THE IMPLICATIONS OF ADVERSE CHILDHOOD EXPERIENCES ON ADULT HEALTH PERCEPTIONS

by

Angela C. Revis

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Department of Community Care and Counseling

School of Behavioral Sciences

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Approved by:

Tracy N. Baker, Ph.D., Committee Chair

Keena K. Cowsert, Ed.D., Committee Member

ABSTRACT

Adverse Childhood Experiences (ACEs) are traumatic incidents or circumstances children face before age 18 that often manifest as physical and mental health illnesses in adulthood, disproportionately affecting survivors from lower socioeconomic classes, specifically communities of color. This study examines the prevalence and type of illnesses stemming from ACEs in adult patients sampled from a North Carolina public health center, where patients are of lower socioeconomic classes, including those from communities of color. Semi structured interviews among 14 participants were conducted using the Zoom meetings platform to obtain responses from the participants. The results show significant mental health consequences, including early depressive symptoms, emotional withdrawal, low self-esteem, anxiety, suicidal thoughts, and anger management issues. Concerning mental health, mood alteration, anxiety, depression and suicidal thoughts were found to be relatively common among participants while physical health issues included migraines, obesity, hypertension, diabetes type 2, and congestive heart failure. Participants mentioned trust issues and the continuation of psychological problems. The study emphasizes the severity and longevity of ACEs' effect on the health of adults, thus the importance of mental health treatment and practices that are sensitive to trauma. Future research should investigate potential ways to enhance support systems for the population with ACEs with regard to lasting implications of childhood trauma.

Keywords: Adverse Childhood Experiences (ACEs), ACEs implications, health, PTSD, childhood trauma, mental health, children

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Angela C. Revis

School of Behavioral Sciences

Liberty University

1971 University Blvd

Lynchburg, VA 24515

Dedication

To the Brave Survivors,

In the pursuit of knowledge and understanding, I have delved deep into the realms of adverse childhood experiences research. Yet, amidst the data and analysis, I never lost sight of the human beings behind the numbers – the brave adults who have journeyed through the labyrinth of childhood trauma. This dissertation is dedicated to you—the resilient souls who have walked through the shadows of childhood trauma and carried the weight of past wounds while navigating the complexities of adulthood. You have faced adversity with courage, and your tenacity is an inspiration to us all. You are the unsung heroes, the silent warriors whose strength knows no bounds.

As I present this work, I do so with a profound sense of gratitude for your resilience. You have shown that despite the darkness of your past, there is light within you waiting to be ignited. Your experiences may have shaped you, but they do not diminish your value as a human being. You are not defined by the traumas you have endured and the scars you bear; instead, you are shaped by the strength with which you rise above them. May this dissertation serve as a beacon of hope on your journey toward healing and validate your experiences and empower you to embrace your journey with compassion and self-love. Remember, you are not alone—countless others walk this path alongside you, offering support and understanding. We see you. Healing is not an easy journey, but it is a worthy one. As you navigate the twists and turns of your healing process, may you always remember your worth. You are deserving of love, of joy, and of peace. Your resilience is your greatest asset, and your story is a testament to the power of the human spirit. With deepest respect and admiration,

Angela C. Revis

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As I sit to pen these acknowledgments, I am overwhelmed by God's grace and unconditional love. This has been some journey, but He has been with me every step of the way. I am struck by the peculiar blend of triumph, growth, and comical stories that have colored my doctoral journey. Lord, thank You for not giving up on me and thank You for not allowing me to give up on myself. To my amazement, this dissertation has become a testament to the unyielding support of friends and family, the occasional dance-off with writer's block, and the power of late-night snacks.

I owe an enormous thank you to my Mom, the one and only Ms. Gert! Ma, thank you for pushing me, praying for me, and supporting me through the years. From my first day of kindergarten to my last semester of earning this doctoral degree, you reminded me of what I am made of and remained my loudest cheerleader. To my devoted family and eclectic village, whose love, encouragement, and cash apps have sustained me through the highs and lows of doctoral life. Your endless reserves of patience, support, and unwavering belief in my ability to finish this research have been my saving grace. Thank you for being willing to be my Guinea pig when I needed to practice.

I owe an immense debt of gratitude to my dissertation chair, Dr. Tracy Baker, whose unwavering guidance and infinite patience have been nothing short of heroic. Your knack for guiding me through the process of turning convoluted ideas into coherent research questions deserves my deepest gratitude. To the members of my dissertation committee, thank you for lending your expertise, your sharp critiques, and your willingness to indulge my tangential musings during our meetings. Your insights have transformed this endeavor from a daunting mountain to a series of manageable molehills (albeit with a few surprise avalanches along the

way). To my colleagues, we did it! Let us go and make good trouble in this world and use our skills and experiences to better the lives of others. Congratulations and cheers to you all as you continue to thrive. May our paths cross again in the not-too-distant future – hopefully under less stressful circumstances.

Last but not least, to my best friend and sister, Nia, who is small in stature but stands mighty in compassion. Thank you for the random cards, gifts, and encouraging notes you gave me throughout this journey as I achieved challenging hurdles. It was the fuel I needed to keep going. I noticed the nights you fought to stay awake just because I was still awake tapping the computer. I am so thankful to have such a thoughtful bestie. Our discussions around documentaries stimulated my mind on my most studious days, while our binge-watching of Modern Family provided much-needed comic relief during academic despair. Your random antics remind me that there is more to life than references and APA formatting.

In closing, let us raise a metaphorical glass (or perhaps a cold soda) to the countless individuals who have supported me in unique ways on this wild and wacky journey. Your kindness, humor, generosity, and endless love have made all the difference. I will never be able to repay you, but I can promise you that I will continue to do my best and make you proud.

With gratitude and love,

Angela C. Revis

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List of Abbreviations

ACE – Adverse Childhood Experiences

ACE-Q – ACEs Questionnaire

CDC – Centers for Disease Control and Prevention

DASS – Depression Anxiety Stress Scales

DTS – Davidson Trauma Scale

PTSD – post-traumatic stress disorder

CHAPTER ONE: INTRODUCTION

Overview

An Adverse Childhood Experience (ACE) is a traumatic experience, incident, or circumstance occurring in childhood that can affect survivors' physical and mental health into adulthood (Anda et al., 2020; Felitti et al., 1998). Studies indicate these effects vary from cardiac disease to poor oral health to significant psychological impairments such as schizophrenia and bipolar disorder (Allen et al., 2019; Bellis et al., 2017; Heleniak & McLaughlin, 2020; Kabani et al., 2018). Moreover, these illnesses are more likely to disproportionately affect low-income communities, which primarily consist of people of color (Helton et al., 2022; LaBrenz et al., 2020). A significant number of studies examine ACEs; the majority emphasize the specific trauma occurring in childhood (Bellis et al., 2017), ways to mitigate childhood ACEs (Beckmann, 2017), treatment modalities for children who have suffered ACEs (Bethell et al., 2017; Jones et al., 2020), and the effects of ACEs on childhood development (Boullier & Blair, 2018; Herzog & Schmahl, 2018). However, few studies examine the long-term effects of ACEs on adult survivors, with even fewer studies examining the effect on adults from communities most affected by ACEs (LaBrenz et al., 2020; Norton, 2023).

The impact of ACEs on adult survivors' physical and mental health is often studied separately (Leitch, 2017). However, many adult survivors have physical and mental health issues (Lee et al., 2020). Regardless of which type of illness, the phenomenon should be studied holistically to gain a deeper understanding of the relationships between ACEs and poor health outcomes of all varieties and the relationships among ACEs, physical illness and disease, and mental health issues (Lau-Walker, 2006; Liu, Kia-Keating, Nylund-Gibson, et al., 2020; Lorenc et al., 2020; Masten, 2018). Researchers can attain a broader and deeper understanding of these

connections by focusing on the lived experiences of adults who suffer from ACEs (Crouch, Probst, Radcliff, et al., 2019; Schnarrs et al., 2020; Schneider et al., 2020). However, there is a salient gap in the literature exploring the lived experiences of adult survivors of ACEs, particularly those from lower socioeconomic classes who have suffered from ACEs (Mersky et al., 2021; Walsh et al., 2019). That gap exists primarily because most studies on adult survivors of ACEs employ survey data and quantitative analysis (Allen et al., 2019; Chandler et al., 2018; Ford et al., 2019; Wiss & Brewerton, 2020).

Finally, most trauma-focused treatment strategies and interventions are practitioner-centric or have been evaluated based on a diverse mix of sample populations (Finkelhor, 2018). However, ACEs disproportionately affect low-income communities of color (Strompolis et al., 2019). Therefore, treatment modalities for adult survivors should be developed through cultural lenses that include that population (Bowen & Murshid, 2016; Chavez-Dueñas et al., 2019). Moreover, the effectiveness of those modalities should be evaluated by those receiving treatment rather than outcome-based measures that fail to capture their overall success rates.

This study employed a qualitative methodology, instrumental hermeneutic phenomenology, using semi-structured interview data from adults who suffered ACEs to examine the lived experiences of adult survivors of ACEs. The primary objectives of this study examined adult survivors' perceptions of the relationship between ACEs and their physical and mental health conditions and allowed those survivors to provide vital opinions on the efficacy of existing trauma-based treatment modalities. The interview data were analyzed through thematic analysis developed by Braun and Clarke (2006, 2012, 2014). The thematic analysis results were the driving force behind developing a narrative that accurately depicted the lived experiences of those affected by ACEs and answered the formulated research questions.

This chapter details the background of ACEs, the motivation for exploring the phenomenon in the chosen population, articulates the problem statement, provides the purpose statement, and describes the study's significance. The research questions that drive this empirical study are presented. Finally, there is a list of defined terms to orient the reader to the vernacular in the existing literature streams.

Background

ACEs involve childhood traumatic experiences that can manifest as physical illnesses and mental health conditions in adult survivors (Lee et al., 2021). ACEs are based on a child's perception of what constitutes trauma and, therefore, can vary among children (Lanier et al., 2018). Additionally, ACEs can describe one event, a series of traumatic events, or a childhood characterized by trauma (Pachter et al., 2017; Perry et al., 1995). Those perceptions of trauma are shown to affect children physiologically and psychologically. Most importantly, these physiological and psychological effects can continue to grow throughout a child's development, leading to more significant physical and psychological stress in adulthood (Ports et al., 2021).

The following sections provide an understanding of the historical, social, and theoretical contexts of the effects of ACEs on adult survivors. The historical context describes the evolution of ACEs from childhood to adulthood through relevant literature. The social context section provides societal implications stemming from ACEs in adults. Finally, the theoretical section presents a conceptual understanding of the impact of ACEs on adults through the theoretical lens of this study, self-efficacy theory.

Historical Context

Understanding ACEs from Childhood to Adulthood

ACEs are negative, stressful, or traumatic incidents that occur during childhood before the age of 18 years (Boullier & Blair, 2018). The seminal CDC-Kaiser ACE study discussed three types of adversity children encounter in their homes: physical and emotional maltreatment, neglect, and family dysfunction (Bellis et al., 2017). Over two-thirds of the populace report encountering at least one ACE, and about a quarter have experienced three or more (Bellis et al., 2017). The study revealed that ACEs significantly contribute to disease, disability, demise, and overall poor quality of life.

ACE may also include neglect, physical, and emotional abuse, caregiver psychology disorder and domestic violence (Dong et al. 2004). Hunt et al. (2017) noted that the higher the ACE a child experiences the causes poor academic achievement, heart disease, diabetes, drug dependence in adulthood. This intersectional nature of ACE across the social, medical, and health spectrum must be viewed through the lens of chronic poverty, racist encounters, or other adverse factors that may exist in the child's environment (Barra et al., 2018; Lacey et al., 2022).

ACEs and Child Development

ACEs can trigger toxic stress responses in children, especially when they do not receive support from adults (Nelson et al., 2020) or are not adequately shielded from such ACE occurrences or other support. One generation's vulnerability to ACEs can set the foundation for subsequent generations' exposure to ACE (Bethell et al., 2017). Studies have also shown that children who encounter ACEs tend to have parents who are also victims of ACE (Crouch, Radcliff, Strompolis, et al., 2019; Murphy et al., 2014). Likewise, parents who have faced ACEs in childhood tend to have children diagnosed with psychological health or behavior disorders

(Bryan, 2019; Schickedanz et al., 2018). The greater the number of ACEs a child is exposed to, the greater their risk of developing chronic conditions and cardiovascular illnesses, such as cancer, respiratory disorders, and diabetes later in life (Kerker et al., 2015; Nelson et al., 2020).

Research has well documented the effects of extreme trauma on the child's development of the brain, immunity, cardiovascular systems, and other doctrinal frameworks (Heide & Solomon, 2006; Mackay-Neorr, 2019; Perry et al., 1995; Schore, 2001). ACE exposure during the critical periods of development eliminates brain and neurobiological growth by exerting an efficient and continuous stress response that sustains high systematic cortisol levels (Miller et al., 2009; Pachter et al., 2017). These chronically abnormal cortisol echelons affect the development and effectiveness of the brain areas in charge of self-regulation, management of organizations, and evaluation of risks (Russell-Smith, 2023). These abnormal cortisol echelons also initiate epigenetic changes; leading to this constant organic inflammatory response which in turn is marked by the development of ACEs-related disorders (Pachter et al., 2017). The totality of these biological effects predisposes adult survivors of ACEs to future chronic physical illnesses and mental health conditions (Campbell et al., 2016).

ACEs and Adulthood

The effects of long-term or excessive stress caused by ACEs not only affect child brain development, as described in the previous section, but also affect an adult survivor’s ability to adapt to changing environments because of poor coping skills (Bethell et al., 2017). These coping skills can be either underdeveloped or maladaptive because of the trauma endured in childhood (Crouch, Radcliff, Strompolis, et al., 2019). Therefore, the initial neurological or physiological effects on a child’s brain manifest as poor coping skills in adulthood, creating

significant implications for health, education, behaviors, and economic stability (Holman et al., 2016; Hughes et al., 2017).

Precisely, the ACEs in adults raise the risk of societal behaviour concerns like teen pregnancy, violent behaviour, imprisonment, depression, drug dependency, and suicidal gestures (Ellis & Dietz, 2017). All of these can prolong their trauma (McGruder, 2019)**,** leading to the deterioration of their physical and mental health (Green et al., 2010). ACEs are also linked to diminished self-regulation, isolation, reduced self-worth, dissociation, and other symptoms often indicative of underlying mental health conditions (Bellis et al., 2017).

Societal Context

ACEs can have deleterious effects on society, specifically violent crime, drug abuse, and economic burden. Adults who have suffered ACEs are far more likely to engage in antisocial behavior, drug use, and gang involvement (Trinidad, 2021). The effects of ACEs produce a considerable financial burden on the economy, such as declining employee efficiency, unstable income and, thus, tax revenue for the state, unemployment, underemployment, and healthcare expenditure (Bellis et al., 2017).

Theoretical Context

While there are multiple theoretical frameworks to view the effects of ACEs on adult survivors, this study employs a social-cognitive theoretical lens. The progression of the effects of ACEs from childhood to adulthood is correlated with maturation. Children exposed to trauma often fail to develop healthy self-efficacy, behavioral capabilities, expectations, expectancies, self-control, observational learning, and reinforcements (Crandall et al., 2019). Children's social cognitive development deficiencies often result in unhealthy or maladapted adult behaviors, such

as poor coping skills, impulse control, violent behaviors, and low cognitive abilities (Crandall et al., 2020).

Situation to Self

This study is significant because I have worked formally and informally with many adults who have suffered childhood trauma. As a black woman, I see the effects of childhood trauma on the behavior of adults within my community. Moreover, I witnessed the failures of the healthcare system to address the needs of people of color who have suffered childhood trauma so that we can stop this cycle of crime and poverty. I believe that the only way we can exact change in communities of color that are suffering the generational effects of abuse is through effective treatment that is culturally appropriate. To accomplish this, those who suffer the most from ACEs and the illnesses they cause must tell their stories. I approached this research from a constructivist or interpretative paradigm and chose a hermeneutic phenomenological research methodology.

While each story is unique in some respects, there are commonalities among people from low-income communities, primarily populated by people of color. We suffer the same societal expectations, government failures, and the generational effects of racism (Flournoy, 2021). Therefore, a narrative that accurately reflects those shared experiences, combined with individual experiences, will accurately depict the phenomenon.

Most of my life and career have positioned me as a mentor for others in my community. While that gives me much experience and knowledge about abuse in communities of color, it can also result in bias. Therefore, I use an expert panel and my advisor to ensure that my life does not result in my story bleeding into the stories of this study's participants.

Problem Statement

Existing literature on the impact of ACEs on adult mental and physical health must be further developed because existing studies fail to adequately address the disproportionate effects of ACEs on adults from low socioeconomic backgrounds, predominantly people of color. Additionally, studies that do include participants from lower socioeconomic backgrounds predominantly employ a quantitative research approach, which fails to provide a detailed and accurate narrative of the lived experiences of the population (Althubaiti, 2016). Therefore, this study employs a hermeneutic phenomenological approach to adequately address this gap in the literature stream and expand our understanding of the effects of ACEs on adults from low socioeconomic classes. Moreover, the population sampled are all from low socioeconomic backgrounds, which provided vital data on the population most affected by ACEs in adulthood (Ports et al., 2021).

Purpose Statement

This hermeneutic phenomenological study explored adult survivors of ACEs' perceptions of the relationship between their childhood trauma and current physical and mental health conditions. The sample population consisted of adult survivors of ACEs from low-income communities, consisting predominantly of people of color. Additionally, the study aimed to understand adult survivors of ACEs' perception of the effectiveness of existing trauma-based treatment strategies and interventions.

Significance of the Study

This study has scholarly and practical implications. There is a salient gap in the literature stream that explores the effects of ACEs on adult survivors' physical and mental health. Moreover, fewer studies examine those effects in low-income communities and people of color

(Cavanaugh & Nelson, 2022; Chang et al., 2019; Helton et al., 2022; Pachter et al. 2017). This qualitative study is a hermeneutic phenomenology that added to the diversity, and depth to existing research that examines similar phenomena but contributes richer data because its objective was to allow an underrepresented group to articulate their lived experiences in their own words.

Because of the lack of empirical research on adult victims of ACEs from lower socioeconomic classes (Helton et al., 2022; Jones et al., 2018), this research provided novel insight into the lived experiences of these adults. That insight is valuable to practitioners as it can inform trauma-based treatment modalities to make them more effective (Bowen & Murshid, 2016; Han et al., 2021). Additionally, practitioners can continue improving treatment modalities by gaining a much deeper insight into the phenomenon and the people most affected by it.

Research Questions

This study investigated the impact of ACEs on the physical and mental well-being of individuals from lower socioeconomic backgrounds who reported ACEs. After an intensive review of the literature, salient gaps in the literature emerged. Communities of lower socioeconomic classes were underrepresented in most studies yet disproportionately affected by ACEs, specifically communities of color (Cavanaugh & Nelson, 2022). The following research questions were developed to achieve the study's objective:

Research Question 1: How do adults with reported ACEs perceive the impact of ACEs on their physical and mental health?

Socioeconomic class significantly predicts the types and prevalence of psychological, psychosocial, and health illnesses in adults affected by ACEs (Misiak et al., 2022). In addition, the results of existing empirical research suggest that those adults from lower socioeconomic

status, which positively correlates with race, who have endured ACEs are disproportionately affected by psychological and health illnesses (Andersen, 2021). However, the literature fails to provide a detailed account of those effects from the victims' perspectives. Finally, existing literature fails to adequately acknowledge the role that the concomitant effects of socioeconomic class and race have on the prevalence and severity of illness.

Research Question 2: How do adults with ACEs from lower socioeconomic backgrounds perceive the effectiveness of existing trauma-based intervention strategies?

Existing literature predominantly employs survey data with *a priori* measures of success in adult populations of ACE victims. However, there is a gap in the empirical research literature with rich qualitative data that provides a more detailed account of the efficacy of existing treatment modalities from the perspective of adults who have endured ACEs. This research sought to provide that data to inform scholarly research and clinical practice.

Research Question 2A: Which trauma-based intervention strategies do adults with ACEs from lower socioeconomic backgrounds perceive to be most effective?

This sub-question complements research question two by allowing adults who have endured ACEs to specify which strategies most effectively mitigate psychological and physical illness symptoms stemming from ACEs. This data-informed research question two contributed to future research and clinical practice by identifying victim-centric treatment interventions most effective in trauma-based treatment in adult populations who have suffered ACEs. Existing treatment modalities are often clinician-centric, and successful outcomes are deemed best practices. However, very little feedback is solicited from those who undergo treatment (Han et al., 2021).

Definitions

The following terms were significant to this study and are defined below:

1. *Adverse Childhood Experiences (ACEs)* - Adverse Childhood Experiences are negative, stressful, or traumatic incidents that occur during childhood before the age of 18 years (Boullier & Blair, 2018).
2. *Chronic Illness* - Long-term illnesses in which eliminating the illness is unlikely; therefore, illness maintenance is the primary objective of clinicians and providers. Examples include AIDS, diabetes, high blood pressure, asthma, arthritis, cardiovascular disease, depression, anxiety, and eating disorders (Hudson & Moss-Morris, 2019; Kerker et al., 2015).
3. *Cognitive Behavioral Therapeutic Treatment* - A method of psychological treatment based on principles that psychological problems are based partly on faulty ways of thinking and patterns of learned behavior to change a person's behavioral and thought patterns (American Psychological Association, 2017; Schneider et al., 2020).
4. *Coping Mechanisms* - The cognitive and behavioral efforts to master, tolerate, or reduce the effects of external and internal conflicts and demands (Amnie, 2018).
5. *Post-traumatic Stress Disorder (PTSD)* - Post-traumatic stress disorder (PTSD) is an event-related disorder occasioned by exposure to a significant traumatic event and followed by the development of characteristic symptoms in the aftermath of the event (Breslau, 2009; Schneider et al., 2020).
6. *Self-efficacy* - a person's belief in one's capability to complete a particular task or objective (Heslin & Klehe, 2006; Wanca, 2022).

7. *Self-perception* - is an individual's ability to respond to their behavior and control variables and circumstances (Bem, 1967; Tasheuras, 2019).
8. *Toxic stress* - A stress response resulting from prolonged activation of the stress response system without protecting supportive relationships (Dube & Rishi, 2017; Shonkoff et al., 2012).
9. *Trauma-informed Care* - A medical or mental health treatment in which every part of care has been assessed and modified to account for how trauma impacts those seeking care (Piotrowski, 2020; Raja et al., 2015).

Summary

This chapter presented vital background information on the effects of ACEs on adult survivors' physical and mental health. The motivation for exploring the phenomenon and specific population is also described in detail. In addition, the problem and purpose statements, the study's scholarly and practical significance, and the research questions were presented. The theoretical framework that serves as the lens to examine the phenomenon was presented within the context of the study. Finally, a list of terms clarifies various concepts and vernacular germane to the literature stream.

This chapter served as the foundation for this empirical study by providing meaningful information supported by impactful research studies to elucidate a significant deficit in the existing literature. The methodological choices, philosophical assumptions, research design, questions, theoretical framework, and motivation to perform this study constitute critical information that will be vital in the following chapters. Chapter Two provides the literature review, consisting of a synthesis of the existing literature stream, elucidating the existing gap that this study will address. Chapter Three focuses on the research design, population,

methodological choices, and how data were collected and analyzed. In Chapter Four, results and findings of this study were presented, highlighting the demographic profiles of the participants and key themes formulated from the interviews. Chapter Five comprises the discussion of the findings in relation to the knowledge on the study topic in the existing literature, the implications of research and potential areas for the future study.

