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Religion and Social Support as Protective Factors Among African American Women Sexually Abused as Children

Vanessa K. Tower
Walden University

Walden University

College of Allied Health

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Vanessa K. Tower, LISW-S

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Review Committee
Dr. Chris Kladopoulos, Committee Chairperson, Psychology Faculty
Dr. Matthew Howren, Committee Member, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

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2024

Abstract

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by

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MS, Walden University, 2018

MSW, The Ohio State University, 2001

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

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Abstract

Childhood sexual abuse (CSA) is a worldwide public health issue. Although CSA has been researched internationally, research on African American women who self-report CSA remains limited. Utilizing secondary data from the National Longitudinal Study of Adolescent to Adult Health, a quantitative study was conducted to explore whether religion and social support were related and differed as a function of CSA presence versus absence among African American women between ages 33 and 43. This study was grounded in resiliency theory, which is rooted in the study of adversity and is a strength-based approach. A cross-comparative correlation design was conducted. Religion and social support scores between the self-reported CSA and non-CSA participants were compared. Results revealed the CSA group showed lower religion and social support than the non-CSA group. Religion and social support scores were positively correlated for each group but did not differ between groups. Results of the study suggest that religion and social support could be both protective factors and risk factors and are discussed relative to resiliency theory. Positive social change may be promoted by the present findings through developing and informing culturally competent policies and clinical practices that support preventive and clinical interventions associated with adaptive functioning for this population. Protective factors promoting resilience can be incorporated into the treatment milieu as part of a multicultural framework and used to enhance and promote practitioner training, including graduate academic work, supervised field training, and continuing education for practitioners in clinical and community program settings.

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Dedication

This body of work is dedicated to those who have endured and survived the interpersonal trauma of childhood sexual abuse (CSA), to those who stood by their side through their darkest hours, and to those who continue to support CSA survivors throughout their journey to physical, mental, emotional, and spiritual healing.

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Chapter 1: Introduction to the Study

Introduction

Childhood sexual abuse (CSA) is a worldwide public health issue (Hailes et al., 2019; Lev-Wiesel et al., 2018; Ménard & MacIntosh, 2021; Parra-Barrera et al., 2021) and has long-term effects that can negatively impact survivors' mental, physical, and social well-being throughout their lifespan (Borja et al., 2019; Chang et al., 2019; Hailes et al., 2019; Ladis et al., 2023; Letourneau et al., 2018; Sanjeevi et al., 2018; Sigurvinsdottir et al., 2021; Walker-Williams & Fouche, 2017). Although CSA has been researched nationally and internationally (Alcantara et al., 2019; Biel, 2022; da Costa et al., 2022; Klebanov & Katz, 2022; Lees & Devries, 2018; Letourneau et al., 2018; Rosmarin et al., 2018), research on adult African American female CSA survivors remains limited (Gilliard, 2022; Newsom & Myers-Bowman, 2017). Because there continues to be a gap in the literature among different cultures of ethnic minorities who experienced CSA (Gilliard, 2022; Linde-Krieger et al., 2021; Newsom & Meyers-Bowman, 2017; Sanjeevi et al. 2018; Sawrikar & Katz, 2017, Sawrikar & Katz, 2018), and the literature is "substantially under-developed" (Sawrikar & Katz, 2017, p. 166), researchers have suggested examining adult African American female CSA survivors to explore protective factors that may influence resilience in these women (Gilliard, 2022; Lassri et al., 2023; Newsom & Meyers-Bowman, 2017; Sawrikar & Katz, 2017).

The role, if any, that social support and religious coping play in buffering stressors among African American women CSA survivors remains unclear. Consequently, this study was conducted to examine whether social support and participation in organized religion during adulthood are factors associated with coping in African American women CSA survivors. Study results may help fill the research gap on resilience in African American women survivors of CSA by drawing on a nationally representative ethnic sample, thereby enriching and informing the existing body of academic research. The research results may also contribute to social change by informing culturally competent clinical practice and by supporting preventive and clinical interventions associated with adaptive functioning for this population. Consequently, the factors identified as promoting resilience could be incorporated into the treatment milieu as part of a multicultural framework for these women and used to enhance and promote practitioner training, including graduate work, such as academic study and supervised field training, and continuing education such as training in clinical and community program settings. This study's potential for positive social change is aligned with racial and ethno-cultural responsiveness as reflected in the American Psychological Association (APA, 2019) guidelines on race and ethnicity.

The information offered in this chapter comprises the background of CSA research, the problem statement, and purpose of the study. Additionally, the research questions and hypotheses, theoretical framework, nature of the study, and definitions are included in this chapter. Finally addressed in this chapter are assumptions clarifying aspects of the study believed but not demonstrated, the scope and delimitations specific to the study's research problem, limitations to the study, and the study's significance.

Background

CSA is a public health issue, and CSA survivors are at higher risk for adult sexual assault (Laughlin & Rusca, 2020; Walker-Williams & Fouche, 2017; Zamir et al., 2018), depression, anxiety (Blakemore et al., 2017; Gray & Rarick, 2018; Hailes et al., 2019; Maalouf et al., 2020; Sanjeevi et al. 2018; Thomas et al., 2022; Timraz et al., 2019), insomnia, repressed memory, hypervigilance, hyperarousal (Gray & Rarick, 2018), dissociation (Gómez, 2019; Lassri et al., 2023), suicidal thoughts/attempts (Blakemore et al., 2017; Gray & Rarick, 2018; Sanjeevi et al. 2018; Thomas et al., 2022), and non-suicidal self-injurious behaviors (Gómez, 2019). CSA survivors are also at higher risk for negative social and sexual functioning (Sanjeevi et al., 2018), substance use, criminal activity, risky sexual behavior (Linde-Krieger et al., 2021), and low self-esteem (Linde-Krieger et al., 2021; Sanjeevi et al., 2018; Timraz et al., 2019).

CSA encompasses varying definitions, including legal definitions (Parra-Barrera et al., 2021), research definitions (Parra-Barrera et al., 2021; Sanjeevi et al., 2018), and definitions based on different organizations and task forces (Parra-Barrera et al., 2021). CSA has been defined differently in various studies, thus, making defining and evaluating CSA a difficult task (Linde-Krieger et al., 2021). Researchers used varying perspectives to define CSA, making it more challenging to conduct prevalence studies (Gilliard, 2022; Parra-Barrera et al., 2021; Sanjeevi et al., 2018). Sanjeevi et al. further argued that having "…researchers define CSA may be of less practical utility than it would seem at first glimpse" (p. 623). For this study, CSA was defined as a physical or non-physical sexual act perpetrated against an individual under the age of 18 and the perpetrator was the child's parent, adult caregiver, or other individual (Fix et al., 2019).

Sexual abuse includes touching and non-touching behaviors (Latzman et al., 2017; Lev-Wiesel et al., 2018; Mitchell et al., 2021; Parra-Barrera et al., 2021; Sanjeevi et al., 2018). Although strangers sexually abuse children, over 93% of CSA survivors know their abuser (National Children's Advocacy Center, 2018). Moreover, research shows that CSA survivors are less likely to define their experience as abuse if the perpetrator is another child (Sanjeevi et al., 2018). However, Gewirtz-Meydan and Finkelhor (2020) found that children and adolescents are more often sexually abused and assaulted by other juveniles. Furthermore, Chopin and Beauregard (2021) reported that each year in Canada, the rate of juveniles committing CSA acts has increased.

CSA is a worldwide public health issue (Hailes et al., 2019; Lev-Wiesel et al., 2018; Ménard & MacIntosh, 2021; Parra-Barrera et al., 2021) regardless of race, gender, ethnicity, or socioeconomic status (Lev-Wiesel et al., 2018). Consequently, Sanjeevi et al. (2018) proposed that when addressing CSA, clinicians must be culturally competent and provide "culturally valid services" by considering "variations in [CSA] definitions, and resilience factors across cultures" (p. 631). Because this study was focused on African American/Black women residing in the United States who experienced CSA, the focus was on how CSA is defined in the United States.

The U.S. Department of Health and Human Services (HHS, 2021) defined a child as "a person who has not attained the lesser of (a) the age of 18 or (b) the age specified by the child protection law of the state in which the child resides" (p. 116). The American

Psychological Association (APA; 2023a) defined a child as "a young boy or girl between infancy [about 2 years of age] and adolescence [10-12 years of age]" (para 1.). However, for this study, a child was considered an individual under the age of 18.

HHS (2021) defined sexual abuse as a type of maltreatment where the child is used sexually by the perpetrator for sexual gratification or financial benefit. Moreover, this abuse can be in the form of pornography, molestation, incest, statutory rape, exposure, and other activities sexually exploitative in nature. Regardless of gender or age, any person can perpetuate sexual abuse (APA, 2023b). The APA (2023b) defined sexual abuse as sexual exploitation or violation; the APA additionally declared, "Although the term typically is used with reference to any sexual contact between adults and children, sexual abuse can also occur in any relationship of trust" (para. 1).

CSA is stigmatized among some cultures (Alaggia et al., 2019; Gemara & Katz, 2023; Gray & Rarick, 2018; McElvaney et al., 2021; Sanjeevi et al., 2018; Thomas et al., 2022), and many instances of CSA go unreported (Gray & Rarick, 2018; Nicol et al., 2022; Sanjeevi et al., 2018; Thomas et al., 2022; Turla et al., 2022). In addition, the longer the timeframe from the abuse to the disclosure, the longer the individual lives with the mental, physical, and behavioral effects of the abuse (Alaggia et al., 2019; McGill & McElvaney, 2023). Although not all individuals who experienced CSA or other childhood adversities will exhibit maladaptive behavioral, medical, or psychological problems (Stafford & Gulwadi, 2020), many survivors do experience physical, mental (Borja et al., 2019; Chang et al., 2019; Sanjeevi et al., 2018; Walker-Williams & Fouche, 2017), and social well-being challenges that can last a lifetime (Borja et al., 2019; Chang et al., 2019; Sanjeevi et al., 2018; Walker-Williams & Fouche, 2017). Several long-term effects include the tendency for revictimization (Hébert et al., 2020; Himmerich et al., 2019; Kocturk & Bilge, 2018; Walker-Williams & Fouche, 2017; Zamir et al., 2018), mistrust of others, self-destructive behaviors (Ménard & MacIntosh, 2021; Sanchez et al., 2019), anxiety, and feelings of stigma and isolation (Sanjeevi et al., 2018).

Sawrikar and Katz (2017) purported that CSA survivors from ethnic minority communities are at greater risk for suicidality. Gray and Rarick found that 62.5% of boys who reported CSA and 42.3% of girls who reported CSA were more likely to engage in substance abuse. Furthermore, 66.9% of girls who reported CSA and 46% of boys who reported CSA were more likely to report depressive symptoms, while 48.4% of girls who reported CSA and 46% of boys who reported CSA were more likely to report suicidal ideations.

Although CSA survivors may experience physical health, mental/psychiatric, or emotional difficulties throughout their lifetimes, other CSA survivors may develop effective coping mechanisms and be resilient despite experiencing this childhood adversity (Sanjeevi et al., 2018). Due to limited and underdeveloped research on African American women who were sexually abused as children, this study is needed to help fill the research gap and enrich the literature by exploring possible protective factors contributing to this population’s resilience. The research results may also contribute to social change by informing culturally competent clinical practice and by supporting preventive and clinical interventions associated with adaptive functioning for this population. Consequently, the factors identified as promoting resilience could be incorporated into the treatment milieu as part of a multicultural framework for these women and used to enhance and promote practitioner training, including graduate work, supervised field training, and training in community programs. This positive social change is aligned with racial and ethno-cultural responsiveness as reflected in the APA (2019) guidelines on race and ethnicity.

Problem Statement

There is a long history of sexual violence against Black girls and women (Barnes, 2018; Barnes, 2021; Jacobs, 2021; Preiser & Assari, 2018; West, 2018), and most known instances of CSA are perpetrated by those known to the survivors (McElvaney et al., 2021; National Children’s Advocacy Center, 2018; Turla et al., 2022). Consequently, the survivors may be traumatized by the very individuals who were supposed to serve as their protectors (Klar-Chalamish & Peleg-Koriat, 2021). Such adverse experiences can be very confusing for a child.

CSA can lead to many adversities well into adulthood (Ben-David & Jonson-Reid, 2017; Kavanaugh et al., 2017). These adversities include neurodevelopmental problems (Edwards, 2018; Huang et al., 2021; Kavanaugh et al., 2017; Schertz et al., 2018) as well as difficulties with mental, physical, and social well-being (Borja et al., 2019; Chang et al., 2019; Walker-Williams & Fouche, 2017). Also, women who experienced CSA are at higher risk for adult sexual assault (Laughlin & Rusca, 2020; Walker-Williams & Fouche, 2017; Zamir et al., 2018). The literature on CSA among ethnic minorities has been “substantially under-developed” (Sawrikar & Katz, 2017, p. 166), and researchers have suggested examining this population to ascertain factors associated with resilience in these women (Gilliard, 2022; Lassri et al., 2023; Newsom & Meyers-Bowman, 2017; Sawrikar & Katz, 2017). Sanjeevi et al. (2018) emphasized the importance of clinicians being cognizant of the presentation of risk and resilience factors across multiple cultures and being capable of providing culturally competent services to CSA survivors.

Purpose of the Study

In this quantitative study, I explored whether religion and social support are factors contributing to positive coping during adulthood among African American women between the ages of 33 and 43 who self-reported CSA. For this study, *religion* and *religiosity* were used interchangeably. Despite experiencing childhood adversity, individuals are resilient and can develop healthy and effective coping skills (Sanjeevi et al., 2018).

Research Questions and Hypotheses

I anticipated that religion and social support during adulthood would be predictive factors among African American women between ages 33 and 43 who self-reported CSA. The specific research questions and corresponding hypotheses to examine these relationships were as follows:

Research Question 1 (RQ1): Is there a significant difference in the religiosity scores among the self-report CSA group and non-CSA group?

$H_0$1: There is no significant difference in the religiosity scores among the self-report CSA group and non-CSA group.

H_a1: There is a significant difference in the religiosity scores among the self-report CSA group and non-CSA group.

Research Question 2 (RQ2): Is there a significant difference in the social support scores among the self-report CSA group and non-CSA group?

H_02: There is no significant difference in the social support scores among the self-report CSA group and non-CSA group.

H_a2: There is a significant difference in the social support scores among the self-report CSA group and non-CSA group.

Research Question 3 (RQ3): Is there a positive correlation between religion and social support for the self-report CSA group and non-CSA group?

H_03: There is no correlation between religion and social support for the self-report CSA group and non-CSA group.

H_a3: There is a positive correlation between religion and social support for the self-report CSA group and non-CSA group.

Theoretical and/or Conceptual Framework for the Study

Resiliency Theory

Although many researchers contributed to the development of resiliency theory, Emma Werner and Norman Garmezy are regarded as pioneers of this theory (Daniels, 2021). In 1955, Werner began a longitudinal study following ethnically diverse infants from Kauai, Hawaii (Johnson & Wiechelt, 2004) for over 32 years (Daniels, 2021; Johnson & Wiechelt, 2004). During this study, Werner identified several internal and environmental factors linked to resilience in adulthood despite the participants' early childhood adversities (Daniels, 2021; Johnson & Wiechelt, 2004).

Resiliency theory provides a basis for understanding why children and adolescents exposed to risk become healthy adults (Garmezy, 1991) and served as the theoretical framework of this study. Norman Garmezy was an experimental psychopathologist and a pioneer in the study of risk and protective factors (Masten, 1990; Masten et al., 2011). In the early 1970s, Garmezy and an honors student conducted a literature review on "competence in disadvantaged Black children" (Masten, 1990, p. 658), and this eventually led to many years of research focusing on resilience in children who experience diverse stressors (Masten, 1990; Masten et al., 2011; Masten & Cicchetti, 2012).

Resiliency theory is rooted in the study of adversity and its impact upon one's life (Hunsu et al., 2021; van Breda, 2018). Nevertheless, it is a strength-based approach that allows researchers and practitioners to identify strengths for promoting positive change (Hunsu et al., 2021) and healthy coping is possible (Friedberg & Malefakis, 2022). Tusaie and Dyer (2004) purported resiliency theory originated from the construct *resilience* and focused on positive outcomes. Resilience dates to the 1800s (Tusaie & Dyer, 2004) and has its beginnings in psychological research related to coping and physiological research related to stress (Friedberg & Malefakis; 2022; Tusaie & Dyer, 2004).

Risk, protective factors, and positive adaptation are emphasized in resilience-focused research (Hunsu et al., 2021). Resiliency theory asserts multiple intrinsic

(Friedberg & Malefakis; 2022; van Breda, 2018) and extrinsic (Friedberg & Malefakis; 2022) factors should be considered when determining risk and protective factors (Hunsu et al., 2021). Intrinsic factors are considered personal characteristics such as self-esteem, coping skills, and developmental, genetic, psychological, epigenetic, and neurochemical components (Friedberg & Malefakis; 2022). Extrinsic factors are environmental (Friedberg & Malefakis; 2022) and include such things as social support (Hunsu et al., 2021; Young et al., 2019) and psychosocial components (Friedberg & Malefakis; 2022). A more detailed description of resiliency theory is in Chapter 2.

Religion and social support in African American women CSA survivors were examined. Specifically, the goal was to determine if religion and social support are related and vary in the presence versus absence of reported CSA in this adult population. Researching this population from the theoretical framework of resiliency theory promotes a strength-based approach in examining possible predictive factors employed by African American women who are survivors of CSA.

Nature of the Study

A cross-comparative correlation design utilizing data from Waves III, IV, and V of the National Longitudinal Study of Adolescent to Adult Health guided the research study. The independent variable in this study was CSA and the dependent variables were religion and social support. Religion and social support scores were compared between the two groups (i.e., self-report CSA group and non-CSA group), and then for each group, the correlation between religion and social support were examined and compared between the groups.

In 2014, the name, National Longitudinal Study of Adolescent Health was changed to the National Longitudinal Study of Adolescent to Adult Health and became known as *Add Health* (Harris, Halpern, Whitsel et al., 2019). The Add Health survey data included information on participants' economic, social, physical, and psychological well-being in conjunction with data about the participants' family environment, school, community, peer associations, friendships, and romantic relationships. The purpose of Add Health was to understand what behaviors and environments may influence the participants' well-being and health in adulthood (Harris, Halpern, Whitsel et al., 2019).

The independent variable, CSA, was informed by Waves III, IV and V Add Health data while the outcomes involving the dependent variables, religion and social support, were informed by Wave V. Oftentimes, CSA survivors do not disclose the childhood abuse until adulthood (Alaggia et al., 2019; Collin-Vézina et al., 2021; McGill & McElvaney, 2023) and some never disclose (Collin-Vézina et al., 2021). In a meta-analysis conducted by Alaggia et al., the mean age of adults disclosing CSA was between 40 and 50. The researchers also noted that disclosure was significantly influenced by age and gender (Alaggia et al., 2019). For example, disclosures increased with age, especially in adulthood, and when considering gender, older adolescent women were to some extent more likely to disclose before adulthood than their male counterparts (Alaggia et al., 2019).

During Wave III, participants were between ages 18 and 26, Wave IV participants were between ages 24 and 32, and Wave V participants were between ages 33 and 43 (Dennis et al., 2022). Waves III through V data were utilized to determine if participants self-reported CSA, and Wave V data were used to analyze participant religion and social support outcomes.

Definitions

Age: The number of years a person has been living (Basaraba, 2020).

Child: A person under the age of 18 or the age established by the child protection law in the child's state of residence (HHS, 2021). The APA (2023a) defines *child* as "a young boy or girl between infancy [about 2 years of age] and adolescence [10-12 years of age]" (para. 1). For this study, a child was an individual under age 18.

Childhood sexual abuse (CSA): A type of maltreatment in which a child is used sexually by a perpetrator for sexual gratification or financial benefit (HHS, 2021). For this study, CSA included a physical or non-physical sexual act perpetrated against an individual under the age of 18 and the perpetrator was the child's parent, adult caregiver, or other individual.

Educational attainment: The highest level of education attained (Avent Harris et al., 2020; Hardner et al., 2018; Ringle et al., 2020).

Ethnicity: A construct characterizing "people based on having a shared culture (e.g., language, food, music, dress, values, and beliefs) related to common ancestry and shared history" (APA, 2019, p. 46).

Gender: Biologically being male or female (Prosen, 2022).

Negative religious coping: Feeling abandoned by a higher power or experiencing doubt and conflict about one's religious faith (Skalski et al., 2019).

Positive religious coping: Skalski et al. (2019) defined this as "the extent to which one believed their religion was helpful in managing stress, reflecting a secure relationship with a Higher Power, a sense of spiritual connectedness, and a benevolent worldview" (p. 1,372).

Protective factors: Factors protecting individuals from stressors encountered or enabling them to recover from effects of stressful experiences (Hunsu et al., 2021).

Race: "The social construction and categorization of people based on perceived shared physical traits that result in the maintenance of a sociopolitical hierarchy" (APA, 2019, p. 47).

Religion: Participation in sacred and organized institutions (Hamilton, 2020; Kusmaul & Wolf, 2023; Sigurvinsdottir et al., 2021; Upenieks & Orfanidis, 2022), such as churches (Hamilton, 2020; Siler et al., 2021), mosques, or synagogues (Currier et al., 2023) and includes ethical conduct based on spiritual teachings, and rituals or practices (Hamilton, 2020; Upenieks & Orfanidis, 2022).

Religious coping: Using religion to deal with and understand stressors (Siler et al., 2021; Skalski et al., 2019). These life stressors are managed interpersonally by engaging church members and clergy or through intrapersonal management by use of self-talk, personal beliefs, or individual rituals (Heiden-Rootes et al., 2021; Siler et al., 2021).

Resilience: The ability to successfully cope, function, and bounce back from stress and adversity (Friedberg & Malefakis; 2022; Hunsu et al., 2021; Thomas et al., 2022; Young et al., 2019).

Sexual abuse: A type of maltreatment where a child is used sexually by a perpetrator for sexual gratification or financial benefit (HHS, 2021). APA (2023b) defined this as sexual exploitation or violation that can occur in any relationship of trust. For the purposes of this study, sexual abuse pertained only to individuals who were under the age of 18 when the sexual abuse occurred.

Social support: The perception of feeling loved, cared for, valued, esteemed, and a sense of belonging to a network of mutual obligation and communication (Timraz et al., 2019). An individual's perception of the quantity and quality of social connections (Gao et al., 2022) and psychological resources and material, which increases one's ability to cope with stress (Fletcher et al., 2021).

Spirituality: A meaningful personal, private relationship (Hamilton, 2020; Sigurvinsdottir et al., 2021) and sacred experience (Hamilton, 2020) with a higher power to make meaning of one's experience (George & Bance, 2020; Hamilton, 2020; Upenieks, 2021).

Assumptions

The first researcher assumption was that the participants would respond honestly to the questions posed. The second assumption was that the individuals who participated in the Add Health study did so to help researchers and therapists understand behavioral and environmental influences of well-being and health in adulthood (Harris, Halpern, Whitsel et al., 2019). The third assumption was that resiliency has been shown to vary across individuals of different populations, and similar variability in resiliency was anticipated among African American women who were sexually abused as children.

