study them. However, development is considered continuous.
- We will begin by discussing development in infancy and young toddlerhood.
- First, cognitive development refers to an individual's mental and intellectual processes. As you'll see, cognitive, emotional, social, and sexual development are all interrelated.
- While infants' cognitive abilities are more limited than older individuals, research shows that infants can:
 - Imitate others.
 - They are particularly likely to imitative adults' goal-directed behavior.
- They can also,
 - Notice people's intentions,
 - Categorize objects, and
 - Understand the permanence of objects.
 - Specifically, we'll spotlight the concept of *object permanence*, which is the idea that an object still exists even when you cannot see it. Very young infants develop object permanence over time.
- Of note, brain growth and maturation contribute to cognitive development. Thus, changes in the brain impact cognitions, emotions, and behaviors. In addition, interactions with the outside world as well as one's thoughts, emotions, and behaviors influence changes in the brain.
 - Therefore, just as the brain impacts thoughts, emotions, and behaviors.... These thoughts, emotions, and behaviors impact the brain.

Slide 7 – Age 0-2: Cognitive, Emotional, and Social Development

- Emotional development refers to the ability to:
 - Identify and understand one's feelings,
 - Identify and understand others' feelings,
 - Manage emotions, and
 - o regulate behavioral responses to emotions
- The ongoing development of these emotional abilities are significant for functioning, including creating and maintaining social relationships.
- Emotional displays of distress are shown in infants when they cry because they are hungry or uncomfortable. Also, infants experience positive emotions when fed, held by a parent, and soothed.

- Early on, infants are unable to regulate or control the expression of overwhelming emotions. They have some abilities, although limited, to manage their emotions when attending to or focusing on something.
- In many ways, emotional development and social development are intertwined and, thus, sometimes called *social-emotional development*. Emotions are also interrelated to cognitions and behaviors.
 - In the very young, this may look like a toddler who enjoys playing with airplanes wanting to learn about airplanes and play with toy airplanes.
- Regarding social development, infants are biologically equipped for social communication.
 - Infants enjoy looking at human faces and are comforted by touch.
 - Further, rapid development of the brain during infancy further prepares the very young for social interaction, including the ability to imitate and understand others.
- Of note, appropriate parental responsiveness to the needs of infants and young children predicts positive social, emotional, and cognitive (intellectual) development.

Slide 8 – Age 0-2: Sexual Development

- Some aspects of sexual response are present from birth.
- Thus, some forms of sexual behavior in young children are a part of normal development.
- For example,
 - It is common for young children to touch their own private parts.
 - Also, masturbation and pelvic thrusting are observed in infants and toddlers.
 - Typically, this occurs by rubbing or thrusting against a soft object, such as a pillow, blanket, stuffed animal, or doll.
 - Showing one's private parts to others and some curiosity about private parts is also seen in this age group.
 - For some parents, these behaviors may not be recognized as aspects of sexual development and, therefore, go unacknowledged.
- Because very young children (like infants) do not have the language skills for communication, much of what is known about young childhood sexual development is based on parent report of child behavior and adult recollections of childhood experiences.
- Additionally, warmth, nurturance, and appropriate physical affection from parents at a young age (e.g., being held and hugged by parents) can have positive implications for intimate relationships and expressions of affection in adulthood.

Slide 9 – Age 3-7: Cognitive, Emotional, and Social Development

- Next, we'll discuss development in children age 3 through 7 years old.
- During preschool and early schooling, children experience rapid improvements in executive functioning, which are the "cognitive processes that underlie goal-directed behavior" (Best & Miller, 2010, pg. 1641)
 - Executive functioning includes things such as inhibition or self-control,

working memory, and shifting between rules and tasks or attentional flexibility.

- Children in preschool can begin to inhibit their behaviors and show large improvements in inhibition skills by age 8. Performance in working memory and shifting tasks also tends to improve in preschool through adolescence.
- In summary, while skills in executive functioning (i.e., self-control, memory) begin to develop shortly after birth, ages 3 to 5 represent "a window of opportunity for dramatic growth" (Center for the Developing Child, nd, pg. 1) in executive functioning skills. Of course, executive functioning continues to develop through adolescence and early adulthood.