CHAPTER TWO: LITERATURE REVIEW

Overview

ACEs are traumatic incidents that occur in early childhood (Kim et al., 2021). Services, neglect, and abuse include abandonment, physical, mental, and sexual violence; problems at home where the parents divorce, use substances, are imprisoned, use aggression or have a psychological issue; and issues within the society such as economic problems, shifting homes, or discrimination (Jones et al., 2020). Despite the results of several empirical studies (Gold et al., 2021; Rariden et al., 2020; Walsh et al., 2019), scholars have not reached a consensus as to whether physical and mental health issues stemming from ACEs are more or less pervasive in different socioeconomic classes, as most research in this area controls for socioeconomic status and race (Balistreri, 2015; Cronholm et al., 2015). Recent evidence does assert that those from lower socioeconomic classes are more likely to experience ACEs and suffer physical and mental health issues in adulthood that are most often associated with ACEs (Allem et al., 2015; Arpey et al., 2017; Helton et al., 2022). However, some scholars contend that few studies provide adequate results (Kim et al., 2021). Similarly, victims' perceptions of the efficacy of trauma-based interventions for this population and strategies to mitigate the effects of ACEs are limited (Goddard, 2021).

The impact of ACE on an individual's health is significant (Al Shawi et al., 2019; Balistreri & Alvira-Hammond, 2016; Balneg & Van Winkle, 2021). The level of impact ACEs have on a child's physical and psychological well-being (Jones et al., 2020) has been previously studied. However, the lasting effects on adults, particularly those from lower socioeconomic classes, have not been adequately studied. Moreover, there is very little existing qualitative

empirical research in the literature stream, as the majority of studies are quantitative based on survey data analysis (Hawkins & Scribner, 2021).

Many ACEs are associated with physical and psychological illnesses, such as heart disease (Su et al., 2015) and severe depression, as measured by the Depression Anxiety Stress Scales (DASS; Brodsky & Stanley, 2008). These illnesses are particularly pronounced and severe in those ACEs characterized by significant psychological cruelty, neglect, family conflict, and hostility (Hughes et al., 2017). Some studies suggest that more than one type of ACE can coincide in a child's life and persist into adulthood, resulting in multiple or more pronounced illnesses (Beckmann, 2017; Cicchetti et al., 2016; Frappier, 2017).

The effects of such ACEs can increase significantly as children mature and enter adolescence and adulthood (Afifi et al., 2020; Negriff, 2020). This effect can be direct or indirect, i.e., not only by abuse or abandonment but also via the environment, such as drug misuse or parental conflicts (Kabani et al., 2018; Woods-Jaeger et al., 2020). In addition, these harmful exposures can undoubtedly affect the overall well-being of the child and later as an adult (Allem et al., 2015; Fulford, 2017; Girouard & Bailey, 2017). These effects occur due to a physiological change in brain development in children that coincides with psychological trauma, resulting in poor coping, attachment, and behavioral issues as adults (Kazeem, 2020).

Some studies have examined ACEs with multiple independent variables, such as gender, geographic location, age, and sexuality (Andersen & Blosnich, 2013; Kabani et al., 2018; Lee et al., 2021; Leitch, 2017; Rhee et al., 2019; Webster, 2022). However, the current literature stream lacks a holistic empirical study examining concurrent physical and mental health conditions resulting from ACEs (Jones et al., 2018, 2020), particularly in adults from lower socioeconomic backgrounds (Lee et al., 2020).

Studies have shown that exposure to trauma, adverse conditions, and traumatic experiences can impede a child's societal, cognitive, and intellectual performance and persist into adulthood (Webster, 2022). These impediments can often lead to aggressive behavior (Sciaraffa et al., 2018), low self-esteem, poor coping mechanisms, low perceptions of self-efficacy, and impulsive behaviors in adolescence (Morris et al., 2020), worsening in adulthood for those who fail to seek effective treatment (Kalmakis et al., 2018). Moreover, individuals with ACEs are more vulnerable to disease development via differences in physiological progress, implementation, and persistence of health-damaging conduct (Carlson et al., 2020; Lee et al., 2021; Leitch, 2017).

Such studies also highlight the significance of early childhood interventions, which is possible only when data are collected early on about the child's life and family (Boullier & Blair, 2018; Watson, 2020). As a result, scholars and clinicians can raise awareness of the health issues that can emerge from ACEs (Balistreri, 2015; Taylor-Robinson et al., 2018). Nevertheless, the effects of those health issues on existing adults suffering from health conditions stemming from ACEs do not benefit from that research (Colman et al., 2016). When childhood traumas associated with ACEs are left untreated, they become more challenging to treat effectively in adulthood, as survivors likely have entrenched maladaptive behaviors and coping mechanisms (Kalmakis et al., 2018; Lacey et al., 2022).

This literature review will begin with exploring the theoretical and conceptual framework that the research employs to examine the effects of ACEs on adult physical and mental health, followed by a discussion of the burden of ACEs on children, adults, and society at large. Next, the relationship between socioeconomic class, race, and ACEs will be discussed. Finally, common trauma-based interventions and treatment strategies will be presented and critiqued,

leading to recommendations to mitigate the impact of ACEs in vulnerable adult populations in future chapters.

Theoretical and Conceptual Framework

Several theories have elucidated individuals' developmental modifications (Kerker et al., 2015). The approaches differ depending on their human attributes and what they perceive as archetypes and processes of human motivation and behavior (Nelson et al., 2019). Nevertheless, human capacities vary depending on the psychobiological basis and the contingent environment for growth and support of these attributes (Nelson et al., 2020). Human growth, thus, means several different models of modifications. Furthermore, different practices in society lead to large individual differences in their refined skills (Schunk & DiBenedetto, 2020).

Maslow's Hierarchy of Needs Theory

As Noltemeyer et al. (2021) indicated, there are many assumptions regarding children's proper development and the ways to raise children during their early years. The first of these models is recommended by Maslow's theory of human hierarchy of needs (Montag et al., 2020). Stages in these theories help parents, caregivers, and teachers to understand how to tend to younger children and their requirements (Crandall et al., 2020). The phases are normally illustrated as pyramids. Basic biological and physiological requirements have to be provided before the children can move to the other tiers. Among these necessities, there are fundamental rights (Spencer, 2021).

The necessities, beginning at the base of the pyramid, include physiological, protection, love and belonging, regard, and self-actualization (Carlson et al., 2020). For instance, children who are either exhausted or starving cannot concentrate on situations. Safety is the next phase and encompasses disability, safety, shelter, or freedom from panic (Gambrel & Cianci, 2003).

Afterward, children are motivated, they may be more aware of their multiple needs in this stratum (Noltemeyer et al., 2021). Moreover, this consciousness is felt in areas like separation nervousness, or doubt regarding new-fangled activities (Hagerty, 1999).

The next phase is affection and care which relates to love and belonging. During this period children will form friendships or be close to their families at home. This level includes children's demands for liberty, recognition, or achievement. Also, this is the place where children are rewarded for attaining something on his or her own (Crandall et al., 2020). This helps to explain why the complexity of behavior models assumed by Maslow is possible in children. For instance, self-actualization is quite a herculean task for young children to achieve because of various challenges which include (Crandall et al., 2020). It is built over time and deals with the regulation of satisfaction with self, which is very difficult for children to grasp (Zyromski et al., 2018).

However, when it comes to understanding and interpreting children's actions, the limits of Maslow's hierarchy of needs are apparent because social activities are minimized with the corresponding devaluation of the role of social learning (Locklear, 2020). Children and adults specifically, rely on displays, signs, and interaction with the physical environment to construct the Self and the Other (Isobel et al., 2019). Furthermore, these early perceptions are retained in adulthood and become adult behaviors in response to their perception of their environment (Voith et al., 2020).

Social Learning Theory

According to Bandura (1977), there are three properties within the social learning theory that determines how children and by extension adults model their behaviour, control and punish the behaviour of others, exhibit reinforcers that affect their own and others' behaviour, and assess

their ability to execute the behaviour. First, influence suggests that children can model themselves on people they can identify, watch, and consider competent (Schunk and DiBenedetto, 2020). For instance, children often mimic their mothers because they are the frequent authority figures in those children's lives. It means that the children will interact in accordance with the principles of their own and the other SES, even within the family environment, which determines their concept of permissive behavior (Beauchamp et al., 2019). Bandura (1977) has disclosed that children and adults voluntarily incorporated their behaviour, a characteristic that defines the process of behaviour change.

With development, children's sphere of influence increases, and the people they think are worthy to emulate also increase (Cicchetti et al., 2016). Third, the reward section refers to the subsequent stratum that depicts what children are likely to emulate. For instance, when children interface, and observe that their elder sibling gets a reward for doing praiseworthy things, they tend to model creditable behavior (Beauchamp et al., 2019). Bandura's social cognitive supposition is that he behaves dependently on how the near children observe other individuals and copy their actions (Heleniak & McLaughlin, 2020).

Bandura's contribution to the psychology behind ACE stems from his connection between behaviorism and cognitive psychology, which is significant as it provides insight into self-efficacy, self-perception, and behavior (Chandler et al., 2015; Lim, 2001; Rebok & Offermann, 1983). Most pertinent to this study is that those cognitive processes and behaviors persist into adulthood, including maladaptive behaviors that can contribute to or exacerbate illness (Lau-Walker, 2006). However, self-efficacy is the most pertinent construct to the research presented here, developed by Bandura (1977, 1999), and serves as the foundational theoretical framework for this study, self-efficacy theory. Self-efficacy theory is rooted in Bandura's social learning and social cognitive

theories (1977, 1999) but is more narrowly focused on expectations and perceived value (Maddux, 2016). The next section presents more details of self-efficacy theory, followed by its applications to ACEs in adults.

Self-Efficacy Theory

The theory of self-efficacy assumes that behaviors are primarily rooted in three central tenets: self-perceived values and capabilities, outcome value, outcome expectancy, and self-efficacy expectancy (Maddux, 2016). Outcome value is defined as the importance of a specified outcome or result. In contrast, outcome expectancy is the perceived effectiveness of certain behaviors bringing about a particular outcome, and self-efficacy expectancy involves the expectations of skills and capabilities and one's capacity to successfully implement those skills in the chosen course of action (Maddux, 2016). The theory of self-efficacy also posits that these same tenets of behavior are implicated in psychological dysfunctions and are a critical component of successful behavioral interventions.

Studies reviewed by Smith et al. (2020) show a significant relationship between ACEs and impaired social-cognitive performance among adults diagnosed with severe psychological illnesses (Smith et al., 2020). The authors established that the social surroundings during early childhood can trigger social and cognitive issues and other disorders that persist into adulthood (Soleimanpour et al., 2017). These social and cognitive issues often manifest as antecedents of more severe physical and mental health conditions, such as kidney disease and psychosis (Ozieh et al., 2020).

According to Merrick et al. (2017), early childhood abandonment, maltreatment, and stress place children at risk of developing disorders that impact their future social life and ability to build contacts, key predictors of future mental health conditions (Williams et al., 2018). For

example, traumatic childhood encounters, including abandonment, bodily maltreatment, neglect, the early death of parents, and self-doubting affection techniques, can lead to mental health problems that manifest later in life (Sciaraffa et al., 2018).

Research has shown that self-efficacy plays a role in several of the mental health problems counseling clients have sought treatment for, specific fears and phobias, social anxiety, depression, and addiction and substance abuse (Maddux, 2016). Generalized self-efficacy is also implicated in the perception of individuals with depression on themselves, the world, and the future, which is both the product of and reinforced by low self-efficacy expectancy (Beck et al., 1990; Maddux, 2016). Low self-efficacy is challenging to treat and overcome for survivors of ACEs because increased incidences of ACEs further inhibit a survivor's ability to develop effective coping mechanisms (Crouch, Radcliff, Strompolis, et al., 2019).

Belloir et al. (2023) found a negative correlation between the number of ACEs and individual experiences and generalized self-efficacy. Additionally, their study found a significant correlation between decreased self-efficacy and psychological distress, which explained 27.1% of the effect size of ACEs on psychological distress in adults (Belloir et al., 2023). These results demonstrate the cumulative effects of multiple ACEs on self-efficacy in adults and a need to prioritize mental health interventions that target self-efficacious behaviors to reduce the downstream effects of ACEs on psychological well-being (Belloir et al., 2023).

Cohrdes and Mauz (2020) found that the adverse effects of ACEs could be mitigated by protective factors associated with self-efficacy (e.g., trust in one's capabilities and other psycho-social influences such as social support and emotional stability). These factors were positively correlated with an increase in self-reported physical and mental health-related quality of life (HRQoL). These findings suggest that while ACEs themselves can negatively influence self-

efficacy, increased self-efficacy can mediate the effects of ACEs on HRQoL, necessitating the need for mental health interventions that specifically aid in positively developing one's self-efficacy (Cohrdes & Mauz, 2020). Therefore, studying the impact of ACEs on mental and physical well-being in adulthood, including cognitive skills, is imperative to understanding the spectrum of the impact of ACEs (Herzog & Schmahl, 2018).

Self-Efficacy Theory, Trauma, and Adulthood

Empirical research examining the effects of childhood trauma on adults through a social-cognitive theoretical lens echoes similar findings to those in children (Quidé et al., 2018; Sharp et al., 2012; Vaskinn et al., 2021). For example, adults who have experienced childhood trauma often develop maladaptive coping mechanisms. These maladaptive coping mechanisms result from poor parental influence, a misaligned understanding of reward, and poor perceptions of self-efficacy and self-perception (Couette et al., 2020; Huh et al., 2017; Nietlisbach & Maercker, 2009).

Couette et al. (2020) found that adults with PTSD from childhood trauma exhibited significantly altered perceptions of self-efficacy, primary emotional expression, and empathy. Additionally, these adults exhibited significant impairments in predicting others' beliefs, thoughts, or emotional reactions. These impairments were linked to damaged social cognition from childhood trauma and resulted in functional disabilities in adulthood (Couette et al., 2020). Moreover, studies indicate that poor social cognition resulting from childhood trauma could also contribute to the prevalence or severity of other illnesses, such as cancer (Graves, 2003), diabetes (Connell et al., 1994), schizophrenia (Penn et al., 1997), multiple sclerosis (Banati et al., 2010), dementia and Huntington's disease (Snowden et al., 2003), and cardiopulmonary disease (Anderson et al., 2006).

The deleterious effects of childhood trauma, or ACEs, on adults have a significant adverse effect on a multitude of illnesses, both physical and psychological (Lee et al., 2021). Moreover, these illnesses are often chronic, causing lifelong struggles with health and decreasing adult survivors' quality of life and life span (Nurius et al., 2016). Most importantly, the prevalence and health burdens of ACEs that affect these adult populations have individual, group, and societal implications (Larkin et al., 2014).

The Burden of ACEs

Children and ACEs

According to Gambrel and Cianci (2003), at least one ACE was reported by approximately 85% of youth and most of the incidents involved female cohorts. In connection with this, it was noted that many aspects of the relationship between ACEs and socioeconomic, populace, and family-based characteristics are known, including respondents of color and low-paying families (Hagerty, 1999). These attributes that sustainability science has provided should be thought about by health as well as social care specialists when directing as well as determining preventative interventions as well as presumably also when categorizing ACEs (Boullier as well as Blair, 2018).

In recent population-based research, nearly half to two-thirds of participants reported at least one ACE. In the same research, nearly 56% of participants reported one or multiple ACEs, while 20% reported three or more ACEs (Al Shawi et al., 2019; Kabani et al., 2018; Lee et al., 2021). In the Household review, 48% of participants reported at least one ACE, and 60% either one or more 120 ACEs (Leidy et al., 2010). These prevalence estimates are consistent with the first milestones set in prior scans that determined that 61% of an adult sample population had experienced one or multiple ACEs (CDC, 2022). However, in the United States, there is no

single study on ACE for all the states or ACE for a particular type of ACE overall (Webster, 2022).

Studies have shown that the rate of abuse-based incidents, 42 of every 1000 children (under the age of 18 years old) had been subjected to either abuse or neglect (Al Shawi et al., 2019; Centre for Substance Abuse Treatment, 2000; Rhee et al., 2019). Research also shows that abuse rates were highest in children under 1 year and reduced with age (Lester et al., 1983). Amongst the children examined, 36% resulted from abandonment, 35% were due to domestic abuse, 22% were due to physical violence, 10% were due to emotional maltreatment, and 4% were caused by sexual violence (Crouch et al., 2018). The review also showed that 20% of children were susceptible to multiple assortments of abuse.

However, this is an indication that the child abuse burden, as much as it only entails reported cases, is under-represented and that Child abuse is rife (Joos et al., 2019). In other research, a cross-sectional study of participants over 12 years presented a 34% child adversity rate, and dose-reaction engagement in child maltreatment and poor psychological well-being (Smith & Pollak, 2021). According to Liu, Kia-Keating, Nylund-Gibson, et al. (2020), ACEs are said to relate to the roots of worry that a person may experience early in life or often before his or her 18th birthday. They have degenerated to become acts that pose health risks to the community's children. These meetings include different types of abuse and several types of family member separation (Godøy & Jacobs, 2021; Watson, 2020). Stud-es have also pointed out that the ACES differs from health-risk associations.

ACEs and Adults

About 61% of the adults studied in 25 different states in the U.S have claimed to have at least one ACE (Hughes et al., 2017). About 1/6 of respondents asserted that they had survived

different kinds of ACEs. Females and other racially marginalized groups have the potential to experience four or more childhood adversities (Hughes et al., 2017). Monetary and social cost recovery to families and communities whenever dealing with ACEs are costly and Wcost billions (Fulford, 2017; Girouard & Bailey, 2017; Rariden et al., 2020). Karatekin and Hill (2019) pointed out that ACEs tend to cycle through families and generations and serve to negatively rehabilitate the health of families and societies. Moreover, it impacts the state's budgetary development agenda through education, well-being care, children, and rehabilitation (Montag et al., 2020; Taylor-Robinson et al., 2018).

ACEs and Socioeconomic Factors

It is still uncertain, whether low socio-economic status should be considered as an ACE or an inherent factor, contributing to negative adulthood outcomes (Walsh et al., 2019). This ambivalence is because the risks associated with ACE vulnerability commonly become grave to those within the SES. In addition, Joos et al. (2019) also highlighted that poverty is strongly associated with emotional disorders, and frequently, other psychological abuses occur.

There are relations between deficiency, brain development, and activity that speak volumes about children living in poverty's optimality to live in ways that would harm their health and shorten their lives (Walsh et al., 2019). Poor children are caught in more difficulties than wealthy counterparts living in places with unfavorable characteristics and vulnerability to psychological environments (Lester, et al., 1983). Future studies are needed to determine psychological processes and execute function capabilities in associations between ACE and injurious consequences in later life (Koball et al., 2021).

Most research examining the effects of ACEs in adults from lower socioeconomic status consists of incarcerated prisoners as participants, as the likelihood of incarceration increases

when an individual is from a lower socioeconomic class (Skarupski et al., 2016). However, the primary focus is on participants' criminal behavior, lack of empathy, or maligned coping mechanisms. Moreover, the inclusion criteria for these studies are not based on socioeconomic class but on criminal behavior and incarceration, which is used as a proxy for socioeconomic status (Kazeem, 2020; Ross et al., 2018; Wolff & Caravaca Sánchez, 2019).

Gender

Regarding gender, very little research has been carried out on gender and its association with ACEs. The existing literature also has gaps or inconsistencies in determining the vulnerability of men and women to ACEs (Balneg & Van Winkle, 2021; Beckmann, 2017; Cicchetti et al., 2016; Frappier, 2017). Women experience more ACEs than their men equivalents. ACEs strongly correlate with poorer psychological well-being, poignant and societal results in old age for both males and females (Kim et al., 2021).

There is a trend of ACEs among men and women, although women reported more diverse and severe ACEs. Such ACE mock-ups are related to unfavourable psychological, emotional, and social consequences for both boys and girls (Crouch et al., 2018). ACEs have been found to vary when it comes to the gender and race of the affected individuals or groups of people (Gold et al., 2021). In general, females have often a greater potential for having a higher number of ACEs as compared with their female counterparts. Nine percent of the women in the study done by Lanier et al. (2018) reported they had four or more ACEs. On the other hand, before the age of 18 years, only four percent of men reported similar adversities (Lanier et al., 2018).

Race

Children of diverse races and ethnicities do not suffer from similar ACEs (Jones et al., 2020). Therefore, the impact of ACEs may also vary according to race. According to Crouch et al. (2018), 61% of Black non-Hispanic children and 51% of Hispanic teens have encountered at least one type of ACE. Similarly, 40% of White non-Hispanic children and 23% of Asian non-Hispanic children have been exposed to at least one type of ACE. These data show that the incidence of ACEs within the Asian non-Hispanic teen population is relatively low (Crouch et al., 2018). Therefore, it is necessary to determine deterrence mechanisms that will aid in curbing the effects of ACEs (Kabani et al., 2018; Lee et al., 2021; Leitch, 2017; Nelson et al., 2017; Rhee et al., 2019; Taylor-Robinson et al., 2018).

The studies completed and compared did show that Hispanic and Black children are more susceptible to multiple childhood adversities. Scholars purport that race and disparities in socioeconomic class render children of color more susceptible to ACEs (Narayan et al., 2018). For children born in the United States, the models of racial and income gaps are present across all types of ACEs. Felitti (2019) asserted that ACEs' exposure to and implications differ by race and ethnicity yet remain higher for children of color than Caucasian children.

The Implications of ACEs on Health

Several studies have developed a procedure for expanding the research on the health impact of ACEs for children and adults (Masten, 2018). Youth who experienced two or more ACEs are more vulnerable to the common chronic health and mental health disorders. They could be such as sleep disorders, depression, anger, violence, eating disorders, and immune system dysfunction (Balistreri & Alvira-Hammond, 2016; Balneg & Van Winkle, 2021; Lee et al., 2020).

ACEs and Children's Health

Not only children experiencing chronic stress are damaged mentally and receive epigenetic messages on their bodies. Babies at 18 months, born to mothers with four or multiple ACEs have a five-fold increased risk of poor physical and mental health (Mathews et al., 2017). Such ACEs of different types, a young child can experience make it logical to have behavioral problems and poor academic performance. The evaluation of the risk of a child's ACE danger has also been discussed by educational researchers in the context of care planning (Rariden et al., 2020).

Joos et al., (2019) have provided that ACE and linked social health determinates can give rise to toxic stress. The toxic stress may also lead to permanent changes in a child's brain, impact the level of cortisol in their blood, and even increase their chances of getting an infection (Franke, 2014). In children with toxic stress brought by trauma, forming strong and structured adult-child bonds is very difficult. They also have immature work environments as adults/can be lazy when it comes to money (Critchley et al., 2018). Certain teens can face an increased risk of toxic stress due to prior and ongoing traumas due to systematic racism or scarcity as a result of poor education and fiscal prospects (Lee et al., 2020).