Presenting issues have been shown in research examining the impact of CSA on African American women (Gómez, 2023) and has also shown resiliency, because of their lived experiences, including the intersection of stigma, marginalization, and disparities in power and privilege (Gómez, 2023). These assumptions were necessary for this study because the focus was to explore religion and social support as protective factors contributing to coping in African American women CSA survivors.

Scope and Delimitations

This research was limited to African American women ages 33–43 who reported experiencing sexual abuse or sexual assault by a parent, other adult caregiver, or other individual on at least one occasion before the age of 18. Here, a child was defined as a person under the age of 18 or the age established by the child protection law in the child's state of residence (HHS, 2021). Because research regarding resilience is limited and understudied among African American female CSA survivors, the scope of this study was to explore whether religion and social support are factors associated with coping among a sample from this population. Thus, individuals of other races and ethnicities and individuals identifying as men or transgender women were excluded from this study.

Another delimitation of this study was that the differences in frequency or duration of sexual abuse, possibly resulting in increased or decreased trauma depending on the participants' lived experiences of the abuse itself, was not considered in this research although the frequency was recorded in the Add Health Wave IV and V surveys. The focus of the study was to examine religion and social support among individuals who experienced CSA. Other types of childhood abuse such as physical or emotional abuse may have occurred but were not included in this analysis. When CSA occurs, there may be other experiences of child maltreatment. In 2019, 656,000 children in the United States were victims of abuse and neglect. Of that number, 9.3% were sexually abused, and 2.1% of those sexually abused children were victims of multiple types of child maltreatment, including categories such as physical abuse and neglect (HHS, 2021). The possibility that participants could have been involved in an intimate partner violence relationship before or during the research study is acknowledged but was not explored in the present study. A long-term effect of CSA includes the tendency for revictimization (Hébert et al., 2020; Himmerich et al., 2019; Kocturk & Bilge, 2018; Walker-Williams & Fouche, 2017; Zamir et al., 2018).

Understanding human behavior and the meaning of social phenomena can be explained through theories (Azzopardi et al., 2018). Azzopardi et al. (2018) purported that feminist theory “offers a critical, gender-based analysis of patriarchal social order that enables men to hold greater power and privilege over women on a social hierarchy” (p. 260). The researchers further stated that the power is imbalanced and “intersects with other forms of oppressive power relations, such as race and class, and functions across sociocultural, familial, political, legal, and economic realms to reinforce male superiority” (Azzopardi et al., 2018, p. 260). Resiliency theory was used in this study because it is a strength-based approach rooted in the study of adversity. Resiliency theory also allows researchers and practitioners to identify strengths for promoting positive change. Owing to the target population of the study, feminist theory was considered for this research but was not selected because the resiliency theory better encompassed the focus of this study. This study represented African American women throughout the United States because the surveys were administered throughout all U.S. regions. Data from this study could be generalized to African American women between ages 33 and 43, and replication of this study could be conducted to incorporate men and other races and ethnicities.

Limitations

This study had several limitations. One limitation was the retrospective analysis that utilized secondary self-report data, and recall bias may have occurred. For example, participants may not have accurately remembered previous experiences or events, and information may have been omitted as a result. Secondary data were used and although the Add Health study includes a nationwide sample, findings from this current study may not be generalizable to all populations because the current study's focus was strictly on African American women who reported being sexually abused or sexually assaulted by a parent, other adult caregiver, or other individual before reaching the age of 18. African Americans encompass multiple cultures, and the response to CSA may vary from culture to culture. According to Sanjeevi et al. (2018), CSA could be defined, reported, and addressed differently depending upon culture.

Another limitation to this study was that research on adult ethnic minority CSA survivors is limited (Gilliard, 2022; Newsom & Myers-Bowman, 2017) because there continues to be a gap in the literature among different cultures of ethnic minorities who experienced CSA (Gilliard, 2022; Linde-Krieger et al., 2021; Newsom & Meyers-Bowman, 2017; Sanjeevi et al. 2018; Sawrikar & Katz, 2017, Sawrikar & Katz, 2018), and the literature lacked development (Sawrikar & Katz, 2017). Another limitation to the sample size was how CSA was identified in the Add Health data set. For example, CSA and sexual assault in this data set were categorized from the standpoint of the parent, other adult caregiver, or other individual as the sexual abuser. Gewirtz-Meydan and Finkelhor (2020) found that children and adolescents are more often sexually abused and assaulted by other juveniles. Yet, these CSA survivors are less likely to define this experience as abuse if the perpetrator is another child (Sanjeevi et al., 2018).

Results from the study conducted by Gewirtz-Meydan and Finkelhor (2020) indicated

> that sexually abused children were more likely female, Black (non-Hispanic), of low social economic status (SES), and residing in a large city. They were more likely to have either a single parent, single parent and a stepparent, or other adults as their legal guardians (rather than living with both biological parents). (p. 207)

Also noteworthy in this study of 506 children and adolescent survivors of sexual abuse and sexual assault was that 66.3% of these occurrences were not reported to a parent or other adult. The Add Health data set did not specifically include data on sexual abuse involving juvenile offenders and that may have limited the sample size of those who experienced CSA. When considering the dependent variable of religion, it is worth noting that a determination could not be made on whether the participants responded to the questions based on their religion, spirituality, or both.

Significance

Although CSA has been researched internationally (Alcantara et al., 2019; Biel, 2022; Chopin & Beauregard, 2021; da Costa et al., 2022; Klebanov & Katz, 2022; Lees & Devries, 2018; Letourneau et al., 2018; Nicol et al., 2022; Rosmarin et al., 2018; Thomas et al., 2022), research on adult African American female CSA survivors remains limited (Gilliard, 2022; Newsom & Myers-Bowman, 2017) and understudied (Gilliard, 2022; Sanjeevi et al. 2018; Sawrikar & Katz, 2017). Additionally, adverse effects may occur that could impact survivors' mental, physical, and social well-being for a lifetime (Borja et al., 2019; Chang et al., 2019; Walker-Williams & Fouche, 2017). Although some CSA survivors may have experienced these mental, physical, and social well-being adversities, others developed effective coping mechanisms and were resilient despite this childhood adversity (Sanjeevi et al., 2018). Due to limited and underdeveloped research on protective factors during adulthood for African American female CSA survivors, this study was needed to help fill the research gap and enrich the literature by exploring possible protective factors contributing to this population's resilience.

Based on the research results, social change may be promoted by developing and informing culturally competent policies and clinical practices that support preventive and clinical interventions associated with adaptive functioning for this population. Consequently, the factors identified as promoting resilience could be incorporated into the treatment milieu as part of a multicultural framework for these women, thereby enhancing and promoting graduate academic work, supervised field and practitioner training, as well as continued educational training across various community programmatic and clinical settings. This positive social change is aligned with racial and ethno-cultural responsiveness as reflected in the APA (2019) guidelines on race and ethnicity.

Summary

CSA is stigmatized among some cultures (Alaggia et al., 2019; Gray & Rarick, 2018; Gemara & Katz, 2023; Sanjeevi et al., 2018; Thomas et al., 2022), making it more likely that the rate of CSA may be higher than reported among some racial and ethnic groups. For example, many instances of CSA go unreported (Alaggia et al., 2019; Gray & Rarick, 2018; Nicol et al., 2022; Sanjeevi et al., 2018; Thomas et al., 2022; Turla et al., 2022), or the abuse is often not disclosed until adulthood (Alaggia et al., 2019; Collin-Vézina et al., 2021; McGill & McElvaney, 2023), and some never disclose (Collin-Vézina et al., 2021). The purpose of this quantitative study was to examine whether religion and social support are predictive factors during adulthood among African American women between ages 33 and 43 who self-reported CSA.

Chapter 2 includes an extensive literature review concerning the adverse effects of CSA and factors promoting resilience. In addition, the theoretical foundation for this study, resiliency theory, is comprehensively discussed.

Chapter 2: Literature Review

Introduction

CSA is a worldwide public health issue (Hailes et al., 2019; Lev-Wiesel et al., 2018; Ménard & MacIntosh, 2021; Parra-Barrera et al., 2021), and long-term effects can impact survivors' mental, physical, and social well-being throughout the lifespan (Borja et al., 2019; Chang et al., 2019; Hailes et al., 2019; Ladis et al., 2023; Letourneau et al., 2018; Sanjeevi et al., 2018; Sigurvinsdottir et al., 2021; Walker-Williams & Fouche, 2017). Researchers have studied CSA from a national and international level (Alcantara et al., 2019; Biel, 2022; da Costa et al., 2022; Klebanov & Katz, 2022; Lees & Devries, 2018; Letourneau et al., 2018; Rosmarin et al., 2018). However, research limitations still exist for CSA populations involving adult African American women (Gilliard, 2022; Newsom & Myers-Bowman, 2017; Sanjeevi et al. 2018; Sawrikar & Katz, 2017). Because the literature gap remains involving lived experiences of ethnic minorities exposed to CSA (Gilliard, 2022; Linde-Krieger et al., 2021; Newsom & Meyers-Bowman, 2017; Sanjeevi et al. 2018; Sawrikar & Katz, 2017, Sawrikar & Katz, 2018) and the literature continues to be underdeveloped (Sawrikar & Katz, 2017), researchers have suggested examining these populations to analyze factors that may influence or promote resilience in these women (Gilliard, 2022; Lassri et al., 2023; Newsom & Meyers-Bowman, 2017; Sawrikar & Katz, 2017).

The purpose of this quantitative study was to explore whether religion and social support are related and vary as a function of presence versus absence of reported CSA among African American women between ages 33 and 43. CSA survivors may experience physical health, mental/psychiatric, or emotional difficulties throughout their lifetimes. However, other CSA survivors develop effective coping mechanisms and are resilient despite experiencing this childhood adversity (Sanjeevi et al., 2018). Due to limited research on African American women sexually abused as children, it may be valuable to study protective factors in this population.

CSA has been researched internationally (Alcantara et al., 2019; Biel, 2022; da Costa et al., 2022; Klebanov & Katz, 2022; Lees & Devries, 2018; Letourneau et al., 2018; Nicol et al., 2022; Rosmarin et al., 2018; Thomas et al., 2022); however, research on African American women survivors remains limited (Gilliard, 2022; Newsom & Myers-Bowman, 2017). This study may help fill the research gap on protective factors in adult African American female CSA survivors, thereby informing the existing body of academic research. This research may also promote social change by informing culturally competent clinical practice and by supporting preventive and clinical interventions associated with adaptive functioning for this population. Consequently, the factors identified as promoting resilience can be incorporated into the treatment milieu as part of a multicultural framework for these women, and used to enhance and promote practitioner training, including graduate work, supervised field training, and training in community programs. This positive social change is aligned with racial and ethno-cultural responsiveness as reflected in the APA (2019) guidelines on race and ethnicity.

The purpose of this chapter is to explore the prevalence of CSA and lived experiences of African American women survivors and to explore neurological, psychological, and physical effects, risk factors, and protective factors. Resilience theory and other concepts relating to this research are also examined.

Literature Search Strategy

A literature review was conducted utilizing the following databases: Google Scholar, PsycARTICLES, SAGE Journals, ScienceDirect, and Thoreau Multi-Database. Additionally, keywords searched were *child sexual abuse*, *child sexual assault, child sexual trauma, adult survivor, females, African American females, Black females, minority, educational attainment, ethnic minorities, interpersonal relationship, religion, spirituality, mental health, trauma, resilience, self-esteem, social support, resiliency theory, feminist theory,* and *relational-cultural theory*. The literature review included peer-reviewed journal articles, college dissertations, and reports produced by the HHS and the Child Family Community Australia Information Exchange. Furthermore, current research on resilience in African American female CSA survivors was limited; therefore, a broad search on female CSA survivors was conducted.

Although most of the research focused on was published in the last 5 years, historical articles were also reviewed for foundational purposes. I sought to understand the history of CSA from lived experiences of minority individuals and the general effects of sexual abuse throughout various developmental stages. Consequently, a literature review involving the impact of CSA throughout a lifespan was necessary to gain a better understanding of the trauma experienced and possible protective factors.

Theoretical Foundation

Resiliency Theory

Although many researchers contributed to the development of resiliency theory, Emma Werner and Norman Garmezy are regarded as pioneers of this theory (Daniels, 2021). Resiliency theory and the conceptual framework of resilience have been studied across many disciplines. Resiliency theory provides a basis for understanding why children and adolescents exposed to risk become healthy adults (Garmezy, 1991). Garmezy was an experimental psychopathologist and a pioneer in the study of risk and protective factors (Masten, 1990; Masten et al., 2011). In the early 1970s, Garmezy and an honors student conducted a literature review on "competence in disadvantaged Black children" (Masten, 1990, p. 658), which led to many years of research focusing on resilience in children who experience diverse stressors (Masten, 1990; Masten et al., 2011; Masten & Cicchetti, 2012).

Resiliency theory is rooted in the study of adversity and that adversity's impact on one's life (Hunsu et al., 2021; van Breda, 2018). Nevertheless, it is a strength-based approach that allows researchers and practitioners to identify strengths for promoting positive change (Friedberg & Malefakis, 2022; Hunsu et al., 2021; Thomas et al., 2022). Tusaie and Dyer (2004) purported resiliency theory originates from the construct of resilience and focuses on positive outcomes. Resilience dates back to the 1800s and has its beginnings in psychological research related to coping and physiological research related to stress (Tusaie & Dyer, 2004). Friedberg and Malefakis (2022) propose that "resilience is a dynamic process with multiple determinants" (p. 383). In essence, it is possible that depending on life's circumstances, an individual displaying resilience today may not display resilience days, months, weeks, or even years from now and vice versa.

Risk, protective factors, and positive adaptation are emphasized in resilience-focused research (Friedberg & Malefakis, 2022; Hunsu et al., 2021). Resiliency theory asserts multiple intrinsic (Hunsu et al., 2021; van Breda, 2018) and extrinsic factors should be considered when determining risk and protective factors (Hunsu et al., 2021). The intrinsic factors are considered personal characteristics (Friedberg & Malefakis; 2022) such as self-esteem, coping skills, and developmental, genetic, psychological, epigenetic, and neurochemical components (Friedberg & Malefakis; 2022). Extrinsic factors are environmental (Friedberg & Malefakis; 2022) and include such things as social support (Hunsu et al., 2021; Young et al., 2019) and psychosocial components (Friedberg & Malefakis; 2022).

Although Werner, a developmental psychologist, began using the term *resilience* in the early 1970s and conducted a 40-year longitudinal study (Friedberg & Malefakis, 2022; van Breda, 2018), it was in the 1980s when resilience became a major research topic (Friedberg & Malefakis, 2022). Resilience consists of individual, social, and contextual variables that help with positive coping; however, when adverse childhood experiences occur, growth and development may be stifled (Thomas et al., 2022). These positive variables are called *promotive* or *protective factors* and consist of assets and resources that reduce or eliminate the negative effects of adversities on an outcome (Gale, 2021). Examples of assets include self-esteem (Lassri et al., 2023), self-efficacy, critical thinking, and communication (Gale, 2021). Examples of resources include social support

(Gale, 2021; Thomas et al., 2022), positive parenting, family support, school safety, and community involvement (Thomas et al., 2022). In essence, these positive individual, social, and contextual variables comprise intrinsic and extrinsic factors. When resilience factors are identified, these factors may be operationalized to improve one's response to adversity.

Resilience is defined and operationalized in multiple ways (Bowling et al., 2022). More recently, resilience has been defined as the ability to successfully cope, function, and bounce back from stress and adversity (Friedberg & Malefakis; 2022; Hunsu et al., 2021; Thomas et al., 2022; Young et al., 2019). These adversities can be acute or chronic (van Breda, 2018), and Thomas et al. (2022) argued that social environment, family, and child characteristics contribute to resiliency. Bowling et al. (2022) stated that psychological resilience is a construct, and the study of psychological resilience helps people understand "how individuals recover from or adapt to stress and restore mental, psychological and emotional balance" (p. 495).

Researchers study resilience and resiliency theory to determine if resilience is influenced by intrinsic and extrinsic factors across multiple populations and contexts. Research on resilience and resiliency theory revealed some association between strength and intrinsic and extrinsic factors (Thomas et al., 2022), such as religious or spiritual coping (Al-Qahtani et al., 2022; Thomas et al., 2022), posttraumatic growth (Walker-Williams & Fouche, 2017), gender roles (Jefferis & Theron, 2018; Ozturk & Mohler, 2021), parenting style/family influence (Giovanelli, et al., 2018; Lind et al., 2018; Thomas et al., 2022), genetics and epigenetics, emotional awareness, temperament/emotional regulation (Friedberg & Malefakis, 2022), intelligence, sociability, communication, and external supports/positive relationships (Al-Qahtani et al., 2022; Friedberg & Malefakis, 2022; Gale, 2021; Jefferis & Theron, 2018; Thomas et al., 2022).

In this study, religion and social support were explored to determine their relatedness and difference in the presence or absence of CSA among African American women between ages 33 and 43. Researching this topic from the theoretical framework of resiliency theory promotes a strength-based approach and examines protective factors that may have aided in this coping. Studying how African American women cope against life challenges, such as CSA, builds on the resiliency theory and may help fill a research gap by studying whether similar predictive factors might apply to this specific African American adult female CSA population.

The next section focuses on the literature review that details CSA, its prevalence and effects, and the sociohistorical context involving sexual abuse of African American women. Although religion will be measured in the present study, spirituality is considered a component of religion and the two are typically studied together, yet they are separate constructs (George & Bance, 2020; Manoiu et al., 2023). For example, spirituality involves searching for a sense of purpose and meaning in life (George & Bance; 2020) and searching for a belief in a higher power and the sacred (Manoiu et al., 2023). Religion often refers to formal practices involving behaviors (Manoiu et al., 2023) and “an institutionalized (i.e., systematic) pattern of values, beliefs, symbols, behaviors, and experiences that are oriented toward spiritual concerns, shared by a community, and transmitted over time in traditions" (George & Bance, 2020, p. 17). Several variables that will be analyzed in this study include CSA (i.e., independent variable) and religion and social support (i.e., dependent variables).

Literature Review Related to Key Variables and Concepts

Childhood Sexual Abuse

CSA is a worldwide public health issue (Hailes et al., 2019; Ménard & MacIntosh, 2021; Parra-Barrera et al., 2021; Thomas et al., 2022) regardless of race, gender, ethnicity, or socioeconomic status. CSA has varying definitions, including legal definitions (Parra-Barrera et al., 2021), research definitions (Parra-Barrera et al., 2021; Sanjeevi et al., 2018), and definitions based on different organizations and task forces (Parra-Barrera et al., 2021). Sexual abuse includes touching and non-touching behaviors (Latzman et al., 2017; Mitchell et al., 2021; Parra-Barrera et al., 2021; Sanjeevi et al., 2018). Although strangers sexually abuse children, over 93% of CSA survivors know their abuser (National Children's Advocacy Center, 2018). Research shows that CSA survivors are less likely to define their experience as abuse if the perpetrator is another child (Sanjeevi et al., 2018). However, Gewirtz-Meydan and Finkelhor (2020) found that children and adolescents are more often sexually abused and assaulted by other juveniles.

The HHS (2021) defined a child as "a person who has not attained the lesser of (a) the age of 18 or (b) the age specified by the child protection law of the state in which the child resides" (p. 116). The APA (2023a) defined child as "a young boy or girl between infancy [about 2 years of age] and adolescence [10-12 years of age]" (para. 1).

HHS (2021) defined sexual abuse as a type of maltreatment where the child is used sexually by the perpetrator for sexual gratification or financial benefit. Moreover, this abuse can be in the form of pornography, molestation, incest, statutory rape, exposure, and other activities sexually exploitative in nature. Regardless of gender or age, any person can perpetuate sexual abuse (APA, 2023b). The APA (2023b) defined sexual abuse as sexual exploitation or violation. However, the APA went on to say, “Although the term typically is used with reference to any sexual contact between adults and children, sexual abuse can also occur in any relationship of trust” (para. 1). For the purposes of this study, sexual abuse pertains only to individuals who were under the age of 18 when the sexual abuse occurred. For this study, CSA is defined as a physical or non-physical sexual act perpetrated against an individual under the age of 18 and the perpetrator was the child’s parent, adult caregiver, or other individual.

Prevalence of Childhood Sexual Abuse

The National Data Archive on Child Abuse and Neglect compiled data submitted by states in 2019, revealing a decrease in child maltreatment victims from 677,000 in the federal fiscal year (FFY) 2018 to 656,000 FFY 2019 (HHS, 2021). According to HHS (2021), the total U.S. child population was 73,611,881 during FFY 2019. The FFY 2019 National Data Archive on Child Abuse and Neglect further revealed that 15.5% of the known children were victims of two or more types of child maltreatment, 7.2% were sexually abused only, and 9.3% were sexually abused and experienced another form of child maltreatment. Although the Child Maltreatment 2019 report did not describe the race and ethnicity of children sexually abused, the data included a racial and ethnic comparison. For example, the highest number of child maltreatment was experienced by American Indian or Alaska Native children at 14.8 per 1000 children, and African American children experienced the second-highest victimization at 13.8 per 1000 children (HHS, 2021).

CSA is stigmatized among some cultures (Alaggia et al., 2019; Gemara & Katz, 2023; Gray & Rarick, 2018; McElvaney et al., 2021; Sanjeevi et al., 2018; Thomas et al., 2022) and many instances of CSA go unreported (Gray & Rarick, 2018; Nicol et al., 2022; Sanjeevi et al., 2018; Thomas et al., 2022; Turla et al., 2022). Furthermore, the longer the timeframe from the abuse to the disclosure, the longer the individual lives with the mental, physical, and behavioral effects of the abuse (Alaggia et al., 2019; McGill & McElvaney, 2023).

According to Lev-Wiesel et al. (2018), research shows that the overall estimated prevalence rates for self-reported CSA are 12.7% (globally) and 14.1% (North America). Furthermore, when examining this data by gender, women comprised 18% globally, and 20.1% in North America, while men comprised 7.6% globally, and 8.0% in North America. Also noteworthy is the World Health Organization (2020) report that 1 in 13 men and 1 in 5 women experienced CSA between the ages of 0 and 17, further supporting findings that CSA is a global public health problem.

Sociohistorical Context Involving Sexual Abuse of Female African Americans

There is a long history of sexual violence against Black women (Barnes, 2018; Barnes, 2021; Jacobs, 2021; Preiser & Assari, 2018; West, 2018). For example, during slavery, Africans were often raped and impregnated by crew members while crossing the

Atlantic to arrive in North and South America (King, 2014), thus, creating an institutionalized pattern of rape (West, 2018). Black bodies were objectified (Sanchez et al., 2019), and Blackness was rendered "invisible" (Sanchez et al., 2019, p. 408). During slavery in the United States, sexual violation of enslaved men and women was permissible by law. Therefore, producing many healthy children meant economic wealth for slave owners (West, 2018).

Enslaved individuals had no rights and were subject to beatings or family separation if the slave girl, woman, or man revealed the rape. Furthermore, male slaves were forced to mate with slave girls and women, and sometimes their loved ones were required to watch these forced rapes (National Humanities Center, 2007). Moreover, some male slaves holding supervisory responsibilities modeled the behaviors of their slave masters by using their authority to rape enslaved girls and women (King, 2014). King also purported that slaves "were considered 'chattel' in the antebellum United States" (p. 173). Some enslaved rape survivors ran away or fought back, while others learned to maintain a code of silence (West, 2018). Although sexual assault of Black girls and women continued after slavery, more men and women found their voices during the civil rights era, and many spoke out against it, while others remained silent.