Slide 10 – Age 3-7: Cognitive, Emotion, and Social Development

- The emotionality of children age 3 through 7 tends to be much more complex than infants.
- Preschool children...
 - Begin to interpret their own experiences,
 - Begin to learn about the ranges in emotions, and
 - Are better able to manage their emotions.
- Toward the end of preschool, children with a good emotional foundation have the ability to...
 - Anticipate their own and others' emotions,
 - Talk about their own and others' emotions, and
 - Use their awareness of emotions to navigate social interactions.
- By the end of the preschool years and during early schooling, children may report feeling more complex emotions such as embarrassment, pride, guilt, and shame.
- Also, young children can feel emotions quite deeply and intensely. For example, they can feel strong emotions of sadness, grief, anger, anxiety, and happiness.
- Developing language abilities allow children to communicate their feelings to others
- Of note, emotion regulation is highly interrelated to executive functioning and problem-solving abilities.
- Further, children's abilities to recognize and manage their emotions are extremely important to social functioning.
 - Teachers' and peers' perceptions of a child's social abilities are often determined by that child's emotion recognition abilities. Further, these abilities associate with how "well-liked" a child may be in their classroom.
 - For example, kids prefer others who aren't constantly upset.
- Some see emotional abilities as a foundation for current and future social competence and social skills.
- Finally, because the child's environment can play an important role in the development of cognitive, emotional, and social abilities, adults interacting with children should be supportive, caring, engaging, and protective.

Slide 11 – Age 3-7: Sexual Development

• Some forms of sexual behavior in children 3 to 7 years old continue to be a part of normal development.

- For example,
 - Curiosity about the opposite sex's private parts is typical.
 - Children may learn that their genitals are different than other parts of their body, in that they are private and are covered.
 - The "bathing suit" rule may be taught to children to show how private parts are the parts of your body covered by the swimsuit.
 - Also, exploratory play, such playing doctor or playing house with others of the same age, is common.
 - Engagement in masturbation may continue, though this is typically done in private.
- The frequency of *observed* sexual behaviors (e.g., touching one's private parts, showing others one's private parts, and masturbation) tends to peak around age 5 and then declines. However, this decline of *observed* sexual behaviors is likely because children begin to engage in sexual behaviors privately.

Slide 12 – Age 8-12 (Preadolescence): Cognitive, Emotional, and Social Development

- Brains continue to mature through preadolescence. Though, it's believed that there is a less dramatic growth of executive functioning skills during this time.
- For example,
 - Studies appear to show modest improvement and *refinements* to self-control skills during this age range.
 - Performance on working memory tasks and the ability to shift between tasks and rules continues to increase.

Slide 13– Age 8-12 (Preadolescence): Cognitive, Emotional, and Social Development

- During this age range, children can generally make a distinction between the genuine expression of emotions with close friends and more managed displays of emotions with others.
 - For example, preadolescents may share their emotions of joy, sadness, or anxiety in-depth with friends, but they may not display these genuine emotions with teachers or less familiar peers.
- Also, preadolescents have an increased ability to problem-solve, including the ability to generate several potential solutions for managing negative emotions.
- More so than in earlier development, those in preadolescence tend to have better understanding of "reality," meaning they have more realistic thoughts and beliefs.
- They also have increasing abilities to accurately evaluate how much control they have during stressful situations.
- Further, in regards to social development, the function of friendship changes through normative development.
 - For example, friends during preadolescence begin to serve different purposes compared to friends in earlier childhood.
 - Friends increasingly serve to help form one's identify, with this especially true into adolescence.
- Even during the late school-age and middle school years, children's conception or understanding of friendship changes through development
 - \circ In ages 10-11, friends are those who have similar values and rules. Friends

are expected to be loyal to each other.

• In ages 11-13, friends tend to be those who have similar interests. They attempt to understand each other and friends engage in more personal self-disclosure.

Slide 14 – Age 8-12 (Preadolescence): Sexual Development

- Typically, around the age of 8 or 9, there is a noticeable tendency for males and females to play separately from one another, such that males primarily spend time with other males and females tend to spend time primarily around other females.
- Despite this, romantic interest in the other gender may occur.
- During preadolescence, curiosity regarding sexual matters remains high.
 - Therefore, youth in this age range tend to question matters of reproduction and sexuality and may seek out answers to their many questions.
 - Many 10- and 11-year-olds are very interested in how their bodies will change with puberty, including how aspects related to their genitals will change and how their secondary sex characteristics will develop.
 - Secondary sex characteristics are physical attributes which change during puberty, but which aren't directly tied to reproduction. For example, these include pubic and underarm hair growth, breast development in females, and facial hair growth in males.
 - These physical changes that will occur in puberty are often anticipated
- Engagement in masturbation is common.
- Children in this age range may engage in consensual sexual activities with peers (e.g., kissing, sexual touching, and beyond).
- Developmentally appropriate "sex play" with friends of the *same sex* is common.
 - Particularly, because of the separation between genders, same-sex activity is likely more common than heterosexual activity in this age range.
 - Many times, these same-sex encounters in preadolescence are replaced by heterosexual activities in adolescence.
 - Same-sex experiences in childhood infrequently play a determining role in establishing one's sexual orientation.
 - Though, for some, sex play with friends of the same gender does reflect an attraction to members of that same sex and this orientation may more fully develop in adolescence and adulthood.