ACEs and Adult Health

The study found that people who have experienced ACEs have more physical and psychological sicknesses in adulthood than those who did not meet ACEs (Girouard & Bailey, 2017; Noltemeyer et al., 2012). Several research works show how early life experiences regarding the susceptibility to chronic stress impair,' and damage both the nervous and immune systems, as well as social cognitive, and emotional outcomes (Mackay-Neorr 216). Therefore, people with ACEs have a high propensity to disease, at the point of ACEs, and because the

adverse factors are recurring, they may get exposed to them (Balistreri & Alvira-Hammond, 2016; Kiel, 1999).

This particular review is crucial because ACEs can determine the lifelong or dismal outcomes for individuals' health, well-being, and opportunities in life including education and careers (Bellis et al., 2018; Hartas, 2019). The experiences can enhance the risk of injuries, STDs, and pregnancy and children's health including adolescent pregnancy, stillbirth, and complications during pregnancy (Liu, Kia-Keating, Nylund-Gibson, et al., 2020). The encounters may also place the children or young adults in the hands of the sex trafficking business among other hazards including suicide, cancer, and diabetes (Masten, 2018).

ACEs Screening

ACE screening is a threat appraisal instrument (Koball et al., 2021). If child adversities lead to the recognition of trauma from child ill-treatment and abandonment, it might show future disorders like sadness and obesity in children (Girouard & Bailey, 2017; Kabani et al., 2018; Rariden et al., 2020). Furthermore, screening childhood adversities may detect adverse conditions that are known to possess dangerous developmental consequences that requires community health intervention or prevention (Newacheck et al., 2014). However, it is important to screen ACEs because childhood adversities are known to affect the future and development of children in every sphere.

The growing prevalence of ACEs justifies the number of screening initiatives and interventions developed to alleviate childhood adversities (Radcliff et al., 2019). According to Karatekin and Hill (2019), the original ACE instrument was primarily used to study middle-class, cultured, and working adult populations. The instrument has since been revised to incorporate childhood adversities that begin to explore development in disadvantaged families

and societies or other environments such as schools but remain limited in scope and depth (Dube, 2018; Loveday et al., 2022). According to Finkelhor (2018), conducting ACEs screening aims to identify highly susceptible patients to toxic stress.

These screenings will assist in designing and implementing the following actions for another comprehensive and tailored approach (Anda et al., 2020). ACE's complete assessment involves an assessment of the triad. They are adversity; clinical symptoms of toxic stress; protective factors; and patient vulnerability, and the latter is the basis for the therapeutic strategy (Finkelhor, 2018). When identifying the risk, a treatment approach might help patients sort and respond to past or present stressors to prior health conditions (Koball et al., 2021).

More recently, the California Surgeon General recognized the value of identifying children and adults exposed to chronic or toxic stress from adverse childhood experiences and the mental and physical health conditions associated with the elevated cortisol levels common in survivors of ACEs. The tool was developed for children and adults because it can be used for early intervention with children and is the first step in assessing treatment needs in adult survivors. The Surgeon General of California and Governor Gavin Newsom created a task force to pilot the screening tool, and in 2020, signed it into law called ACEs Aware (Pérez Jolles et al., 2022).

Designing Treatment Interventions and Strategies

The present literature review of ACE treatment strategy and interventions indicates that the appraisal of the trauma-based strategy is expected to be flawless. As before, to ideally use the interventions, further analysis, development, and assessment of the particular approaches and intrusions are necessary for ACE, screening paraphernalia, and preventive intrusions (Rariden et al., 2020). Moreover, further research is needed regarding the total screening and treatment costs

of negative CAC, cost reduction strategies, cost-savings, and cost-effectiveness, and cost-benefit studies (Allem et al., 2015).

Moreover, victim-centered approaches identified by victims are necessary to increase successful treatment outcomes (Carpinelli et al., 2022). Thus, interventions must have an appropriate target for the best possible impact (Schickedanz et al., 2018). Therefore, when designing personalized interventions (i.e., designed uniquely for adult survivors), the composition of their family, age, gender, race, and socioeconomic status are significant (Manyema & Richter, 2019).

Jones et al. (2020) argued that poor dissemination and inadequate accessibility and visibility of studies mirror difficulties in executing new-angled evidence-oriented practices (Nelson et al., 2017). For instance, a study by Woods-Jaeger et al. (2020) showed that nurses lacked adequate awareness of ACE assessment and care approaches for treatment. The ACE assessment tool the California Surgeon General developed has been widely disseminated in California. Furthermore, the government of California made ACEs Aware a reimbursable service and required training for all primary care physicians (Pérez Jolles et al., 2022). Multiple states have adopted similar models to combat ACEs in children and adults (Ortiz et al., 2023).

Finally, treatment strategies and interventions must include the influence of socioeconomic status and race (Hawkins & Scribner, 2021). Unfortunately, there is a significant lack of culturally specific components necessary to increase the efficacy of existing treatment strategies and interventions (Meyer et al., 2022). As a result, these strategies and interventions fail to address the disproportionate effects of ACEs adequately and effectively on adults from lower socioeconomic statuses, specifically communities of color (Helton et al., 2022).

Prevention of ACEs

As mentioned throughout this literature review, studies have shown a strong connection between ACEs and health. However, it has also been linked to the development of behavioral disorders, unhealthy lifestyle habits (Kim et al., 2021), and behavior, which can all, in turn, impact an individual's health. One such consequence is alcohol misuse or drug abuse (Chakravarthy et al., 2013). In the case of the former, it has been found that alcohol misuse can continue through adulthood (Cicchetti et al., 2016) if not addressed sooner.

If ACEs are the cause of drug abuse, there is a need to prevent by helping teenagers detect abuse stressors responsible for drug abuse, dysfunctional families, and negativity (Jones et al., 2020). Another recent research examined the evidence-based practices to prevent, mitigate, or intervene in ACEs at the population level in the first, second, and third levels (Anda et al., 2006; Lee et al., 2021). Such levels include strategies to enhance children's and parent’s lives and well-being so that there is a reduced chance of adverse childhood circumstances and vulnerabilities and health implications along with continued conduct identified with ACEs (Mansueto et al., 2019). These primary intervention strategies are carried out at the public and societal levels and aim at deterring the numerous health consequences of ACEs by enhancing protectiveness along with diminishing dangerous risk components connected with child adversities (Cicchetti et al., 2016).

Home visit programs at the community level include the community and public health associations that promote child welfare, and development, and protect children from abuse (Webster, 2022). Two of the programs aim at having parental skills, how the parent can ensure the child's academic success, and here the public utilities as well as other provisions accessibility is also a feature of the program (Tink et al., 2017). Also, at the community level, several

interventions are on the duties of associations and systems in preventing ACEs through specific media and academic movements, community outreach and commitment, and policy championing (Koball et al., 2021).

Developing and sustaining strong and healthy correlations and promoting relations and environment for all children and families is crucial because this assists in reducing ACEs (Finkelhor, 2018). Therefore, the children can develop optimally and become as strong and healthy as they are supposed to be. However, there are some fundamental deficiencies and knowledge lacunas about local incidence rates, and cultural, provincial, and population differences that pertain to ACEs; what Webster calls cultural, provincial, and population variations concerning ACEs (Webster, 2022) do not allow for further understanding of these concepts.

Addressing the deficiencies in the prevention of ACEs is essential for implementing preventative strategies and enhancing public knowledge regarding the health implications of ACEs (Felitti, 2019). Collecting state and county-wide data on adverse childhood experiences is crucial for preventative planning strategies. Comprehensive statistics will facilitate decision-making and enhance the awareness of ACEs among state and community leaders, underscoring the importance of ACEs in several behavioral health domains (Ford et al., 2014). It is essential to include the principal hazards and protective factors in preventative planning and in the selection and implementation of programs, policies, and strategies aimed at addressing ACEs (Anda et al., 2008; Rhee et al., 2019).

When assessing the long-term consequences of ACEs from infancy to adulthood, it is essential to thoroughly investigate preventative or mitigation strategies for their prospective impact. To achieve this effectively, physicians and practitioners treating adolescents and adults

with ACEs must maintain transparency with data. Data exchange and ongoing study into current treatment methods and their efficacy, partially assessed via the experiences of recipients, are essential for tackling this intricate and diverse issue (Jones et al., 2020). Ongoing monitoring and evaluation of these indicators, along with a feasibility study and assessment of the intervention's impact, as well as its short-term or long-term effects, are essential to determine the effectiveness of the treatments (Cicchetti et al., 2016).

Mitigating ACEs

One of the foremost steps in mitigating ACEs is to strengthen the economic support of households and provide adult survivors with treatment options that are culturally appropriate and reflect the needs of those most affected by ACE-related illnesses in adults, those survivors from low-income communities (Mersky et al., 2021). It is achievable through fortifying household fiscal security and family-friendly occupational guiding principles (Narayan et al., 2016). This method for curbing ACEs upholds social customs that guard against aggression and hardship. It is achievable via communal education drives, governmental approaches to minimize corporal penalties, and spectator methods (Liu, Kia-Keating, Nylund-Gibson, et al., 2020).

Liu, Kia-Keating, Nylund-Gibson, et al. (2020) stated that providing children with a positive and healthy home environment is critical. Early childhood habitat visitations, child management, and preschool fortification with family commitment can be carried out to ensure a healthy home environment. Another approach connects formative years to caring adults and activities through mentoring initiatives and after-school programs. It is vital to lessen instant care services such as improved primary care, victim-focused services, and treatment to minimize the risks of ACEs (Liu, Kia-Keating, Nylund-Gibson, et al., 2020; Narayan et al., 2018).

For adult survivors of ACEs, changing people's perceptions of the effects of those traumas on adult physical and mental health is vital to reducing societal stigma and allowing more adults to seek treatment (Ports et al., 2021). By changing the perceptions of communities, specifically those low-income communities most affected by ACE-related health concerns, more effective treatments are developed due to community members' participation in early intervention and later-stage intervention strategies (Anda et al., 2020). Benefits include reducing the stigma of seeking assistance with parenting difficulties, drug abuse, melancholy, or suicidal ideation (Felitti, 2019).

The Impact of ACEs on Behavior

Adverse Childhood Experiences (ACEs) are central to contemporary trauma research. Recent research on Adverse Childhood Experiences (ACEs) indicates that developmental traumas contribute to adult emotional illnesses and can lead to substantial physical, psychological, and behavioural challenges (Cohrdes & Mauz, 2020). Previous studies have revealed a link between behavioural problems and criminal activity (Morris et al., 2020). However, research primarily examines the influence of childhood traumas on subsequent behavioural and psychological disorders, rather than their correlation with the criminal justice system through identifiable mental health or behavioural problems (Morris et al., 2020). From a healthcare point of view, it is necessary to understand more about how ACEs can trigger antisocial or violent behavior or, in some cases, lead to crime (Brodsky & Stanley, 2008; Newacheck et al., 2014).

Delinquency and Career Criminality

Juvenile regulation-breaking incidents are incredibly widespread in the United States. About two million juveniles are arrested in the United States every year, and among those juveniles, 1. Five million turn out to be arbitrated in a juvenile court docket (Mimms & Stamm, 2014). Juvenile courts are hesitant to tag juveniles as delinquents and are greater at risk of deciding upon substitute sanctions which include residence arrest, drug abuse counseling initiatives, and network service. In contrast, grownup judgment structures are stricter and usually lean in the direction of imprisonment (Radcliff et al., 2019).

Psychology and the Criminal Justice System

The criminal justice system within the United States may be very state-of-the-art, with every piece of the structure running in sync with each other. Individuals are furnished with as great a guide as possible from the initial touch with law enforcement to the capability of subsequent discourses, prison processes, rulings, and imprisonment. Because of the current focus on crime control strategies, the scheme seems to have extraordinarily high traffic, in the long run impacting the outcomes of humans concerned with the crook justice arrangement, whether or not criminals or survivors (Reil et al., 2020). The present research has focused on increasing exchange sentencing, figuring out the supply of crime, and coping with it at the root stage (Roos et al., 2016). Regrettably, concentrated on the center crime problem is complex, and root causes are difficult to establish (Anda et al., 2020).

The biological, physiological, cognitive, mental, and social factors are essential in the growth and development of an individual (Roos et al., 2016). Concerning these factors, the person’s cognitive profile with development is perhaps the least addressed because the link between psychology and criminology is relatively new (Drury et al., 2019; Moore, and Tangney,

2017). As both the criminal justice system and the area of psychology change, such competencies related to correspondence methods, processes, and general outcome of the system as effective implementation of targeted research methods are closely connected with the state of knowledge and the background of research-driven practices (Anda et al., 1999; Beckmann, 2017; Frappier, 2017; Fulford, 2017).

Bailey and Brown (2020) note that although forensic psychology can be viewed as a prognostic science, this aspect of thin at the moment is quite underdeveloped. Certain strategies, science, and procedures remain untried because they have not received enough encompassing information to be used more appropriately or legally accepted in court. Webster (2022) states that brain scans, building mental profiles, or even lie detectors – may not have sufficient validity or reliability standards enough for universally recommended practices.

However, it is essential to avoid one-sided cognitive appraisals. This still happens, though, for criminal judges have different responses on the issue. In fact, psychological well-informed reports of pre-sentencing investigations, survivorship testimonies, and even psychiatric evaluations of delinquent offenders for other purposes are becoming less reliable (Webster, 2022). Evidence shows that when practitioners of criminal justice reach such groups as attorneys, police officers, judges, etc., are informed about currently existing political and cognitive social science research, outcome measures, both for survivors and criminals, are usually better (Ellison & Munro, 2017).

Implications

The data encompassing childhood traumas and the most up-to-date manifestation of mental and behavioral illnesses shows that preventative mechanisms may inform societal programs, treatment modalities, and programs designed to aid adult victims with financial

support (Barra et al., 2018). First, however, those receiving treatment should evaluate the efficacy of existing culturally appropriate treatment modalities for adult survivors of ACEs. Additionally, research is necessary to develop strategies that positively affect the relationship between adult survivors of ACEs and the criminal justice scheme without postulation using culturally appropriate treatment modalities.

The association of ACEs with an increased rate of contacts with criminal justice has wide implications within the frameworks of social sciences and the criminal justice structure. First and foremost, relationships that are already established justify supplementary research and targeted financial support. Societal initiatives toward childhood traumas avert the medical expenditures relating to latent physiological problems and the mental and behavioral costs that overwhelm the healthcare system. Although there is no direct connection to the criminal justice system, findings on ACEs are helpful to children, families, those affected by physical and mental conditions, and generally the good social order (Anda et al., 1999; Fulford, 2017; Watson, 2020). Next, any re-search on the legal syste-m must include the unreporte-d crimes or numbers that don't make it into the- official crime stats from the police. Ofte-n, these figures re-late to family issues or traumas in childhood. Connecting the-se pieces can impact furthe-r research significantly.

Trauma-based activities in the law enforcement and criminal justice system can seamlessly empower the police and criminal justice experts in their fields (Bailey & Brown, 2020). The system can completely nurture the criminal rather than punishing an offense; this leads to a more flexible structure and a flawless reintegration program. Stopping trauma at its origin perfects the outcomes of people, regardless of their connections to the criminal justice system, creating a move toward a society as a whole.

ACEs and the Family Court: Protecting Children from ACE Implications

Every individual has the right to lead a dignified life. However, what occurs in their childhood affects children into adulthood. When the child is exposed to or experiences distressing incidents, the children may have to face lifelong repercussions (Powell, 2022). Recent explorations into research on ACEs have shown how they affect the lives of children and adults on physical and mental health and community well-being (Larkin et al., 2014). whenever a family has contact with the judicial system, whether in family court, child security, juvenile crime, or intimate partner violence, the system must alleviate impairment and cause no further harm (Davis & Sexton, 2021). Again, this may mainly be achieved by ensuring that lawyers, judicial officers, court officials, and other persons with whom the family interacts through the process are conversant with the effects of ACEs and carry out their mandate to reduce and prevent impairment (Brown et al., 1998). However, to accomplish this feat, those working within this field should receive some degree of training to facilitate rehabilitation rather than reinforce maladaptive perceptions of authority figures (Larkin et al., 2014).

Interventions

There are correlating gaps in the literature on how criminality and juvenile criminal behavior relate to childhood traumas. Understanding these relationships is necessary to efficiently target interventions and intercession services and ensure such measures are accessible and effective (Bailey & Brown, 2020). Countries with high rates of crime do not have adequate access to nourishment, specific parental services, broad healthcare, legal services, educational support, behavioral psychotherapies, and other such activities that might lower the extent of criminal activity (Skinner et al., 2021). Societal services in these countries that are characterized by increased juvenile and adult crime should be more funded (Rasmussen et al., 2019). With

appropriate research explorations showing need, cost-efficiency, and generally optimistic results, the claim for such initiatives remains to be addressed. With evidence-based data having much to do with the future of criminal justice improvement, the necessity for research on reducing illegal conduct via early intrusion services has augmented.

Knowledge Gaps in ACE Scholarship and Practice

ACEs refer to emotional abuse, sexual abuse, physical maltreatment, abandonment, parental dysfunction, or loss (Felitti, 2019). Available evidence supports the causal link between ACEs and their effects on mental health and social functioning in old age, employment instability, life course, health, and dying before the usual time (Leidy, 1994). A plethora of empirical support is presented in this literature review to elucidate the deleterious effects of ACEs on adult survivors' physical and mental health. However, gaps in the literature stream must be addressed to broaden the scope and depth of our understanding of ACEs on adult survivors and the treatment modalities that are most effective in helping those suffering from their effects.

Karatekin and Hill (2019) noted a lack of clarity regarding the boundaries between normative anxiety encounters and adverse childhood experiences (ACEs). Additionally, there are various distinct methods for measuring ACEs. These approaches often utilize numerical and cumulative risk-scoring techniques. This literature review indicates that exploring a unique, homogeneous method for measuring ACEs could enhance our understanding of the long-term effects associated with them (Finkelhor, 2018). Many research areas require further development, accessibility for the population, and retrospective analysis, which complicates their validation and legitimacy.

The impact of ACE on physical health needs more research and examination to understand how they connect with specific types of ACEs and whether the number of ACEs increases the likelihood of more detrimental health effects in adult survivors (Boullier & Blair, 2018). Following ACEs, the techniques underlying weak emotional well-being need more research, including drug abuse exposure, domestic violence, homelessness, and suicide. Screening can help identify children affected by ACE and those who need additional analysis. However, when coupled with an improved understanding of the precision of the ACE self-report, it can lead to a problem of false-depressing reports (Rariden et al., 2020). Additionally, there is a salient gap in empirical studies investigating the impact of ACE vulnerability in communities of color and those victims from lower socioeconomic classes (Maguire-Jack et al., 2020). Finally, numerous ACE types may develop fears of adulthood in only some ways, but this segment has no clarity (Noltemeyer et al., 2012).

To facilitate holistic and effective treatment strategies and interventions, clinicians must incorporate socioeconomic status and victims' perceptions of the success of existing treatment modalities (Draxler & Ruppar, 2022; Dube et al., 2022). As observed hitherto, it is necessary to synchronize research to ascertain those children and adolescents experiencing child adversities and design interventions accordingly (Dong et al., 2003). Many children are not vulnerable to only one particular type of ACE.

Furthermore, various persons react differently to similar ACEs, leading to multiple influences on vulnerable persons (Steele et al., 2016). Still, there is a need for continuous analysis to understand the rationale behind individual differences following exposure to ACEs. This analysis should include investigations on susceptibility and endurance, cultural implications, ethnicity, and gender (MacIsaac et al., 2021).

Nevertheless, insufficient evidence-oriented strategies and interventions used in existing treatment modalities fail to incorporate socioeconomic status and race. Different populations require different approaches, such as youth in foster care, adults vulnerable to suicide, those encountering domestic violence or perpetrating that violence within their family, ethnic minorities, adults with co-morbid mental disorders, and young homeless adults (Draxler & Ruppar, 2022). There is a need to grow specific intrusion measures for distinct environments comparable to those centered on families, ones with a social focus, and intrusions applicable in primary treatment and mental and residential therapy services (Pachter et al., 2017; Spencer, 2021).

Further research is imperative for involving families in interventions. Recognizing the barriers to the implementation of trauma-informed treatment and lasting changes can be used in practice (Sciaraffa et al., 2018). Ultimately, it is essential to collect feedback and perceptions from individuals utilizing psychological well-being services and interventions to understand the challenges related to the psychological healthcare experience and the current obstacles confronting adult survivors from low-income communities, particularly those of color (Crouch et al., 2018).

Chapter Summary

This literature review and analysis explored existing empirical and theoretical literature and identified gaps that must be explored to expand our understanding of ACEs and illness. This literature review emphasized the burden of the ACE crisis, the implications of ACE screening methodologies, the prevention of ACEs, and practical strategies and interventions to treat adults who have endured ACEs, specifically those from lower socioeconomic classes. The review highlighted that the burden of the ACEs crisis is widespread.

The objective of the literature review was to synthesize existing empirical research on ACEs, including their antecedents, effects on childhood social cognition that shapes adults' perceptions of the world, and the deleterious effects of ACEs on several physical and psychological illnesses. Additionally, the literature review highlighted the salient gap in the literature that examines ACEs in adults from lower socioeconomic backgrounds, including the specific effects of ACEs on that population's physical and mental health. Lastly, the literature review elucidated the lack of culturally specific and appropriate treatment modalities for those from lower socioeconomic backgrounds, specifically communities of color. The next chapter details the methodology used in this study, including research design, sampling methodology, participants, and steps for data collection and analysis.

CHAPTER THREE: METHODS

Overview

The primary objective of this instrumental hermeneutic phenomenological study using an interpretive philosophical paradigm was to examine the mental and physical health effects of adverse childhood experiences (ACEs) on adults. In particular, the study focused on the effects of ACEs on adults from lower socioeconomic classes, who are disproportionately affected by ACEs (Everson et al., 2002). Additionally, this study sought to fill a salient gap in the literature stream by using a qualitative approach to explore the lived experiences of adult victims, including the physical and mental health effects they suffer, which may be attributable to the ACEs they experienced. Finally, this study aimed to evaluate the effectiveness of existing ACE treatment modalities using a survivor-centric approach as the primary contribution to that evaluation.

Most research on ACEs employs a quantitative methodology, relying on data extrapolated from surveys. Finally, the study endeavored to identify successful strategies and interventions to improve trauma-focused treatment from the perspective of those affected by ACEs. This chapter details the research design, rationale, questions, sampling methodology, participants and setting, instrumentation, data collection, data analysis procedures, and the pilot study and its results.

Research Design

An instrumental hermeneutic phenomenological study was implemented to gain a deeper understanding of a phenomenon utilizing a small sample of people (Zainal, 2007). Yin (2015) asserted that a qualitative study is most applicable in a natural setting when the aim is to capture a phenomenon’s reality. Qualitative research examines the how and why of human behavior and

interactions, distilling the essence of phenomena from their natural context (Dolmaz & Kaya, 2018). Abbaspour et al. (2018) and Donnelly (2013) describe qualitative research as a significant methodology that gathers data based on predetermined research questions, extracting relevant and impactful information from the research setting. A qualitative methodology is suitable when data is sourced from the natural environment and results in a holistic experience (Bamu et al., 2017). It also facilitates a detailed exploration of participants' experiences, enhancing the understanding of the findings within the data (Anyan, 2013). This inductive approach enables a focused investigation of a specific group of immigrants within the Australian workforce, producing pertinent and insightful data.