Effects of Childhood Sexual Abuse

It must be acknowledged that not all individuals who experience CSA or other childhood adversities will exhibit maladaptive behavioral, medical, or psychological problems (Stafford & Gulwadi, 2020). However, many survivors do experience physical, mental, (Borja et al., 2019; Chang et al., 2019; Walker-Williams & Fouche, 2017) and social well-being challenges that can last a lifetime (Borja et al., 2019; Chang et al., 2019; Walker-Williams & Fouche, 2017). Several long-term effects include the tendency for re-victimization (Hébert et al., 2020; Himmerich et al., 2019; Kocturk & Bilge, 2018; Walker-Williams & Fouche, 2017; Zamir et al., 2018), low self-esteem, depression, mistrust of others, self-destructive behaviors (Ménard & MacIntosh, 2021; Sanchez et al., 2019), anxiety, and feelings of stigma and isolation (Sanjeevi et al., 2018).

CSA is an interpersonal trauma (Gómez, 2019; Laughlin & Rusca, 2020) and most known instances of CSA are perpetrated by those known to the survivor (McElvaney et al., 2021; National Children's Advocacy Center, 2018; Turla et al., 2022). Consequently, the survivors may be traumatized by the very individuals who are supposed to serve as their protectors (Klar-Chalamish & Peleg-Koriat, 2021).

Neurodevelopmental. CSA can lead to a myriad of issues, including neurodevelopmental problems (Edwards, 2018; Friedberg & Malefakis, 2022; Kavanaugh et al., 2017; Schertz et al., 2018) well into adulthood (Ben-David & Jonson-Reid, 2017; Kavanaugh et al., 2017). The human brain is high in plasticity, particularly during childhood, adolescence, and early adulthood. This plasticity is shaped by environmental experiences and heredity (Friedberg & Malefakis, 2022) and the brain continues to develop well into early adulthood (Guyer et al., 2023).

During childhood, traumatic experiences can significantly change the size and regions of the developing brain (Edwards, 2018; Friedberg & Malefakis, 2022; Huang et al., 2021), possibly contributing to adverse long-term effects (Edwards, 2018; Huang et al., 2021). These long-term effects can impact how a person learns, interacts with others, and regulates their emotions. Friedberg and Malefakis (2022) stated that the hippocampus, amygdala, and frontal cortex can be negatively impacted due to traumatic experiences. Examples of stress-related negative impacts on the hippocampus, amygdala, and frontal cortex can include impaired decision making, impaired problem solving, and problems with long-term and declarative memory. As the prefrontal cortex matures, executive functioning also develops, necessitating a higher cognitive process level (Dileo et al., 2017). The executive functioning also aids in developing independence and navigating peer and family relationships (Dileo et al., 2017).

Structural brain changes are observed in individuals who experience CSA (Edwards, 2018; Himmerich et al., 2019) and other traumatic experiences (Edwards, 2018). Additionally, using neuroimaging, researchers found that psychological and physical problems such as posttraumatic stress disorder (Edwards, 2018; Friedberg & Malefakis, 2022), somatic complaints, suicide, and depression (Edwards, 2018) are linked to the same sections of the brain (Edwards, 2018; Friedberg & Malefakis, 2022) that are impacted by traumatic sexual experiences (Edwards, 2018). These structural changes in the brain can lead to deficits in cognitive processing involving memory, problem-solving, and decision-making (Kavanaugh et al., 2017).

Furthermore, due to negative structural brain changes (Himmerich et al., 2019), behavioral and emotional impairments such as aggression (Dileo et al., 2017) and emotional dysregulation (Friedberg & Malefakis, 2022; Kavanaugh et al., 2017), may arise. Consequently, poor decision making and difficulty solving problems may lead to re-victimization (Himmerich et al., 2019; Kocturk & Bilge, 2018; Walker-Williams &

Fouche, 2017; Zamir et al., 2018). Moreover, mental, physical, and emotional long-term consequences may occur when stress is not proactively managed.

Physical/Medical. During stress, the immune system is weakened, and health problems may exacerbate (Maalouf et al., 2020). According to Maalouf et al. (2020), "Chronic stress can also manifest itself through PTSD" (p. 752). Additionally, chronic stress can result in negative health consequences during adulthood such as cardiovascular, reproductive, sleep, and immune system problems (Maalouf et al., 2020).

There have been reports of links between CSA and medical ailments such as eating disorders (Hailes et al., 2019), obesity, insomnia, breathing problems such as asthma (Maalouf et al., 2020), depression, and anxiety (Blakemore et al., 2017; Hailes et al., 2019; Maalouf et al., 2020; Thomas et al., 2022). Ultimately, stress increases one's risk for health problems.

Psychological–Emotional/Social–Environmental. Although most CSA survivors remember the event(s), they may only remember fragments of the abuse. Some survivors may use maladaptive coping strategies, such as repressed memory (Kate et al., 2021), to cope with the memories of the abuse. For example, dissociation may be used as a defense mechanism (Gómez, 2019; Kate et al., 2021). The survivor learns to detach himself/herself from the abuse by decreasing conscious awareness of the abuse, thereby avoiding stress (Kate et al., 2021). However, this maladaptive strategy results in further mental health difficulties (Gómez, 2019).

Psychological effects of CSA include but are not limited to lower self-esteem (Lawson & Akay-Sullivan, 2020), depression, anxiety (Blakemore et al., 2017; Gray &

Rarick, 2018; Hailes et al., 2019; Maalouf et al., 2020; Sanjeevi et al. 2018; Thomas et al., 2022), suicidal thoughts/attempts (Blakemore et al., 2017; Gray & Rarick, 2018; Sanjeevi et al. 2018; Thomas et al., 2022), insomnia, repressed memory, hypervigilance, hyperarousal (Gray & Rarick, 2018), and non-suicidal self-injurious behaviors (Gómez, 2019). Social and environmental effects of CSA include but are not limited to substance use/abuse (Fletcher, 2021; Gray & Rarick, 2018), promiscuity, mental health issues (Gray & Rarick, 2018), risky lifestyle, prostitution, risk of sexual assault (Laughlin & Rusca, 2020; Walker-Williams & Fouche, 2017; Zamir et al., 2018), poor judgment and decision-making, and poor or chaotic relationships (Fletcher, 2021). These social and environmental effects may also negatively impact relationships with family, friends, co-workers, and others. Positive interpersonal relationships can be a protective factor (Deuter et al., 2020), and protective factors aid in one's resilience despite adversities experienced (Friedberg & Malefakis, 2022).

Resilience: Risk and Protective Factors

Resilience is the ability to successfully cope, function and bounce back from stress and adversity (Friedberg & Malefakis; 2022; Hunsu et al., 2021; Thomas et al., 2022; Young et al., 2019). Resilience is also viewed as a journey or process (Newsom & Myers-Bowman, 2017), including an ecological and social process (Laughlin & Rusca, 2020). Sanjeevi et al. (2018) proposed that when addressing CSA, clinicians must be culturally competent and provide "culturally valid services" by considering "variations in [CSA] definitions, and resilience factors across cultures" (p. 631).

Women experience CSA at slightly higher rates than their male counterparts and both genders cope with this trauma differently (Gray & Rarick, 2018). For example, utilizing a national database to analyze archival data from a 2013 Youth Risk Behavior Survey, Gray and Rarick revealed that female adolescent CSA survivors experience more suicidal ideation and depressive symptoms, and their male counterparts cope with the sexual abuse by using substances. However, there was no difference in coping style based on race or ethnicity.

Coping styles and strategies impact one's development. Based on study results, Gray and Rarick (2018) provided examples of avoidant coping strategies used by adolescent survivors of CSA, including hypersexuality, depression, substance abuse, and suicidal ideations. Few studies have examined resilience factors in African American women CSA survivors. However, studies involving adult female CSA survivors from other ethnic cultures found that resilience was supported by protective factors including social support (Thomas et al., 2022; Timraz et al., 2019), emotional health, and culture (Thomas et al., 2022).

Effective coping strategies that support resilience in African American women CSA survivors can be incorporated into the treatment process. Hence, an enhanced culturally responsive approach to treating this population may occur. Although attending church can be viewed as a coping strategy, research findings are mixed on whether religious participation serves as an effective coping strategy for survivors of childhood adversities such as family violence/conflict (Sigurvinsdottir et al., 2021) or CSA (Sigurvinsdottir et al., 2021; Thomas et al., 2022).

Religion

African American churches are seen as staples in the Black community and have not only been used as a means of religious and spiritual support (Hamilton, 2020), but are instrumental in community organizing to confront social injustices. Although African American churches are a supportive and robust force, CSA remains taboo and stigmatized in the Black community (Sharpe, 2018). CSA is a social and public health injustice not discussed much in African American churches.

The Pew Research Center (2019) reported a rapid decline in Christianity in the United States. This decline decreased from 77% in 2009 to 65% in 2019. Additionally, there was a slight increase in non-Christian faiths from 5% in 2009 to 7% in 2019. As one might anticipate, U.S. church attendance also declined from 54% to 45%. However, 58% of Black American church attendance remained consistent, despite this being down by 8% over the past decade (Pew Research Center, 2019).

Although considered an under-studied cultural issue (Blakemore et al., 2017; Tishelman & Fontes, 2017), there is a growing body of research focusing on religious and spiritual coping related to CSA survivors (Blakemore et al., 2017; George & Bance, 2020; Morton et al., 2019; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Sigurvinsdottir et al., 2021; Thomas et al., 2022). Despite this, the research remains limited as it pertains to adult African American CSA survivors (Gilliard, 2022; Newsom & Myers-Bowman, 2017).

Depending upon the CSA survivor's view of religion or spirituality (Vazquez, 2019), religious and spiritual influences could be both risk (Ghorbani et al., 2021; Jung et al., 2022; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018) and protective factors (Ghorbani et al., 2021; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Sigurvinsdottir et al., 2021; Tae & Chae, 2021; Upenieks, 2021; Upenieks & Orfanidis, 2022). For example, a risk factor may arise when the abuse occurs in a religious or institutional setting where the abuser is like a father figure, mainly when the sexual abuse is perpetrated by clergy (Stevens et al., 2019). However, religiosity can be seen as a source of strength or suffering (Rosmarin et al., 2018; Vazquez, 2019) and clergy-perpetrated sexual abuse is not only a physical, social, and psychological traumatic event but a spiritual one as well (Blakemore et al., 2017; Stevens et al., 2019). Positive spiritual and religious coping are still possible after such trauma (George & Bance, 2020).

Spirituality is viewed as a meaningful personal, private relationship (Kusmaul & Wolf, 2023; Sigurvinsdottir et al., 2021) with a higher power to make meaning of the experience (George & Bance, 2020; Upenieks, 2021). Here, the individual searches for the meaning of life (Upenieks, 2021). Additionally, having a sense of purpose and meaning may result in strong resilience (Friedberg & Malefakis, 2022).

Religion/religiosity involves participation in sacred and organized institutions (Hamilton, 2020; Kusmaul & Wolf, 2023; Sigurvinsdottir et al., 2021; Upenieks & Orfanidis, 2022), such as churches (Upenieks & Liu, 2022), mosques, or synagogues (Currier et al., 2023), and includes ethical conduct based on spiritual teachings (Upenieks & Liu, 2022), and rituals or practices (Hamilton, 2020; Upenieks & Liu, 2022). These spiritual teachings and practices are valued among a community of believers (Sigurvinsdottir et al., 2021).

While examining the relationship between CSA and family violence/conflict on depressed mood and anger, Sigurvinsdottir et al. (2021) found that religion and spirituality were diminished among survivors of stressful life experiences such as sexual abuse (Sigurvinsdottir et al., 2021). Stevens et al. (2019) found that when the sexual abuse was at the hands of religious authorities and other adults, the CSA survivor was more likely to disengage with their religious communities and were less religious than those who suffered from CSA at the hands of their parents. Upenieks and Liu (2022) found that individuals who attended religious services regularly (i.e., weekly) as children, often regularly attended religious services as adults and this regular attendance was also “associated with more favorable future health expectations” (p. 2,560). Additionally, Upenieks and Liu (2022) focused on religious participation as a life course framework to predict future expectations about health. For example, religiosity was associated with lower levels of drinking, smoking, and marijuana use (Upenieks & Liu, 2022), all of which can be negative coping mechanisms for CSA survivors.

Several limitations were that the studies relied on self-report and the participants were primarily Caucasian (Sigurvinsdottir et al., 2021; Stevens et al., 2019; Upenieks & Liu, 2022). In addition, a cross-sectional design was used, making it harder to determine causation (Sigurvinsdottir et al., 2021). A strength of the studies conducted by Sigurvinsdottir et al. (2021) and Stevens et al. (2019) was the large sample sizes, which added to the generalization of findings regarding the impact of CSA and religious or spiritual coping.

Arguably, positive religious and spiritual coping are associated with decreased psychological distress (George & Bance, 2020; Ghorbani et al., 2021; Upenieks & Orfanidis, 2022), and this supports the conclusion that religion/spirituality may be a protective factor (Jeong & Cha, 2019). Individuals who experience positive religious coping may view God as benevolent and loving, while those who experience negative religious coping may feel abandoned by a Higher Power or may experience doubt and conflict about their own religious faith (Skalski et al., 2019). Examples of positive religious coping include using a faith community to seek God's comfort (Jung et al., 2022; Ladis et al., 2023), praying (Jeong & Cha, 2019; Ladis et al., 2023), and believing God will bring divine justice. Negative religious coping may include feelings of abandonment by God, seeing the abuse as God's punishment, and questioning God's power (Ladis et al., 2023). As noted by Ladis et al. (2023), positive religious coping is adaptive while negative religious coping is maladaptive.

Overall, key research findings revealed that religious and spiritual coping are both protective (Jung et al., 2022; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Sigurvinsdottir et al., 2021; Tae & Chae, 2021; Upenieks, 2021; Upenieks & Orfanidis, 2022) and risk factors (Jung et al., 2022; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018) depending upon the lens through which the survivor views religion/spirituality (Jung et al., 2022; Vazquez, 2019). Positive religious and spiritual coping can buffer against psychological distress (George & Bance, 2020; Ladis et al., 2023; Tae & Chae, 2021; Upenieks, 2021; Upenieks & Orfanidis, 2022) and is often employed among individuals with higher rates of posttraumatic stress disorder (Ladis et al., 2023).

Conversely, the survivor’s mental health may decline when God or Allah is viewed as judgmental and angry (Ghorbani et al., 2021). Also, individuals with bipolar disorder may still experience adverse effects of CSA despite perceiving a strong relationship with God (Lamis et al., 2019).

Studies have found that traumatic experiences such as CSA resulted in a rejection or diminished view of religion and spirituality (Sigurvinsdottir et al., 2021), especially when the abuser was a clergy (Stevens et al., 2019). In this study, religion and social support, using *Add Health* data was correlated and examined relative to reported and non-reported CSA with a sample of African American women between ages 33 and 43.

Social Support

Social support is defined as the perception of feeling loved, cared for, valued, esteemed, and having a sense of belonging to a network (Timraz et al., 2019). Social support is a predictor of resilience (Al-Qahtani et al., 2022; Friedberg & Malefakis, 2022; Laughlin & Rusca, 2020; Thomas et al., 2022; Timraz et al., 2019; Weber Ku et al., 2021) and serves as a protective factor (Hunsu et al., 2021; Laughlin & Rusca, 2020; Weber Ku et al., 2021) in trauma survivors.

Social support is a coping strategy (Laughlin & Rusca, 2020; Thomas et al., 2022; Timraz et al., 2019) and can be a protective factor (Al-Qahtani et al., 2022; Fletcher et al., 2021; Schiff et al., 2021; Weber Ku et al., 2021) or a risk factor (Schiff et al., 2021). Coping strategies can be positive or negative and involve various behaviors or thoughts to manage stressors (Fletcher et al., 2021; Wamser-Nanney & Campbell, 2020), threatening situations (Wamser-Nanney & Campbell, 2020), or demands (Fletcher et al., 2021). Positive coping strategies can include problem-focused coping (Fletcher et al., 2021; Wamser-Nanney & Campbell, 2020) and seeking social support (Wamser-Nanney & Campbell, 2020). Maladaptive coping strategies may include emotion-focused coping, such as using distraction, alcohol, and other drugs (Fletcher et al., 2021) and avoidant or dissociative behaviors to relieve emotional pain. Increased risk is associated with avoidant and emotion-focused coping, while protective factors are associated with problem-focused coping (Fletcher et al., 2021).

Family support (Kocturk & Bilge, 2018; Laughlin & Rusca, 2020), community support (Laughlin & Rusca, 2020), and maternal perceived social support (Schiff et al., 2021) can buffer adverse effects of childhood abuse and other childhood traumatic events. In addition, social support and optimism were linked to positive changes in biological processes and physical health outcomes (Sosnowski et al., 2019). When social support of adolescent survivors of CSA was lacking, well-being deteriorated (Kocturk & Bilge, 2018).

Learning how to provide the appropriate family support needed during disclosure of sexual abuse can help buffer the harmful effects of this abuse and may, in turn, contribute to the child’s resilience. Stated another way, “Maternal support offered to sexually abused children following disclosure can be a crucial factor in children’s recovery” (McGillivray et al., 2018, p. 793). Schiff et al. (2021) also suggested that providing social support to mothers of young children could promote resiliency in those children.

Adolescents who perceived social support disclosed sexual abuse early, but those who did not perceive social support delayed disclosure (Kocturk & Bilginer, 2020). Although there was no significant difference between those who disclosed early versus those who delayed disclosure, the early disclosers experienced fewer negative reactions (Kocturk & Bilginer, 2020). Perhaps these survivors perceived the support needed to come forward.

Several limitations to the various studies involving social support include the fact that a control group was not used, which limited the ability to conclude whether symptom reduction reflected the psychotherapy or the passage of time (Fletcher et al., 2021). Use of small sample sizes (Fletcher et al., 2021) and sample types (Kocturk & Bilge, 2018; Kocturk & Bilginer, 2020; Sosnowski et al., 2019; Wamser-Nanney & Campbell, 2020) resulted in reduced generalizability. In addition, maternal reports were rated by the mothers and not the children (Schiff et al., 2021; Wamser-Nanney & Campbell, 2020), and self-reports (McGillivray et al., 2018) used might have resulted in recall bias. Another limitation included using cross-sectional designs (Kocturk & Bilginer, 2020; Schiff et al., 2021), making it difficult to determine causation.

Future research should focus on moderating effects of self-compassion and social support programs on resilience-based treatment (McGillivray et al., 2018), causal and longitudinal studies (Kocturk & Bilge, 2018; Kocturk & Bilginer, 2020; Schiff et al., 2021), to determine if sexual revictimization occurs due to the lack of community and family support (Kocturk & Bilge, 2018). Researchers should also examine the severity of the CSA and its impact upon overall well-being and physical health (Sosnowski et al., 2019). They should also study the relationship of emotional support to the child's coping when it involves CSA and how trauma-focused coping is impacted by one's cultural values (Wamser-Nanney & Campbell, 2020).

Overall, social support is a coping strategy that can either be a protective (Al-Qahtani et al., 2022; Fletcher et al., 2021; Schiff et al., 2021; Weber Ku et al., 2021) or risk factor (Schiff et al., 2021). Maternal support also plays an integral role in the child's resilience when that child has experienced trauma (McGillivray et al., 2018; Schiff et al., 2021). Continued research is needed to gain more insight into male CSA survivors' responses to social support. Social support may result in growth-fostering relationships.

Growth-Fostering Relationships

Growth-fostering relationships are authentic, interpersonal, relationships that consist of meaningful connections (Haskins & Appling, 2017). In an environment that fosters relationship growth, everyone grows and contributes to the relationship (Haskins & Appling, 2017), thus promoting self-esteem and a sense of mutual respect and appreciation. In recent years, researchers have become interested in growth-fostering relationships. However, research is limited in studying the impact of these relationships on CSA survivors. CSA is an interpersonal trauma (Gómez, 2019; Laughlin & Rusca, 2020) and often involves a betrayal of close relationships and friendships. Studies revealed that adult CSA survivors experience depression at higher rates (Sanjeevi et al., 2018; Timraz et al., 2019), and are at greater risk for revictimization (Hébert et al., 2020; Scoglio et al., 2021; Walker-Williams & Fouche, 2017; Zamir et al., 2018).

Female adolescent and adult CSA survivors are at an increased risk for dating violence (Hébert et al., 2020; Zamir et al., 2018). These survivors may become involved in dating relationships earlier than their peers and may engage in risky behaviors (Hébert et al., 2020; Haiyasoso & Schuermann, 2018; Scoglio et al., 2021) such as casual sex or compulsive sexual behaviors (Hébert et al., 2020). Despite this, survivors can be taught to recognize, build, and maintain healthy relationships (Haiyasoso & Schuermann, 2018). Teaching characteristics of healthy relationships to adolescent CSA survivors can serve as a preventive measure, help build self-esteem (Haiyasoso & Schuermann, 2018), and may result in positive transition into adulthood.

According to Guyon et al. (2019), female CSA survivors reported feeling distrust towards men, distrust in dating relationships, and engaged in protection strategies to maintain self-esteem and to cope with their lived experiences of betrayal. Empathy, empowerment, engagement, and authenticity are characteristics of meaningful connections and components of growth-fostering relationships (Crumb & Haskins, 2017; Haiyasoso & Schuermann, 2018).

Growth-fostering relationships promote mutual respect, authenticity, trust, and meaningful connections that can support the well-being of CSA survivors. Research findings also show that maternal attachment buffers interpersonal problems and trauma severity experienced by female CSA survivors (McGillivray et al., 2018; Schiff et al., 2021). Future studies should also include male CSA survivors (Guyon et al., 2019; Scoglio et al., 2021) to examine and understand the relationship challenges they may experience due to the abuse (Guyon et al., 2019). It is possible that growth-fostering relationships promote psychological well-being. However, this assumption requires further research.

Self-Esteem

Shame and ongoing stress are effects of chronic sexual abuse (Lawson & Akay-Sullivan, 2020), and shame can lead to low self-esteem (Gilliard, 2022; Wingfield, 2021). CSA survivors may have low (Lawson & Akay-Sullivan, 2020) or high self-esteem depending upon their view of God (Vazquez, 2019). For example, a CSA who sees God positively (i.e., loving and caring) may have higher self-esteem than a survivor who views God as judgmental and unkind. Other circumstances or variables may also contribute to self-esteem among CSA survivors.

Self-esteem is defined as an individual's perception of their self-worth (Arsandaux et al., 2020). Low self-esteem is a negative effect of CSA (Gilliard, 2022; Lawson & Akay-Sullivan, 2020; Wingfield, 2021). However, this negative effect can be mitigated by social support (Al-Qahtani et al., 2022; Fletcher et al., 2021; Upenieks, 2021; Weber Ku et al., 2021) and suitable parental attachment and paternal support (Muslu et al., 2020). Lassri et al. (2023) found that self-concept clarity buffered the effects of low self-esteem in CSA survivors. It is possible that educational attainment might play a positive role in one's self-esteem. However, this hypothesis requires further research.

Educational Attainment

Ringle et al. (2020) found that child maltreatment can impede child and adolescent development and adult educational attainment due to increased attention problems. These increased attention problems may become a challenge to the survivor's concentration and focus. Moreover, it may be a struggle for students who experience CSA to "keep up academically, socially, and psychologically" when coping skills are inadequate (Hardner et al., 2018, p. 376).