Slide 15 – Sexual Behavior Problems

- Across the age periods discussed so far, you can see that some sexual behaviors are a part of normal development. However, some sexual behaviors might raise concern and be problematic.
- These behaviors are often called "sexual behavior problems."
- Some examples include:
 - Sexual behaviors which involve coercion, tricks, or threats.
 - Sexual behaviors which involve aggression or injury.

- So, sexual behaviors are of concern when they cause physical or emotional harm to others. A child's sexual behaviors should not be negatively affecting other children.
- Also, sexual behaviors are of concern when they cause physical or emotional harm to the self.
 - E.g., physical harm to oneself may include touching oneself to point where one's private parts are sore or hurt.
- Therefore, it may also be concerning when sexual behaviors are associated with anger, distress, or strong negative emotions or when sexual behaviors occur with other physically aggressive behaviors
- More examples of problematic sexual behaviors include:
 - Sexual behaviors between children of significantly different ages or developmental abilities (e.g., 12-year-old engaging in behaviors with a 6-year-old).
 - This also includes Sexual behaviors which do not change following parental redirection, intervention, or appropriate discipline. This may look like a child who is unable to stop themselves, even when a parent redirects them.
- Also,
 - The frequency of sexual behaviors is important. If a child is frequently engaging in sexual behaviors and the behaviors are persistent, then they may be a concern. Also, if the behaviors are increasing in their frequency, intensity, or invasiveness, these behaviors may be a problem.
- Some less common sexual behaviors that may be problematic include:
 - A child asking adults or peers to engage in sexual acts with them,
 - Inserting an object into one's private parts, or
 - Touching animals' genitals.
- Overall,
 - It's important for adults to understand normal sexual development of children. Anytime a child is engaging in sexual behaviors not within normal development or engaging in sexual behaviors typical of an adult, the child may be engaging in problematic sexual behaviors.
- Professional support (e.g., therapeutic intervention) may be needed for children who exhibit sexual behavior problems.

Slide 16 – Female Puberty

- In the progression toward adolescence, puberty is a major developmental milestone.
- On average, female puberty begins at age 10 or 11. Though, puberty may come before or after this average range.
 - In the U.S., approximately 15% of females enter puberty by age 7.
- Females experience the following changes:
 - Breast development
 - Growth of pubic and underarm hair
 - Increased acne
 - Growth spurt

- Labia, clitoris, and uterus enlarges
- Vaginal walls thicken
- o Body contours round
- During puberty, females experience menarche, or their first menstrual period.
 - Most females experience their first menstrual period at age 12 or 13. However, there is considerable variation in the age a female experiences menarche.

Slide 17 – Male Puberty

- Males typically experience puberty later than females. On average, males enter puberty around age 12. Though, puberty may come before or after this age.
- Males experience the following changes:
 - o Deepening of voice
 - o Growth of facial, body, and pubic hair
 - Increased acne
 - Growth spurt
 - o Increased muscularity
 - o Penis, testes, and scrotum increase in size
- Also, while males can experience orgasm before puberty, first ejaculation occurs during the pubertal stage.

Slide 18 – Adolescence (13-early 20s): Cognitive, Emotional, and Social Development

- Adolescence is often seen as the transition from childhood to adulthood in western cultures.
- Puberty leads to changes in physical development and adolescents start to physically look similar to adults (e.g., facial hair on males). However, cognitive development lags behind physical development. Therefore, adolescents may physically look like adults, but they do not have the advanced cognitive abilities in decision-making, planning, and impulse control adults tend to have. This mismatch can cause conflict when one expects an individual who is just a teenager (but who looks like an adult) to act as an adult.
- Adolescents tend to be more impulsive and more focused on short-term consequences rather than long-term consequences. Executive functioning does not fully develop until late adolescence or early adulthood.
- There is evidence of regression (i.e., decrease) in self-regulation abilities during adolescence. Particularly, adolescents commonly engage in increased risky behavior.
- However, compared to preadolescents, adolescents are faced with riskier, more emotionally-charged situations (like driving, dating, exposure to drugs and alcohol). Thus, because their self-regulation abilities are not fully matured, they act in ways that *look* like there's a decrease in abilities.
- Peers become increasingly important to adolescents, which then influence their social development and social functioning. *Susceptibility* to peer pressure tends to increase until approximately age 14. Then, *resistance* to peer pressure begins to increase at age 14. Thus, conformity to peers tends to be higher during early

adolescence.

• Further, emotional development ties closely to social development, with many adolescents becoming increasingly aware of how emotions and the communication of emotions impacts social relationships.