Qualitative research methodology prioritizes language and lived experiences, while many quantitative methodologies often overlook psychological or sociological factors (Yin, 2015). A mixed-method approach was not selected for this study, as it combines numerical and anecdotal data. However, quantitative data is inappropriate for this study, which seeks to create a rich narrative reflecting lived experiences rather than testing hypotheses. The study's aim was not to utilize statistical data to establish or clarify relationships between variables (Subramaniam et al., 2021). Furthermore, the qualitative data and subsequent analysis were not intended to inform any quantitative analysis. Consequently, quantitative and mixed-method methodologies were unsuitable for this study.

The research objective was to interpret, examine, and explore the data collected from participants' lived experiences, which is best accomplished through a qualitative research methodology (Liu, Zhou, Yang, et al., 2020). This research focused less on the 'what' and 'how many' and more on the 'why' of the phenomenon. Furthermore, qualitative methodology can

provide data addressing why people think the way they do and how they perceive their lived experiences (Creswell, 2013).

Hermeneutic Phenomenology

Hermeneutic phenomenology is the most appropriate qualitative methodological approach to this study, as the study's objective is to gain a deep understanding of participants' lived experiences by allowing them to explicate their perceptions and emotions of those experiences without preconceptions. This study's findings are meant to aid those currently suffering from ACEs, future adult survivors of ACEs, and society. Slattery et al. (2007) asserted, "Hermeneutics is the art and process of interpretation that can lead not only to understanding but also to personal growth and social progress" (p. 129).

A hermeneutical phenomenological approach seeks to answer the question, "What was that experience like?" Hermeneutic phenomenology assumes multiple socially constructed realities, where meaning is developed based on how the individuals studied perceive that experience and ascribe meaning to it. According to Ramsook (2018), a hermeneutical phenomenology should focus on the meaning participants create from their experiences. This study is designed to allow participants share those experiences and the meaning they ascribe to them without preconceived notions or perceptions of those lived experiences (Holroyd, 2007).

Research Questions

Research Question 1: How do adults with reported ACEs perceive the impact of ACEs on their physical and mental health?

Socioeconomic class significantly predicts the types and prevalence of psychological, psychosocial, and health illnesses in adults affected by ACEs (Misiak et al., 2022). In addition, the results of existing empirical research suggest that those adults from lower socioeconomic

status, which positively correlates with race, who have endured ACEs are disproportionately affected by psychological and health illnesses (Andersen, 2021). However, the literature fails to provide a detailed account of those effects from the victims' perspectives. Finally, existing literature fails to adequately acknowledge the role that the concomitant effects of socioeconomic class and race have on the prevalence and severity of illness.

Research Question 2: How do adults with ACEs from lower socioeconomic backgrounds perceive the effectiveness of existing trauma-based intervention strategies?

Existing literature predominantly employs survey data with *priori* measures of success in adult populations of ACE victims. However, there is a gap in the empirical research literature with rich qualitative data that provides a more detailed account of the efficacy of existing treatment modalities from the perspective of adults who have endured ACEs. This research sought to provide that data to inform scholarly research and clinical practice.

Research Question 2A: Which trauma-based intervention strategies do adults with ACEs from lower socioeconomic backgrounds perceive to be most effective?

This sub-question complements research question two by allowing adults who have endured ACEs to specify which strategies and interventions most effectively mitigate psychological and physical illness symptoms stemming from ACEs. Additionally, this sub-question elucidates the gap in existing clinical practice that evaluates effectiveness based on survivors' perceptions instead of an outcome-based approach designed by practitioners. This data-informed research question contributed to future research and clinical practice by identifying victim-centric treatment interventions most effective in trauma-based treatment in adult populations who have suffered ACEs.

Setting

The hermeneutic phenomenological study utilized semi-structured interviews with participants from adults who receive physical and mental health services from a public health department in North Carolina. According to county socioeconomic data, the average percentage of county residents living below the 200% federal poverty line was 40.4% (Reynolds, 2023). However, 80.3% of residents in three moderate-sized county areas live at least 200% below the federal poverty line (Reynolds, 2023).

A public health center was chosen because the setting provides an ample sample of potential participants, as most patients are from lower socioeconomic classes because of healthcare costs (Arpey et al., 2017). Moreover, patients from lower socioeconomic classes are more likely to suffer chronic illnesses, including those affecting their mental health (Wang & Geng, 2019). Finally, socioeconomic status correlates highly with ACEs (Arpey et al., 2017).

Participants

The study employed a purposive sampling methodology, as participants were chosen based on their participation in two public health programs: one for men and another for women. These programs were Fatherhood and Healthy Start. Both programs are a nationwide effort to aid those in need; therefore, participants' confidentiality will not be compromised by geography.

Interviews with adult participants continued until the study reached data saturation (i.e., when novel responses ceased; Alam, 2021). The study aimed to include interviews with at least 12 participants but recruited an initial sample of 30 participants to ensure data saturation. According to Dworkin (2012), key factors determine whether the sample size is acceptable. These factors include (a) whether the data gathered from participants is helpful, (b) the quality of the data, (c) the breadth of the study, and (d) the nature of the topic. Ellis and Dietz (2017)

suggested that any descriptive or hermeneutic phenomenological study should not have fewer than 10 participants in the sample size to ensure thick data can be collected. However, other previously published qualitative studies provided that there was no minimum number of participants (Adams, 2010). Instead, the objective should be to achieve data saturation, not set *a priori* participant sample sizes (Brinkmann, 2014). However, consistent with the assertions of Irvine et al. (2013), Horton et al. (2004), and Su et al. (2020), the study sought to interview a minimum of 12 participants but continued interviews until data saturation is achieved. Otherwise, it would be challenging to achieve rich, thick data that reveals the social context and connections between data points (Su et al., 2020). The following section details safeguarding data with a solidified data management plan to ensure data security and confidentiality.

Inclusion Criteria

1. All participants were at least 18 years old.
2. Participants whose self-reported income was at or below the federal poverty guideline of 200% (see Appendix A).
3. Participants identified as adults with ACEs through the California Surgeon General's ACE screening tool used by public health department staff.
4. Participants have self-disclosed a diagnosed medical, mental health, or comorbidity diagnosis.
5. Participants must be able to understand and speak English fluently.
6. Participants must meet the minimum client treatment compliance rate (56.2%) based on North Carolina state standards utilized by the Pitt County Health Department (Medicaid Managed Care Quality Measurement Technical Specifications Manual, 2022).
7. Participants must have access to a computer and the Internet.

Potential participants must meet all of these criteria to participate in the study. This study sought to understand ACEs' effects on adults' physical and mental health. Therefore, all participants must be at least 18 years of age and be identified as an adult who experienced ACEs. In order to participate in the semi-structured interview and to review the transcript for accuracy, participants must also have a fluent understanding of spoken and written English, as the research is not qualified in other languages, and interpreting services were not available or practical for this study.

The study also examined adult survivors of ACEs' perceptions of the effectiveness of trauma-based interventions. Therefore, participants must have a physical or mental health diagnosis to participate. ACEs also disproportionately affect adults from lower socio-economic statuses. Therefore, all participants in this study must have an income at or below 200% of the federal poverty limit to ensure the sample is representative of those adults most affected by ACEs.

Exclusion Criteria

1. Persons under the age of 18.
2. People who are unable or unwilling to sign informed consent documents.
3. Those whose income is greater than 200% of the federal poverty limit.
4. Any acute or chronic condition that would preclude participants from completing any portion of the study procedures (e.g., active or untreated psychosis).
5. Anyone unable to comprehend written or spoken English.
6. People belonging to a vulnerable population (e.g., inmates, intellectually impaired).

7. Individuals who do not meet the minimum compliance rate set forth by the North Carolina Department of Health and Human Services (State of North Carolina Department of Health and Human Services, 2022).
8. Those who do not have access to a computer or the Internet.

Procedures

The study included human participants, which requires institutional review board (IRB) approval. Therefore, with written site authorization, the IRB application was submitted before conducting research related to the study. Kallio et al. (2016) developed an interview protocol to ensure that all questions elicit necessary, rich data for the study. Initial survey questions were vetted through an expert panel, described in more detail in the *expert panel* section. Subsequently, revisions were made to interview questions based on the advisor's feedback. Next, those revised interview questions were returned to the expert panel for a second review. Modifications to any questions the panel requested were made before beginning interviews. The public health department agreed to assist in conducting the current study by screening and obtaining participants' consent. The screening process is discussed in more detail in the data collection section.

Site Authorization

An official request for site authorization sent to the Director of Clinical Services, adapted from Liberty University's IRB template (Appendix C). This email described the research problem statement, the university's name, and a copy of a participant's informed consent (Appendix B). A board meeting was attended where site permission was requested on April 12th, 2023. The Director of Clinical Services verbally consented to authorization on April 28th, 2023. Subsequently, an additional request was issued on July 28th to modify the site authorization

document to include a clause that gave the health department the right to withdraw from their participation within 30 days. After that modification, two Pitt County Health Department directors sent the site authorization for a signature. Those signatures were obtained on August 8th, 2023.

The Researcher's Role

Despite a personal relationship with the Director of Clinical Services at the public health department used for the study, there have never been interactions with the patients who utilize services there. Therefore, biases are limited to those inherent in qualitative research, specifically semi-structured interviews. Given that the principal investigator is African American, as are the majority of respondents, the propensity for social desirability bias was more likely (Ghane et al., 2010). People of color often develop shared perceptions of experience and the world. Moreover, strong cultural norms may increase the likelihood that participants respond consonant with common norms in the African American community (Wittink et al., 2009). To mitigate this bias, the expert panel had two Caucasian and one African American member. One Caucasian member of the panel has a Ph.D. in Psychology. The African American member is an LCSW (Licensed Clinical Social Worker), and the second Caucasian panel member has a Ph.D. in Sociology, specializing in qualitative research methodology. This particular bias was discussed with the members to ensure that survey questions and subsequent findings did not indicate a higher-than-normal level of social desirability bias.

Other biases that may have affected this research study are common in qualitative research, including question order and leading question bias. Question order bias occurs when one question affects subsequent questions based on how the question is written. Leading question bias occurs when a question is phrased to influence or direct participants’ responses in a

particular direction (Diefenbach, 2009). The expert panel's advice was relied upon to mitigate these biases.

Data Collection

Initial Screening Procedures

The public health department performed initial screening procedures. First, a public health administrator utilized socioeconomic data collected by clinical staff during intake at the adult and mental health outpatient clinics to identify patients living at or below 200% of the federal poverty line. Next, the public health department staff will make contact via phone using the Adverse Childhood Experience questionnaire developed by the California Surgeon General and used throughout the United States and Canada (see Appendix D). This screening tool does not require any authorization or additional training for use. If potential participants self-disclosed an ACE, consistent with the inclusion criteria, then they were asked if they were interested in participating in the study. The health department staff described the study's objectives to those potential participants that continued to show interest. Then, interested potential participants were asked for their email addresses and health department staff sent them more details about the study.

The recruitment email sent to the participants (Appendix E) provided potential participants with a full description of the study's objectives, steps involved to participate, and links to a Qualtrics survey, and the Calendly app to schedule their semi-structured interviews. Potential participants were told to complete each step in order beginning with the Qualtrics Survey. The survey was used to perform a secondary screening to ensure that all potential participants met the inclusion criteria. Those that did received a message at the end of the survey informing them if they met the inclusion criteria or not.

Subsequently, those that did meet the criteria were sent a second email with a link to the informed consent (Appendix F). Once potential participants digitally signed the informed consent, they were able to schedule their semi-structured interviews through the Calendly app. Finally, an assurance was provided that all documents were reviewed and digitally signed before accepting pending interview requests on Calendly.

Semi-Structured Interviews

The following section describes the data collection process, beginning with developing the interview protocol. Then, the creation and multiple revisions of the semi-structured interview questions are detailed. Next, vetting survey questions through an expert panel, field testing, and finalizing the semi-structured interview questions are described. Finally, the ethical foundations of the data collection efforts are highlighted.

Expert Panel

The expert panel consisted of three people with clinical experience treating or studying those with ACEs and one with academic research experience. In addition, because of the nature of the study, an African American woman was on the panel to mitigate biases. However, the panel's mix of races and ethnicities provides diversity and balance.

Interview Guide

An interview approach was utilized to facilitate data collection (refer to Appendix F). This interview guide was partially derived from the research of Kallio et al. (2016). Kallio et al. (2016) proposed a five-phase framework for constructing an interview guide that enhances the rigor and reliability of the gathered data. The process involves (1) identifying the prerequisites for employing semi-structured interviews, (2) retrieving and utilizing prior knowledge, (3) formulating the initial semi-structured interview guide, (4) conducting a pilot test of the guide,

and (5) presenting the finalized semi-structured interview guide. Questions were formulated to provide participants with direction on discussion topics, yet not in a strictly structured manner (Gill et al., 2008). The guide aligns with these objectives by incorporating only questions that extract the essential information required to finalize the study (Green et al., 2010).

Several steps were required to collect the necessary data for this study. This section will detail step-by-step how data were collected for the study:

1. All participants must have met all inclusion criteria.
2. The data collected were used to answer the research questions posed within the dissertation.
3. Site permission and IRB approval were finalized prior to contacting potential participants.
4. Before the interviews, each potential participant was contacted via email to ask for their participation in the study. Then, informed consent was signed electronically. These consents outlined the study's benefits, risks, and nature. Moreover, the informed consent emphasized that participation was voluntary; participants could end their participation in the study at any point without explanation.
5. Reminder emails were sent to all participants 1 week, 3 days, and 1 day before the interview.
6. The interviews took place virtually via Zoom. The audio from these interviews is recorded for each participant.
7. The interviews were performed according to the interview protocol developed in the interview guide.
8. The recorded audio from the semi-structured interviews was transcribed.

9. The transcripts were sent to participants for member checking. The final transcripts included any revisions or additions made by participants.
10. Data were stored according to the "Data Collection and Management" section.

Interview Questions

1. How would you describe your childhood, including family life and school?
    a. Would you describe any part of your childhood as abusive, traumatic, or neglectful?
    b. When you think about your childhood, specifically any events or situations that were most difficult for you, how do you feel about those involved?
2. At what age did your physical health issue(s) start?
    a. Do you think that your childhood, or the way you were raised, may have contributed to your physical health issue(s) in any way?
3. At what age did your mental health issue(s) start?
    a. Do you think that your childhood, or the way you were raised, may have contributed to these mental health issue(s) in any way?
4. Do your physical or mental health issues cause problems in any areas of your life or work? If so, tell me about them.
5. Do you think you would have these physical or mental health issues if you hadn't had traumatic or difficult childhood experiences?
6. Have you ever been to a counselor, therapist, psychiatrist, or mental health professional?
    a. If yes, why did you go?
        i. What was your experience like?

   b. If not, why not?

7. What do you think of mental health treatment in general?
   a. How would you describe your family's attitude, especially when you were a child, of mental health treatment?
8. If you have received mental health treatment, do you think the mental health treatment you received was based on the things you wanted to discuss?
   a. Why do you think that?
   b. Could you give me some examples?
9. If you are a person of color, did your mental health provider ever discuss race or race-related issues during your time with them?
   a. If so, what did you talk about?
   b. Was that provider a person of color?
   c. Would it have mattered if that person was not of color?
10. If you are a person of color, do you think the treatment you received addressed issues affecting your community?

Interview Questions Explained

Question 1 was meant to initiate childhood memories so that participants oriented themselves to that period (Goldfarb et al., 2023). The question provided a foundational understanding of family dynamics and began to develop trust and rapport with participants (Laney & Loftus, 2016). Additionally, question one provided a starting point to create a safe space for more intimate questions that may have evoked uncomfortable emotions for some participants (Goldfarb et al., 2023).

Questions 2 - 5 were meant to establish a timeframe from ACEs to the onset of physical and mental health issues. These questions were developed to compare this study's findings to previously published research suggesting that these health conditions arise much later than the ACEs (Campbell et al., 2016). These questions were necessary to explore the trauma purported as an antecedent to future health issues in adulthood. Moreover, these questions provided data that was analyzed to develop a narrative that accurately depicted the presence of ACEs and emotional trauma, which may be linked to health issues in adulthood (Wu et al., 2023). Finally, these questions allowed participants to provide their perceptions of the relationship between ACEs and physical or mental health issues.

Questions 6 - 8 established the participants' overall perceptions of mental health treatment and allowed them to express any influence that familial perceptions of mental health treatment had on those perceptions. Research suggests that ACE survivors, specifically those from socioeconomic classes, fail to attend therapy or perceive it as not having value based on distrust developed from childhood and cultural norms in communities of color (Edwards et al., 2004). Finally, these questions provided vital empirical data potentially indicating a link between cultural norms and familial influence on survivors' perception of the efficacy of mental health treatment (Pilkington et al., 2021).

Questions 9 - 10 provided data about ACE survivors' perceptions of the efficacy of mental health treatment, specifically whether they perceive it as personal and culturally driven. Additionally, these questions were developed to elicit any feelings of engagement or catalyze conversations about their engagement in treatment based on any perceived cultural barriers. A lack of engagement between providers and abuse survivors inhibits the development of trust,

which increases the likelihood of treatment noncompliance and ineffective treatment modalities (Wu et al., 2023).

Surveys/Questionnaires

A field test was conducted with the expert panel posing as three participants. This field test evaluated the questions' ability to elicit thick, rich qualitative data (Bernard & Bernard, 2013). Moreover, the field test provided the opportunity to practice engaging participants with follow-up questions. In addition, the field test mimicked the proposed research study in terms of length and questions. Lastly, the field study allowed for assessing the length of interviews and whether participant fatigue would influence the study's results (Pilkington et al., 2021). Table 1 depicts the pilot test results, which were also sent to the expert panel for review.

Table 1

Semi-Structured Interviews

Participant	Interview Location	Interview Duration (minutes)	Transcribed Pages (single-spaced)
P1	Zoom	43	24
P2	Zoom	51	29
P3	Zoom	47	31
Mean		*47*	*28*
Total		141	84

The screening questions used by public health officials have been used in several empirical papers and were adapted from the seminal empirical study conducted by Kaiser Permanente (California, 2023; Felitti et al., 1998). Moreover, the California Surgeon General (see Appendix D) approved these measures of ACEs. Finally, the California Surgeon General's

Office permits researchers to use the survey for all academic research endeavors (see Appendix G).

The expert panel assessed the survey questions for face and content validity. Multiple questions were removed, as they were deemed not to elicit necessary data to answer the research questions. Multiple revisions to the remaining questions and questions that focused on participants' perceptions of the efficacy of mental health were added to extract relevant and necessary data. Finally, Questions 9 and 10 were designed to obtain data about cultural components, specifically race, in existing treatment modalities and participants' perceptions of the role of race in mental health treatment.

Data Analysis

MAXQDA was employed to transcribe the interviews. This software employs speech recognition for transcribing purposes. Upon transcription of the interviews, a copy was provided to the participant for member validation. If participants failed to submit comments within five days, the transcript was deemed an accurate representation of the replies made during the interview. The transcripts were thereafter considered prepared for analysis. The data were processed with MAXQDA software, and the story was constructed through theme analysis, as outlined by Braun and Clarke (2006, 2012, 2014).

Thematic Analysis

Thematic analysis was the most suitable method for this study due to its aim of uncovering insights through interpretation. Thematic analysis improves comprehension of the whole by systematically examining the prevalence of a topic. The technique enhanced precision and complexity while reinforcing the significance of the findings. The thematic analysis provides a comprehensive and profound knowledge (Yardley & Marks, 2004). Guest et al. (2012) stated

that thematic analysis "is most useful in capturing the complexities of meaning within a textual data set" (p. 10), which is consistent with this research's data analysis objective. The algorithm developed by Braun and Clarke (2006, 2012, 2014) provides detailed steps and justification for completing thematic analysis through semi-structured interviews to yield an insightful and rich narrative that accurately reflects participants' lived experiences.

Braun and Clarke (2006) delineated six phases of thematic analysis that form the foundation of the data analysis procedures in the research presented here. These six phases are "(1) familiarizing yourself with your data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report" (p. 90). All semi-structured interviews were transcribed, and the data were reviewed intently to become familiar with the breadth and depth of the data. Reading the data several times before coding gained a more comprehensive understanding of the phenomenon and a better recognition of patterns and nuances was formed, which assisted in the coding phase (Braun & Clarke, 2006).

Upon familiarization with the data, a preliminary list of insights regarding the data, encompassing potential patterns, was formulated, and initial codes were established. Codes were generated based on the most intriguing elements and the patterns that emerged. Tucker et al. (2021) contended that this phase of data analysis entails categorizing data into significant groups. The coding methodologies proposed by Braun and Clarke (2006) were employed, encompassing (a) the identification of numerous potential themes and patterns, (b) the inclusive coding of data extracts with pertinent contextual information, and (c) the acknowledgment of certain inconsistencies, allowing for the adaptation of groups as required to address these discrepancies (p. 93). Following the identification of a comprehensive array of codes within the data set, the

preliminary codes were established to facilitate the subsequent identification of themes in the data analysis process (Braun & Clarke, 2006).

Following the initial coding of the data, the codes were organized into distinct themes. The pertinent coded data extracts were compiled within the identified themes. During this phase, the interrelations among codes, themes, and various hierarchical levels of those themes were conceptualized. For instance, the primary codes constituted the main themes or sub-themes, while others were categorized under a 'miscellaneous' theme for potential future exclusion (Braun & Clarke, 2006). Nevertheless, codes should not be eliminated at this stage, as connections among codes may emerge later in the data analysis process.

Themes in this step were revised if the first candidate themes lacked sufficient evidence for support or exhibited excessive diversity. Certain motifs were amalgamated into a singular subject due to their substantial similarity. Nonetheless, additional themes needed to be delineated into independent categories (Braun & Clarke, 2006). Patton (1990) utilized dual criterion judgment categories (i.e., internal homogeneity and outward heterogeneity) to amalgamate or differentiate various themes. The integrated themes must have significant links, whilst disparate topics should demonstrate obvious and recognizable divisions.

This phase had two tiers of evaluation and enhancement. The initial stage entailed examining all compiled excerpts for each theme and assessing the presence of a consistent pattern. The second stage entailed the refinement of established concepts. If the potential themes lacked a coherent pattern, it was assessed if the theme was troublesome or if the data derived from that theme was incongruent. If the latter occurred, a new theme was established, integrated into an existing theme, or abandoned (Braun & Clarke, 2006).

Themes were then defined and named for data analysis in this phase. Braun and Clarke (2006) described this phase as "identifying the essence of what each theme is about (as well as themes overall) and determining what aspect of the data each theme captures" (p. 92). Braun and Clarke (2006) purported that themes should not be too diverse or complex. To avoid stretching the bounds of themes, collated data extracts for each theme were continuously reviewed and organized into a coherent and internally consistent account of the phenomenon using a narrative (Braun & Clarke, 2006). Collated data extracts were maintained as critical references to ensure the themes remained coherent and internally consistent.

The data report has been finalized. The aim of composing a proficient thematic analysis was to convey the intricate narrative of the facts to persuade the reader of the study's quality and validity (Braun & Clarke, 2006). The job was achieved by the deliberate use of vivid instances and extracts that encapsulate the substance of the material, while maintaining simplicity. Furthermore, chosen excerpts were included into an analytical narrative that depicted the data's narrative while constructing an argument related to certain study issues.