Ringle et al. (2020) used prospective longitudinal data to analyze whether child maltreatment (i.e., neglect, physical/emotional abuse, and sexual abuse) was directly associated with adult educational attainment. The researchers found that low involvement in extracurricular activities, poor school engagement, and school disciplinary problems indirectly affected adult educational attainment. A strength of this study was that the data analyzed were collected for over 30 years; however, the use of retrospective self-reports possibly led to recall bias as memory may change over time (Ringle et al., 2020). Additionally, there could have been other influences that the researchers could not readily rule out. Ringle et al. (2020) proposed such influences included social support, child resiliency, school climate, learning disabilities, and bullying. The findings may be generalizable to a specific population because the racial composition of the sample was primarily White, most of the children were from two-parent homes, and all participants were from Eastern Pennsylvania. For these reasons, Ringle et al. (2020) suggested that the sample may be generalizable to a specific population rather than a larger population.

In a quantitative study examining the experiences of 260 adult CSA survivors, Hardner et al. (2018) found "a correlation between increased trauma symptoms among CSA survivors and lower educational attainment" (p. 380). Hence, the trauma symptoms may result in poor concentration, as noted by Ringle et al. (2020), and poor coping skills (Hardner et al., 2018). On the other hand, Hardner et al. (2018) suggested dissociative amnesia served as a protective factor for CSA survivors. For example, CSA survivors with dissociative amnesia were more likely to graduate from a 4-year college or higher education than survivors who did not exhibit dissociative amnesia (Hardner et al., 2018).

The research studies involving CSA and educational attainment contained several limitations. Some limitations included the use of online surveys, thereby limiting responses to those who have access to computers and the internet, and the inability to generalize the results to other populations (Hardner et al., 2018). Other limitations included the use of retrospective self-reports, and cross-sectional designs (Hardner et al., 2018; Ringle et al., 2020). Significant predictors of decreased educational levels are age at onset of the sexual abuse (Hardner et al., 2018), caregivers' level of education (Hardner et al., 2018), total scores on the *Trauma Symptom Checklist-40* (*TSC-40*; Hardner et al., 2018), adolescent school discipline problems (Ringle et al., 2020), childhood attention difficulties (Ringle et al., 2020), and lower participation in extracurricular activities (Ringle et al., 2020).

Future research should examine other mediating variables such as social support, and child resiliency (Ringle et al., 2020). Future research should also include random selection and prospective studies (Hardner et al., 2018) and increased sample sizes. The use of longitudinal studies has been beneficial, as researchers have utilized prospective cohort designs to draw conclusions regarding child maltreatment and educational attainment (Ringle et al., 2020).

Being knowledgeable and understanding both the risk factors that may hinder educational attainment and the protective factors for helping to successfully cope with and manage the stress and trauma may be beneficial for CSA survivors, particularly as they further their education (Hardner et al., 2018).

Age

CSA survivors often do not disclose the abuse until adulthood (Alaggia et al., 2019; Collin-Vézina et al., 2021; McGill & McElvaney, 2023) and some never disclose (Collin-Vézina et al., 2021). Additionally, Alaggia et al. (2019) argue that disclosure is significantly influenced by age and gender with older female adolescents more likely, to some extent, to disclose sooner than their male counterparts.

Mental Health Treatment

The rates of mental illnesses among African Americans are similar to the general population (American Psychiatric Association, 2017). However, because of the stigma surrounding mental illness (Avent Harris et al., 2020; Phillips, 2020), African Americans seek mental health treatment at lower rates than the general population (Avent Harris et al., 2020). Along with the stigma, other barriers to African Americans seeking mental health treatment include mistrust of the mental health care system (American Psychiatric Association, 2017; Phillips, 2020), lack of culturally competent providers, lack of providers from racially and ethnically diverse backgrounds, lack of insurance or underinsurance, denial of mental health problems, lack of knowledge regarding available treatment, and the importance of family privacy (American Psychiatric Association, 2017).

CSA is an interpersonal trauma (Gómez, 2019; Laughlin & Rusca, 2020), and the type of coping strategies used influences the mental health of the survivors. Manyam et al. (2020) purport that healing can be facilitated through a solid therapeutic alliance consisting of supportive therapy and trust (Lawson & Akay-Sullivan, 2020; Manyam et al., 2020). Therapists must also recognize that ethnic minority CSA survivors vary in expectations about services and needs (Sawrikar, 2020). Sawrikar (2020) found that ethnic minority CSA survivors were more likely to receive services that acknowledged how power can be abused based on race. Sawrikar further purported that this acknowledgment of power could occur when the therapist was culturally competent.

Summary and Conclusions

The present study was conducted to examine whether measures of religion and social support are related and vary between presence and absence of reported CSA with African American women between ages 33 and 43. In recent years, researchers have become increasingly interested in the resilience of individuals who have experienced some form of trauma, and CSA has been extensively researched internationally. Findings in the literature indicate that CSA survivors can be resilient. However, research on African American women CSA survivors remains limited. For this study, the overarching research questions are: Is there a significant difference in the religiosity scores among the self-report CSA group and non-CSA group? Is there a significant difference in the social support scores among the self-report CSA group and non-CSA group? Is there a positive correlation between religion and social support for the self-report CSA group and non-CSA group?

This study’s findings may help fill the research gap on coping in African American women who self-report CSA, thereby informing the existing body of academic research. This research may also promote social change by informing culturally competent clinical practice and supporting preventive and clinical interventions associated with adaptive functioning for this population. Consequently, the factors identified as promoting resilience can be incorporated into the treatment milieu as part of a multicultural framework for these women, and used to enhance and promote practitioner training, including graduate work, supervised field training, and training in community programs. This positive social change is aligned with *racial and ethno-cultural responsiveness* as reflected in the American Psychological Association guidelines on race and ethnicity (APA, 2019).

In Chapter 3, a discussion and description of the research design, rationale, and methodology used to examine the relationship between religion, social support, and African American women who self-report CSA will occur. Chapter 3 will also include a description of the research participants used to test the hypotheses along with the recruitment and data collection processes.

Chapter 3: Research Method

Introduction

Although some CSA survivors may experience physical health, mental/psychiatric, or emotional difficulties throughout their lifetimes, others may develop healthy and effective coping mechanisms (Fletcher et al., 2021; Schaer, 2021), thus, promoting resilience despite experiencing childhood adversity (Sanjeevi et al., 2018; Schaer, 2021). Utilizing secondary data, a quantitative study was conducted to explore whether reported religion and social support scores were related and varied as a function of presence versus absence of CSA with African American women between ages 33 and 43. The purpose of studying this age group was two-fold. Oftentimes CSA survivors do not disclose abuse until adulthood (Alaggia et al., 2019; Collin-Vézina et al., 2021; McGill & McElvaney, 2023), and some never disclose (Collin-Vézina et al., 2021). Additionally, disclosure is significantly influenced by age and gender with older female adolescents more likely, to some extent, to disclose sooner than their male counterparts (Alaggia et al, 2019). Given the research data, the 33 to 43 age group of the Wave V participants was selected to analyze the religion and social support outcome data.

Chapter 3 includes a discussion of the cross-comparative correlation research design used to study religion and social support among self-report CSA and non-CSA groups. The methodology, threats to validity, independent and dependent variables are discussed as part of the research design and rationale. In addition, the Add Health study is discussed at length as the secondary data were derived from Waves III, IV and V of this longitudinal study. Also discussed in this chapter are threats to validity as related to the proposed design and methodology and Add Health longitudinal data used.

Research Design and Rationale

A cross-comparative correlation design utilizing data from Add Health Waves III, IV, and V was used in this study to explore whether religion and social support vary as a function of presence versus absence of reported CSA among African American women between ages 33 and 43. The independent variable was CSA, and the dependent variables were religion and social support. Reported and non-reported CSA group assignments were informed by Waves III, IV and V Add Health data while the outcomes involving the dependent variables, religion and social support, were informed by Wave V.

The data were derived from the Add Health longitudinal study. This longitudinal study was originally developed in the 1990s in response to a federal mandate "to understand the causes of adolescent health and health behaviour *(sic)*, with special emphasis on the multiple contexts of adolescent life" (Harris, Halpern, Whitsel et al., 2019, p.1). The University of North Carolina, Carolina Population Center (CPC) houses the Add Health data sets (Harris, Halpern, Whitsel et al., 2019). This longitudinal study occurred over a 20-year period with data collection occurring in 1994–1995 (Wave I), 1996 (Wave II), 2001–2002 (Wave III), 2008–2009 (Wave IV), and 2016–2018 (Wave V; Assini-Meytin et al., 2022; Harris, Halpern, Biemer et al., 2019; Harris, Halpern, Whitsel et al., 2019).

The Add Health study originated in 1994 with a nationally representative sample of 20,745 U.S. adolescents between ages 12 and 19 (Harris, Halpern, Whitsel et al., 2019) in Grades 7–12 (Brown et al., 2021; Harris, Halpern, Biemer et al., 2019; Harris, Halpern, Whitsel et al., 2019) and followed into adulthood. Funded by the National Institute of Child Health and Human Development (NICHD) and 23 other foundations and federal agencies, this multisurvey, multi-wave interdisciplinary design (Assini-Meytin et al., 2022) has been utilized by over 50,000 multidisciplinary researchers from around the world (Harris, Halpern, Whitsel et al., 2019). Furthermore, over 3,500 peer-reviewed journal articles using Add Health data have been published in over 750 different disciplinary journals and Add Health has also been a data source for master's and doctoral level students (Harris, Halpern, Whitsel et al., 2019).

Seventy-one public schools, three Catholic schools, and six other private schools participated in this longitudinal study. The original cohort was selected from 80 schools in the Northeast, South, Midwest, and Western parts of the United States. The schools were in suburban, urban, and rural areas (Chen & Harris, 2020). Also included was an oversampling of African American students whose parents were considered "highly educated" (Harris, Halpern, Whitsel et al., 2019, p. 2), meaning one or more parents were college graduates (Chen & Harris, 2020).

Because secondary data were available for the study, the only foreseen time constraint involved reviewing research questions posed during each Wave of the study. A cross-comparative correlation design was consistent with research designs needed to advance knowledge in this discipline by exploring religion and social support in African American women survivors who self-report CSA.

Methodology

Population

The target population for this study included African American women between ages 18 and 43 who self-reported CSA and African American women within this same age group who did not report CSA. Based on the G*Power 3.1.9.4 computation, a sample size of 176 participants was needed for this study. A total of 1,398 participants was used in this study. Detailed information regarding the G*Power computation is discussed in the Power Analysis and Sample Size section of this chapter.

Wave III participants were between ages 18 and 26, Wave IV participants were between ages 24 and 32, and Wave V participants were between ages 33 and 43 (Dennis et al., 2022). Waves III through V data were utilized to determine if participants self-reported CSA. Wave V data were utilized to analyze participant religion and social support outcomes.

Participants who self-reported CSA would have experienced sexual abuse or sexual assault by a parent, adult caregiver, or other individual before reaching the age of 18. The focus of this study was to identify factors that may have contributed to coping in adulthood by African American women who self-reported CSA. Specifically, religion and social support were examined. The purpose of studying this age group was two-fold. Oftentimes CSA survivors do not disclose the abuse until adulthood (Alaggia et al., 2019; Collin-Vézina et al., 2021; McGill & McElvaney, 2023) and some never disclose (Collin-Vézina et al., 2021). Additionally, disclosure is significantly influenced by age and gender with older female adolescents more likely, to some extent, to disclose sooner than their male counterparts (Alaggia et al, 2019). Given the research data, the 33 to 43 age group of the Wave V participants was selected to analyze the religion and social support outcome data.

Although considered an understudied cultural issue (Blakemore et al., 2017; Tishelman & Fontes, 2017), there is a growing body of research focusing on religious and spiritual coping related to CSA survivors (Blakemore et al., 2017; Jung et al., 2022; Morton et al., 2019; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Sigurvinsdottir et al., 2021; Thomas et al., 2022). Despite these studies, the research remains limited as it pertains to adult African American CSA survivors (Gilliard, 2022; Newsom & Myers-Bowman, 2017).

Researchers revealed that religious and spiritual influences could be risk factors (Jung et al., 2022; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018) as well as protective factors (Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Sigurvinsdottir et al., 2021) for CSA survivors depending upon survivors' view of religion or spirituality (Vazquez, 2019). In 2019, there was a rapid decline in Christianity and in church attendance in the United States as well as a slight increase in non-Christian faiths (Pew Research Center, 2019). However, 58% of Black American church attendance remained consistent, despite this being down by 8% over the past decade (Pew Research Center, 2019).

Social support is a coping strategy (Laughlin & Rusca, 2020) and a predictor of resilience (Al-Qahtani et al., 2022; Weber Ku et al., 2021). Social support serves as a protective factor (Fletcher et al., 2021; Hunsu et al., 2021; Weber Ku et al., 2021) against posttraumatic stress symptoms (Fletcher et al., 2021) in trauma survivors. Ultimately, social support can be a protective factor (Al-Qahtani et al., 2022; Fletcher et al., 2021; Schiff et al., 2021; Weber Ku et al., 2021) or a risk factor (Schiff et al., 2021).

Sampling and Sampling Procedures

Sampling Method

Probability sampling is typically used in quantitative research and allows for a representative sample of a target population, larger sample sizes (Etikan & Bala, 2017; Sharma, 2017), and minimal selection bias (Ellis, 2020). Researchers can identify and select the most appropriate sampling method when the advantages and disadvantages of using each sampling technique are explored and understood (Sharma, 2017). Moreover, generalizations and statistical inferences can be made with probability sampling (Sharma, 2017).

During Wave I of this longitudinal study, *Add Health* utilized a multistage stratified random sample design (Azimi & Daigle, 2021; Harris, Halpern, Biemer et al., 2019; Harris, Halpern, Whitsel et al., 2019; Prowell & Williams, 2021; Wu, 2020) with unequal probability of sample selection (Chen & Harris, 2020). Schools were stratified by region, school type (i.e., public, private, parochial), urbanicity, size, and ethnic mix (Chen & Harris, 2020). School sizes varied from fewer than 100 students to over 3,000 students, and “replacement schools were selected within each stratum” (Chen & Harris, 2020, p. 5) until an eligible school or school pair was available.

Based on the stratified random sample design, 80 high schools (Azimi & Daigle, 2021; Harris, Halpern, Whitsel et al., 2019; Wu, 2020) and 52 middle schools were included in the study (Azimi & Daigle, 2021; Wu, 2020). Furthermore, students in each school were randomly selected to complete in-home questionnaires after stratification by grade and sex (Chen & Harris, 2020; Harris, Halpern, Whitsel et al., 2019; Wu, 2020). During Wave I (1994-1995), over 90,000 students completed in-school questionnaires and 20,745 students completed in-home questionnaires (Chen & Harris, 2020). Add Health included an oversample of specific populations for the in-home surveys. For example, physically disabled adolescents (Wave I only), Black adolescents with college-educated parents, Chinese, Cuban, and Puerto Rican adolescents were all part of the Wave I in-home oversample (Chen & Harris, 2020; Wu, 2020).

Harris, Halpern, Whitsel et al. (2019) noted several advantages to using Add Health data. Specifically, all 50 states are represented, including individuals of varying races and ethnicities, socioeconomic subgroups, immigrant status, and geographical location. Additionally, Harris, Halpern, Whitsel et al. (2019) postulated that within-group analysis of nine separate racial and ethnic groups is possible, and that vulnerable and understudied populations could also be studied.

According to Sharma (2017), strengths associated with stratified random sampling include reduced potential for random sampling errors and increased representation of the population being studied. In addition, the costs for data collection may be lower (Chen & Harris, 2020). However, stratified random sampling can be time consuming (Sharma, 2017), and the statistical analysis can be more complicated (Chen & Harris, 2020).

Sampling Procedures

Similar to Assini-Meytin et al. (2022), Fix et al. (2019), and Shen et al. (2021), a dichotomous variable was created for CSA or sexual assault based on one item in the Add Health Wave III longitudinal study (Fix et al., 2019), three items in the Add Health Wave IV longitudinal study (Assini-Meytin et al., 2022; Fix et al., 2019; Shen et al., 2021), and two items in the Add Health Wave V longitudinal study (Assini-Meytin et al., 2022). The following items were used to assess CSA and sexual assault: (a) the frequency that a parent or other adult caregiver touched the participant in a sexual way prior to the sixth grade (Wave III) or before the age of 18 (Wave IV); (b) the participant was forced to engage in any type of sexual activity against her will in a physical way (Wave IV and Wave V); or (c) the participant was forced to engage in any type of sexual activity against her will in a non-physical way (Wave IV and Wave V). Examples of physical and non-physical force include verbal pressure, threats of harm, or being given drugs or alcohol (Shen et al., 2021; UNC Carolina Population Center, 2009). When responding to the second and third items, participants were instructed to not include any experiences with a parent or adult caregiver (Shen et al., 2021; UNC Carolina Population Center, 2009).

For this study, participants who reported CSA or sexual assault on or after the age of 18 were excluded from the study. Samples were drawn from data sets contained in the Add Health Waves III, IV, and V longitudinal study. The analysis included African American female participants between ages 33 and 43 who completed the Wave V assessment and who self-reported CSA or non-CSA.

Sampling Frame

Waves III, IV and V data sets consisted of follow-up via a computer-based survey in 2001-2002, 2008-2009 and a mixed mode survey design in 2016-2018 (Harris, Halpern, Whitsel et al., 2019). The mixed mode survey design included web/mail with in-person and phone non-response follow-up (Harris, Halpern, Biemer et al., 2019). Wave III participants were between the ages of 18-26, Wave IV participants were between the ages of 24-32, and Wave V participants were between the ages of 33-43 (Dennis et al., 2022). The respondents who completed follow-up interviews were initially interviewed during Wave I while an adolescent.

Waves III, IV and V included data collection from original Wave I participants from all 50 states. The response rate was 77.4% during Wave III and 80.3% during Wave IV (Dennis et al., 2022; Harris, Halpern, Whitsel et al., 2019). Additionally, the response rate during Wave V was 71.8% (Dennis et al., 2022). In total, there were 15,197 participants during Wave III (Dennis et al., 2022; Harris, Halpern, Whitsel et al., 2019), 15,701 participants during Wave IV (Dennis et al., 2022; Harris, Halpern, Whitsel et al., 2019), and 12,300 participants during Wave V (Dennis et al., 2022). In the present study, data collected from Waves III through V was used to identify African American women between the ages of 18 and 43 who self-reported CSA. Wave V data was used to analyze participant religion and social support outcomes. During this time, participants would have been between the ages of 33 and 43. Excluded in the present study were male participants, transgender female participants, Hispanic participants, and any other participants who were not identified as African American.

The research participants were adults during Waves III, IV and V. However, they were adolescents during their initial participation in the Wave I in-home surveys. The Quality Education Database (QED) is a school-based design that was used to obtain the *Add Health* Wave I sample (Chen & Harris, 2020), and during that time, the QED was comprised of 26,666 U.S. high schools (Chen & Harris, 2020). The sampling frame was stratified by region, school type, school size, urbanization, and racial composition (Chen & Harris, 2020; Wu, 2020). African American adolescents with college-educated parents, Chinese, Cuban, and Puerto Rican adolescents, and physically disabled adolescents (Wave I only) were all part of an oversample (Wu, 2020). Although 26,666 U.S. high schools comprised the QED, as noted earlier only 80 high schools and 52 feeder schools participated in this nationally representative *Add Health* study.

Power Analysis and Sample Size

Faul et al. (2007) developed G*Power and stated, "…the power of a statistical test is the probability that its null hypothesis (*H*0) will be rejected given that it is in fact false" (p. 175). G*Power 3 is a statistical power analysis using post hoc and a priori to determine analysis power and sample sizes in research studies (Verma & Verma, 2020).

For the present study, a priori power analysis was computed using G*Power 3.1.9.4. To calculate the sample size needed, a two-tailed *t* test was conducted with the statistical test being Means: Mann-Whitney test (two groups), with normal parent distribution. The allocation ratio N2/N1 was 1. Based on this computation, a total sample size of 176 provides a 95% power estimate, $\alpha = 0.05$, with a medium effect size, $d = 0.5$. For simple correlation, a total sample size of 115 provides a 95% power estimate, $\alpha =$

0.05, with a medium effect size, d = 0.3. Because the minimum size calculated was greater than the sample size required for the simple correlation, the sample size of 176 was utilized.

A cross-comparative correlation research design was applied to study religion and social support scores among the self-report CSA and non-CSA groups. A priori power analysis was computed using G*Power 3.1.9.4. To calculate the sample size needed, a two-tailed *t* test was conducted with the statistical test being Means: Mann-Whitney test (two groups), with normal parent distribution. The allocation ratio N2/N1 was 1. Based on this computation, a total sample size of 176 provided a 95% power estimate, $\alpha = 0.05$, with a medium effect size, d = 0.5.

Procedures for Recruitment, Participation, and Data Collection

Archival Data Use

Add Health is a prospective, longitudinal study consisting of a nationally representative sample of U.S. adolescents in grades 7-12 during 1994-95 and followed into adulthood using four in-home interviews (Chen & Harris, 2020). Over twenty years of *Add Health* data are currently available through Waves I-V.

A stratified sample of 80 high schools were selected to participate in this study with a probability of selection proportionate to school size (Chen & Harris, 2020). The schools were stratified by urbanicity, region, ethnic mix, size, and school type (i.e., parochial, private, public). The high schools were defined as having at least an 11th grade and more than 30 students (Chen & Harris, 2020). A “feeder” school was also identified and selected for participation. A “feeder” school was considered a junior high or middle school associated with the high school. In addition to the 80 high schools, 52 feeder schools participated, and 79% of all schools selected agreed to participate in the *Add Health* study.

Procedures for Participation in the Add Health Study

Add Health is a longitudinal study that began when participants were in early and late adolescence. Prior to the study, informed consent was obtained and aligned with the requirements of *Add Health* and the University of North Carolina School of Public Health Institutional Review Board (Franchino-Olsen et al., 2022). Participants' identities were also protected so that the answers could not be linked to his or her name or other identities. Participants were young adults during Waves III through V and consented to participation (Harris, Halpern, Biemer et al., 2019).

Procedures for Data Collection of Add Health Data

Data were gathered through in-school questionnaires, school administrator questionnaires, parent interviews, and in-home interviews utilizing a computer-assisted personal interview (CAPI)/Audio Computer-Assisted Self Interview (ACASI; Harris, Halpern, Biemer et al., 2019). During Wave I, over 90,000 students completed in-school surveys and 20,745 students completed in-home interviews (Chen & Harris, 2020). Furthermore, over 15,000 original Wave I respondents participated in the Wave III 2001-2002 and Wave IV 2008-2009 data collection, while over 12,000 participated in the Wave V 2016-2018 data collection (Harris, Halpern, Whitsel et al., 2019). Waves III, IV and V data collection also consisted of in-home interviews (Harris, Halpern, Biemer et al., 2019; Harris, Halpern, Whitsel et al., 2019).