Slide 19 – Adolescent Sexual Development

- Regarding sexual development, Many adolescents masturbate. By age 19, it is approximated that 86% of males and 66% of females have masturbated. Compared to earlier stages of development, the frequency of masturbation tends to increase.
 - In adolescence, sexual behaviors such as kissing, genital-touching, and oral sex may occur. Recent studies have found that rates of oral sex are increasing in this age group, perhaps because oral sex is believed to be more acceptable and less risky (though sexually transmitted infections can be spread through oral sex).
 - Sexual intercourse is also a sexual behavior that may occur in adolescence.
 - Engagement in sexual intercourse is associated with the output of sex hormones, curiosity, the feeling of being "ready", wanting to express love and affection as well as pressure from peers and dating partners.
 - Same-sex behavior may occur in adolescence. One large study found that one in ten adolescences reported same-sex sexual contact. These behaviors may or may not be expressions of same-sex or bisexual orientation.

Slide 20 – Talking to Kids about Sex

- Now, we will transition to discussing skills for talking to kids about sex.
- The following information should not be considered an end-all/be-all when it comes to discussing sex with children. Instead, we hope this information helps start a conversation about how <u>you</u> might decide to speak about sex to children with whom you interact. This may be as a parent or through a personal relationship with a child ... or through professional interaction with a child (e.g., as a therapist or health care professional). Because many people feel uncomfortable discussing issues related to sex, we hope the following discussion is helpful in eliciting ideas about your own beliefs about how to talk to children about sex.
- "Starting early" can increase openness and communication about sexual matters and provide an atmosphere where a child may feel more comfortable coming to you with questions.
- Also, be prepared if a child brings questions to you at an early age. Studies have shown that by age 4, many children begin asking questions about where babies come from. Putting off an answer can halt communication. Also, you may find that beginning a dialogue about sex during preadolescence and adolescence (without any foundation laid in earlier development) can be very awkward and uncomfortable.

• Thus, discussing issues related to sex during day-today interactions, particularly when issues related to sex are naturally observed (e.g., a child learns or sees that a family friend is pregnant) can feel more effortless.

Slide 21 – Talking to Kids about Sex, Cont.

- Use language consistent with the child's developmental level and cognitive abilities. Young children have difficulty understanding abstract concepts and likely will not fully grasp the complex physiology and biological processes of sex and conception. Therefore, discussing the basics in a developmentally appropriate way may be most helpful for young children. With that said, though, many experts suggest using anatomically correct names for the genitals, such as using the correct names for the penis and vagina. This is suggested for many reasons, including that it can enhance self-confidence, body image, and communication, and overall can help avoid confusion.
- Broadly, answering questions directly can be helpful.
- Following providing an answer to a question a child has, you may decide to check to see if the child understood your answer. Also, let them know you're open to answering more questions.
- In particular, it may be beneficial to discuss the changes that will happen in puberty *before* they actually happen. Changes that occur in puberty, such as a first menstrual period or first ejaculation, can be shocking and frightening if one is unprepared.
- Also, waiting to discuss these issues until preadolescence and adolescent may have some negative repercussions, in that it's likely children at this age have already received potentially inaccurate information about sex from peers.

Slide 22 – Talking to Kids about Sex, Cont.

- It's okay to be open with children about your discomfort or uneasiness discussing these topics. Though, you may also share the importance of these discussions, despite the discomfort that may be had. Thus, *willingness* to discuss issues of sexuality tends to be important for creating a more open dialogue.
- In addition to discussing puberty and sex, it is also important to discuss healthy relationships and dating, including what healthy and unhealthy relationships look like.
- Of note, as a parent to a child, it's good to share your own values about sex. Parental values can play an important role in an adolescent's sexual decisionmaking.
- In fact, "positive parent-adolescent communication about sex has been linked to decreased risk of contracting sexually transmitted infections, more effective and consistent use of birth control, and decreased incidence of teenage pregnancies" (pg. 369).
- Though, it's important to also note that if a parent feels unable to do so or if a child prefers to talk with another person, it can be helpful to have another trusted adult in a child's life with whom the child can discuss sex. This could be a therapist, physician, case worker, uncle, aunt, or grandparent.

Slide 23 – Conclusion

- In review, we hope you learned about the...
 - Cognitive, emotional, social, and sexual development of children and adolescents.
 - Ages discussed included ...
 - Ages 0-2,
 - Ages 3 to 7 years old,
 - Preadolescence, and
 - Adolescence.
- We also hope you learned some
 - Skills for talking to children and adolescents about sex.
- Throughout this training, it was our goal is to promote and empower *all adults and all professionals* to be a positive support for children, adolescents, and their parents or caregivers. Knowledge in child and adolescent development could help you provide this positive support.
- We hope you found this information valuable.
- Please click the arrow to go to the next page.

Slide 24 – Thank You and Return to Study Questions

- Thank you for participating!
- To finish the study, please exit this training and return to the Qualtrics webpage

YouTube link of webinar in video-format: https://youtu.be/rxhycdm2SbM © 2019 Kate Theimer

Screenshots of child and adolescent development webinar begin on next page.