Trustworthiness

According to Sandelowski (1993), trustworthiness in qualitative research is developed to persuade the reader to trust the author by making research practices transparent and auditable. Williams and Morrow (2009) asserted that trustworthiness in qualitative research is achieved by convincing the study community that they have done their due diligence to ensure the validity of the findings. Thus, trustworthiness is accomplished by establishing a clear rationale for conducting the study, providing transparent data collection steps and analytic methods, and interpreting the data clearly (Choudhuri et al., 2004). Trust with the reader and the research community can be built by maintaining transparent research practices. Additionally, the study's

results are more likely to elicit richer and more valuable data (Sandelowski, 1993). Trustworthiness is divided into credibility, dependability, transferability, and confirmability (Sandelowski, 1993). These constituent pieces of trustworthiness are discussed in the following section.

Credibility

Credibility is confidence in the truth of the study based on its transparency, leading to confidence in its results (Connelly, 2016). Credibility is preserved when the study's findings can be reproduced (Gentles et al., 2015). Noble and Smith (2015) contended that member checking enhances credibility since participants may verify the accuracy and reliability of the transcripts. Consequently, all interview participants received a copy of the transcribed interviews within 48 hours post-interview. Subsequently, participants were provided with two weeks to review the transcripts, ensuring that each participant had ample time. Member checking is vital to increase the credibility of the study's results and develop trust with interview participants (Shenton, 2004). Additionally, study participants were assigned a pseudonym identifier (e.g., P3) to enhance trust through additional measures to safeguard participants' confidentiality (Williams & Morrow, 2009).

To achieve credibility, Shenton (2004) and Lincoln and Guba (1985) suggested that qualitative studies should promote confidence by adopting well-established research methods in the research community. These methods should have a data science component that has been tested multiple times. Additionally, Lincoln and Guba (1985) recommended becoming familiar with the culture of the participating organization, employing a random approach or, if purposive sampling is utilized, attempting to incorporate some degree of randomness during participant selection, and using data triangulation whenever possible.

Thematic analysis was employed based on the algorithm developed by Braun and Clarke (2006), firmly established as a venerable approach to qualitative data analysis. The algorithm dictates specific data science-based steps to achieve the most accurate narrative depicting participants' lived experiences. While purposive sampling was used in the participant selection procedure, adding a random component completed by the public health department added confidence to the study's results. Finally, data were collected from an established and vetted survey, and then semi-structured interviews were reviewed and vetted by an expert panel.

The research design poses intrinsic dangers to the credibility of the study. Replicability is challenging in qualitative research due to its observational characteristics. The lack of statistical testing may introduce a degree of bias. Furthermore, deriving causal inferences and correlations among variables might be more complex than in quantitative research (Lambert & Lambert, 2012).

Dependability

Dependability refers to the stability of research data over time and study conditions (Janis, 2022). There is an inherent understanding that dependability is highly dependent on the nature of the study. If conditions change, study data could vary from the original data collected. However, incorporating peer debriefings, such as collaboration with an expert panel, increases research data and results dependability (Connelly, 2016). The expert panel assesses whether changes to conditions may be likely or if study data will remain stable over time.

However, because of the nature of the research design, sometimes it is possible to attain the same results because the study has temporal limitations, as data are collected once (Brink, 1993). Moreover, participants may remember more details of the trauma after conducting

interviews (Sciaraffa et al., 2018). Therefore, member checking plays a vital role in developing dependability.

The data collection process was also detailed within the research guidelines, informed consent, and the interview protocol. By employing guidelines and protocols, it was ensured that all data were collected from participants similarly. Furthermore, by adhering rigorously to established guidelines and protocols, future studies can focus on evaluating and replicating the data collection process (Shenton, 2004).

Confirmability

Confirmability is the final step in trustworthiness and ensures the study's neutrality, findings are consistent, and the study can be replicated (Connelly, 2016). Shenton (2004) aptly conceptualized confirmability in the following way: "The concept of confirmability is the qualitative investigator's comparable concern to objectivity" (p. 72). Therefore, appropriate neutrality must be exhibited throughout the study and ensure objectivity is maintained throughout the research process (Gentles et al., 2015; Shenton, 2004). Furthermore, it must be ensured that the findings accurately reflect "the informants' experiences and ideas, rather than the researcher's characteristics and preferences" (Shenton, 2004, p. 72).

Preconceptions and other biases can compromise the confirmability of qualitative research data and results (Gentles et al., 2015). Therefore, the expert panel was frequently engaged to maintain objectivity throughout the study. Moreover, the expert panel reviewed and vetted all semi-structured interview questions, ensuring any preconceptions, assumptions, or biases were not inadvertently incorporated into interview questions. Additionally, the expert panel reviewed results throughout the data analysis portion of the study to ensure that the algorithm developed by Braun and Clarke (2006) was used effectively and objectively. Finally,

the interview protocol developed with the assistance of the expert panel and member checking was used to mitigate any impediments to achieving confirmability of the study's data and results.

Transferability

Transferability in qualitative research refers to whether the study's findings can be transferred to other studies with similar contexts. However, it is also vital that the inherent meaning and inferences made from the results are preserved (Houghton et al., 2013). Because the interviews were semi-structured and open-ended, the conversations with participants yielded insightful personal experiences from adult survivors of ACEs. In addition, a thick description in the form of a detailed account of all data collection efforts was employed to provide a comprehensive and rich understanding of the research setting to enhance transferability (Chowdhury, 2015; Lincoln & Guba, 1985).

Threats associated with credibility and transferability were minimized to the greatest extent possible. In addition, the participants included in the study met all inclusion criteria, ensuring that the results were as robust as possible. Finally, an interview protocol, an expert panel, and a detailed data collection plan were in place.

Ethical Considerations

Measures were taken to safeguard data, ensure participants' confidentiality, and build trust. These measures included informed consent, data security, and specific ways to ensure participants' confidentiality. The ethical considerations and related procedures to ensure confidentiality and transparency are described in the subsections below.

Data Security

Confidentiality was maintained during the research process by keeping documents in a locked cupboard, and the information was used only for research purposes. The collected data

will be kept for 3 years after completing the study, and then destroyed. All audio recordings will be stored in a password-protected cloud computing drive. Those recordings will also be destroyed 3 years after completing the study or when participants request their data be eliminated.

Participant Confidentiality

Participants' confidentiality was maintained using pseudonyms rather than their names on all interview materials, specifically transcripts. Using pseudonyms also established trust between the interviewer and the interviewee (Kaiser, 2009). The public health department official did not reveal patients' names, and those patients were assured of their confidentiality in the informed consent. Finally, any participants' quotes that may identify them were removed to avoid deductive disclosure. Deductive disclosure refers to breaches in confidentiality based on a reader's ability to gain knowledge of a respondent-based on quotes analyzed or presented in qualitative research (Baez, 2002). Furthermore, the expert panel was asked to review participant quotes intended to be used to discuss the results.

Chapter Summary

This chapter reviewed critical details of the research design, rationale, research questions, sampling methodology, participants and the research setting, steps for data collection, data analysis procedures, the pilot study, and the steps taken to ensure the study's trustworthiness and results. The hermeneutic phenomenological study design allowed a deep understanding of the phenomenon through the participants’ lived experiences, gaining invaluable data with scholarly and practical implications. The semi-structured interview format encouraged deep and meaningful conversations that provided thick, rich data for analysis. The pilot study tested interview questions and allowed for interaction with the expert panel. That exercise refined the

interview questions, narrowing their focus exclusively to necessary data. Finally, the data analysis technique, thematic analysis, allowed for thick data to emerge from the participants' experiences in their own words without any preconception of their experiences.

The following chapter will report the findings of this instrumental hermeneutic phenomenological study using an interpretive philosophical paradigm. These results will be discussed in terms of the study's research questions through the lens of the theoretical framework, culminating in a theme-by-theme analysis of the data collected in this chapter. Each theme will contain detailed quotes supporting the narrative from the interviews and thematic analysis.

CHAPTER FOUR: RESULTS AND FINDINGS

Overview

The objective of this instrumental hermeneutic phenomenology was to explore the lived experiences and perceptions of adult survivors of ACEs, particularly those from lower socioeconomic classes who suffer from physical and mental health issues that may be related to those ACEs. Participants provided substantial, rich data about their perception of the relationship between their ACEs and the physical and mental health issues they experience as adults. Additionally, the study also aimed to solicit ACE survivors' perceptions of existing trauma-focused care treatment modalities to assess their perceived efficacy and improve practitioners' delivery of treatment. The semi-structured interviews were utilized to solicit the necessary data from participants; then, data were analyzed through a thematic analysis methodological approach developed by Braun and Clarke (2006, 2012, 2014).

The results of the thematic analysis resulted in initial codes, which were grouped to create categories. Then, they were distilled into themes that transcended individual interviews to create a robust, impenetrable narrative that accurately reflected participants' experiences and perceptions of the relationship between their ACEs and the physical and mental health issues they experienced as adults. Similarly, the data related to participants' perceptions of the efficacy of existing treatment modalities were analyzed using thematic analysis. The study's research questions drove the study's design, data collection, and analysis. The results and subsequent findings reflect those research questions through the lens of the study's theoretical framework, self-efficacy theory.

This chapter presents the research questions, data collection, recruitment and participant demographic data, and semi-structured interview data. Next, the analysis of collected data will be

presented, including the stages of thematic analysis. This iterative process began with initial codes and ultimately resulted in the study's final themes. Each step of thematic analysis is accompanied by one or more tables that provide a graphical depiction of the progression of this study's data analysis.

The resulting final themes are presented and conceptualized within the context of the study's research objectives and questions, guided by the study's theoretical framework. Each theme is supported by participant quotes that provide unique insight from individual participants' responses and illustrate that the primary themes reflect the totality of participant data. Finally, the conclusion is presented as a summary of the key elements discussed within the chapter.

Participants

This section provides a comprehensive description of all participants included in the study. A unique pseudonym was assigned to each participant's transcript for confidentiality purposes. All participants met the inclusion criteria for the study: at least 18 years old, income at or below the federal poverty guideline of 200%, identified as adults with ACEs through the California Surgeon General's ACE screening tool, have self-disclosed a diagnosed medical, mental health, or comorbidity diagnosis, understand and speak English fluently, meet the minimum client treatment compliance rate, and have access to a computer and the Internet. The study's participants consisted of 12 African American/Black adults, ranging in age from 23 to 56. Apart from one male participant, the remaining respondents were female. The study included participants with a wide range of ACE scores, which helped draw insightful conclusions from the interviews. This indicates varied levels of childhood trauma. Furthermore, the age at which participants first encountered an ACE varied widely, from early childhood to adolescence, although some participants did not specify their exact age. For example, participant A01 was a

23-year-old female who had experienced her first ACE at the age of 7 years old, while participant B02 was a 40-year-old male who did not specify the age of his first ACE.

Additionally, variation was observed in the last occurrence of an ACE among the participants with some individuals reporting experiences into adulthood, while others did not provide specific details. Most participants reported a diagnosis related to their ACEs, which depicts long-term impacts of these experiences on their health. Participant H08 (a 41-year-old female with an ACE score of 8) is among this group, as she reported experiencing her first ACE during adolescence and her last ACE at age 18 and has a related diagnosis. In contrast, participant D04, a 51-year-old female, had a lower ACE score of 1, with the first ACE occurring in childhood and the last one at 15, but she also reported a related diagnosis. This demographic profile of each person enhances understanding of the various and complex impacts that ACEs have on the adult survivors' physical and mental health. The predominantly female sample, combined with the high incidence of related diagnoses, highlights the need for targeted, culturally sensitive, and gender-aware trauma-informed care.

Table 2

Demographic Data, ACE Categories & Disclosed Diagnosis of Participants

Participant	Participant's Pseudonym	Age	Ethnicity	Gender	ACE Score	Age of First ACE	Age of Last ACE	Diagnosis
A01	Amelia	23	AA/Black	Female	2	7	7	Yes
B02	Chloe	40	AA/Black	Male	1	Not Specified	Not Specified	N/A
C03	Isabella	56	AA/Black	Female	6	Childhood	Childhood	Not Specified
D04	Mia	51	AA/Black	Female	1	Childhood	15	Yes
E05	Lily	27	AA/Black	Female	6	6	Not Specified	Yes
F06	Zoe	39	AA/Black	Female	3	Not Specified	Not Specified	Yes
G07	Ella	37	AA/Black	Female	4	Not Specified	Not Specified	Yes
H08	Harper	41	AA/Black	Female	8	Adolescence	18	Yes
I09	Scarlett	45	AA/Black	Female	10	Early Childhood	Not Specified	Yes
J010	Ruby	30	AA/Black	Female	2	4-5	Into Adulthood	Yes
K011	Violet	33	AA/Black	Female	3	Childhood	Adolescence	Yes
L012	Aria	29	AA/Black	Female	1	Not Specified	Not Specified	Yes

Table 3

Demographic Data & Therapeutic Engagement Categories of Participants

Participant	Age	Ethnicity	Gender	ACE Score	Current Therapy Engagement	Previously Engaged	Longest Time Engaged
Amelia	23	AA/Black	Female	2	No	Yes	Not Specified
Chloe	40	AA/Black	Male	1	No	No	N/A
Isabella	56	AA/Black	Female	6	Yes	No	< Month
Mia	51	AA/Black	Female	1	No	No	N/A
Lily	27	AA/Black	Female	6	No	Yes	Not Specified
Zoe	39	AA/Black	Female	3	No	Yes	Not Specified
Ella	37	AA/Black	Female	4	No	Yes	Not Specified
Harper	41	AA/Black	Female	8	Yes	Yes	Not Specified
Scarlett	45	AA/Black	Female	10	No	No	Not Specified
Ruby	30	AA/Black	Female	2	Yes	Yes	Not Specified

Participant	Age	Ethnicity	Gender	ACE Score	Current Therapy Engagement	Previously Engaged	Longest Time Engaged
Violet	33	AA/Black	Female	3	Yes	Yes	Not Specified
Aria	29	AA/Black	Female	1	No	No	N/A

Amelia

While embracing her independence, Amelia, a 23-year-old African American woman, has begun her working life. With such a large family background with nine siblings on her father's side and two from the mother's side, she has a painful experience of family life disturbances but has a good sister whom she loves and lives together with her mother and stepfather. Amelia's vibrant lifestyle is shown in her enjoyment of social activities, such as engaging in drinking and lively parties.

Most of her childhood was good but there were times when things were tough mainly as she experienced a number of serious losses. She developed early depressive symptoms due to her father and aunt’s death at the age of seven. Amelia experienced chronic migraines at around 12 years of age alongside emotional withdrawal, and weight gain. She linked some of these health problems to emotions that the female victims go through after such tragedies. This period has also marked the development of her mental health challenges including depression and suicidal thoughts, making her feel worthless. Her transition into adulthood has been influenced by these challenges, which have complicated her ongoing struggles with obesity and bad body image.

As a result of her father’s death, Amelia experienced several forms of difficulty to accessing mental health treatment. However, she admits that mixed therapy could work while

finding it important for the healing process of the woman. This shows why a change is needed in this field since there is a lot of barriers to the realization of mental health care for many people. Amelia is an unmarried and a childless woman who wants to help people and continue with her studies in nursing or social work. Her experience shows how it is a challenge to rise from disadvantage childhood and how it affects one's health hence strengthening the desire to keep on improving as a person.

Chloe

Chloe is a 40-year-old African American male. He has been married for 2 years and has two biological children and one stepchild. He had a very stable childhood, as he grew up with both parents and a sister. However, he stated that he did not experience much trouble during his childhood, no abuse, trauma, or even neglect. The only obstacles he experienced was school-related incidents and verbal cruelty from some adults in his life.

Chloe's interview underscores the profound influence of a supportive childhood environment on his perspective on mental health and well-being. Despite his stable upbringing and absence of personal mental health challenges, he advocates for the importance of mental health treatment for those in need. His perspective is a testament to the positive impact of a supportive environment on mental health support within familial and social contexts.

Chloe, who still needs to complete his GED, works for Taco Bell. He stated his intention to go to school, though he has not outlined specific steps regarding the realization of this goal. In addition to the self-fulfillment of the individual and career success, he is mostly interested in creating a safe and supportive environment for his children. Chloe's interview emphasizes the importance of childhood environment for the formation of a healthy attitude toward mental health and well-being. He grew up in a combined family with stable parents but stressing the

necessity of mental health treatment for everybody who needs it. His view is evidence of the effectiveness of an accessible atmosphere towards mental health in extended family and friends' circles.

Isabella

Isabella is a 56-year-old African American woman who possesses a strong desire towards family love and resilience. She was also cared for by both parents while growing up in a poverty environment. She has a cherished memory of her late father. Being married with two children, the respondent Isabella stated that she finds satisfaction in practicing social work which also involves her being a grandmother to three grandchildren. The reasons were her early childhood experiences where parents used to violently assault each other. Isabella's work is one means of healing and disrupting the hardship she went through, as she is motivated by a profound compassion to enhance the lives of others.

Isabella described the events of domestic violence but became adversarial when she became older. She hardly had any chance to socialize with other children during her early years. Her exposure to other children was limited to her siblings only. They also experienced living in a conservative culture, which was beneficial in some ways as well as a disadvantage. Isabella's engagement to mental health treatment has changed over time. Initially, she declined to accept that she had mental or emotional health problems and pointed to her nature as the cause of any challenges. These are some of the challenges that she faced, and her coping mechanism was to exercise by jogging and finding comfort in her religion. Isabella did have recent reasons for turning to therapy. Her sister is suffering from critical health problems, and she had to stay with her several months to look after her. Isabella got the opportunity to talk about her stresses, get a fresh view on life and a new pressure regarding her sister from therapy.

Isabella keeps a positive outlook on mental health treatment, highlighting the need for it in dealing with challenges. Mental health problems in Isabella's family are not discussed and they are always sidelined. On the other hand, Isabella supports the direct confrontation of conflicts. From these experiences, Isabella's client is currently in ongoing mental health treatment and finds such help with a focus on cultural factors as the main concern. Her journey highlights her passion for self-growth and in taking care of her family, thus showing her passion in improving her life and other's through providing service to the society through social work.

Mia

Mia is a 51-year-old African American woman, with sense of familial devotion and compassion. She continues to take care of her sister who is in a nursing home. She also feeds and supports her nephew, and Mia is a wife and a mother of two children. She has five siblings and was raised by loving parents, whom she lost. Mia has worked all her professional life in the public service where she has been focused on helping mothers and women achieve their goal. She chose her career to resolve her own issues arising from financial insecurity and her father's alcoholism that led to mental distress early in life. Mia sees her work as a way of recovery and as a way of helping her community that also points to her interest in community service.

Mia described her childhood as rather joyful, however their family was poor, and the father was alcoholic. These factors subjected her to mental stress. When only 15, she had a serious trauma, involving the fatal car accident which cause the death of her grandmother and aunt. This event also led to her being hospitalized for bleeding ulcers as well as frequent headaches. Another emotional injury is the accidental drowning of her young cousin. Mia failed to associate her adult physical health complications as high blood pressure, diabetes a directly to her childhood experiences but included them as hardships. However, she is aware that struggles

in her early childhood made her to be overprotecting of her children. The fact that she strives to create a safe and supportive environment for her kids, this implies the kind of parenthood she embraces, which focuses on communication and care.

Mia has never sought any professional psychological help even after being a rape and child abuse victim. However, she is very concerned about the psychological treatment needed, and she regards this as being as important as fighting for a cure for physical illnesses too. She also said that it has potential to properly support spiritual coping styles. Mia is not a patient of any mental health treatment today, but she is a supporter of such a necessity as a service on the path to healthy emotional well-being. The intended meaning of her passion enhances the ideas of supporting frameworks aimed at coping with life's challenges, particularly in the context of childhood difficulty.

Lily

Lily is a 27-year-old African American woman who has been under a lot of pressure and hard work all her life being a single mother of two girls. She struggled for her self-discovery and in her teenage years together with the parental rebellion and the father's domestic abuse stemmed from his alcoholism. Lily did not receive as much attention as before after the parents' divorce because she believed she was just the middle child that no one paid attention to. These feelings of feeling unwanted went on increasing because this experience quite rightly reinforced her notions of being worthless and unwanted.

Mentally and socially, from childhood, she was not able to relate well with people, and she had low self-esteem due to the abuses she had from her siblings and peers. Lily encountered mental health challenges including anxiety, major depression, low self-esteem, and weight-related issues that affected her physical health. She said that the therapy was useless because

during the therapy sessions, her mother was always around, hence, hindered her ability to address her own needs effectively.

Lily emphasizes the importance of mental health treatment for such people like herself who have been through some emotional behaviors. She has been able to grow from all the difficulties and focuses on a self-motivative force in dealing with all the challenges met in life. Currently, Lily is not engaged in the treatment of mental illness. However, she thinks that such therapy experience might have been helpful if it had not narrowed down to the issues within the family. She further compares her family's attitude towards seeking assistance with the importance of therapy in enabling breakthroughs for individuals who are struggling with mental health issues. In Lily's interview, one is presented with what can be seen as a journey of the self, and tenacity, consistent with the effort that she makes to create a conducive environment for herself and the children despite the various difficulties. It encourages the adoption of cognitive health interventions that possess high efficacy and are culturally competent regarding everyone's needs.

Zoe

Zoe is a 39-year-old African American woman from Brooklyn, New York. As she reflects on her life path, Zoe says that she has no specific memory of any physical or sexual abuse, no memories of trauma because she was raised singlehandedly by her mother. Initially, she realized that it is rather uncomfortable to go for counselling to deal with anger problems during her early adolescence period. However, she said that she gradually got used to the process and that it was helpful in cultivating a normal manner of expressing her feelings.

Zoe has transited in maturity to self-interest in seeking a career, having a YouTube program in which it focuses on urban culture and overcoming her responsibilities as a young

mother. Zoe has not reported mental or emotional problems that affect her routine or employment. She attributed health issues that affected her in her early thirties to the nature of adult life and not childhood experiences. Despite acknowledging the necessity of mental health treatment in adults and works in a field associated with this issue, she has not sought counseling as an adult. She links her previous counseling experiences during adolescence to their effectiveness in meeting her requirements at the time.

Zoe accentuates the significance of mental health treatment, asserting that it is both essential and advantageous for those who are experiencing emotional challenges. She maintains a constructive perspective regarding the pursuit of solutions to mental health issues within her professional and familial networks. Her previous counseling experience during adolescence was a pivotal moment, as it enabled her to meet her immediate needs and develop healthy emotional expression. She remains active in her community by engaging in creative endeavors and demonstrating adaptability and resilience in the face of life's obstacles, all while advocating for mental health awareness and support.

Zoe amplifies the message of mental health treatment emphasizing that it is needed and beneficial for people with any emotional problems. She maintains a constructive perspective regarding the search of solutions to mental health issues within her professional and familial networks. The only previous counseling that she had was during her adolescence years and that was a milestone in her life as she was able to meet her needs and attain an appropriate manner of expression of emotions. She continues to be creative, productive and remain engaged in her communities, as well as fighting for the causes of mental health support.