Add Health included additional participants in the study by purposefully oversampling twins and siblings of twins, African American students whose parents had at least a college degree, disabled students (Wave I only), and ethnic minority students who were Chinese, Puerto Rican, and Cuban (Chen & Harris, 2020; Harris, Halpern, Whitsel et al, 2019; Wu, 2020). According to Harris, Halpern, Whitsel et al. (2019), the genetic oversamples allowed researchers to determine if genetics or environment played a role from early adolescence into adulthood. It also allowed researchers to examine interactions between genetics and the environment. Harris, Halpern, Whitsel et al. (2019) further stated that ethnic oversamples allowed for unprecedented diversity in the areas of ethnicity, race, geographical location, and socioeconomic status. African American students whose parents had a college degree were oversampled because family income could be influenced in the *Add Health* study (Chen & Harris, 2020). Thus, estimates could be biased if appropriate adjustments for over-sampling are not made when researching family income and other variables related to family income (Chen & Harris, 2020).

Procedures for Gaining Access to the Add Health Data Set

Researchers can apply for Waves I-V *Add Health* data by accessing the CPC Data Portal at https://data.cpc.unc.edu. *Add Health* data was used to obtain the sample size needed for this research. To access certain data, a contractual agreement was completed. Entering into a contract was only permissible after a Contract Application was completed consisting of a security plan, an IRB approval letter, and a monetary fee for new contracts only (UNC, Carolina Population Center, n.d.). Additionally, only certified researchers were granted access to the data.

Instrumentation and Operationalization of Constructs

Childhood Sexual Abuse

The independent variable was childhood sexual abuse (CSA). Dichotomous measures were constructed to represent CSA absence “0” or presence “1.” Participants who retrospectively self-reported CSA would have experienced sexual abuse or sexual assault by a parent, adult caregiver, or other individual before reaching the age of 18. CSA was a composite measure based on one item from Wave III, three items from Wave IV, and two items from Wave V. The frequency that the parent or adult caregiver touched the participant in a sexual way, forced the participant to touch him or her in a sexual way, or forced the participant to have sexual relations was measured in Waves III and Wave IV to determine self-reported CSA. This item was measured on a 6-point Likert scale ranging from 1 (one time) to 6 (this has never happened). The remaining two CSA items from Waves IV and V were dichotomous measures consisting of inquiries about the experience of being forced in a physical or non-physical way to engage in sexual activity against the participant’s will. Parents and adult caregivers were not included in these two items.

Religion

Religion was a dependent variable operationalized in this study as participation in sacred and organized institutions (Hamilton, 2020; Kusmaul & Wolf, 2023; Sigurvinsdottir et al., 2021; Upenieks & Orfanidis, 2022), such as churches (Upenieks &

Liu, 2022), mosques, or synagogues (Currier et al., 2023), and included ethical conduct based on spiritual teachings, and rituals or practices (Hamilton, 2020; Upenieks & Orfanidis, 2022). Religiosity data was retrieved from Wave V and included four items.

The Wave V religion scale focused on religious beliefs and practices. The first item was included in this study as part of descriptive statistics. This item asked about present religion (i.e., none/atheist/agnostic, Protestant, Catholic, other Christian, Jewish, Buddhist, etc.). The other three items contained Likert scales (see Appendix A) and focused on the frequency of attendance, prayer, and the importance of one's religious faith. Responses for frequency of religious services attendance included 1 = *never*, 2 = *a few times*, 3 = *once a month*, 4 = *2 to 3 times a month*, 5 = *once a week*, 6 = *more than once a week*. Responses for frequency of private prayer included 1 = *never*, 2 = *less than once a month*, 3 = *once a month*, 4 = *a few times a month*, 5 = *once a week*, 6 = *a few times a week*. Lastly, responses to the importance of one's religious faith included 1 = *not important*, 2 = *somewhat important*, 3 = *very important*, 4 = *more important than anything else*.

Social Support

In this study, social support was a dependent variable and data from the Wave V social support scale was used to measure this variable. For this study, social support was defined as the perception of feeling loved, cared for, valued, esteemed, and a sense of belonging to a network of mutual obligation and communication (Timraz et al., 2019). Social support also includes an individual's perception of the quantity and quality of social connections (Gao et al., 2022) and psychological resources and material which increases one's ability to cope with stress (Fletcher et al., 2021).

The Wave V social support scale contains 23 items. All 23 items in the social support scale included questions requiring either dichotomous or Likert scale responses (see Appendix B). The dichotomous items contained a total of 12 questions related to the participant's ability to rely on and open up to her spouse/partner, children, other family members, and friends. The questions also related to whether the participant felt that these same individuals made too many demands or criticisms of her.

Some Likert scale questions were reverse coded with higher numbers indicating higher social support. For example, several items stated, *"During the past 7 days, I felt that I could not shake off the blues, even with help from my family and friends. During the past 7 days, I felt depressed. During the past 7 days, I felt sad."* The Likert scale responses to these questions that were reverse coded consisted of 1 = *never or rarely*, 2 = *sometimes,* 3 = *a lot of the time*, and 4 = *most of the time or all of the time*. Dichotomous questions were not recoded. Educational attainment responses were recoded as 1 = *Some High School or Less*, 2 = *High School Diploma or GED*, 3 = *Some College/Vocational/Technical education*, 4 = *College/Vocational/Technical School Degree*, and 5 = *Master's Degree or Higher*. The study variables and scales of measurement are displayed in Table 1.

Table 1

Study Variables and Scales of Measurement

Variables	Scales of measurement
Childhood sexual abuse (independent)	Dichotomous
Religion (dependent)	Interval and ordinal
Social support (dependent)	Dichotomous and ordinal

Data Analysis Plan

According to Chen and Harris (2020), SAS or STATA software are recommended to correctly analyze Add Health data. Specifically, sample weights must be used when analyzing Add Health data to assure the sample remains nationally represented. Use of sample weights allows the findings to be generalized to the larger population under study (Chen, 2018). SPSS software has sample weight capabilities and also allows the researcher to analyze subpopulations (Chen & Harris, 2020). Consequently, Add Health provided access to SPSS and the sample weights; hence, these resources were used to conduct the analyses in this study.

Data Cleaning and Screening

Regardless of the type of data utilized, researchers must be cognizant of potential problems associated with data collection (Dasari & Varma, 2022), as well as transfer and integration of data (Dasari & Varma, 2022). Data quality issues must be addressed using the process of data cleaning (Dasari & Varma, 2022; Pallant, 2020). Consequently, data cleaning and screening should be determined prior to any research. Data cleaning and screening involves checking for errors, and then finding and correcting the errors in the data file (Dasari & Varma, 2022; Pallant, 2020).

Errors can be checked by “identifying values that fall outside the range of possible values for a variable” (Pallant, 2020, p. 45). For example, gender was coded as 1 = male, 2 = female. However, because only female participants were used in this study, gender coding non-representative of women was removed from this study. Pallant offered multiple methods to check for, and correct errors utilizing SPSS. Pallant advised that after errors have been found and corrected, “Frequencies” must be repeated as this is an essential step in verifying that the errors have been corrected (p. 49).

It is likely that a data set will have missing data (Ballard et al., 2022; Dasari & Varma, 2022; Pallant, 2020; Segerstrom, 2020), thus leading to an “unpredictable and unusable conclusion” (Dasari & Varma, 2022, p. 1,379). To address missing data during this study, the descriptive statistics were analyzed to determine if utilizing means imputation was a viable option. Lee et al. (2023) purported that when study variables contain more than 5% of missing data, means imputation to address missing data should not be used. Thus, means imputation was not used because more than 5%of data was missing for the study variables under review. Hence, pairwise deletion was used to address missing data for the cross-comparative correlation analyses.

Pallant (2020) highly recommended using pairwise exclusion to address missing data. Grigsby and McLawhorn (2019) stated that pairwise deletion entailed “using all available data for a case and only excluding them when they have missing values on the variables being analyzed” (p. 45). Wright et al. (2019) used both multiple imputation and listwise deletion to address missing data. Assigning codes can be an additional way to address missing data (Pallant, 2020).

Missing data consists of information that participants refused to answer (Segerstrom, 2020), questions that did not apply to the participant, and data entry errors resulting in invalid answers (Dasari & Varma, 2022). Specifically, data can be missing completely at random (MCAR), missing at random (MAR), or not missing at random (NMAR; Segerstrom, 2020; van Ginkel, 2020). While MCAR does not risk biasing the results of the analyses, MAR can bias the results, and NMAR "are the most problematic and yield biased estimates" (Segerstrom, 2020, p. 1).

Blank cells are recognized in SPSS as missing data (Pallant, 2020). Pallant (2020) discussed the following three SPSS options to address missing data: exclude cases listwise, exclude cases pairwise, and replace with mean. Wright et al. (2019) noted that utilizing listwise deletion helped with robustness of the findings. However, researchers warn against using listwise deletion because the entire participant case is thrown out even when one piece of data is missing, thus, resulting in the discarding of valuable information (Jadhav et al., 2019; Kamara et al., 2023; van Ginkel et al., 2020). Additionally, use of listwise deletion often leads to a loss of statistical power and biased results in the statistical analyses (van Ginkel et al., 2020). van Ginkel et al. reported that applied researchers have concerns about using multiple imputation to address missing data. However, van Ginkel et al. argued that using multiple imputation is the "most sophisticated method for dealing with" missing data (p. 297).

Segerstrom (2020) proposed that researchers traditionally used a process called, *ipsative mean imputation,* to avoid completely eliminating the participant's data. With *ipsative mean imputation*, instead of eliminating data, the mean of the items is used. Segerstrom purported this process works well if more items (than those missing) are present, when the reliability scale is high ($\alpha > .70$), and when the scale measures a single well-defined domain. Segerstrom further states that *ipsative mean imputation* should only be used with standardized items, item means, and sums of items involving biased missing data because the "missingness will artificially deflate scores" (p. 1). Jadhav et al. (2019) stated that if missing data exceeds 25%, conducting a comparison of results before and after imputation is best. On the other hand, Lee et al., (2023) used listwise deletion instead of imputation because the descriptive analysis revealed that some study variables had a missing rate of more than 5%.

Some researchers such as Ballard et al. (2022) and Pallant (2020) warned against using mean imputation because this approach could result in biased estimates and severe distortions when a lot of data is missing. However, according to Jadhav et al. (2019), "limitations of mean imputation are almost absent if less than 10% of the data is missing and when the correlations between the variables are low" (p. 917). Furthermore, several researchers used mean imputation when analyzing Add Health data. For instance, Fakunmoju et al. (2021) used *ipsative mean imputation* to address missing data when analyzing rape myth acceptance across four countries. Assini-Meytin et al. (2022) used multiple imputation to study the impact of CSA on socioeconomic attainment in adulthood. Wright et al. (2019) used both multiple imputation and listwise deletion to address missing data when examining social and individual protective factors that contributed to breaking the cycle of violence. In essence, imputation is becoming a prominent method to address the problem of missing data when examining Add Health variables (Azimi & Daigle, 2021; Fix et al. 2019; Maki, 2018; Weber Ku, 2021).

Research Questions and Hypotheses

The data analysis plan has been developed to address the following research questions and hypotheses:

RQ1: Is there a significant difference in the religiosity scores among the self-report CSA group and non-CSA group?

$H_0$1: There is no significant difference in the religiosity scores among the self-reported CSA group and non-CSA group.

H_a1: There is a significant difference in the religiosity scores among the self-reported CSA group and non-CSA group.

RQ2: Is there a significant difference in the social support scores among the self-report CSA group and non-CSA group?

$H_0$2: There is no significant difference in the social support scores among the self-report CSA group and non-CSA group.

H_a2: There is a significant difference in the social support scores among the self-reported CSA group and non-CSA group.

RQ3: Is there a positive correlation between religion and social support for the self-report CSA group and non-CSA group?

$H_0$3: There is no correlation between religion and social support for the self-report CSA group and non-CSA group.

H_a3: There is a positive correlation between religion and social support for the self-report CSA group and non-CSA group.

Statistical Tests and Analyses

A cross-comparative correlation design was utilized to test the hypotheses. Because assumptions were not met for the independent *t* test, the Mann-Whitney-Wilcoxon test (i.e., Mann-Whitney *U* test) was conducted to test Hypotheses 1 and 2. Additionally, a chi-square test was used to address the dichotomous items contained within the social support scale. These dichotomous items consist of 12 questions related to the participant's ability to rely on and open up to her spouse/partner, children, other family members, and friends. The questions also related to whether the participant experienced demands and criticisms from these same individuals made.

Hypothesis 3 involved a simple correlation analysis. Because assumptions were not met for the Pearson correlation analysis, a Spearman correlation analysis was conducted. Likert items on the social support scale were analyzed using simple correlation while the dichotomous items were analyzed using the point-biserial correlation design.

Descriptive Statistics

Descriptive statistics involve specific methods for calculating, describing, and summarizing research data in an efficient, meaningful, and logical way (Salkind & Frey, 2020; Vetter, 2017a; Vetter 2017b). Examples of these methods include the mean, median, and mode (Salkind & Frey, 2020; Morgan et al., 2020) and are also known as measures of central tendency (Morgan et al., 2020). Descriptive analysis results are presented in this research in the form of mean and standard deviation of religiosity and social support scores.

Inferential Statistics: Between Groups Analysis

A between-groups cross-comparative design is where "each participant in the study is in one and only one condition or group and members of one group are independent of those in all other groups" (Morgan et al., 2020, p. 86). The two groups consisted of self-reported CSA and non-CSA. These groups were compared to determine if there was a significant difference in the religiosity and social support scores.

Comparison of religiosity and social support scores between the self-report CSA and non-CSA groups were completed. Because assumptions were not met for the independent samples *t* test, the Mann-Whitney-Wilcoxon test (i.e., Mann-Whitney *U* test) was used. For the dichotomous items of the social support scale, a chi-square two-sample test was conducted to compare the proportion of affirmative responses between groups.

Inferential Statistics: Within Groups Analysis

The within-groups analysis consisted of determining if there was correlation between religiosity and social support scores for each group. When a researcher is interested in analyzing how two variables are correlated, Morgan et al. (2020) recommended utilizing the Pearson correlation and bivariate regression. Correlation is used to describe direction and strength of the relationship between two variables (Pallant, 2020), and bivariate regression involves examining how the value of a dependent variable covaries with an independent variable (Frankfort-Nachmias & Leon-Guerrero, 2018; Morgan et al., 2020). Assumptions of Pearson's correlation were not met when using total scale scores. Thus, the Spearman correlation was used as recommended by Pallant (2020).

Type I and Type II Errors

Type I errors occur when the true null hypothesis is incorrectly rejected, while Type II errors occur when failing to reject the null hypothesis although the null hypothesis is false (Salkind & Frey, 2020; Verma & Verma, 2020). Bonferroni adjustment is a common method used to limit Type I errors (Pallant, 2020). In addition to using the Bonferroni adjustment method, Pallant (2020) proposed post-hoc comparisons as an additional Type I error reduction strategy. Researchers proposed that the probability of a Type II error decreases when the sample size is increased (Salkind & Frey, 2020; Verma & Verma, 2020).

Using an alpha level of .05 helps minimize the combined Type I and Type II error rate (Maier & Lakens, 2022). For this study, the criterion of $\alpha = .05$ was used for statistical significance. If the *p*-value was less than .05, the null hypothesis was rejected, and the alternative hypothesis was accepted. Conversely, if the *p*-value was greater than .05, I failed to reject the null hypothesis, and the alternative hypothesis was not accepted.

Morgan et al. (2020) identified three assumptions for the independent-samples *t* tests: (a) the dependent variables in the two groups have equal variances (standard deviation squared), (b) the dependent variables are normally distributed within each group, and (c) the data are independent. Meaning that the participant scores are not systematically related to each other.

The *t* test is robust and therefore limited to Type I error inflation owing to assumption violations (Morgan et al., 2020). Nevertheless, the first assumption was automatically checked in SPSS for equality of variance using the Levene's test (Morgan et al., 2020; Pallant, 2020). The second assumption was evaluated by using SPSS to conduct a test for skewness and kurtosis (Pallant, 2020), and to conduct the Shapiro-Wilk test for normality (González-Estrada & Cosmes, 2019). Pallant stated that skewness revealed the symmetry of the distribution while kurtosis revealed the "peakedness" of the distribution (p. 57). Although the variance can be underestimated when kurtosis is used, having a large sample size of 200 or more helps to reduce this risk (Pallant, 2020). According to Morgan et al. (2020), the ideal time to address the third assumption is during the research design and data collection process. If any of the *t* test assumptions were violated, the nonparametric Mann-Whitney *U* test would have been conducted (Morgan et al., 2020; Verma & Verma, 2020).

Morgan et al. (2020) and Pallant (2020) identified assumptions of the Pearson's correlation *(r)* statistical test: (a) the variable scores are normally distributed, (b) the relationship between the two variables is linear, and (c) outliers (i.e., extreme scores) can cause a big effect on the correlation. Additional assumptions of Pearson's correlation offered by Pallant included the following: (a) the level of measurements includes interval or ratio (continuous) variables; (b) each participant has a score on the X and Y variables (related pairs); (c) each measurement or observation is not influenced by other measurements or observations, in other words, there is “independence of observations” (p. 132); and (d) homoscedasticity is present, meaning that “The variability in scores for variable X should be similar at all values of variable Y” (p. 132).

Histograms of scores were used to check for normal distribution (Pallant, 2020). Spearman’s correlation was be used to address assumption violations involving normal distribution (Morgan et al., 2020; Pallant, 2020), scatterplots were used to check the assumption of linearity (Morgan et al., 2020; Pallant, 2020), outliers, and homoscedasticity (Pallant, 2020). If outliers are found, Pallant (2020) recommended checking for errors and correcting the problem, if appropriate. Pallant also suggested that the researcher may consider reducing the effect that the outlier has on the *r* value by removing or recoding the offending value. For independence of observation violations, a more stringent alpha level was recommended (Pallant, 2020).

In this research, Spearman’s correlation was used to analyze the relationship of two variables. Simple linear regression describes the relationship between two variables (Morgan et al., 2020; Prion & Haerling, 2020) and can be used during this research for Likert scale data to address ordinal levels of measurement (Pallant, 2020) and to make predictions (Morgan et al., 2020). Simple linear regression assumptions are similar to Pearson’s *r* in that there must be a linear relationship and the variables must be normally distributed (Morgan et al., 2020). For this study, the total score for each participant was calculated for each scale; however, the measures were not normally distributed. Subsequently, the Spearman correlation analyses were conducted, which is recommended for Likert scale data (Pallant, 2020).

Threats to Validity

External Threats to Validity

Validity means that what was intended to be measured was indeed measured (Babbie, 2017; Salkind & Frey, 2020; Morgan et al., 2020). External validity means that the study can be generalized to settings, groups of people, and real-world events (Duckett, 2021; Matthay & Glymour, 2020).

One external threat to validity is sampling bias. *Add Health*'s multistage stratified random sampling process contributed to selecting a nationally representative sample. Over 20,000 middle and high school students in the United States participated in this longitudinal study between 1994 and 1995. Follow-up in-home interviews occurred in 1996 (Wave II; *n* = 14,738), 2001-02 (Wave III; *n* = 15,197), 2008-09 (Wave IV; *n* = 15,701), and 2016-18 (Wave V; *n* = 12,300; Harris, Halpern, Whitsel et al., 2019). Although the multistage stratified random sampling process allowed for a nationally representative sample, one factor affecting the selection of black youths in the *Add Health* study included parental education (Chen & Harris, 2020). During Wave I of this longitudinal study, an oversampling occurred for black adolescents who had at least one parent with a college degree (Wu, 2020). Hence, if statistical analysis adjustments were not properly made to address this oversampling, variables or estimates related to family income could be biased (Chen & Harris, 2020). Additionally, the black youths selected for participation in this study may have had greater economic opportunities than their black peers whose parents were not college educated.

Matthay and Glymour (2020) suggested that threats to external validity should be addressed when interpreting the research findings. Matthay and Glymour also proposed oversampling underrepresented groups. Although oversamples were completed during the Add Health study, the study cannot be generalized to similar students in geographical locations outside the United States.

The target population consisted of African American women between the ages of 33 and 43 who self-reported CSA. As such, this study cannot be generalized to other age, gender, or race/ethnicity categories. However, it could be generalized to the population being studied.

Internal Threats to Validity

Validity means a test or assessment measures what is intended to be measured (Pallant, 2020; Salkind & Frey, 2020). When a study has internal validity, the conditions for causal inferences have been satisfied (Crano, 2019; Duckett, 2021). Several internal threats to validity are participant attrition, response bias, and retrospective recall bias. Participant attrition (Duckett, 2021; Slocum et al., 2022), including mortality attrition, threatens the integrity of longitudinal studies and occurs when participants drop out of the study (Duckett, 2021).

Attrition was analyzed during each Add Health wave. When comparing baseline data measures involving respondents and non-respondents in the areas of health, demographic, attitudinal, and behavioral indicators, the researchers found that total and relative biases were minimal after adjusting the study estimates with final sampling weights (Harris, Halpern, Whitsel et al., 2019). Additionally, the Wave I sample population was adequately represented during the remaining Add Health waves, and according to Harris, Halpern, Whitsel et al. (2019), Wave IV attrition bias rarely exceeded 1%.

In-home interviews were conducted to gather Add Health data. Telephone interviews and web-based surveys were also conducted during Wave V. Response bias can occur when participants give specific responses believed to meet the researcher's approval. Moreover, some participants may purposefully skip survey or interview questions, thus, resulting in non-responses. Data cleaning and screening was conducted by viewing participant responses to assess consistency. Means imputation was not appropriate for use in this study because more than 5% of the data was missing from key dependent variables. Consequently, the missing research data was addressed by using pairwise deletion for the Mann-Whitney *U* test and listwise deletion was used for the Spearman test.

Retrospective recall bias was another threat to internal validity. Add Health participants used self-report to respond to survey questions. Using self-reports could result in an internal threat to validity if retrospective recall bias occurred. For instance, participants may not accurately remember previous experiences or events, and information may be omitted as a result. Wright et al. (2019) reported that although they believed the Add Health sample included underreported abuse, the abuse prevalence estimates in the Add Health study were generally consistent with other national surveys. Retrospective bias is later discussed as a limitation to the research findings.

Threats to Statistical Conclusion Validity

Statistical conclusion validity means appropriately using statistical methods to analyze relationships among study variables (Grigsby & McLawhorn, 2019; Matthay & Glymour, 2020; Yanagida et al., 2019). Hence, the conclusions based on the statistical analysis are viewed as correct conclusions (Flake & Fried, 2020). Moreover, Fabrigar et al. (2020) noted, "*Statistical conclusion validity* refers to the accuracy of a conclusion regarding a relation between or among variables of interest" (p. 317).

Statistical conclusion validity violations can result in Type I and Type II errors (Fabrigar et al., 2020; Matthay & Glymour, 2020). Statistical power is reduced when measurement errors occur or measured variables are modified (Grigsby & McLawhorn, 2019; Matthay & Glymour, 2020). When there are measurement errors, the relationship between two variables is weakened, while the relationship among three or more variables is strengthened or weakened (Matthay & Glymour, 2020).

Guetterman (2019) reported threats to statistical conclusion include, but are not limited to, an inadequate sample size, thereby resulting in low statistical power, as well as incorrectly calculating the effect size resulting in inaccurate effect size estimation. Threats to statistical conclusion validity should be noted as a limitation in the research and could be remedied by assuring the study has enough statistical power and proper planning for an acceptable sample size (Guetterman, 2019). An example of proper planning could involve conducting a post-hoc power analysis (Guetterman, 2019).

As noted earlier, *Add Health* utilized a multistage stratified random sample design with unequal probability of sample selection. As a result, the probability of selecting participants for the sample was not the same. Accordingly, reweighting the samples was required (Wu, 2020). Specifically, Wu (2020) reported, "The analysis of *Add Health* data always needs to be weighted in order to adjust for the effects of its complex survey design" (p. 33). Because of the sampling design, Chen and Harris (2020) recommended that researchers use special software, such as SAS or STATA, to analyze *Add Health* data correctly. However, SPSS is another software capable of analyzing weighted data. As a result, *Add Health* provided SPSS software and sample weights to be used in this research study.

Ethical Procedures

Access to Research Data

Archival data were used in this research study. The Walden University Research Ethics Approval Checklist was used as a planning worksheet and IRB forms A and B were completed as part of the IRB approval process for secondary analyses. In preparation for requesting access to the data, an *Add Health* application was completed and forwarded to the University of North Carolina CPC (n.d.). A conditional IRB Approval Letter from Walden University accompanied the application and included an expiration timeframe. The University of North Carolina CPC application process also included payment and the following forms as developed by the CPC: Sensitive Data Security Plan, Data Details and Justification, Supplemental Agreement, and the Security Pledge. These forms were on the following CPC website, https://data.cpc.unc.edu/projects/2/view (UNC Carolina Population Center, n.d.). Additional personnel (e.g., Dissertation Chair, etc.) who may access this data as a result of this research also completed and submitted the Security Pledge and Supplemental Agreement.

The secondary data used included an extensive data set containing personal identifiers only distributed to certified researchers who maintain limited access (UNC Carolina Population Center, n.d.). Confidentiality of all research participants was maintained, participants were identified using an alpha numeric code, and participant names were not included in the data sets.

Participant Protection and Confidentiality

Training in the protection of human participants must occur prior to data collection. Walden University accepts Human Research Protections Training certificates from the National Institutes of Health (NIH), the Collaborative Institutional Training Initiative (CITI), and from other agencies (Walden University, n.d.). My NIH certification number is 2259592. *Add Health* Wave I research participants were studied into young adulthood during Waves III, IV and Wave V and as adults, consented to continued participation in this longitudinal study (Harris, Halpern, Biemer et al., 2019). As previously stated, although secondary data was used for this research, participant names were not included in the data sets. Additionally, all participants were identified via a numeric code which also remained confidential.

Data Collection and Retention Schedule

Documents and data were stored on an encrypted, password-protected, UNC CPC server to maintain *Add Health* data privacy. Data sets, documents, and statistical analyses were only shared with the dissertation committee Chair. Research documents received from the UNC CPC were stored in a locked home office file cabinet. Electronic documents received from UNC were stored on a password protected computer. Complete and accurate research activity records will be maintained for five years and made readily available upon request from the IRB or the CPC. After five years, paper documents will be destroyed using an electric paper shredder and dumped, and electronic records will be deleted and dumped. Per the UNC CPC contract, all sensitive data will be deleted from the UNC CPC server twice per year.

Summary

The procedures for the present cross-comparative correlation study exploring whether religion and social support are related and vary as a function of presence versus absence of reported CSA among African American women between the ages 33 and 43 was provided in Chapter 3. Data was obtained from Waves III, IV and V of *Add Health*, a nationally representative longitudinal study (Chen & Harris, 2020). CSA was the independent variable, and the dependent variables were religion and social support.

Add Health utilized a multistage stratified random sample design (Azimi & Daigle, 2021; Harris, Halpern, Whitsel et al., 2019; Prowell & Williams, 2021; Wu, 2020) with unequal probability of sample selection (Chen & Harris, 2020). Accordingly, reweighting the samples was required (Wu, 2020). The reweighted data set was retrieved from *Add Health* and SPSS was employed to analyze the data.

The Mann-Whitney *U* test and chi-square tests that were conducted to study religiosity and social support scores among the self-report CSA group and the non-CSA group, and the Spearman’s correlational test and point-biserial correlational tests used to study the relationship between religion and social support for the two groups (i.e., self-report CSA and non-CSA) were covered. Based on a priori power analysis using G*Power 3.1.9.4. to calculate minimum sample size showed 176 participants data would be required. Data screening, data cleaning, and threats to validity were also discussed in this chapter. The research results are presented and discussed in Chapter 4.

Chapter 4: Results

Introduction

CSA is a worldwide public health issue (Hailes et al., 2019; Lev-Wiesel et al., 2018; Ménard & MacIntosh, 2021; Parra-Barrera et al., 2021) and although CSA has been researched internationally, research on adult African American women who self-report CSA remains limited. The present study was completed to explore whether religion and social support are related and varied as a function of reported CSA among African American women between ages 33 and 43. Positive social change may be promoted through the obtained findings by informing development of culturally competent policies and clinical practices that support preventive and clinical interventions associated with adaptive functioning for this population.

The research questions and hypotheses addressed were as follows:

RQ1: Is there a significant difference in the religiosity scores among the self-report CSA group and non-CSA group?

$H_0 1$: There is no significant difference in the religiosity scores among the self-report CSA group and non-CSA group.

$H_a 1$: There is a significant difference in the religiosity scores among the self-report CSA group and non-CSA group.

RQ2: Is there a significant difference in the social support scores among the self-report CSA group and non-CSA group?

$H_0 2$: There is no significant difference in the social support scores among the self-report CSA group and non-CSA group.

H_a2: There is a significant difference in the social support scores among the self-report CSA group and non-CSA group.

RQ3: Is there a positive correlation between religion and social support for the self-report CSA group and non-CSA group?

H_03: There is no correlation between religion and social support for the self-report CSA group and non-CSA group.

H_a3: There is a positive correlation between religion and social support for the self-report CSA group and non-CSA group.

This chapter contains the data collection process, descriptive statistics, statistical assumptions, and research results. Statistical analysis findings are organized by research questions, and tables and figures are included to further illustrate the research results.

Data Collection

Archival data from Add Health (Harris, Halpern, Whitsel et al., 2019) were used in this research study. The Add Health study originated in 1994 with a nationally representative sample of 20,745 U.S. adolescents between ages 12 and 19 (Harris, Halpern, Whitsel et al., 2019) in Grades 7–12 (Brown et al., 2021; Harris, Halpern, Biemer et al., 2019; Harris, Halpern, Whitsel et al., 2019) and were followed into adulthood.

During Wave I of this longitudinal study, Add Health utilized a multistage stratified random sample design (Azimi & Daigle, 2021; Harris, Halpern, Biemer et al., 2019; Harris, Halpern, Whitsel et al., 2019; Prowell & Williams, 2021; Wu, 2020) with unequal probability of sample selection (Chen & Harris, 2020). Schools were stratified by region, school type (i.e., public, private, parochial), urbanicity, size, and ethnic mix (Chen & Harris, 2020). Additionally, Add Health included an oversample of specific populations for the in-home surveys, including physically disabled adolescents (Wave I only), as well as Black adolescents with college-educated parents, Chinese, Cuban, and Puerto Rican adolescents (Chen & Harris, 2020; Wu, 2020).

Participants in the present study included adult African American women between ages 33 and 43. Data were collected from Waves III, IV, and V to identify participants who self-reported CSA. The outcome measures, religiosity and social support scores, were gathered from Wave V data.

Timeframe, Response Rates, and Discrepancies

The overall timeframe for approval from Walden University's IRB was approximately 75 days. This approval process included an application process with the University of North Carolina, Carolina Population Center (CPC) in order to access restricted Add Health data.

Archival data from Waves III, IV, and V of Add Health were used. The overall Add Health response rate during Waves III, IV and V were 77.4% (i.e., 15,197), 80.3% (i.e., 15,701), and 71.8% (i.e., 12,300; Dennis et al., 2022), respectively. There were no discrepancies in the data procedures.

Descriptive and Demographic Characteristics of the Samples

Figure 1 provides the percentage of participants in the CSA and non-CSA groups. There were 350 participants who reported CSA and 1,048 participants who did not report CSA. The number of participants based on region, education level, and religion are presented in Table 2. Most participants were from the Northeast (57.7%), followed by the Midwest (18.2 %), the West (12.7%), and the South (8.2%). Additionally, 2.9% of the participants' regions were not identified.

Figure 1

Research Study Participants

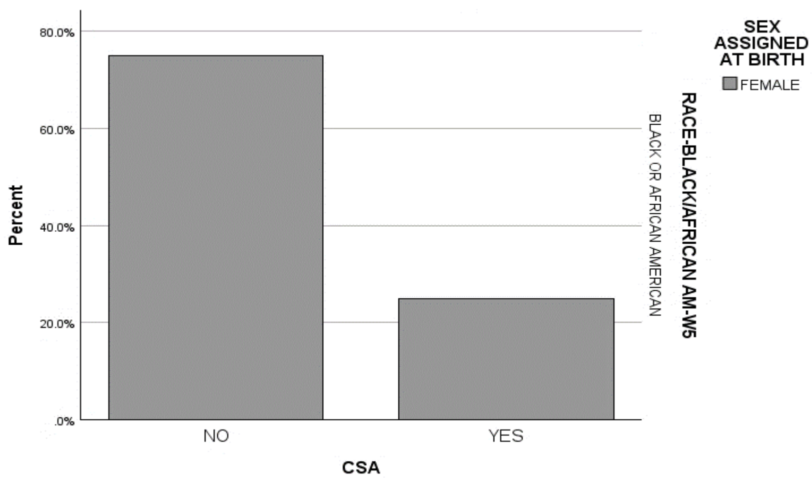


Table 2

Cross-Sectional Weighted Demographics

Demographics	Non-CSA	CSA	Total	%
Region				
Northeast	628	178	806	57.7%
Midwest	180	74	254	18.2%
West	127	50	177	12.7%
South	85	36	121	8.7%
Missing data			40	2.9%
Education				
Some HS or less	37	24	61	4.4%
HS diploma or GED	125	44	169	12.1%
Some college, vocational, or technical education	322	118	440	31.5%
College, vocational, or technical degree	342	100	442	31.7%
Master's degree or higher	220	63	283	20.3%
Religion				
Other	138	44	182	13.1%
None/atheist/agnostic	77	27	103	7.5%
Catholic	35	9	44	3.2%
Other Christian	369	142	511	36.8%
Buddhist	2	1	3	0.2%
Muslim	2	2	4	0.3%
Protestant (such as Assembly of God, Baptist, Lutheran, Methodist, Presbyterian, etc.)	415	124	539	38.9%
Political leaning				
Very conservative	56	17	73	5.6%
Conservative	196	53	249	19.0%
Middle-of-the-road	431	153	584	44.5%
Liberal	229	91	320	24.4%
Very liberal	66	21	87	6.6%

Representativeness of the Sample

Although considered an understudied cultural issue (Blakemore et al., 2017; Tishelman & Fontes, 2017), there is a growing body of research focusing on religious and spiritual coping related to CSA survivors (Blakemore et al., 2017; George & Bance, 2020; Morton et al., 2019; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018;

Sigurvinsdottir et al., 2021; Thomas et al., 2022). Despite this, the research pertaining to African American CSA survivors remains limited (Gilliard, 2022; Newsom & Myers-Bowman, 2017). The Pew Research Center (2019) reported a rapid decline in Christianity in the United States. This decline decreased from 77% in 2009 to 65% in 2019. As one might anticipate, U.S. church attendance also declined from 54% to 45%. However, 58% of Black American church attendance remained consistent, despite attendance being down by 8% over the past decade (Pew Research Center, 2019). In this study, most of the participants identified their religious affiliation as Protestant or other Christian. Overall, there were no significant discrepancies between the national statistics and this sample.

Results

Descriptive Statistics

Statistical descriptives for the group comparison of religiosity reflected the following when CSA and non-CSA groups were combined: $M = 3.46$, $SD = .952$, $n = 1{,}394$. The minimum and maximum religiosity scores ranged from 1 to 5, with 5 representing higher religiosity.

Statistical descriptives for the group comparison of social support reflected the following when CSA and non-CSA groups were combined: $M = 2.75$, $SD = .488$. $n = 1{,}398$. The minimum and maximum social support scores ranged from 1 to 4.65, with 4.65 representing higher social support.

For the simple correlation design pertaining to religiosity, the combined CSA and non-CSA groups yielded the following descriptive statistics: $M = 3.46$, $SD = .947$, $n =$

1,172. The minimum and maximum religiosity scores ranged from 1 to 5, with 5 representing higher religiosity.

For the simple correlation design pertaining to social support, the combined CSA and non-CSA groups yielded the following descriptive statistics: $M = 2.75$, $SD = .488$, $n = 1{,}172$. The minimum and maximum social support scores ranged from 1 to 4.48 with 4.48 representing higher social support.

Assumptions

Independent Samples t Test

Preliminary analyses were conducted to assess the assumptions of homogeneity of variances, normality, and outliers (Morgan et al., 2020; Pallant, 2020). The assumption of the equality of variances, assessed by Levene's test of equality of variances, was not violated, as evidenced by $p = .28$ for the religiosity scores, and $p = .40$ for the social support scores. Normality of the distributions were evaluated (histograms for religiosity and social support scores are shown in Figures 2 and 3, respectively), by testing for skewness and kurtosis (Pallant, 2020), and by conducting the Shapiro-Wilk's test of normality. Table 3 provides the findings of the tests for skewness and kurtosis of these measures. The assumption of normality was violated, as evidenced by the skewness and kurtosis values for religiosity (Table 3). Significant violation of this assumption was also evidenced by the Shapiro-Wilk's test involving of religiosity scores ($p < .001$) and social support scores ($p < .001$). This information is also found in Table 4 showing boxplots that were used to test outliers (Pallant, 2020). Figures 4 and 5 reflect multiple outliers for both CSA and non-CSA religiosity and social support scores. Because three out of four assumptions were violated, a Mann-Whitney *U* statistical test was conducted to test Hypotheses 1 and 2.

Figure 2

Distribution of Religiosity Scores

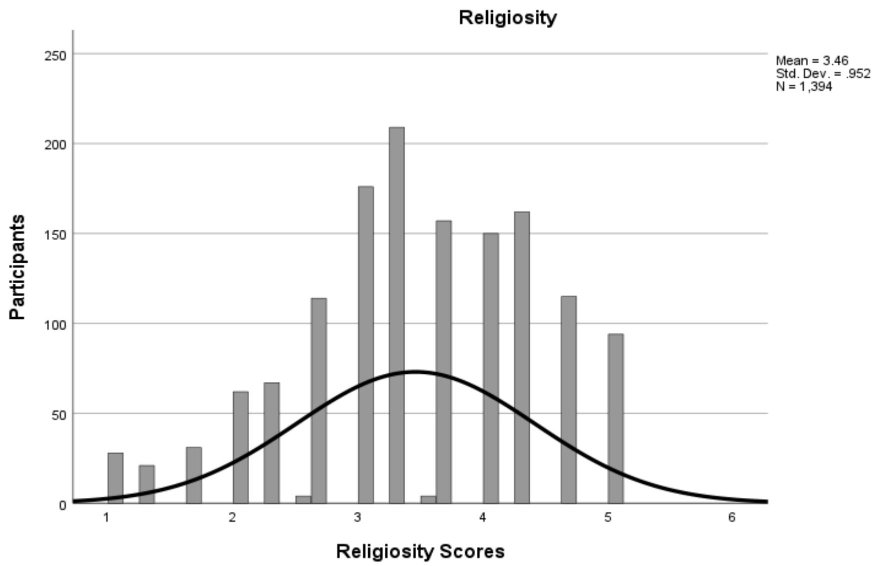


Figure 3

Distribution of Social Support Scores

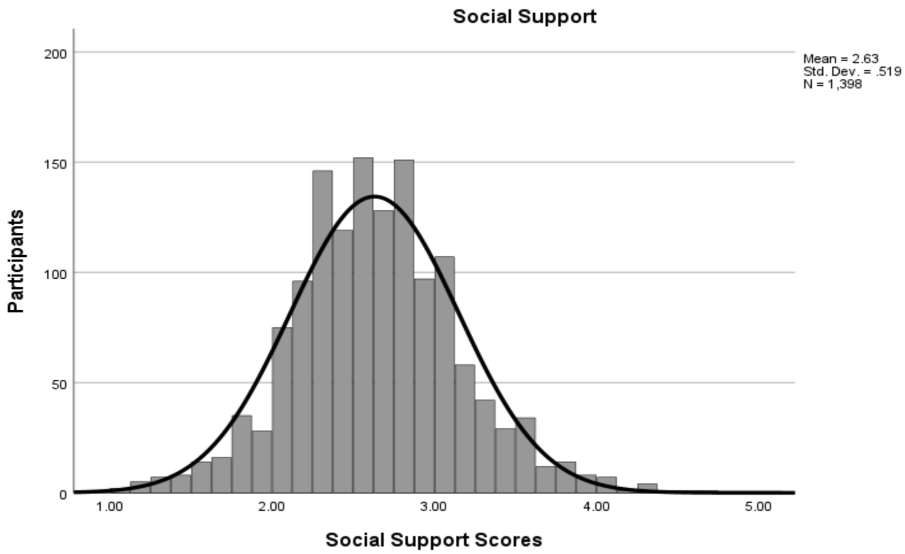


Table 3

Skewness and Kurtosis

Variable	CSA	n	Mean	SD	Variance	Skewness		Kurtosis	
						Statistic	SE	Statistic	SE
Religiosity	No	1,044	3.49	.958	.917	–.442	.076	–.283	.151
	Yes	350	3.38	.931	.866	–.325	.130	–.207	.260
Social support	No	1,048	2.64	.512	.262	.174	.076	.605	.151
	Yes	350	2.59	.539	.290	.400	.130	.767	.260

Table 4

Test of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
Variable	Statistic	df	Sig.	Statistic	df	Sig.
Religiosity	.088	1,394	<.001	.965	1,394	<.001
Social Support	.046	1,398	<.001	.992	1,398	<.001

Figure 4

Boxplots for Religiosity Scores

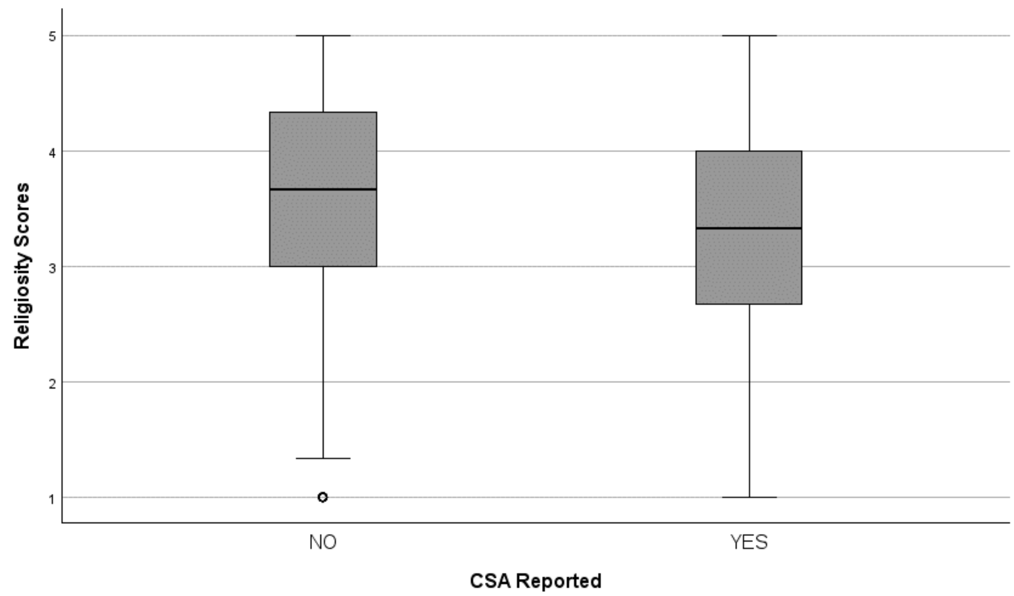
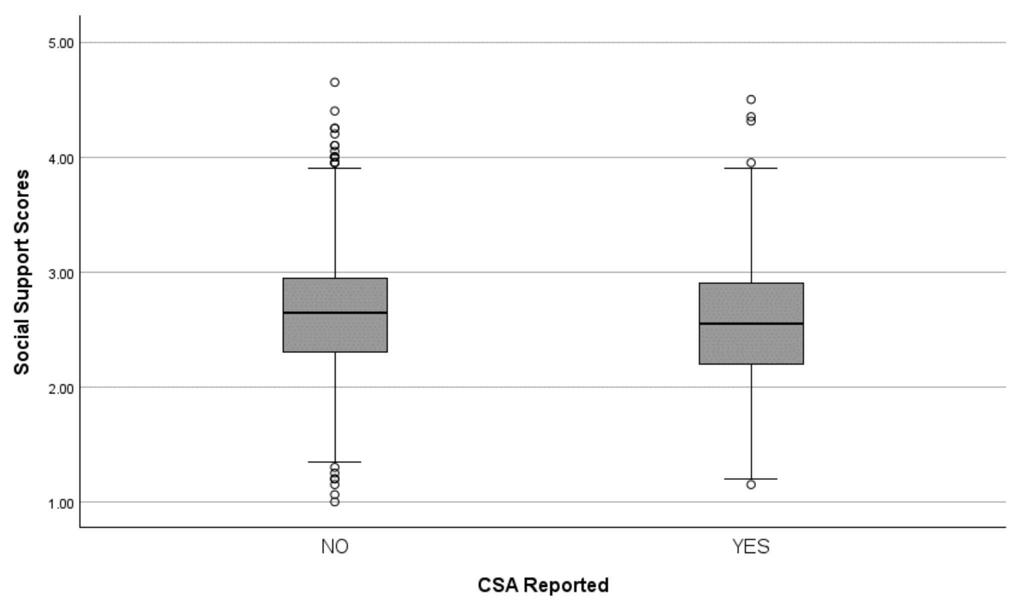


Figure 5

Boxplots for Social Support Scores



Pearson Correlation

Preliminary analyses were conducted to assess the assumptions of linearity, homoscedasticity, normality, and outliers (Morgan et al., 2020; Pallant, 2020). A scatterplot of religiosity and social support scores is presented in Figure 6. Normality was tested using skewness and kurtosis values, presented in Table 5, and Kolmogorov-Smirnov and Shapiro-Wilk's tests of normality are presented in Table 6. Boxplots were used to check for outliers. The scatterplot revealed a violation in the assumption of linearity as evidenced by the curvilinear lines. The assumption of normality was violated, as evidenced by the religiosity kurtosis (non-CSA = –.325, CSA = –.154). However, normality was not violated for social support (non-CSA .485, CSA = .128). Significant violation of this assumption of normality was also illustrated by the Shapiro-Wilk's test (religiosity: p <.001). The assumption of outliers was violated as evidenced by the boxplots in Figures 7 and 8. Consequently, none of the assumptions for Pearson's correlation were met. Thus, a Spearman's *rho* statistical test was conducted.