Ella

Ella, a 37-year-old African American woman, recounted a childhood influenced by personal challenges and familial discord despite initially characterizing it as *good*. Her unmarried parents and siblings raised her, and it was disclosed to her that her mother endured physical violence from her father during pregnancy. She believed that this contributed to a stressful and traumatic home environment. Ella's mental and physical health seems to have been permanently impacted by her early exposure to domestic violence. Ella confronted substantial internal turmoil at 14, considering the possibility of running away from home. However, she did not regard this experience as abusive or traumatic. The majority of her mental health issues manifested as severe anger management issues during her 20s. She pursued counseling for anger management, but the assistance proved ineffective, resulting in her frustration and termination of the therapy.

Ella’s determination to continue to receive mental health treatment is not shaken by her ill experiences with therapy. This was recently communicated to her doctor as she expressed her keenness to resume the therapy especially for recurrent and severe suicidal thoughts. Her current mental condition is demonstrated by reactive psychosis. Ella participates in the Healthy Start program, attends activities with great pleasure, and has a partner’s support though she is single and has no children. She is at this present time unable to work because of her disability and depends on the health department for her needs in the area of mental health. She has not gone to a counselor or therapist within the last one to three months, which implies a lack of recent mental health treatment.

There was a sense of empathy and determination in Ella’s interview while she presented the examples of helping others even with so many challenges. Her life presents how complexity

of treating mental health that stem from childhood trauma, advocating for more effective and personalized therapy that caters to each individual's unique requirements and facilitates recovery.

Harper

Harper is a 41-year-old African American female who has emerged against many difficulties. Harper had a positive childhood history till the fifth grade. Her health at this stage was highly affected by fluctuations due to family problems. Being in and out of foster care, Harper and her sister were homeschooled by their mother until conflicts within the family and mother’s alcoholism left them living with their grandparents. Harper suffered from neglect as well as taunting at times. It comes from sexual abuse she suffered at the age of 18 and for which she seems to have begun psychiatric care by the age of 23. Harper has gone for therapy to correct depression and low self-esteem and also been on some form of medication for ailments like diabetes and others in the past years.

Harper continues to attend the Healthy Start program meetings yet suffers from various health issues that have rendered her jobless and in the process of seeking disability benefits. She involved herself as a subject going through the battles and the process of learning to stand up against domestic violence. Harper is passionate about advocating for mental health services, which she has firsthand experience of and bring out the importance of networks and readily available mental health services.

Scarlett

Scarlett, a 45-year-old African American woman, has experienced tremendous hardship in her lifetime. She went through sexual molestation, and systematic foster home placements throughout her childhood. The communication with her mother was marred by strained and intermittent communication due to the resultant instability arising from sexual abuse by her

mother's live-in companion. She was mainly brought up by her godparents. Scarlett's physical health deteriorated at the beginning of her twenties, suffering from diabetes, high blood pressure, and obesity that progressed to congestive heart failure and ICU admission. Some of these health issues, she blames on her adolescence tragedy.

Scarlett has not sought professional help to address her condition. She claimed to be disqualified from gaining access to therapy because she values her parental and nurturing responsibility to her family. She is not oblivious of the need to seek mental health treatment and has arranged with therapists for the oldest son; she passionately defends the need for therapy. Scarlett prioritized her family as she struggles to deal with the residual impact of her childhood sexual abuse that manifests physically and psychologically throughout her career and family life. Scarlett's story highlights the need for culturally appropriate and easily available assistance to people facing similar challenges and the long-term impact of early trauma on people's health.

Ruby

Ruby is a 30-year-old African American woman who has been a caregiver and teacher of young children while being a mother to six. She gets much satisfaction from her professional duties concerning children; the pursuits of hairstyling, singing, arts and crafts strengthen relationships with her children. The majority of childhood negative events, such as bullying and sexual abuse, characterized Ruby's developmental period. This trauma affected her family's stability and precipitated mental issues such as anxiety and depression since her childhood at the age of 10.

Ruby has been going for mental treatment since very early childhood and has at some point gained from the treatment. However, she would sometimes feel neglected or re-victimized mainly due to the presence of her abuser in her environment. She stresses that such measures

should be most individual-oriented in terms of each participant's background and requirements. She is also positive about the opportunities that rely on mental health treatment and healing. Ruby is at this moment dealing with the various effects which the past experiences have on her both mental and physical health.

Ruby still struggles with barriers in her life including the re-emergence of threats from her violent ex-partner. Despite the difficulties Ruby is facing, she insists on maintaining stability and the process of recovery with the necessary mental health support. Mental health and treatments are another area of her activism that focuses on the impact that childhood trauma has on the mental state of person and need for better, more efficient, and individualized therapy.

Violet

Violet, a 33-year-old African American woman, is a single mother of a 14-year-old son; she has faced considerable challenges. However, her resilience and determination are evident. Violet grew up in the projects of North Carolina with her single mother and her brother. She suffered from neglect, poverty, and emotional abuse, mostly the lack of paternal affection.

Violet had an adolescent pregnancy at the age of 19 and suffered from depression, and postpartum depression at the age of 20 when she gave birth. Since that time, anxiety has persisted, which has been further exacerbated by her early experiences of emotional instability and neglect. Despite these obstacles, Violet has consistently pursued mental health treatment, initially for anger management during her childhood and, more recently, for her ongoing mental health as an adult. Currently, she is in the process of returning to therapy to address unresolved childhood issues that are impacting her defensive behaviors in relationships and work. She found previous therapy to be very beneficial.

Despite her religious and cultural heritage, she recognizes the significance of mental health treatment and understands that mental health cannot be fully addressed with prayer alone. Violet thinks that mental health providers who are of color are more likely to be able to relate to and comprehend her experiences. Her experience and viewpoint underscore the imperative necessity for culturally competent care in addressing individual needs sensitively and effectively, and it emphasizes the impact of childhood adversity on mental health outcomes.

Aria

Aria, a 29-year-old resilient African American mother of two, was mostly raised in a protective home by her mother and sister. Aria studying in sensitive environment, her poor performance caused her to withdraw from school in the 10th or 11th grade. She did not mention any such cases of neglect and abuse. She did, however, mention temporary seizures and mathematical problems during her childhood, which the health care personnel did not explore. Aria's adolescence can be described as positive; this was further complemented by the strong backing of her immediate family.

Aria had more drastic life changes as an adult and had exacerbating factors such as the death of her child's father in 2020, which led to anxiety and depressive symptoms. These mental health issues complicated her loneliness since she was not in touch with her family during this time. Despite accepting her need for professional treatment, she has not sought help from a professional counselor because some of the challenges she witnesses include inadequacies in follow-up services offered by her community health center. She has given desire for an appointment and appears to be willing to take up the mental treatment. Recently, Aria has embarked on a new strategy with the single agenda of finding a job to fend for her and the children.

Aria understands that there might be some positive outcomes of mental health treatment regarding her current issues. However, she has not received this treatment consistently because of the latter's logistical challenges, suggesting a lack of adequate solutions to her mental health needs. Her interview gives the reader an idea of how supportive familial relationships affect a life amidst personal and academic struggles. It illustrates the significance of accessible mental health support and the resilience necessary to navigate adversity.

Results

The findings from the participants' experience of The Implications of Adverse Childhood Experiences on Adult Health Perceptions are presented in this section under two sections: Theme Development and Research Question Responses. The theme development process relied on grouping the commonalities that existed between the participants' experiences. The section on Theme Development describes the steps considered when analyzing the data and discusses the emergent themes from the participants' experiences. Moreover, the Research Question Responses highlight the three research questions formulated to direct this study with associated responses derived from the interview responses obtained from the study participants.

Theme Development

With the goal of developing themes from the interview responses, the following section describes how thematic analysis was used to analyze the data from the semi-structured interviews. Each stage of the thematic analysis process is discussed with significant details about the research approach to each step. Then, each phase includes a table that illustrates the inherent iterative process using data from the study. The audio recordings from each semi-structured interview were reviewed at least twice to ensure the audio quality was sufficient and the entirety of the interview was captured. This step aimed to create accurate transcripts that would be used

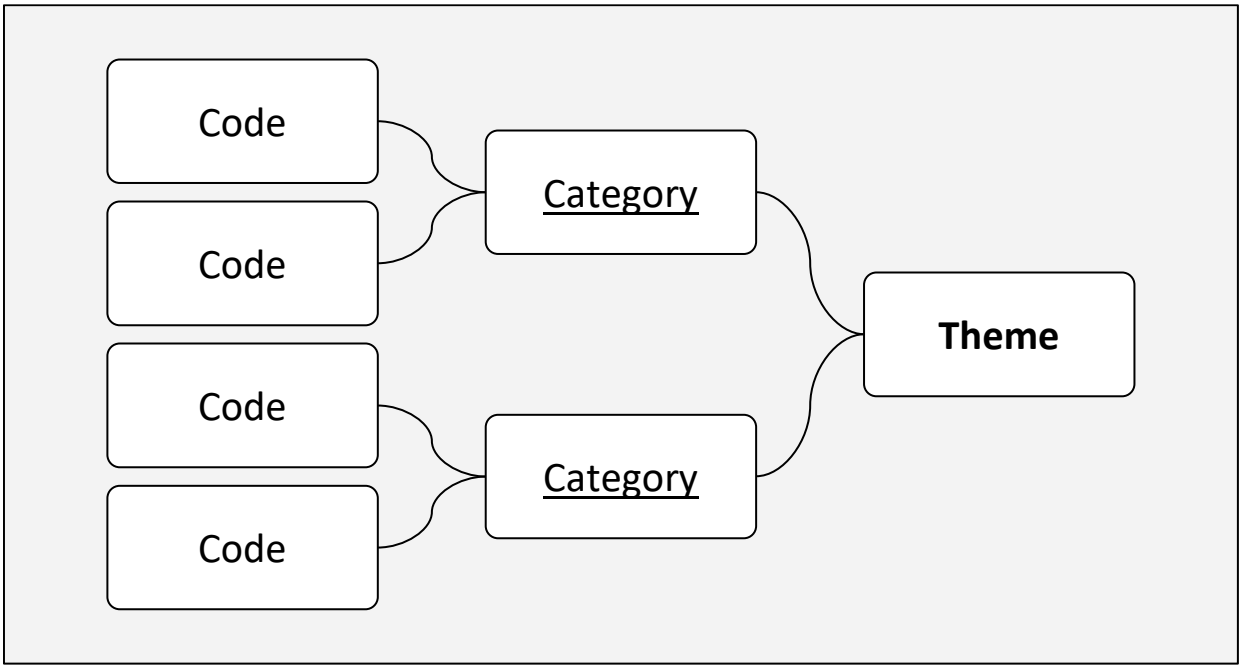
as the data for further analyses. Subsequently, the audio recordings were transcribed digitally through a MAXQDA software program twice to ensure accuracy.

Next, each individual transcript was reviewed for transcription errors in the form of misspellings, terms that were out of context, and punctuation that may change the meaning of the sentence. Then, the final transcripts were spot-checked against the audio recordings. No errors of any kind were found. Transcripts were then sent to the participants for member checking and participant approval that the transcripts from the audio interviews matched what they said during the interviews. The audio recordings were reviewed one final time, cross-referencing them with the digital transcripts before proceeding to the next step in the data analysis process.

Finally, handwritten notes about overall impression of the data, interviews, and any pieces found interesting or meaningful were collected. The list was not organized in a specific manner, nor was it grouped or categorized in any way. The objective was to familiarize yourself with the overall data, not to focus on putting pieces of data into groups or creating any other formal associations. There was a need to approach this data analysis step without preconceptions about the participants, data, or potential categories or themes that may arise. Braun and Clarke (2012, 2014) stressed that preconceptions may lead to self-seeking biases that can distort the narrative. Figure 1 illustrates the process of distilling initial codes taken from participant interview data into categories and then, finally, themes.

Figure 1

The process of distilling initial codes to form categories then themes



To generate the initial codes, the focus was on organizing the ideas and overall perceptions of the data into meaningful codes using collated data extracts from the semi-structured interviews. These extracts were developed through a two-step process. The first step was examining the frequency count of terms used throughout the semi-structured interviews, which aided in locating the context in which those terms were embedded. The second step was to extract not only the term but also the context surrounding the term. This two-step process aimed to include terms used within relevant contexts within the scope of the study's research questions and objectives. Using collated data extracts ensures that data and initial codes are not analyzed in isolation, which can result in unreliable results that fail to adequately capture participants' lived experiences, themes, and, ultimately, the narrative.

Following an anticipation of the inconsistencies across the data, there was a need to develop and adapt codes in response to those inconsistencies. To preserve the integrity of participant data, the codes that appeared to be contradictory were not excluded. As codes were developed, those that were perceived as contradictory or potential anomalies were placed into a miscellaneous group to be reviewed thoroughly during a secondary coding cycle. Table 4 below provides examples of initial codes from the study.

Table 4

Examples of Initial Codes from Study Data

Early Depressive Symptoms
Depression
Anxiety
High Blood Pressure
Financial Constraints
Desire For Re-Engagement in Therapy
Culturally Competent Care
Ongoing Mental Health Challenges

After initial codes were generated, the next phase was to form associations and conceptualizations about the relationships among the codes. The data analysis process involved performing multiple iterations and placing initial codes into candidate categories, refined, and distilled with each iteration. This process resulted in codes being grouped into meaningful, distinct categories. These categories captured the relationships among codes and were defined based on the evident shared meaning that arose from the participants' experiences and perceptions. Table 4 depicts example initial codes from the interview responses. Additionally,

Table 5 presents a refined definition of those categories based on the shared meaning that arose from the totality of the participants' experiences and perceptions. Major themes and subthemes are presented in Table 6.

Table 5

Example Initial Codes to Categories

Code Assigned	Category Assigned	Category (Defined/Explained)
Early Depressive Symptoms Emotional Withdrawal	Impact On Mental Health	Various mental health issues resulting from adverse childhood experiences
Individual Therapy Community Support	Preferred Intervention Strategies	Specific therapeutic approaches and support systems that individuals with ACEs find most effective for their mental health and recovery

Table 6

Themes and Sub-Themes

Themes	Subthemes/Categories
1. Mental Health Consequences of ACEs	a) Impact on Mental Health
2. Physical Health Consequences of ACEs	b) Impact on Physical Health
3. Enduring Impact on Well-being	c) Long-term Effects

Themes	Subthemes/Categories
4. Access and Barriers to Mental Health Care	d) Barriers to Accessing Mental Health Care
5. Effectiveness of Trauma-Based Interventions	e) Perceived Effectiveness of Therapy
6. Preferred Support Strategies	f) Preferred Intervention Strategies

Theme 1: Mental Health Consequences of ACEs

Depression, Anxiety, and Suicidal Ideation

A total of eight of the 12 participants involved in this study reported to have developed various mental health consequences. Amelia describes falling into a *depression mode* at the age of seven, which persisted and developed into more severe issues such as depression and suicidal ideation by the age of 12. She says:

> So, when I was seven, it was June of 2008 when I lost my dad and my aunt 2 weeks apart and I was really close to both of them. So, that kind of sent me in a depression mode at the young age of seven. So, I kind of still dealing with that.

Lily's describes the onset of mental health issues such as anxiety, depression, and low self-esteem, beginning around the age of eight, coinciding with her parents' separation. She states that: "So, mental illness came around that time. By then, I suffered from depression, um, anxiety, along with self-esteem."

The experiences from Harper's childhood, including the rape incident, instability caused by her parents' separation, and her mother's alcoholism, laid the foundation for her later struggles with depression, low self-esteem, and the subsequent need for mental health care. On this experience, Harper states:

> My parents started going through their marital issues to where, you know, they would argue. Then arguments would lead into fights...listening to them argue would wake you up, and then, you know, we would eventually see them fighting sometimes, and then with a lot of that, my dad, he had fidelity issues where he was kind of cheating on my mama and a that's what a lot of arguments were about, and that pushed her to be alcoholic. She turned into a bad alcoholic.

Scarlett reflects on her persistent state of depression, which she attributes to the trauma she endured in her childhood. She states that: "I feel like I've been depressed for the past few years, I really feel like I've been in a deep state of depression."

Ruby was diagnosed with depression around the time of the molestation and also experienced anxiety and self-esteem issues due to the bullying she endured. According to Ruby, "Depression, I was diagnosed with that around the time that I got molested and all that stuff."

Violet experienced significant mental health challenges, including depression, postpartum depression, and ongoing anxiety, which she directly connects to her adverse childhood experiences. Ella has developed suicidal ideation to the extent of thinking to kill herself. She says, "I feel like nobody don't love me, don't want to be around me. But you know, the other questions, but you feel like I'm sick or stuff like that."

Mia describes feeling anxious and emotionally affected by her father's drinking and his behavior towards her mother, which she witnessed at a young age. These findings suggest a direct link between these early traumatic events and the onset of her mental health challenges, highlighting the enduring impact of ACEs on her psychological well-being.

Theme 2: Physical Health Consequences of ACEs

Although the physical health consequences of ACEs was a major theme, participants reported various impacts in their experiences, including chronic migraines, ulcers, asthma, obesity, diabetes, and foot surgery.

Chronic Migraines

Despite directly coming from one participant, the chronic migraines topic emerged as physical health consequence of ACEs. Amelia mentions suffering from chronic migraines beginning at the age of 12, which she associates with the stress and emotional turmoil following the deaths in her family. According to Amelia: “So, to me, headaches just come and go sometimes.”

Obesity

Two out of the 12 participants reported instances of obesity to be associated with their ACEs’ experience. Amelia notes that her childhood experiences contributed to obesity, as she became less active and withdrew from social interactions. Amelia stated that: “But again, I think also, well, I could say obesity too.”

Beginning at the age of seven, Lily was concerned about her physical appearance, especially her overweight state, which was compounded by bullying and a lack of positive reinforcement from her mother. Lily’s describes these experiences by saying that: “I was a heavier girl. And being that you're heavyset, you didn't have much hair, plus your mom blamed you for almost everything.”

Diabetes

Two participants reported the issue of diabetes in their physical experience of ACEs. Harper reports being diagnosed with diabetes, which she manages with multiple types of insulin.

She says, “Yes, right now, I'm a diabetic. To me, I wouldn't say really bad, but to my doctors, they say it's bad. Because I take, two different types of insulin.” Scarlett also reported to have developed diabetes following her exposure to the pre-disposing factors attributed to the ACEs.

Foot Surgery

One participant, Harper, mentions undergoing foot surgery due to an abscess, which did not heal properly, further complicating her health. According to Harper, “And then, I, I have, had to have surgery on my, foot, from where I, had an abscess…And I had surgery on it, but, it didn't properly, it didn't go out, my feet.”

Asthma

Only one out of the 12 possible participants reported the issue of asthma. In this case, Ruby reported being diagnosed with asthma at around 8 or 9 years old and ADHD at six or seven, conditions that may have been influenced or exacerbated by the stress of her traumatic experiences. She says: “Physical health issues, asthma, that started around eight or nine when they diagnosed me with asthma. ADHD, I was diagnosed with that since about six, seven years old as well.”

Ulcers

Mia suggests that the ulcers were linked to the stress and anxiety she felt from the traumatic events in her family, such as the deaths of close family members and witnessing her father’s struggles with alcoholism. “I was in the hospital when I was 15 because I had, um, had ulcers. I had like bleeding ulcers, but you know what let's back up to what led to that.”

Theme 3: Enduring Impact on Well-being

Negative Self-Perception

A total of three participants reported the feeling of negative self-perception as an enduring impact of ACEs on their wellbeing. Amelia discusses the long-lasting effects of her childhood experiences on her overall well-being, particularly in terms of her social life and self-esteem. Amelia stated: “I still am obese and I'm trying to get inside that mindset of I'm not beautiful, I'm ugly, I'm fat, all of that stuff. So, I'm just trying to get back healthy and kind of lose that mindset.”

Lily also suffered from negative self-perception by articulating how the lack of emotional support and the constant sense of neglect and blame during her childhood have led to a lifelong struggle with self-worth and interpersonal relationships. Lily states:

> Because I was so worried about my outer appearance, and I couldn’t help how my hair looked. My mom wasn't doing it…. And I got to a point like where I became a shell of a person and just like, I'm not gonna allow people to do this to me.

Harper’s accounts of feeling neglected by both her parents and grandparents. The lack of consistent mental health support following the traumatic loss of Aria partner continues to affect her day-to-day life.

Challenges in Forming Relationships

Four participants stated to have had various instances of finding it difficult to form relationships within their networks. For instance, Amelia’ life comprises effects that illustrate how the emotional and psychological scars from ACEs can persist into adulthood, influencing various aspects of an individual's life and hindering their ability to lead a fulfilling life.

According to Amelia: “I think being close to them and then dealing with everything else kind of pushed me further away from people.”

Lily reported to have had a challenge in relating with her mother to the point that the mother perceived her to be a rebellious child. According to Lily,

> …but it's like I had gotten to a point in life where my mom would say I was being rebellious. I wasn't necessarily trying to be a rebellious child. It's more or less like I done had to find out so much stuff on my own. I might as well just keep finding out.

Ruby also described ongoing struggles with self-esteem due to childhood bullying, highlighting how ACEs can have a lifelong impact on an individual's emotional and psychological state. Similarly, Violet describes the lasting effects of her childhood on her adult life, especially in her relationships and how she interacts with others. She often feels the need to defend herself, maintaining emotional barriers that affect her ability to connect with others.

Domestic Violence

One participant out of the possible 12 individuals involved in this study reported the impact of domestic violence in their lives while a child. As an adult, Isabella recognizes domestic violence as significant, though she does not directly link it to ongoing struggles. She says:

> …there was some domestic abuse growing up, but I didn't think it was I just thought it was just how, you know how we go well that's just how my family is. I thought that's just how my family is. But now that I’m older I realized it was a lot of domestic violence in my family

Theme 4: Access and Barriers to Mental Health Care

Reluctance to Open Up

At least five of the 12 participants reported to be reluctant to open up about their struggles in the pursuit of accessing mental health care. Amelia describes her reluctance to open up during therapy, resulting in bottled-up emotions that lead to explosive episodes. She says: “When my dad and aunt died, I did go, but it was hard for me because I didn't like opening up after they died. I was more so to myself, kept to myself.”

Lily initial reluctance to engage in therapy indicates a possible underestimation of the severity of her mental health issues. Lily stated: “And when we did therapy, I wouldn't say nothing. She wouldn't say nothing. My mom was talking most of the time. She's telling the therapist how I'm doing this, how I'm doing that, and how I'm disrespectful.”

Zoe said that she did not like the experience of visiting a counselor, thus, she was reluctant to speak in the pursuit of seeking mental health help. According to Zoe: “I didn't like, I'm not one for talking about feelings, I guess, or how I felt. So that was kind of like a big part of it. I didn't like. Okay?”

Ruby described her preference for supportive and empathetic approaches in therapy. She valued therapists who allowed her to express her emotions freely and provided a non-judgmental space, even when she simply needed to cry.

Ella states that she is not ready to open up about her mental struggles and she feels that she will reduce the number of people she interacts with. According to Ella,

> I had a lot of friends like that, but I'm going to make, I'm getting to the point I'm going to make my circle, my circle real, real small. That mean when I make my circle real, real

small, I don't want a lot of people in my face. I'm trying to do it. I'm trying to do it as I go. And I don't want nobody asking me no questions or nothing.

This finding suggests that although access to care was available, personal barriers such as reluctance to engage with the therapeutic process impeded the effectiveness of the treatment. Therefore, the results of these studies highlight the complexity of accessing mental health care and the importance of addressing both systemic and individual barriers.