Figure 6

Pearson r - Scatterplot of Religiosity and Social Support Scores

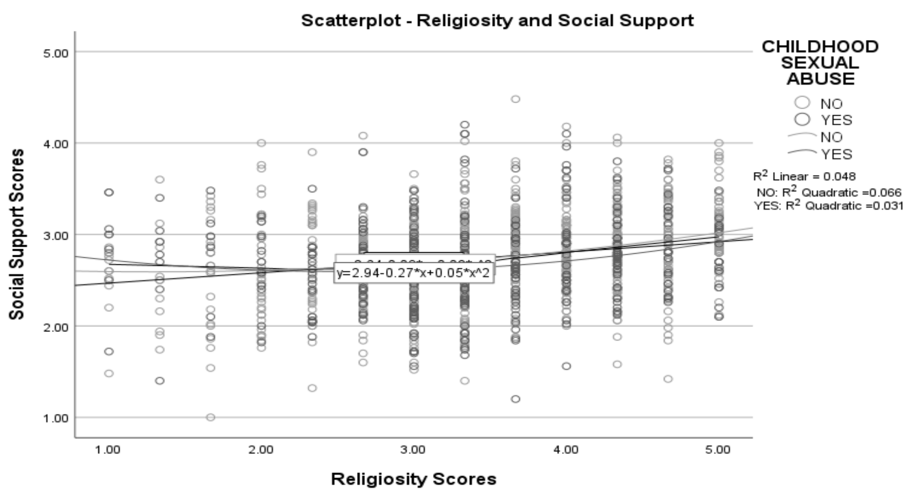


Table 5

Skewness and Kurtosis

Variable	CSA	*n*	M	SD	Skewness		Kurtosis	
					Statistic	SE	Statistic	SE
Religiosity	No	837	3.49	.953	–4.39	.083	–.325	.165
	Yes	300	3.37	.925	–.360	.141	–.154	.281
Social support	No	837	2.77	.476	–.033	.083	.306	.165
	Yes	300	2.68	.514	.263	.141	.290	.281

Table 6

Test of Normality

Variable	CSA	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Religiosity	No	.094	872	<.001	.963	872	<.001
	Yes	.093	300	<.001	.969	300	<.001
Social support	No	.025	872	.200*	.998	872	.485
	Yes	.040	300	.200*	.992	300	.128

Figure 7

Boxplots for Religiosity Scores

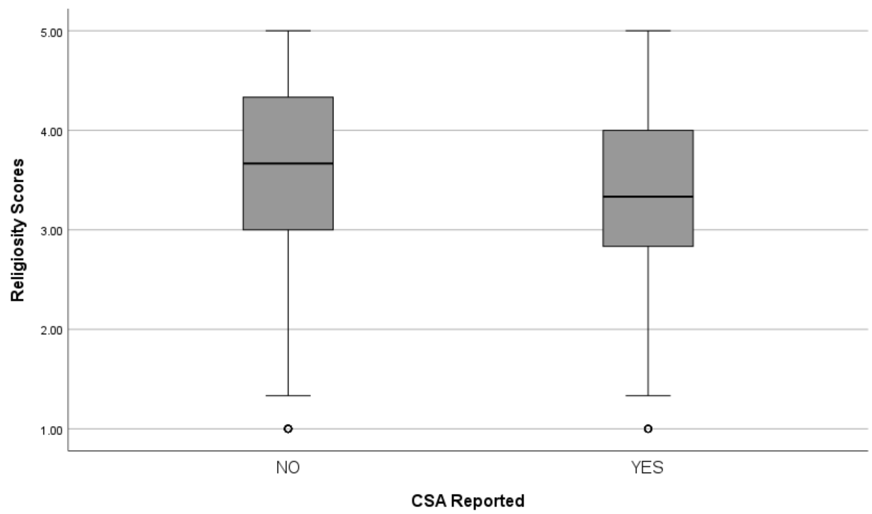
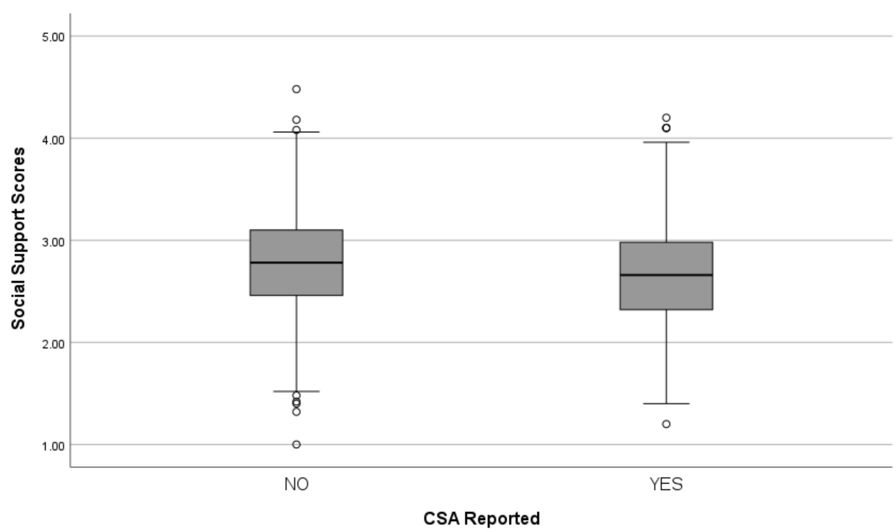


Figure 8

Boxplots for Social Support Scores



Inferential Analysis Findings

Research Questions 1 and 2

Preliminary analyses revealed that three out of four assumptions for an Independent Samples *t* test were violated. Consequently, a Mann-Whitney *U* statistical test was conducted. A total of 1398 cross-sectional weighted data samples were used for this cross-comparative design. Initially, 1437 samples were available. However, 39 samples had more than 5% of missing data from the dependent variables and were therefore deleted using pairwise deletion, as suggested by Pallant (2020). As calculated by the G*Power 3.1.9.4 software, the sample size was well above the minimum size needed.

Morgan et al. (2020) recommended using the formula below to calculate the effect size: $r = Z/\sqrt{N}$

RQ1: Is there a significant difference in the religiosity scores among the self-report CSA group and non-CSA group?

$H_0$1: There is no significant difference in the religiosity scores among the self-report CSA group and non-CSA group.

H_a1: There is a significant difference in the religiosity scores among the self-report CSA group and non-CSA group.

The Mann-Whitney *U* test revealed significantly lower religiosity scores for the CSA group (M = 3.38, SD = .931, n = 350) than the non-CSA group (M = 3.49, SD = .958, n = 1044), z = -2.066, p = .039. Hence, the null hypothesis is rejected, and the alternative hypothesis is accepted. The effect size of .06 reflects that the strength of the relationship between the religiosity scores among the CSA and non-CSA groups is positive and weak. Results are presented in Table 7.

Table 7

Mann-Whitney U – Religiosity CSA and non-CSA Groups

Test	Religiosity	CSA	*n*	*M*	*SD*
Mann-Whitney *U*	169312.00				
Z	-2.066				
Asymp. Sig. (2-tailed)	.039*				
		No	1044	3.49	.96
		Yes	350	3.38	.93

Note. *p < .05

RQ2: Is there a significant difference in the social support scores among the self-report CSA group and non-CSA group?

$H_0$2: There is no significant difference in the social support scores among the self-report CSA group and non-CSA group.

H_a2: There is a significant difference in the social support scores among the self-report CSA group and non-CSA group.

The Mann-Whitney *U* test also revealed significantly lower social support scores for the CSA group (M = 2.59, SD = .538, n = 350) and non-CSA group (M = 2.64, SD = .512, n = 1048), z = -2.084, p = .037. Hence, the null hypothesis is rejected, and the alternative hypothesis is accepted. The effect size of .06 reflects that the strength of the relationship between the social support scores among the non-CSA and CSA groups is relatively weak. Results are presented in Table 8.

Table 8

Mann-Whitney U – Social Support CSA and non-CSA Groups

Test	Social Support	CSA	*n*	*M*	*SD*
Mann-Whitney *U*	169,776.500				
Z	–2.084				
Asymp. Sig. (2-tailed)	.037*				
		No	1048	2.64	.512
		Yes	350	2.59	.538

Note. *p < .05

Dichotomous Item Comparisons

To determine if there is an association between CSA and social support for the dichotomous items of the Wave V Add Health survey, chi-square tests of association were conducted.

Opening Up to Others (Social Support Scale)

There was a significant association between CSA and participants being able to open up to other family members ($x2$= 11.203, df = 2, p = .004, V = .090). The CSA group showed more willingness, at 80.9%, to open up to other family members than the non-CSA group at 78.9%.

There was no significant association between CSA and participants being able to open up to a spouse/partner (x2= .409, df = 2, p = .815, V = .017), children (x2= 3.135, df = 2, p = .209, V = .047), and friends (x2= 2.392, df = 2, p = .302, V = .041).

Relying on Others (Social Support Scale)

There was a significant association between CSA and the participant being able to rely on other family members ($x2$= 23.193, df = 2, p = .001, V = .129). The CSA group showed slightly more willingness to rely on other family members at 25.4%, than the non-CSA group at 24.7%.

There was no significant association between CSA and the participant being able to rely on a spouse/partner ($x2= .244$, df = 2, $p = .885$, $V = .013$), children ($x2= .356$, df = 2, $p = .837$, $V = .016$), and friends ($x2= 4.742$, df = 2, $p = .093$, $V = .058$).

Experienced Demands and Criticism (Social Support Scale)

There was a significant association between CSA and experiencing too many demands or criticism by a spouse/partner ($x2= 7.468$, df = 2, $p = .024$, $V = .074$), children ($x2= 17.655$, df = 2, $p = .001$, $V = .113$), other family members, ($x2= 24.711$, df = 2, $p = .001$, $V = .133$), and friends ($x2= 8.671$, df = 2, $p = .013$, $V = .079$).

The CSA group reported experiencing more demands or criticism from a spouse/partner at 37.4% versus the non-CSA group at 25.6%, and from friends at 17.6% versus the non-CSA group at 12.8%. The non-CSA group reported experiencing more demands or criticism from their children at 83.8% versus the CSA group at 73.4%, and from other family members at 67.8% versus the CSA group at 52.7%.

Research Question 3

Preliminary analyses revealed the assumptions for Pearson’s product-moment correlation were not met. Consequently, Spearman’s rank-order correlations (i.e., Spearman’s *rho*) were run to examine the relationship between religiosity and social support.

For this simple correlation design, 1,172 cross-sectional weighted data samples were used. Forty-six self-reported CSA samples and 183 non-CSA samples were deleted due to missing religion and social support data. An additional 25 CSA samples and 11 non-CSA samples were removed due to missing cross-sectional weighted regions. Overall, a total of 71 CSA and 194 non-CSA samples were removed from the simple correlation design. As calculated by the G*Power 3.1.9.4 software, the sample size was well above the minimum sample size needed.

The group mean and standard deviation for the religiosity data are CSA group (M = 3.37, SD = .925, n =300), and non-CSA group (M = 3.49, SD = .953, n = 872). For the social support data, the mean and standard deviation are CSA group (M = 2.68, SD = .514, n = 300), and non-CSA group (M = 2.77, SD = .476, n = 872).

$H_0$3: There is no correlation between religion and social support for the self-report CSA group and non-CSA group.

H_a3: There is a positive correlation between religion and social support for the self-report CSA group and non-CSA group.

The results of Spearman's *rho* correlations are presented in Table 9. The analysis showed there was a significant positive correlation between religion and social support for the CSA group, rs (298) = .138, [95% CI = .022 (LL); .251 (UL)], p = .017. The null hypothesis was rejected, and the alternative hypothesis was accepted. There was a positive yet weak relationship between religion and social support for the CSA group. The coefficient of determination was .019.

There was a significant positive correlation between religion and social support for the non-CSA group, rs (870) = .251, [95% CI = .185 (LL); .314 (UL)], p = .001. The null hypothesis was rejected, and the alternative hypothesis was accepted. The coefficient of determination is .063.

The correlations between religiosity and social support were compared between the CSA and non-CSA groups using Fisher's r to z transformation (religiosity-social support CSA = .139, non-CSA = .256, *z* = 1.65). Because the observed z value did not exceed the critical z value of $\pm$1.96, the correlation coefficients did not differ significantly between groups.

Table 9

Spearman's rho – Intercorrelations for Study Variables

Variable	1	2
1. Religion	—	.138*
2. Social support	.251**	—

Note. The results for the CSA sample (*n* = 300) are shown above the diagonal. The results for the non-CSA sample (*n* = 872) are shown below the diagonal. $^{*}p = .05$, $^{**}p < .01$

Dichotomous Item Correlations

To determine if there was a relationship between religion and social support dichotomous items, point-biserial correlations were run for each group. The results of the Point-Biserial correlation are presented in Tables 10–12.

Religion and Social Support

There was a significant positive correlation between religion and social support for the CSA and non-CSA groups. The non-CSA group demonstrated greater religiosity and social support at 3.49 and 2.77 mean scores, respectively; while the CSA group religiosity and social support mean scores were 3.37 and 2.68, respectively.

Opening Up to Others (Religiosity Scale)

CSA Group. There was a significant positive correlation between religion and opening up to friends with participants opening up to friends at 70%. There was no significant correlation between religion and the participant being able to open up to her spouse/partner, children, and other family members.

Non-CSA Group. There was a significant positive correlation between religion and opening up to other family members at 79.0% and opening up to friends at 68.5%. There was no significant correlation between religion and opening up to one's spouse/partner and children.

Relying on Others (Religiosity Scale)

CSA Group. There was no significant correlation between religion and relying on one's spouse/partner, children, other family members, and friends.

Non-CSA Group. There was a significant positive correlation between religion and relying on other family members at 79.1% and friends at 72.5%. There was no significant correlation between religion and relying on one's spouse/partner and children.

Experienced Demands and Criticism (Religiosity Scale)

CSA Group. There was no significant correlation between religion and too many demands or criticisms being made by one's spouse/partner, children, family members, and friends.

Non-CSA Group. There was no significant correlation between religion and too many demands or criticisms being made by one's spouse/partner, children, family, and friends.

Opening Up to Others (Social Support Scale)

CSA Group. There was a significant positive correlation between social support and opening up to other family members at 82.4% and friends at 70%. There was no significant correlation between social support and opening up to one's spouse/partner and children.

Non-CSA Group. There was a significant negative correlation between social support and opening up to one's children at 40.1%. There was a significant positive correlation between social support and opening up to other family members at 79.0% and opening up to friends at 68.5%. There was no significant correlation between social support and opening up to one's spouse/partner.

Relying on Others (Social Support Scale)

CSA Group. There was a significant positive correlation between social support and relying on other family members at 83% and friends at 72.4%. There was no significant correlation between social support and relying on a spouse/partner and children.

Non-CSA Group. There was a significant positive correlation between social support and participants relying on other family members at 79.1%, and friends at 72.5%. There was no significant correlation between social support and relying on spouses/partners and children.

Experienced Demands and Criticism (Social Support Scale)

CSA Group. There was a significant negative correlation at 18.4% between social support and the participant's friends making too many demands or criticism. There was no significant positive correlation between social support and the participant's spouse/partner, children, or other family members making too many demands or criticisms.

Non-CSA Group. There was a significant positive correlation between social support and demands or criticism being made by the participant's children at 84%. There was also a significant negative correlation between social support and demands or criticism being made by the participant's friends at 12.7%. There was no significant correlation between social support and the participant's spouse/partner and other family members making too many demands or criticisms.

Table 10

Opening Up to Others

Variable	1	2	3	4	5	6
1. Religion	—	.131*	.027	.061	.112	.126*
2. Social support	.247**	—	.081	–.056	.243**	.297**
3. Opens up to spouse or partner	–.012	.041	—			
4. Opens up to children	.022	–.074*		—		
5. Opens up to other family members	.138**	.207**			—	
6. Opens up to friends	.073*	.307**				—

Note. The results for the CSA sample (n = 300) are shown above the diagonal. The results for the non-CSA sample (n = 872) are shown below the diagonal. *p = .05, **p < .01

Table 11

Relying on Others

Variable	1	2	3	4	5	6
1. Religion	—	.131*	.018	.059	.007	.027
2. Social support	.247**	—	.086	.086	.226**	.360**
3. Relies on spouse or partner	–.032	.029	—			
4. Relies on children	.061	–.057		—		
5. Relies on other family members	.096**	.188**			—	
6. Relies on friends	.095**	.339**				—

Note. The results for the CSA sample (*n* = 300) are shown above the diagonal. The results for the non-CSA sample (*n* = 872) are shown below the diagonal.

**p* = .05, ***p* < .01

Table 12

Experienced Demands or Criticism

Variable	1	2	3	4	5	6
1. Religion	—	.131*	.011	–.001	.009	–.074
2. Social support	.247**	—	–.003	.021	–.041	–.231**
3. Demands or criticism from spouse or partner	.020	–.007	—			
4. Demands or criticism from children	–.041	.092**		—		
5. Demands or criticism from other family members	.008	–.042			—	
6. Demands or criticism from friends	–.050	–.150**				—

Note. The results for the CSA sample (*n* = 300) are shown above the diagonal. The results for the non-CSA sample (*n* = 872) are shown below the diagonal. **p* = .05, ***p* < .01

Summary

This quantitative study was conducted to explore whether religion and social support were related and varied as a function of reported CSA among African American women between the ages of 33 and 43. The null hypotheses were rejected in all three research questions and the alternative hypotheses were accepted. The research questions that guided this study were:

RQ1: Is there a significant difference in the religiosity scores among the self-report CSA group and non-CSA group?

RQ2: Is there a significant difference in the social support scores among the self-report CSA group and non-CSA group?

RQ3: Is there a positive correlation between religion and social support for the self-report CSA group and non-CSA group?

After assumptions for the independent samples *t* test were not met, Research Questions 1 and 2 were examined using Mann-Whitney *U* statistical tests. Results revealed significantly lower religiosity and social support scores for the self-report CSA group than the non-CSA group (Research Questions 1 and 2, respectively).

To answer Research Question 3, Spearman's rank-order correlation was conducted after assumptions for Pearson's product-moment correlation were violated. Results revealed significant positive correlations between religiosity and social support for the CSA and non-CSA groups; however, there was no significance between group difference in the strength of this relationship.

Dichotomous social support items were examined using chi-square tests and point-biserial correlations. The chi-square tests were conducted to examine the association between CSA and the social support dichotomous items. The findings were mixed. Specifically, the CSA group showed proportionately more willingness to open up to and rely on other family members than the non-CSA group. Furthermore, the CSA group reported experiencing proportionately more demands or criticism from a spouse/partner and friends than the non-CSA group. The non-CSA group reported experiencing proportionately more demands or criticism from their children and other family members than the CSA group.

A point-biserial correlation was conducted to determine if there is a relationship between religiosity and the social support dichotomous items. Similar to the chi-square tests, the findings were mixed. There was a significant positive correlation between religion and opening up to friends for both groups. There was a significant positive correlation between religion and the non-CSA group opening up to and relying on family members and friends. For both groups there was no significant correlation between religion and experiencing demands or criticism by a spouse/partner, children, other family members, or friends.

There was a significant positive correlation between social support and opening up to and relying on other family members and friends for both groups. The non-CSA group also showed a negative correlation between social support and opening up to their children.

There was also a significant negative correlation between social support and both groups expressing that friends were too demanding or critical of them. The non-CSA group also showed a significant positive correlation between social support and their children being too demanding and critical. A review and interpretation of the findings, limitations to the study, recommendations for further research, and implications for positive social change are in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to explore whether religion and social support were related and varied as a function of reported CSA among African American women between ages 33 and 43. CSA can lead to many adversities well into adulthood (Ben-David & Jonson-Reid, 2017; Kavanaugh et al., 2017) and although CSA has been researched internationally (Alcantara et al., 2019; Biel, 2022; da Costa et al., 2022; Klebanov & Katz, 2022; Lees & Devries, 2018; Letourneau et al., 2018; Nicol et al., 2022; Rosmarin et al., 2018; Thomas et al., 2022), research remains limited for African American women survivors of CSA (Gilliard, 2022; Newsom & Myers-Bowman, 2017).

Key Findings

Comparisons of religiosity and social support between CSA and non-CSA groups (RQ1 and RQ2, respectively) showed significantly lower religiosity and social support scores for the CSA group. The effect sizes for RQ1 and RQ2 indicated the strength of the relationship between religiosity and social support and groups is weak. For RQ2, the chi-square tests of dichotomous items revealed a significant association between CSA and opening up to and relying on other family members. Specifically, the CSA group was proportionately more likely than the non-CSA group to open up about worries and rely on other family members for help during problems when those family members were not one’s spouse/partner, children, or friend. There was also a significant association between CSA and one’s spouse/partner, children, other family members, and friends making too many demands or criticisms. The CSA group experienced proportionately more demands or criticism from their spouse/partner and friends and proportionately fewer demands or criticism from their children and other family members when compared with the non-CSA group.

For RQ3, results from Spearman's *rho* revealed a positive yet weak correlation between religion and social support for the CSA and non-CSA groups. Additionally, the correlation did not differ significantly between the groups. Similar to the chi-square tests, the point-biserial correlation findings were mixed. The point-biserial analysis showed a significant positive correlation between religion and social support for both groups. Point-biserial correlations for the religious dichotomous items showed a significant positive correlation between religion and opening up to friends for the CSA group and opening up to other family members and friends for the non-CSA group. There was also a significant positive correlation between religion and relying on other family members and friends for the non-CSA group, but not the CSA group.

For both groups, point-biserial correlations for the social support dichotomous items showed a significant positive correlation between social support and opening up to and relying on other family members and friends. The non-CSA group showed a negative correlation between social support and opening up to children. Conversely, both groups showed a significant negative correlation between social support and one's friends making too many demands or criticisms; however, the non-CSA group showed a significant positive correlation between social support and demands or criticism being made by one's children. Hence, as social support increased, the CSA and non-CSA groups experienced less demands and criticism from friends. On the other hand, results from the non-CSA group revealed that the children were more demanding or critical.

Interpretation of the Findings

Based on the findings of analysis of RQ1, individuals in the CSA group had lower religiosity scores than individuals in the non-CSA group. This finding was consistent with key research findings revealing that spiritual and religious influences could be both risk factors and protective factors (Ghorbani et al., 2021; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018) depending on the CSA survivor's view of religion or spirituality (Vazquez, 2019). For example, religion may be a risk factor when the abuse occurred in a religious or institutional setting and was perpetrated by clergy (Stevens et al., 2019). Hence, religion could be seen as a source of suffering or strength (Rosmarin et al., 2018; Vazquez, 2019). George and Bance (2020) contended that positive spiritual and religious coping is still possible after CSA trauma. Perhaps some participants in the CSA group found religion to be a source of solace and support while others may be apprehensive to pursue religion owing to their adverse childhood experiences. Research has shown that some individuals who experience CSA wonder how God could have permitted such childhood trauma (Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018). Moreover, some CSA group participants may not have attended religious services as children and, therefore, may not have engaged in religious practices as adults. Adults who regularly attend religious services as children tend to engage in religious practices during adulthood and have better health outcomes (Upenieks & Liu, 2022).

Although attending church can be viewed as a coping strategy, research findings have been mixed on whether religious participation served as an effective coping strategy for survivors of childhood adversities such as CSA (Sigurvinsdottir et al., 2021; Thomas et al., 2022). Despite African American churches being seen as a means of religious and spiritual support (Hamilton, 2020), CSA remains taboo and stigmatized in the Black community (Sharpe, 2018) and is not frequently discussed in African American churches.

Analysis of RQ2 showed the CSA group had lower social support scores than the non-CSA group. The chi-square tests of association conducted to determine if there was an association between CSA and the social support dichotomous items revealed the CSA group was slightly more willing to open up and talk about their worries with other family members and, during problems, relied on other family members for help more than the non-CSA group. Also, the CSA group experienced proportionately more demands and criticism from a spouse/partner and friends and proportionately fewer demands and criticism from their children and other family members than the non-CSA group. Both groups may have more likely opened up to and relied on other family members because there may have been deeper and closer connections with these family members. Although there were some demands or criticism from other family members, both groups may have felt more supported and less judged by these same family members, possibly resulting in feelings of safety and comfort, mutual respect, and more trusting relationships. In a qualitative study conducted by Timraz et al. (2019) involving 10 Arab women CSA survivors, closeness to other family members and parents emerged as one of two social support subcategories. In addition, all 10 participants reported good relationships with their aunts, siblings, cousins, and grandparents (Timraz et al., 2019). An examination of the generalization of this finding with African American women CSA survivors would be warranted.

Results of the analyses of RQ2 showed social support scores to be lower for the CSA group. The relatively weak effects are supported by current research demonstrating that social support for this particular population is also a coping strategy that can be a protective or a risk factor (Kocturk & Bilge, 2018; Sosnowski et al., 2019). The chi-square test results indicated that while participants felt they could open up and rely on other family members, participants also felt that their children and other family members placed too many demands on them. Also, when responding to questions for the chi-square analyses regarding *opening up to others*, *relying on others*, and *experienced demands or criticism*, the dichotomous social support scores were proportionately lower for the CSA group than for the non-CSA group.

Positive interpersonal relationships can be a protective factor (Deuter et al., 2020), and protective factors aid in one’s resilience despite adversities experienced (Friedberg & Malefakis, 2022). This research supports the assertion of Sanjeevi et al. (2019) that CSA survivors are at higher risk for negative social functioning. Such social well-being challenges could be long-lasting (Borja et al., 2019; Chang et al., 2019; Sanjeevi et al., 2018; Walker-Williams & Fouche, 2017) and include mistrust of others, self-destructive behaviors (Ménard & MacIntosh, 2021; Sanchez et al., 2019), anxiety, and feelings of stigma and isolation (Sanjeevi et al., 2018). Relationships with family, friends, coworkers, and others may be negatively impacted by such negative social functioning.

Analysis of RQ2 dichotomous items showed CSA and non-CSA participants sought social support from other family members, as opposed to seeking support from their spouse/partner, children, and friends. It is possible that participants used the coping strategy of seeking social support (Wamser-Nanney & Campbell, 2020) by opening up to and relying on other family members, despite viewing these family members as placing too many demands on them. Overall, coping strategies can be positive or negative and involve various behaviors or thoughts to manage stressors (Fletcher et al., 2021; Wamser-Nanney & Campbell, 2020), threatening situations (Wamser-Nanney & Campbell, 2020), or demands (Fletcher et al., 2021).

Analyses addressing RQ3, relationships between religion and social support for the CSA and non-CSA groups, revealed significant correlations between religion and social support for both groups. Further analyses indicate these findings are reflected in the positive correlation between religion and opening up to friends, positive correlation between social support and opening up to and relying on other family members and friends, and a negative correlation between social support and too many demands or criticism from friends. Overall, RQ3 findings suggest that for both groups, as religiosity and social support increases, opening up to friends about worries and relying on friends and other family members for help during problems is more likely to increase. Furthermore, as social support increased, the CSA and non-CSA groups viewed their friends as less demanding and critical. RQ3 results further demonstrated that religiosity and social support were used as coping strategies despite some relationships appearing to be more demanding and critical than others. Not opening up to or relying on one’s spouse/partner or children could reflect feelings of mistrust or lack in a sense of safety in the interpersonal relationship (Sanchez et al., 2019).

Results of the analyses of RQ3 support resilience research and the resiliency theory, which asserts multiple intrinsic (Friedberg & Malefakis; 2022; van Breda, 2018) and extrinsic (Friedberg & Malefakis; 2022) factors should be considered when determining risk factors and protective factors (Hunsu et al., 2021). Resilience research and resiliency theory revealed some association between strength and intrinsic and extrinsic factors (Thomas et al., 2022), such as religious or spiritual coping (Al-Qahtani et al., 2022; Thomas et al., 2022), parenting style/family influence (Giovanelli, et al., 2018; Lind et al., 2018; Thomas et al., 2022), posttraumatic growth (Walker-Williams & Fouche, 2017), communication, and positive relationships/external supports (Al-Qahtani et al., 2022; Friedberg & Malefakis, 2022; Gale, 2021; Jefferis & Theron, 2018; Thomas et al., 2022).

Meaningful interpersonal relationships can perhaps be developed when one participates and engages in religious activities that involve others. While studying Catholic women's religious practices and intimate relationships, Huygens (2024) argued that religiosity could be strengthened or hindered by intimate relationships. As noted earlier, religion can be a risk factor or protective factor (Ghorbani et al., 2021; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018) depending on the CSA survivor's view of religion or spirituality (Vazquez, 2019).

It is possible that the Spearman's *rho* test revealed a growth-fostering relationship as part of social support for each group. Growth-fostering relationships are authentic, interpersonal relationships that consist of meaningful connections (Haskins & Appling, 2017). In an environment that fosters relationship growth, everyone grows and contributes to the relationship (Haskins & Appling, 2017), thus promoting self-esteem and a sense of mutual respect and appreciation. Self-esteem is an intrinsic factor identified in resiliency theory (Friedberg & Malefakis; 2022).

Limitations of the Study

There were several limitations in this study. One limitation was that this was a retrospective study consisting of self-report; thus, recall bias may have occurred (Ringle et al., 2020). Participants may not have accurately remembered previous experiences or events, and information may have been omitted as a result. Also, utilizing secondary quantitative data limited the ability to control data collection procedures and obtain valuable information that could have been gained from in-depth interviews.

Secondary data was used, and the research participants for this study included African American women only. Although this study included a national sample, using one race/ethnicity limited the generalizability of the study findings to other populations.

Regarding race and ethnicity, *Black* and *African American* was used interchangeably. However, Black or African Americans encompass multiple cultures, and the responses to CSA, religion, and social support could have varied from culture to culture. According to Sanjeevi et al. (2018), CSA could be defined, reported, and addressed differently depending upon one's culture.

Another limitation to the study was how CSA was identified in the *Add Health* data set. CSA and sexual assault in this data set were categorized from the standpoint of the parent, other adult caregiver, or other individual as the sexual abuser. The *Add Health* Waves III through V data sets did not specifically include data on sexual abuse involving juvenile offenders. Hence, sexual assaults perpetrated by juveniles may not be reported in this study because the CSA survivor was not specifically prompted to consider this type of sexual abuse.

Gewirtz-Meydan and Finkelhor (2020) found that children and adolescents were more often sexually abused and assaulted by other juveniles. Yet, if the perpetrator was another child, CSA survivors were less likely to define this experience as abuse (Sanjeevi et al., 2018).

Gewirtz-Meydan and Finkelhor (2020) stated that sexually abused children likely resided in large cities, were Black (non-Hispanic) females, of low social economic status (SES), and were more likely to be from single parent homes, from homes with a single parent and stepparent, or reside with a legal guardian other than the biological parents. However, Black participants in the *Add Health* study whose parent(s) had a college degree were oversampled; thus, the family income could have been influenced in the *Add Health* study (Chen & Harris, 2020). It is possible that the participants in this study did not meet many characteristics noted by Gewirtz-Meydan and Finkelhor. Additionally, frequency of the abuse was not considered in this study, nor was adult sexual re-victimization. Research showed that female CSA survivors were at higher risk for adult sexual assault (Laughlin & Rusca, 2020; Walker-Williams & Fouche, 2017; Zamir et al., 2018).

Although Waves III through V included inquiry of sexual assault committed by a parent, adult caregiver, or other individual, the study data did not allow one to specifically identify the perpetrator of the abuse (e.g., father, mother, uncle, cousin, neighbor, classmate, stranger, etc.). Another area to note was that this study did not consider whether the participants experienced other types of traumatic childhood experiences such as neglect, mental, emotional, or physical abuse.

When considering the dependent variable of religion, it is worth noting that a determination could not be made as to whether the participants responded to the questions based upon their religion, spirituality, or both. There was also no indication whether the participant grew up in a religious home, thus, possibly impacting religiosity during adulthood. Although this study could not be generalized to the entire population, it can be replicated to include other races, ethnicities, genders, and sexual orientations, and the findings could be compared to the results of this study.

Recommendations

The findings from this study suggest that religion and social support can be protective factors for African American women CSA survivors as well as African American women who were not exposed to CSA. Moreover, although the non-CSA group showed higher religiosity and social support scores, the CSA group also showed significant findings for religion and social support with some dichotomous responses revealing the CSA group felt slightly more supported by some individuals than others. The findings also suggest there is value in inquiring about the role one’s spouse/partner, children, other family members, and friends play. This type of inquiry during clinical practice can aid in identifying individuals who can help promote positive coping in the CSA survivor's life. These findings add to the existing body of CSA academic research and are consistent with other research literature (Al-Qahtani et al., 2022; Fletcher et al., 2021; Ghorbani et al., 2021; Jung et al., 2022; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Schiff et al., 2021; Sigurvinsdottir et al., 2021; Tae & Chae, 2021; Upenieks, 2021; Upenieks & Orfanidis, 2022; Weber Ku et al., 2021).

Future Research

Future research on this topic may be beneficial to gain further insight into whether the age at the time of the first CSA experience, the frequency and duration of the abuse, the number of abuse types (e.g., neglect, sexual, physical, emotional, etc.), and the relationship between the perpetrator and CSA survivor further impact religiosity and social support outcomes. It may further be noteworthy to study whether CSA survivors grew up in a religious household, and whether there are racial/ethnic and gender differences (i.e., male, female, transgender male/female, etc.) as it pertains to religiosity and social support outcomes. Sosnowski et al. (2019) suggested that researchers examine the severity of the CSA and its impact on overall well-being and physical health.

Because maternal support plays an integral role in the child's resilience when that child has experienced trauma (McGillivray et al., 2018; Schiff et al., 2021), researching the adult CSA survivor's perception of childhood maternal support may provide additional insight into protective factors and resilience during adulthood. Research on how growth-fostering relationships impact relationships of adult CSA survivors is also warranted.

It may be advantageous to consider approaching each of these recommendations via a mixed-methods study design with in-depth interviews and more recently validated religiosity and social support instruments, such as the *Attitudes Related to Spirituality Scale* (ARES; Braghetta et al., 2021), and the *Multidimensional Scale of Perceived Social Support* (MSPSS; Kler et al., 2023), to gain additional insight into one's view of religion, spirituality, and social support as coping mechanisms for survivors of CSA.

Implications

Positive Social Change

This study included a nationally represented large sample size (*n* = 1398, cross-comparative analysis; *n* = 1172, simple correlation design) of African American women. The findings addressed the gap in literature on coping in African American women who self-reported CSA (Gilliard, 2022; Lassri et al., 2023; Newsom & Meyers-Bowman, 2017; Sawrikar & Katz, 2017), thereby informing the existing body of academic research.

This research may further promote and enhance social change by informing culturally competent clinical practice and supporting preventive and clinical interventions associated with adaptive functioning for this population. Consequently, the factors identified as protective factors can be explored with the client and possibly incorporated into the treatment milieu as part of a multicultural framework for these women. Furthermore, results from this study can be used to enhance and promote practitioner training, including graduate work, supervised field training, and training in community programs. This positive social change is aligned with *racial and ethno-cultural* *responsiveness* as reflected in the American Psychological Association guidelines on race and ethnicity (APA, 2019).

Theoretical Implications

The theoretical framework used to guide this research was resiliency theory. Resiliency theory and the conceptual framework of resilience have been studied across many disciplines and provide a basis for understanding why children and adolescents exposed to risk become healthy adults (Garmezy, 1991). Resiliency theory is rooted in the study of adversity and its impact upon one's life (Hunsu et al., 2021; van Breda, 2018). Nevertheless, it is a strength-based approach that allows researchers and practitioners to identify strengths for promoting positive change (Hunsu et al., 2021) and healthy coping is possible (Friedberg & Malefakis, 2022).

While examining the relationship between CSA and family violence/conflict on depressed mood and anger, as evidenced in the analysis of religiosity in the present study, Sigurvinsdottir et al. (2021) found that religion and spirituality were diminished among survivors of stressful life experiences such as sexual abuse (Sigurvinsdottir et al., 2021). Stevens et al. (2019) found that when the sexual abuse was at the hands of religious authorities and other adults, the CSA survivor was more likely to disengage with their religious communities and were less religious than those who suffered from CSA at the hands of their parents. Upenieks and Liu (2022) found that individuals who attended religious services regularly (i.e., weekly) as children, often regularly attended religious services as adults and had promising future health prospects.

Few studies have examined resilience factors in African American women CSA survivors. However, studies involving adult female CSA survivors from other ethnic cultures found that resilience was supported by protective factors including social support (Thomas et al., 2022; Timraz et al., 2019), emotional health, and culture (Thomas et al., 2022).

During this study, exploring whether religion and social support were factors contributing to positive coping for African American women sexually abused as children revealed, while there was a significant difference in religion and social support scores among CSA and non-CSA participants and these measures were correlated for both groups, the correlations did not differ significantly between groups, and some findings specific to social support and relationships were not significant. For example, the CSA group showed no significant association between social support and opening up to one's spouse/partner and children. Religiosity and social support scores were lower for the CSA group indicating a possible apprehension in seeking certain types of social support. Although the CSA group religiosity and social support scores were lower, for both groups opening up to friends was directly related to religion, and opening up to and relying on other family members and friends were directly related to social support. It is worth noting research also indicates that religiosity and social support can be both protective and risk factors (Al-Qahtani et al., 2022; Fletcher et al., 2021; Ghorbani et al., 2021; Jung et al., 2022; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018; Schiff et al., 2021; Sigurvinsdottir et al., 2021; Tae & Chae, 2021; Upenieks, 2021; Upenieks & Orfanidis, 2022; Weber Ku et al., 2021).

Practice Implications

Women experience CSA at slightly higher rates than their male counterparts and both genders cope with this trauma differently (Gray & Rarick, 2018). When addressing CSA, clinicians must be aware of risk and resilience factors across cultures, must be culturally competent, must provide culturally competent services, and must be cognizant of how CSA is defined across various cultures (Sanjeevi et al., 2018).

Positive religious and spiritual coping can buffer against psychological distress (George & Bance, 2020; Ladis et al., 2023; Tae & Chae, 2021; Upenieks, 2021; Upenieks & Orfanidis, 2022) and is often employed among individuals with higher rates of posttraumatic stress disorder (Ladis et al., 2023). Conversely, when the survivor views God or Allah as angry and judgmental, mental health may decline (Ghorbani et al., 2021). Likewise, individuals with bipolar disorder may still experience adverse effects of CSA despite perceiving a strong relationship with God (Lamis et al., 2019).

During the therapeutic process, clients may desire to explore and understand how God allowed them to experience such childhood trauma. Clinicians, whether in a secular or non-secular setting, should be prepared to explore these aspects with their clients if, or when, such existential questions arise.

Effective coping strategies that support resilience in African American women CSA survivors can be incorporated into the treatment process. Hence, an enhanced culturally responsive approach to treating this population may occur. Although attending church can be viewed as a coping strategy, research findings are mixed on whether religious participation serves as an effective coping strategy for survivors of childhood adversities such as CSA (Sigurvinsdottir et al., 2021; Thomas et al., 2022). Thus, depending upon the CSA survivor's view of religion or spirituality (Vazquez, 2019), religious and spiritual influences could be both risk and protective factors (Ghorbani et al., 2021; Pirutinsky & Rosmarin, 2020; Rosmarin et al., 2018;) and should be carefully explored when providing culturally competent practice.

Social support is a coping strategy (Laughlin & Rusca, 2020; Thomas et al., 2022; Timraz et al., 2019) and can be a protective factor (Al-Qahtani et al., 2022; Fletcher et al., 2021; Schiff et al., 2021; Weber Ku et al., 2021) or a risk factor (Schiff et al., 2021). Identifying and establishing positive social support during the therapeutic process may help promote healthier relationships. Also during the therapeutic process, clinicians should model and teach characteristics of healthy relationships to adult CSA survivors. This modeling and education may serve as a preventive measure by helping to build self-esteem, and by helping the individual identify situations and relationships that could possibly lead to adult re-victimization. Haiyasoso and Schuermann (2018) acknowledged that survivors could be taught to recognize, build, and maintain healthy relationships.

Conclusion

There is a long history of sexual violence against Black women (Barnes, 2018; Barnes, 2021; Jacobs, 2021; Preiser & Assari, 2018; West, 2018), and most known instances of CSA were perpetrated by those known to the survivors (McElvaney et al., 2021; National Children's Advocacy Center, 2018; Turla et al., 2022). Consequently, the survivors may be traumatized by the very individuals who were supposed to serve as their protectors (Klar-Chalamish & Peleg-Koriat, 2021). As one could imagine, such adverse experiences may be very confusing for a child.

Although CSA survivors may experience physical health, mental/psychiatric, or emotional difficulties throughout their lifetimes, other CSA survivors may develop effective coping mechanisms and are resilient despite experiencing this childhood adversity (Sanjeevi et al., 2018). Due to limited and underdeveloped research on African American women sexually abused as children, this study was needed to help fill the research gap and enrich the literature by exploring possible protective factors contributing to this population’s resilience.

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Appendix A: Religiosity Scale

Variable	Items and Responses
Religion	In the past 12 months, how often did you attend religious services? 1. Never. 2. A few times. 3. Once a month. 4. 2 to 3 times a month. 5. Once a week. 6. More than once a week. How important (if at all) is your religious faith to you? 1 Not important. 2 Somewhat important. 3 Very important. 4 More important than anything else. How often do you pray privately, that is, when you are alone in places other than a church, synagogue, temple, mosque, or religious?* 1 Never. 2 Less than once a month. 3 Once a month. 4 A few times a month. 5 Once a week. 6 A few times a week. 7 Once a day. 8 More than once a day *Recode 1 Never. 2 Once a month or less. 3 A few times a month. 4 Once a week or a few times a week. 5 Once a day or more than once a day. *Recode Key 1 = 1 2 = 2 3 = 2 4 = 3 5 = 4 6 = 4 7 = 5 8 = 5

Note. *Likert Scale items were retrieved from the *Add Health* Wave V Religion and Spirituality Scale. One item was re-coded for this study.

Add Health is directed by Robert A. Hummer and funded by the National Institute on Aging cooperative agreements U01 AG071448 (Hummer) and U01 AG071450 (Aiello and Hummer) at the University of North Carolina at Chapel Hill. Waves I-V data are from the Add Health Program Project, grant P01 HD31921 (Harris) from Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), with cooperative funding from 23 other federal agencies and foundations. Add Health was designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill. Information on obtaining Add Health data is available on the project website (https://addhealth.cpc.unc.edu).

Appendix B1: Social Support Scale - Dichotomous Items

Item Topic	Item Number	Dichotomous Item
Open Up	1	Can you open up to your spouse or partner if you need to talk about your worries?
	2	Can you open up to your children if you need to talk about your worries?
	3	Can you open up to other family members if you need to talk about your worries?
	4	Can you open up to your friends if you need to talk about your worries?
Rely On	5	Can you rely on your spouse or partner for help if you have a problem?
	6	Can you rely on your children for help if you have a problem?
	7	Can you rely on other family members for help if you have a problem?
	8	Can you rely on your friends for help if you have a problem?
Problems (i.e., Demands/Criticism)	9	Does your spouse or partner ever make too many demands or criticize you?
	10	Do your children ever make too many demands or criticize you?
	11	Do other family members ever make too many demands or criticize you?
	12	Do your friends ever make too many demands or criticize you?

Note. Dichotomous items were retrieved from the *Add Health* Wave V Social Support Scale.

Add Health is directed by Robert A. Hummer and funded by the National Institute on Aging cooperative agreements U01 AG071448 (Hummer) and U01 AG071450 (Aiello and Hummer) at the University of North Carolina at Chapel Hill. Waves I-V data are from the Add Health Program Project, grant P01 HD31921 (Harris) from Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), with cooperative funding from 23 other federal agencies and foundations. Add Health was designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill. Information on obtaining Add Health data is available on the project website (https://addhealth.cpc.unc.edu).

Appendix B2: Social Support Likert Scale Items

Variable	Likert Item
Social Support	During the past 7 days, I felt that I could not shake off the blues, even with help from my family.*
	During the past 7 days, I felt depressed.*
	During the past 7 days, I felt happy.
	During the past 7 days, I felt sad.*
	During the past 7 days, I felt that life was not worth living.*
	Add Health responses to above questions. 1. Never or rarely. 2. Sometimes. 3. A lot of the time. 4. Most of the time or all of the time.
	*Reverse coded responses to above questions. 1. Most of the time or all of the time. 2. A lot of the time. 3. Sometimes. 4. Never or rarely.
	*Reverse Code Key 1 = 4 2 = 3 3 = 2 4 = 1

Note. Likert items were retrieved from the *Add Health* Wave V Social Support Scale.

Four items were reverse coded for this study.

Add Health is directed by Robert A. Hummer and funded by the National Institute on Aging cooperative agreements U01 AG071448 (Hummer) and U01 AG071450 (Aiello and Hummer) at the University of North Carolina at Chapel Hill. Waves I-V data are from the Add Health Program Project, grant P01 HD31921 (Harris) from Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), with cooperative funding from 23 other federal agencies and foundations. Add Health was designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill. Information on obtaining Add Health data is available on the project website (https://addhealth.cpc.unc.edu).

Appendix B3: Social Support Likert Scale Items

Variable	Likert Item
Social Support	In the past 12 months, how often did you get together socially with friends or relatives? 1. Never. 2. Less than once a year. 3. About once or twice a year. 4. Several times a year. 5. About once a month. 6. Every week. 7. Several times a week.
	In the past 12 months, how often did you get together with any of your neighbors just to chat or for a social visit? 1. Hardly ever. 2. Several times a year. 3. Several times a month. 4. Several times a week. 5. Daily or almost everyday.
	How many close friends do you have? (Close friends include people whom you feel at ease with, can talk to about private matters, and can call on for help) 1. None. 2. 1 to 2 Friends. 3. 3 to 5 Friends. 4. 6 to 9 Friends. 5. 10 or More Friends.

Note. Likert items were retrieved from the *Add Health* Wave V Social Support Scale.

Add Health is directed by Robert A. Hummer and funded by the National Institute on Aging cooperative agreements U01 AG071448 (Hummer) and U01 AG071450 (Aiello and Hummer) at the University of North Carolina at Chapel Hill. Waves I-V data are from the Add Health Program Project, grant P01 HD31921 (Harris) from Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), with cooperative funding from 23 other federal agencies and foundations. Add Health was designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill. Information on obtaining Add Health data is available on the project website (https://addhealth.cpc.unc.edu).

Appendix B4: Social Support Likert Scale Items

Variable	Likert Item
Social Support	In the past 12 months, about how many hours did you spend on volunteer or community service work? 1. Never. 2. Less than once a year. 3. About once or twice a year. 4. Several times a year. 5. About once a month. 6. Every week.
	How often do you usually vote in local or statewide elections? 1. Never. 2. Sometimes. 3. Often. 4. Always.

Note. Likert items were retrieved from the *Add Health* Wave V Social Support Scale.

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