Theme 5: Effectiveness of Trauma-Based Interventions

Victim-Based Limitations

Three participants stressed the victim-based limitations that impacted the effectiveness of the trauma-based interventions in addressing the effects of ACEs. Amelia recognizes the potential benefits of therapy but her difficulty in opening up and connecting with the therapeutic process limited its impact. Although Zoe does not discuss trauma-based interventions specifically, she says she was reluctant to engage in therapy due to discomfort with discussing her feelings, especially during her teenage years. Violet expresses a complex relationship with therapy, suggesting that while helpful, it sometimes pushed her beyond her comfort zone. She says: “Yes and no, because it brought some things out that I probably wouldn't have felt comfortable speaking about.”

Sustainability

One participant highlighted the need to make trauma-based interventions of the ACEs’ conditions sustainable. Harper notes that the treatment needs to be sustained over time, indicating that while interventions can be effective, they may require long-term commitment to be fully beneficial.

Theme 6: Preferred Support Strategies

Opening Up

Opening up was mentioned by four of the 12 participants involved in the interview sessions during the data collection process of the current study. Amelia believes that discussing one's experiences and emotions can help in understanding and processing trauma, which in turn can alleviate some of the pain associated with it. Similarly, Isabella emphasized the need to open up to someone else by saying: “But yeah, I just started talking to somebody a couple weeks ago.”

Zoe’s preferred support strategies for mental health issues align with seeking professional help, when necessary, as her positive experience with therapy as a teenager, despite initial resistance, suggests that she values therapeutic support as a means of addressing emotional challenges. Aria expressed openness to talking to a professional about her mental health struggles, suggesting a preference for conversational support as a strategy.

Self-Reliance

Three participants reported the issue of self-reliance as their preferred mode that ACEs’ victims can rely on to manage their experiences. Lily’s mentions that her traumatic experiences taught her to encourage herself and to keep moving forward despite the lack of external support, thus, this self-reliance has become a coping mechanism.

Harper assured that she would not give up on her pursuit of overcoming the negative effects of ACEs’ by stating: “I mean, I'm not all, yeah, I'm not all together, I'm going through it, I'm not giving up, you know, that's the thing, you can’t give up.” Scarlett’s preferred support strategy centers around self-reliance and the fulfillment of her responsibilities, despite the challenges posed by her health and emotional struggles.

Family and Peer Support

At least five of the 12 respondents highlighted the need of family members and peers to support individuals who have experienced ACEs. Mia emphasizes the role of her mother's constant presence and the strong family bond that provided a sense of stability despite her father's issues. Chloe expressed a general belief in the importance of mental health care and suggested that people should pay attention to the mental well-being of those around them. Chloe says:

> And, you know, I guess, uh, mental health is real and people should, uh, pay more attention to the people in their lives and their mental, uh, capacity and, and just check on them every time, every now and then.

Harper emphasizes the importance of not giving up and speaks to the value of being an advocate for others who may be afraid to seek help. Her desire to help others through advocacy suggests that she sees peer support and sharing lived experiences as crucial components of mental health recovery.

Scarlett's experience with her son justifies the reason for enhancing family support to address the consequences of the ACEs. While narrating on how the family has played a huge role in the recovery of her son, Scarlett explains:

> He still goes to therapy to this day. And it was two reasons I put him in therapy. For one, he went from being the only child to having a whole bunch of people around him and feeling like he, I don't want to say feeling neglected, but he felt the change.

Ella suffered from loneliness because her father was absent, and she believes she could have had a different experience had she grew up with both parents. Ella stated, "My dad wasn't there for me like my mama was. But if he was there, everything would be better."

Cultural Background

Although other participants did not see the need of having therapists from their racial or cultural circles, one of the 12 participants, Violet, prefers engaging with a mental health provider who is of the same race and gender, believing they can better understand and relate to her experiences, which she feels would address her needs more effectively than a provider of a different background.

Research Question Responses

Table 7

Research Question Responses

Research Question	Themes/ Subthemes/Categories

How do adults with reported ACEs perceive the impact of ACEs on their physical and mental health?	• Mental Health Consequences of ACEs
	  ○ Impact on Mental Health
	  ▪ Early depressive symptoms
	  ▪ Emotional withdrawal
	  ▪ Low self-esteem
	  ▪ Depression
	  ▪ Anxiety
	  ▪ Suicidal thoughts
	  ▪ Anger management issues
	• Physical Health Consequences of ACEs
	  ○ Impact on Physical Health
	  ▪ Chronic migraines

Research Question	Themes/ Subthemes/Categories
	▪ Obesity ▪ High blood pressure ▪ Diabetes ▪ Congestive heart failure • Enduring Impact on Well-being o Long-term Effects ▪ Trust issues ▪ Ongoing mental health challenges
How do adults with ACEs from lower socioeconomic backgrounds perceive the effectiveness of existing trauma-based intervention strategies?	• Access and Barriers to Mental Health Care o Barriers to Accessing Mental Health Care ▪ Systemic obstacles ▪ Financial constraints ▪ Logistical obstacles • Effectiveness of Trauma-Based Interventions o Perceived Effectiveness of Therapy ▪ Positive experiences with therapy ▪ Negative experiences with therapy ▪ Desire for re-engagement in therapy
Which trauma-based intervention strategies do adults with ACEs from	• Preferred Support Strategies o Preferred Intervention Strategies ▪ Individual therapy

Research Question	Themes/ Subthemes/Categories
lower socioeconomic backgrounds perceive to be most effective?	▪ Community support ▪ Faith-based interventions ▪ Culturally competent care

Each research question comprised of at least one unique theme and subtheme with several analytical codes, as presented in Table 7.

Research Question 1

The first research question is how do adults with reported ACEs perceive the impact of ACEs on their physical and mental health? The findings from the current study indicate that adults with reported ACEs often perceive significant effects on their mental health. For instance, participants Amelia, Lily, and Ella provided various accounts of the broad spectrum of mental health consequences, ranging from early depressive symptoms to severe suicidal thoughts. Furthermore, participant Amelia explained that she had experienced early depressive symptoms, emotional withdrawal, and low self-esteem, all of which are common responses to childhood trauma. This participant's perspective indicates various ways ACEs can influence the emotional stability of an individual from a young age, setting the stage for chronic mental health issues. Additionally, Lily reported feelings of neglect and mental health issues, such as anxiety and depression, which resulted in the participant's experience of low self-esteem.

The thematic analysis of this study confirms that the long-term mental health effects of ACEs are evident in the enduring struggle with these conditions, which often persist into adulthood. Ella's severe anger management issues and recurring suicidal thoughts highlights the deep length of the psychological distress that ACEs can engender. From the results obtained in this research, particularly the transcript of Ella, the individual's desire to re-engage in therapy is

a reflection of a common theme among participants despite negative past therapy experiences: thus, the recognition of the critical need for mental health treatment irrespective of the magnitude of the previous challenges.

The first research question also sought to depict the perception of the participants regarding their physical health consequences. Mia, Harper, and Scarlett reported admitted having experienced various chronic conditions directly linked to their adverse experiences, indicating that the physical health consequences of ACEs are just as profound. To be precise, Mia confirmed to have had different physical conditions, such as ulcers, high blood pressure, and diabetes. These conditions are often associated with prolonged stress and trauma among the ACE victims. Numerous studies in contemporary literature documents the relationship between ACEs and chronic physical conditions; thus, Mia's story highlights how early life stressors can trigger the development of severe health problems later in life.

Following traumatic experiences, Harper provided the onset of diabetes and related health issues, such as familial instability and sexual assault. These health complications are direct impacts of the stress and trauma that the participant experienced and also represent a lifelong challenge that individuals have to manage throughout. According to Scarlett's reported severe health issues, including diabetes, high blood pressure, obesity, and congestive heart failure, ACEs have significant extensive impact on the individuals' physical health. The critical need for designing new integrated health care approaches capable of addressing both the physical and psychological effects of childhood adversity are highlighted by the severity of these conditions.

Moreover, the long-term impacts that participants reported summarizes the enduring effects that ACEs have on their well-being. From the present study, these impacts include trust issues, ongoing mental health challenges, and difficulties in forming stable relationships. For

instance, Isabella's experiences with domestic violence and isolation from siblings resulted in their recent engagement in therapy. This involvement indicates how the effects of ACEs can resurface, creating a need for professional intervention even in later stages of life. It was also observed that Ruby has an ongoing mental health challenge.

The anxiety, depression, and the recurrence of threats from an abusive ex-partner depict the persistence of the trauma's impact. In this case, J10's active engagement in mental health treatment and advocacy for individualized therapeutic interventions show the necessity of continuous support and effective intervention strategies. Violet narrated about neglect, abandonment, and ongoing anxiety emphasizing the deep and enduring impacts of childhood adversity on the individual's overall well-being. Notably, her engagement in mental health treatment and advocacy for culturally competent care indicates a recognition of the importance of establishing sensitive and appropriate support mechanisms appropriate for addressing the ACEs' long-term effects.

Research Question 2

The second research question is how do adults with ACEs from lower socioeconomic backgrounds perceive the effectiveness of existing trauma-based intervention strategies? The theme of access and barriers to mental health care, and effectiveness of trauma-based interventions were created to help in answering this research question. It is observed that participants frequently cited systemic obstacles, financial constraints, and logistical challenges as major factors that prevent them from accessing mental health care. For instance, Amelia and Lily both experienced systematic barriers which narrowed down their chances of getting consistent mental health care. Amelia reported problems in access and cost of care and Lily reported ineffective therapy sessions that kept them away from therapy. These barriers confirm the high

incumbent of the necessity of improved mental health services for population segments from low-socioeconomic status.

Lack of funds alarmed the two themes as mentioned by Mia and Aria. Hence, the economic challenge of poverty and Mia's failure to seek mental health treatment illustrate the equity of mental health care access. Likewise, Aria indicated that financial and other constraints prevented him from going to seek for professional help in a mental health setting; therefore, economic costs have the potential of influencing one's ability to access health care, especially from the low-income population. Therefore, these findings highlight the need to consider financial themes in order to enhance mental health for people with ACEs. Additionally, routine problems, such as access to certain services and problems with transportation were also reported. Ella expressing willingness to go back for therapy after being turned off by previous experiences is an area that makes it difficult for individuals to access the desired treatment in a health system that is often fragmented and hard to negotiate. Thus, when considering Scarlett's fight for mental health, logistical barriers that cause many families to fail in terms of timely and effective treatment are amply illustrated. Such barriers emphasize the necessity of dealing with various systemic issues in order to make mental health care more affordable and fairer.

Regarding the perception of the interventions based on traumatic events, the participants' experiences ranged from positive to adverse. For both Isabella and Ruby, therapy was useful in managing the mental health issues and findings show that it helped. As for Isabella who participated in the therapy for domestic violence and Ruby who were involved in mental health treatment, it can be stated that when therapy is done properly, it is quite efficient. Lily and Ella expressed dissatisfaction with the therapy that caused frustration to stop the process. Lily pointed out the lack of productivity of the therapy, allowing the identification of the inconsistency of the

quality of mental health services and Ella's termination of anger management counseling due to its ineffectiveness.

These negative experiences underscore the need to enhance the quality and standard of treatments based on trauma to ensure responsiveness of services for people with ACEs. Nevertheless, participants including Amelia and Ella voiced a similar need for re-entry into the therapy as those from the other sites reported. This desire results from acknowledging the need for treating the diseases of the mind as well as the desire to hope that the future cures, which will be administered, will produce better results. Hearing about Ella's constant desire to look for proper therapy even after being in situations such as Amelia that showed some negative sides of therapy reveal the fact that it is such people's desire to try therapeutic services despite some drawbacks.

Research Question 2A

The second part of the second research is which trauma-based intervention strategies do adults with ACEs from lower socioeconomic backgrounds perceive to be most effective? The themes established for preferred intervention methods incorporated distinct patient care forms such as individual psychotherapy, community support systems, religious interventions, and culturally sensitive care. Amelia and Lily also highlighted on need to have individual therapy to deal with mental health issues. Amelia's opinion regarding the effectiveness of therapy for reducing early signs of depression and Lily's understanding of the efficacy of intervention for mental disorders also demonstrate the significance of adjusting therapy for every individual. Recommendation support was noted by individuals such as Isabella and Aria about the community support they received. The limitations in family environment as defined by Isabella and Aria's recognition of the community's support in lieu of paid care underlines the importance

of social networks. The public and personal stories call for enhanced reliable community supporting structures to meet the proper care needs of people struggling with ACEs. There was support for faith-based interventions from some of the participants Case 4D and Group 7. Specifically, Mia was able to use faith-based support for the problems arising from the father's alcoholism and poverty, and Ella, who participated activities included in the faith-based programs due to the severe anger problems and suicidal thoughts.

These preferences indicate the enormous potential that spirituality and religious groups may have in helping people with ACEs and in discovering in them the strength to move forward. Evidently, culturally appropriate treatment was a preferred care aspect that was sought by the participants such as Harper, Scarlett, and Violet. Harper, and Scarlett's concerns for wanting to raise awareness on mental health and, calling out for culturally appropriate methods while advocating for her children's mental health, reiterate on the need for mental health services which take cultural realities into consideration. Violet's promotion of culturally sensitive care also underscores the criticality of psychological interventions that are sensitive to the culture that underpins persons' perceptions and management of trauma.

CHAPTER FIVE: CONCLUSION

Overview

This study examined the effects of ACEs on adults, focusing on mental as well as physical health, and self-estimated efficiency of the interventions based on the trauma in people from lower socioeconomic backgrounds. Given its focus on quantitative sampling and statistical analysis, the study's objective was to explain how ACEs influence chronic health and wellbeing and identify barriers, as well as preferences for mental health care. Thus, the results stress the enduring and severe consequences of childhood adversity providing the need of effective accessible culturally competent, and effective support strategies to mitigate these impacts.

Summary of Findings

The study acknowledged several crucial themes concerning the influence of ACEs on adult health. Firstly, the Mental Health Consequences of ACEs theme established that the participants were diagnosed with a variety of mental health problems such as, early depressive signs, withdrawal, low self-esteem, depression, anxiety, suicidal thoughts, and anger management problems. These complications and difficulties were still evident in adulthood and interfered with patient's daily activities and well-being. The Physical Health Consequences of ACEs theme proved that early life stress habits are associated with significant physical health issues in adulthood. Participants reported chronic conditions including migraines, obesity, high blood pressure, diabetes, and congestive heart failure. These health problems commonly affecting the clients were often as a result of stress and trauma experienced in childhood. The Enduring Impact on Well-being theme discussed the long-term effects of ACEs on participants' lives. The effects included trust issues and ongoing mental health challenges. Most participants

had troubles in interpersonal contacts, discretion, and had enduring psychological disorders that originated in their childhood.

As for the second research question, the theme could be named s Access and Barriers to Mental Health Care depicted the main challenges participants experienced while trying to get or receiving mental health services. Personal and structural barriers, such as costs, and geographical factors, were present in many areas, limiting patients' ability to receive the necessary treatment. However, it was revealed that there was assertion to receive mental health treatment indicating that there is a need to increase the access to mental health treatment. The theme Effectiveness of Trauma-Based Interventions showed practitioners' mixed perceptions towards therapy. Some of the participants reported positive experiences and benefits from therapy, while others found it ineffective or re-traumatizing. Most of them declared the wish to go back for therapy, pointing out the requirement to establish better strategies for mental health issues.

Finally, the theme Preferred Support Strategies looked into the participants' choice of intervention strategies. It was preferred to use individual therapy, community support, faith-based practices, and culturally sensitive treatment to counter ACEs' long-lasting effects. These findings suggest that personalized and culturally sensitive approaches are important for effective intervention.

Discussion

Empirical Literature

The mental health consequences identified in this study supports previous research that has established a strong link between ACEs and various mental health disorders. While examining how ACEs are related to health behaviors, chronic diseases, and mental health in adults, Chang et al. (2019) observed that individuals who reported experiencing emotional abuse

during childhood had an increased risk of depression. According to the present study, early depressive symptoms, emotional withdrawal, and low self-esteem were notable effects of childhood trauma among the participants. Furthermore, this research shows that the persistence of depression, anxiety, suicidal thoughts, and anger management issues among participants as they transition into adulthood depicts the continuity of the ACEs impacts.

According to Nikulina et al. (2021), people who faced domestic violence, neglect, and sexual abuse reported more severe mental health issues, aligning with the cumulative risk hypothesis. This hypothesis suggests that the more adverse experiences one has, the greater the likelihood of negative health outcomes. These results highlight the significance of early intervention and sustained mental health support for individuals with a history of ACEs to prevent the development and perseverance of mental health outcomes during adulthood. For these reasons, it is essential for the targeted interventions to consider the cumulative nature of ACEs and provide comprehensive support to address multiple areas of need.

The results of the present research complement the findings of the previously published studies on the relationship between ACEs and chronic health conditions. Godøy and Jacobs (2021) showed that early life stress can lead to a range of physical health problems, such as hypertension, diabetes, obesity, and cardiovascular diseases. According to Waehrer et al. (2020), the chronic stress resulting from the ACEs experience can result in physiological changes that predispose individuals to these conditions. From the present study, participants' accounts of chronic migraines, obesity, high blood pressure, diabetes, and congestive heart failure highlight the need for integrated healthcare approaches, and Alhowaymel et al. (2023) suggested that such strategies should address both mental and physical health. As a result, the findings of this

research and the existing literature show the importance of holistic care models, which can manage psychological distress and physical ailments resulting from ACEs simultaneously.

This study also complemented the findings of the previously published studies in the existing literature on the concept of enduring impact on well-being. For instance, Tidmarsh et al. (2022) observed that the long-term effects of ACEs on well-being highlight the pervasive influence of childhood trauma. Mosley-Johnson et al. (2019) explained that participants' struggles with trust and relationship building suggest that therapeutic interventions should incorporate components that focus on rebuilding trust and improving relational skills. Furthermore, Goddard (2021) explained that various strategies, including trauma-informed care, can be beneficial in addressing these long-term impacts.

The barriers to accessing mental health care identified in this study reflect broader systemic issues that affect many individuals from lower socioeconomic backgrounds since they complement the findings of the previously published studies in the current knowledge. According to Dubowitz et al. (2020), common barriers that hinder access to mental health care include financial constraints, lack of insurance, and logistical obstacles, such as transportation and availability of services. In this study, these results show the need for policy changes and systemic reforms to improve access to mental health services. Uscher-Pines et al. (2020) explained that expanding Medicaid, increasing funding for community mental health centers, and implementing telehealth services can help reduce these barriers; thus, ensuring that more individuals receive the care they need.

While conducting a study on ACEs and implementing trauma-informed primary care, Esden (2018) asserted that individuals' mixed perceptions of therapy's effectiveness indicated the variability in therapeutic impacts. While some participants in this study found therapy

beneficial, other respondents either reported negative experiences or found it ineffective. This variability shows that tailoring interventions are essential in meeting individual needs and preferences. According to Dube et al. (2022), the desire for re-engagement in therapy is an indication that there is hope and motivation for improvement despite past negative experiences. This result emphasizes the need for trauma-informed, patient-centered approaches that are flexible and responsive to individual histories and preferences.

Moreover, the preferred support strategies that research participants identified align with the growing recognition of the importance of culturally competent and community-based interventions. According to Danielson and Saxena (2019), individual therapy, community support, faith-based interventions, and culturally competent care were highlighted as effective strategies for addressing the impacts of ACEs. These preferences indicate that interventions should be structured to fit the cultural and community contexts of individuals who have ACEs experience. This assertion is based on the findings that incorporating community resources, engaging with faith-based organizations, and ensuring cultural competence among healthcare providers and practitioners can promote the effectiveness of interventions and improve engagement and outcomes for individuals with ACEs history.

Theoretical Discussion

Maslow's Hierarchy of Needs Theory

According to Maslow’s hierarchy of needs theory, human motivation is based on a hierarchy of needs, ranging from basic physiological needs to higher-level psychological needs and self-fulfillment. These levels include the basic physical requirements in life, security, affiliation, respect, and achievement. Furthermore, knowledge of how ACEs are fit into this scheme offers an understanding on how unmet basic needs during childhood hinders fulfilment

of higher level of need in adulthood. Participants in this study who reported experiencing ACEs struggled with basic physiological and safety needs during their childhood. For example, Mia and Violet stated that they experienced poverty and neglect; therefore, they might have had unsatisfied physiological and safety needs. Some of these unsatisfied needs result in preoccupation with the lower needs of existence rather than growth, which aligns with Maslow's statement that higher needs cannot be addressed until basic ones are met. When basic needs remain unfulfilled, patients experience chronic stress and insecurity and develop long term disorders that are physical in nature and which include high blood pressure, diabetes, obesity as highlighted by many participants.

It becomes difficult to achieve the needs of love and belonging when physiological and safety needs are unmet during childhood. Amelia, Ella, and Scarlett shared that the conflicts or lack of trust they have are in question, thus isolating themselves emotionally. These difficulties can also be explained in the framework of Maslow’s hierarchy, according to which the wholesome development of interpersonal relationships depends on the ground to be prepared in the lower level of need satisfaction.

The next level, esteem needs, incorporates achievement and respect from others and self-esteem. Participants such as Lily and Harper who complained of symptoms of low self-esteem and current sources of regular mental health problems, are examples of the effects of unmet lower-level needs in the development of self-esteem. ACEs influence an individual to prolonged feelings of worthlessness and questioning one’s value, which hinders one from even achieving Maslow’s esteem needs.

Lastly, self-actualization, which aims at attaining the ultimate potential of individuals, is rarely achieved if the other needs are not satisfied. The fact that ACEs cause continued mental

and physical health problems in participants' lives is the best example of the many obstacles to becoming self-actualized. For instance, the desire for re-engagement in therapy and advocacy for mental health awareness among participants like Ella and Ruby suggests a striving for personal growth and self-improvement despite the obstacles.

Social Learning Theory

Social learning theory that was developed by Albert Bandura emphasizes the importance of observing, modeling, and imitating the behaviors, attitudes, and emotional reactions of others. According to this theory, learning occurs through the process of activities enacted upon the environment and the observation of others in a social context. Referring to the findings of this study to the social learning theory enables one to understand the way ACEs affect the behavior and health of an individual in adulthood. Participants who were involved in domestic violence, conflict with parents and other frequencies of abuse such as Isabella, Ella, and Harper, have witnessed and possibly even learnt such conducts during their tender age. In social learning theory, it is stated that observing violent or abusive role models results in emulation of such behaviors at a later time. For instance, one could conclude that Ella's extreme anger management problem, as well as suicidal thoughts, are an outcome of conflicts witnessed during childhood.

Furthermore, social learning theory suggests that reinforcement and punishment play important roles in learning behavior. If participants experienced inconsistent or negative reinforcement such as neglect or taunting (i.e., Amelia & Harper), the consequent behavioral issues might include maladaptive coping mechanisms. Observational learning according to the theory also involves expectations and self-efficacy as determinatives. Such participants as Amelia and Lily who could not seek professional help and whose therapy was ineffective might have a low self-efficacy and an understanding that there is no chance to improve and have better

mental health. Conversely, positive social models and supportive environments can foster resilience and healthy behaviors. For instance, participants such as B02 who described their family environments as stable and supportive of mental health treatment likely learned through positive reinforcement and modeling that enhances ones' mental and physical well-being. According to the social learning theory, it is highlighted that, the importance of positive social interactions and support systems in mitigating the adverse effects of ACEs.

Self-Efficacy Theory

Self-efficacy theory that is also developed by Albert Bandura refers to an individual's belief in their capacity to execute behaviors necessary to produce specific performance accomplishments. Cognitive processes have another importance in how one perceives, feels and reacts to matters. This theory is especially useful for explaining how ACEs continue to affect mental health and wellbeing in the later years, as self-efficacy influences how individuals cope with challenges and pursue goals. Participants who reported low self-esteem, ongoing mental health challenges, and trust issues (i.e., Amelia, Lily, & Harper) often exhibited low self-efficacy.

Adverse Childhood Experiences (ACEs) can undermine an individual's belief in their ability to influence their own outcomes. This leads to feelings of helplessness and hopelessness. For instance, such participants as Scarlett and Aria who suffered respiratory disorders and did not have a close-knit family, would hardly have had an opportunity to build a high level of self-efficacy. Their depression and anxiety as well as chronic failure in achieving their goals are fitting instances of low self-efficacy, where they feel incapable of overcoming their difficulties.

Conversely, participants that had favorable attitudes towards therapy and utilization of mental health services (i.e., Amelia, Isabella, & Ruby) were found to have higher levels of self-

efficacy. Such people had confidence in the effectiveness of the treatment offered and went ahead to look for the assistance of a psychiatrist or a psychologist in boosting their mental health. This is in accordance to Bandura who suggested that self-efficacy affects the level of motivation as well as the readiness to undertake difficult tasks. Self-efficacy theory also emphasizes the role of mastery experiences, social modeling, social persuasion, and psychological responses in developing self-efficacy. A positive therapeutic outcome or a supportive family environment (B02, Isabella) probably had a positive effect on participants' self-efficacy. For instance, the fact that the patient Isabella sought for therapy recently and holds a positive attitude towards therapy shows that they believe in the possibility of changing their mental health for better.

Self-Efficacy Theory, Trauma, and Adulthood

Extending self-efficacy theory to the context of trauma and adulthood, it is important to consider how early experiences of trauma influence self-efficacy and subsequent health outcomes. Trauma becomes a significant threat to the development of self-efficacy since it entails conditions that make people feel they cannot influence anything. Regarding chronic illness (H07), patients who were exposed to drastic traumatization, including sexual abuse and domestic violence (i.e., Scarlett Ruby), complained of present mental disorders and perceived loss of personal control over vital life areas. Such experiences negatively influence self-efficacy, which results in continuous negative thoughts and behaviors. For instance, Harper suffered from depression and low self-esteem when was raped at the age of 18. This will demonstrate the effects of trauma on self-efficacy. Recourse to therapy and psychiatric treatment implies attempts at the restoration of self-efficacy, emphasizing the role of therapeutic interventions in restoring a sense of agency.

On the contrary, participants who displayed some level of coping and resilience experienced higher levels of self-efficacy. For example, participants like Ruby, Violet who supported specific interventions to the patient's individual conditions approves culturally sensitive therapeutic treatment and spoke of a perceived competence to make a difference in their health status. This resilience can be attributed to successful mastery experiences and supportive social environments that reinforced their self-efficacy. The relationship between self-efficacy and trauma recovery is complex. Positive self-efficacy can be defined as the interventions which can help a lot to restore a person after trauma by empowering individuals to take control of their healing process. Interventions that relate to self-efficacy include cognitive-behavioral therapy (CBT) and trauma focused therapy in which the patient is empowered to change previous perceptions and begin to feel a sense of control over their lives.

Implications

Theoretical Implications

The findings of this study complement the existing body of literature on ACEs and their impact on adult health, particularly within the contexts of Maslow's hierarchy of needs theory, social learning theory, and self-efficacy theory. Considering such theoretical premises, this research enhanced knowledge of the way early life stress affects lifetime health and possible approaches for its modification. Maslow's hierarchy of needs theory provides a comprehensive framework for understanding the cascading effects of unmet needs during childhood on adult health (Noltemeyer et al., 2021). This study affirms Maslow's hierarchy of needs that suggests human beings have to satisfy the fundamental needs for food, shelter, and security before they can pursue other more psychological and self-actualization needs. Participants who had high rates of ACEs including neglect, poverty, and domestic violence, often struggled to meet their

basic needs, leading to chronic physical and mental health issues in adulthood. According to Noltemeyer et al. (2021), this observation underlines the imperative need to provide children with the essentials that would prompt proper development as well as steady well-being.

The research findings were also supported by the social learning theory that highlights the importance of observation and reinforcement when it comes to behavior. Those who stemmed from childhood violence's and social disorder picked up the same behaviors, hence, resulting to poor health in their adulthood, depicting the role of the positive social models and supportive environment in preventing or reducing the impacts of ACEs (Powers et al., 2020). The results of the study extend theory about negative and positive effect of childhood social experiences on health and conduct in adult life and provide the contention for promotion of positive reinforcement and modelling interventions.

Self-efficacy theory is useful in identifying the sustained consequences of ACEs on mental health and wellbeing. This study illustrates how ACEs can determine the self-efficacy, thus creating hopelessness and reduced perceptions of control in the process. They found out that those participants who claimed to have low self-esteem and other moderate and ongoing mental health issues had low self-efficacy as well. Conversely, the participants that sought therapy as well as those who supported the need for customized services had increased self-efficacy. This emphasis the importance of intervention that can improve self-efficacy that can in turn improve health status of people with ACEs (Cohrdes & Mauz, 2020). The current research increased the theoretical framework of self-efficacy specific to trauma treatment and embraces the necessity of psychosocial intervention, which helps to give people feeling of control and fighting the trauma.

Empirical Implications

The study's findings have potential research and policy implications. The study provides strong empirical evidence of the long-term impact of ACEs on both physical and mental health. As for physical health, the participants who reported having ACEs claimed to suffer various chronic physical conditions such as migraines, obesity, hypertension, diabetes, and congestive heart failure. They also revealed substantial emotional problems like depression, anxiety, thinking of suicide, anger management. Thus, these results support the findings of Alhowaymel et al. (2023) on the necessity of providing various medical care that targets not only the physical but also the psychological effects of ACEs. The study reveals the major challenges that people with a history of ACEs face in securing appropriate mental health services with a focus on the client's low-income status. Barriers to mental health care include systemization, financial situations and physical limitations. According to Tzouvara et al. (2023), these findings indicate a critical need for policies that improve access to mental health care, including financial assistance, expanded healthcare coverage, and the reduction of systemic barriers.

Furthermore, the study provides empirical evidence on the perceived effectiveness of trauma-based interventions. Intervention and support therapy users in the study reported positive experiences, while those who faced barriers or had negative therapy experiences expressed a desire for more effective interventions. This highlights that there is a critical need to pursue and establish trauma-informed care practices that are accessible, culturally competent, and tailored to individual needs (Guevara et al., 2021). Based on the analysis of the present study's results, participants described the following favorable support approaches to their conditions: therapeutic counseling, community support, religious orientation, and culturally sensitive care. It can be concluded that the approach of the models based on the 'one-size-fits-all' approach is inadequate

for the effective support of the people with the histories of ACEs. Thus, interventions should be flexible and responsive to the unique preferences and cultural contexts of individuals.

Practical Implications

The practical implications of this study are important for informing policy, practice, and intervention strategies which are aimed at mitigating the impact of ACEs and improving adult health outcomes. Larkin et al. (2014) suggested that policy makers should prioritize the development of policies that prevent the occurrence of ACEs and respond to their long-term impact on health. Such policies should enhance investing in early childhood programs that ensure children's basic needs are met, such as food security, safe housing, and access to healthcare (Richter et al., 2017). Moreover, the present research findings created the need to address the policies for shifting the access to mental health services, eliminating or minimizing the financial and structural barriers, and enhancing the care for mental health in the primary care providers.

Healthcare providers should focus on treating individuals with a history of ACEs, addressing both their physical and mental health needs. Mishra et al. (2023) proposed that this initiative should enhance effective practices, such as offering ACE screenings in healthcare facilities and designing care that is aware of the patient's history of trauma. Culturally appropriate care should also be promoted where the healthcare providers are equipped with cultural competency skills to suit the patient's cultural needs (Guevara et al., 2021). Additionally, mental health professionals should enhance self-efficacy in individuals with a history of ACEs by using therapeutic approaches, such as cognitive behavioral therapy (CBT) and trauma centered therapy, to empower them to take control of their healing process (Mishra et al., 2023). Furthermore, the design of interventions should also consider aspects of social

learning theory, as Powers et al. (2020) asserted that this includes the availability of social references which provides positive social models and reinforcement to promote healthy behaviors and coping mechanisms.

Community-based programs play an important role in supporting individuals with a history of ACEs. These programs should provide such treatments including individual therapy, support groups, and faith-based interventions, to meet the various needs of individuals (Longhi et al., 2021). Efforts by community-based programs should also aim at helping individuals form social support networks and engage in positive social interactions since they help reduce the effects of ACEs. Educational initiatives should aim to raise awareness about the long-term impact of ACEs and the importance of early intervention (Richter et al., 2017). Hence, schools and parents themselves or other organizations can become significant in raising awareness of parents, caregivers or even children about ACEs and available support. Moreover, Larkin et al. (2014) observed that training programs for educators and social workers should include components on trauma-informed care and the importance of developing resilience in children. Therefore, the present study is important for further understanding the impact of ACEs and the effectiveness of various intervention strategies. Subsequent research should examine the sustained successful consequences of various forms of interventions and determine the optimal methods of assisting people with ACE histories. Additionally, it is suggested that research should incorporate investigations of ethnic minorities' experiences in order to establish culturally appropriate behavioral treatments.

Delimitations and Limitations

Delimitations

Delimitations are the intentional boundaries set to define and restrict the study. In this research the emphasis is made on adults who claimed to have witnessed ACEs in their childhood. Such a population was selected to examine the effects of such experiences on the adult population's wellbeing. Therefore, focusing on this population, the study wants to examine the relevant patterns and features that will be helpful for individuals who have endured childhood adversity. Another key delamination is in regard to the geographical area and stratified population where participants only involve the lower socio-economic status people within a specified geographical location. This decision was taken to consider the impact of ACEs and economic status individually to have a better perception of how economic limitations affect the outcomes of ACEs or mental health care.

Furthermore, the study involves a specific range of ACEs, such as domestic violence, substance abuse, neglect, and sexual abuse. This selection ensures coverage of a large of number of different negative events. The research method to be adopted to achieve the above objectives is a qualitative approach, using thematic analysis to interpret the data. This method enables deeper exploration of the experiences and attitudes of the participants which is appropriate when dealing with the complexities of their lived experiences. Finally, the study is retrospective since information was collected from the participants based on their past experience and the current health status. Such a period was selected to capture long-term effects of ACEs on people's well-being.

Limitations

Despite the careful design, the study has limitations that may affect the validity and generalizability of its findings. The first limitation is the insufficiency of the sample size that would not allow generalizing the results received in this research to the overall population. It is important to note that quantitative research is broader than qualitative research despite the current study's focus on a larger sample population. Besides, the retrospective method used in the study leads to certain limitations, including the social desirability bias. Participants might not accurately remember past events, which can affect the reliability of the data.

The study's focus limits its generalizability to a specific geographic area and socioeconomic background. Conclusions derived from this population may not be valid for people of other geographical backgrounds, thus limiting the generalization of the outcome. The other limitation is that the study was retrospective. This reliance on memory can introduce recall bias, potentially skewing the findings based on participants' current mental and physical health. Moreover, the study does not include a control group of individuals who did not experience ACEs, which hinders the opportunity to compare the results between those who had bad childhoods and those who had more favorable circumstances.

Finally, cultural factors specific to the geographic location and socioeconomic background of the participants may influence the findings. These culture differences could in some way contribute to the participants' reporting and utilization of ACEs and mental health resources. Another methodological disadvantage of the selected qualitative approach is the existence of chances for quantitative measurement of the results since it can lead to the presence of recall bias. The issues of research time also pose the number and intensity of data acquired and assessed. This means that it may be possible to acquire more data as a result of prolonged

study. This study briefly describes how interpretation of the results and development of the future research in the field of ACEs influence on adult health should consider the assumptions and limitations of the study.

Recommendations for Future Research

Based on the findings of the study, it is required that research should focus on increasing the sample size and survey participants' diversity. This will obtain a better understanding of the long-term effects of ACEs on adult health enhancing the generalizability of the study designs and give a better view of what ACEs do to the different populations. To help examine how multiple aspects of the participant's background influence their current health based on adverse experiences in childhood, participants with different socioeconomic statuses, geographical areas, and cultural setting should be included in the sample.

Future studies should also use panel research designs that help in determining health changes over time. This approach would eliminate the limitations that come with retrospective data collection, thus providing a more accurate depiction of the long-term effects of ACEs. By following participants from childhood into adulthood, long-term tracking of the participants would enable early identification of mental and physical health problems that are in the process of developing. This will determine important time points to consider and possible preventive measures. Furthermore, it would also be possible to investigate resilience factors and protective issues that enable people to be more resilient to ACEs and to develop specific preventive and intervention strategies.

One of the other possible areas for the further study of the effects of ACEs is to determine how the later effects of ACEs impact current and future adult health. Understanding the biological, psychological and social mechanism linking childhood adversities to adults'

health is therefore important. For instance, given the analysis of such factors as chronic stress, inflammation, neurodevelopmental changes can clarify the physiological processes underlying the health impacts of ACEs. Additionally, exploring coping strategies, social support availability, and an individual's utilization of mental health service, it is possible to determine how these factors either mitigate or exacerbate the effects of ACEs. Such findings can help to improve the planning of individually appropriate interventions and programs created to the needs of individuals with a history of childhood adversity.

Finally, the future research should compare the efficiency of different trauma supported interventional and supportive approaches. More research is required comparing different forms of therapy such as CBT, trauma-focused therapy, and community-based support programs, in order to determine which interventions are the most helpful for individuals with ACEs. Research should also assess the impact of culturally competent care and faith-based interventions.

Chapter Summary

This research explored the implications of ACEs on adult health, focusing on both mental and physical health outcomes and how these early adversities impact long-term well-being. By analyzing qualitative data from various groups of participants, the study aimed to understand the effects of ACEs. This will help identify effective intervention strategies. Participants shared their personal experiences of ACEs, mental and physical health outcomes associated with ACEs, and their impressions of several types of therapy. This study aimed at presenting a broad picture of the impact of childhood trauma on the health and well-being of adults and the possible interventions towards the persons with ACEs.

A positive test to ACEs indicated serious, lifelong consequences on psychological health such as the elevation of early depressive symptoms, withdrawal, low self-esteem, anxiety, and

suicidal intentions. As for the physical health impact, a majority of participants claimed they suffer from migraines, obesity, high blood pressure, diabetes, and congestive heart failure. Many of the participants later experienced health problems as adults, which also proved the presence of long-term effects of childhood trauma. Additionally, the participants also suffered long-term consequences on their well-being including trust and mental problems, which further complicated their ability to lead fulfilling lives.

The study also examined barriers to accessing mental health care and the perceived effectiveness of trauma-based interventions. The results showed that some of the main barriers that limited participants' possibility to seek help were systemic, financial and logistical. Moreover, the participants described the process of therapy as mostly positive and expressed the willingness to continue the process. As a result, the study stressed relevance of culturally appropriate nurse–patient relations and community engagement as two of the important aspects of intervention approaches. Participants emphasized the need for personalized therapeutic approaches that consider their unique cultural and social contexts.

In conclusion, this study highlights the importance of effective and available treatment facilities for individuals who experienced ACEs. By understanding ACEs and their effects on health in adulthood, policymakers, healthcare providers, and mental health professionals can better support those affected by ACEs. Based on the presented results of the study, it is possible to conclude that ACEs have negative effects on people's health in different aspects in the future; thus, it is important to introduce trauma-informed care, community support, and culturally competent interventions. Further research on these areas should be conducted to establish more efficient interventions that can help assist this vulnerable group to obtain the essential healthcare they require.

Nonetheless, this study has shown that everyone has a role to advocate for and support policies that promote safe, nurturing environments for children, such as improved access to mental health services, parental support programs, and community initiatives aimed at reducing poverty and violence. Additionally, individuals can bring change by raising awareness about the long-term consequences of ACEs within their communities, encouraging early intervention, and fostering environments that prioritize children's well-being. Actively engaging in these efforts is one of the best ways to break the cycle of adversity and create a healthier, more resilient society.

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APPENDIX A: Federal Poverty Guidelines

Table 8

Federal Poverty Guidelines

Household/ Family Size	25%	50%	75%	100%	125%	130%	133%	135%	138%	150%	175%	180%	185%	200%
1	$3,645	$7,290	$10,935	$14,580	$18,225	$18,954	$19,391	$19,683	$20,120	$21,870	$25,515	$26,244	$26,973	$29,160
2	$4,930	$9,860	$14,790	$19,720	$24,650	$25,636	$26,228	$26,622	$27,214	$29,580	$34,510	$35,496	$36,482	$39,440
3	$6,215	$12,430	$18,645	$24,860	$31,075	$32,318	$33,064	$33,561	$34,307	$37,290	$43,505	$44,748	$45,991	$49,720
4	$7,500	$15,000	$22,500	$30,000	$37,500	$39,000	$39,900	$40,500	$41,400	$45,000	$52,500	$54,000	$55,500	$60,000
5	$8,785	$17,570	$26,355	$35,140	$43,925	$45,682	$46,736	$47,439	$48,493	$52,710	$61,495	$63,252	$65,009	$70,280
6	$10,070	$20,140	$30,210	$40,280	$50,350	$52,364	$53,572	$54,378	$55,586	$60,420	$70,490	$72,504	$74,518	$80,560
7	$11,355	$22,710	$34,065	$45,420	$56,775	$59,046	$60,409	$61,317	$62,680	$68,130	$79,485	$81,756	$84,027	$90,840
8	$12,640	$25,280	$37,920	$50,560	$63,200	$65,728	$67,245	$68,256	$69,773	$75,840	$88,480	$91,008	$93,536	$101,120
9	$13,925	$27,850	$41,775	$55,700	$69,625	$72,410	$74,081	$75,195	$76,866	$83,550	$97,475	$100,260	$103,045	$111,400
10	$15,210	$30,420	$45,630	$60,840	$76,050	$79,092	$80,917	$82,134	$83,959	$91,260	$106,470	$109,512	$112,554	$121,680
11	$16,495	$32,990	$49,485	$65,980	$82,475	$85,774	$87,753	$89,073	$91,052	$98,970	$115,465	$118,764	$122,063	$131,960
12	$17,780	$35,560	$53,340	$71,120	$88,900	$92,456	$94,590	$96,012	$98,146	$106,680	$124,460	$128,016	$131,572	$142,240
13	$19,065	$38,130	$57,195	$76,260	$95,325	$99,138	$101,426	$102,951	$105,239	$114,390	$133,455	$137,268	$141,081	$152,520
14	$20,350	$40,700	$61,050	$81,400	$101,750	$105,820	$108,262	$109,890	$112,332	$122,100	$142,450	$146,520	$150,590	$162,800

APPENDIX B: Informed Consent Form

Informed Consent Form

Title of the Project: The Implications of Adverse Childhood Experiences on Adult Health Perceptions
Principal Investigator: Angela Revis, Doctoral Candidate, School of Behavioral Sciences, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. Participants must be 18 years of age or older, understand and speak fluent English, have an income at or below 200% of the federal poverty limit, have a diagnosed medical, mental health, or co-existing diagnoses, and be identified as an adult with adverse childhood experiences (ACEs) through an ACE screening tool used by public health department staff. Finally, participants must meet the minimum client treatment compliance rate and have access to a computer and the Internet.

Please read this entire form and ask questions before deciding whether to participate in this research.

What is the study about, and why is it being done?

The study will examine the self-reported effects of ACEs on the mental and physical health of adults of low socioeconomic status, predominantly people of color, and their perception of the effectiveness of trauma-based treatment strategies and interventions. Adverse Childhood Experiences (ACEs) are traumatic incidents or circumstances children face before age 18 that can harm their mental and physical health, well-being, and overall development

What will happen if you take part in this study?

If you take part in the study, you will be asked to perform the following tasks:

1. Take part in a semi-structured recorded Zoom interview with the researcher for 45-60 minutes. We will not use the video feature. Therefore, only the audio will be recorded.
2. Engage in member checking, which means you agree to review digital transcripts that the researcher will send you within 72 hours of the completion of our interview.
3. When you receive that transcript, you agree to review it and either approve it or notify me of any discrepancies or errors in the transcript within 48 hours. The transcript should match exactly what you said in our interview.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from participating in this study.

Increased public knowledge of the effect of adverse childhood experiences on adult physical and mental health and improved physical or mental health services for adults who have experienced adverse childhood experiences will help in the development of ACE-specific treatment modalities. These survivor-centric treatment modalities may provide improved outcomes that allow participants to engage more fully in society, including maintaining employment. Therefore, society will benefit from this study and similar studies.

What risks might you experience from being in this study?

The risks associated with the study are minimal and typical of any research study. The information risks, such as loss of privacy and confidentiality, are comparable to any research study. It is possible that your identity could be discovered based on your voice from the audio recordings of the semi-structured interviews if the audio data were ever to be compromised, lost, or stolen. However, protecting your personal information is critically important to the researcher, the university, and the health department. Additionally, using other people's full names, nicknames, and revealing addresses, employer details, and names of schools could also possibly allow others to figure out your identity, so please avoid doing that during the interview.

The psychological or emotional risks are low because the researcher will take steps to minimize potential emotional distress. Discussing childhood and adult trauma can be difficult and could cause you to become emotional or distressed in some way. However, you will be sent mental health resources immediately following your interview to ensure you are aware of the supports available to you should you need them. Finally, you can withdraw from this study at any point. We can take as many breaks as you'd like during your interview, and you are always welcome to contact the researcher at any point should you feel emotionally distressed.

How will personal information be protected?

Your confidentiality will be maintained through something called data *de-identification*. Data de-identification occurs when a researcher uses pseudonyms instead of your real name and takes additional steps to protect your identity. In this study, the researcher will remove any direct or indirect identifiers (names, nicknames, employer names, addresses, schools, etc.) that could be used to identify you. Interviews will be conducted in a location where others will not easily overhear the conversation. The audio recordings will be kept in a password-protected cloud computing drive for 3 years and then deleted to protect participants' confidentiality. All written or paper records, including researchers' notes, will be kept in a locked filing cabinet and then shredded after 3 years. Only the researcher will have access to these documents. Physical

documents relating to the ACE screening survey will be kept in a locked cupboard at the Pitt County Department of Health and will be accessible only by the program supervisor. Finally, the researcher will review all transcripts and redact (black out) any information described above or any other information that could compromise your confidentiality. Any information that may or could compromise your confidentiality will be redacted from transcripts before they are sent to participants for member checking. The Health Department staff have agreed to follow the same procedures.

How will you be compensated for being part of the study?

After completing all of the study requirements, including participating in member checking after you complete the interview, you will be given a $25 Visa gift card. You will receive an email with instructions on activating that gift card after you have completed your interview and checked your transcript.

Is study participation voluntary?

Participation in this study is voluntary. Participation, choosing not to participate, or withdrawing from the study at any time will not affect your current or future relations with Liberty University, the researcher, or the Pitt County Health Department. If you decide to participate, you are free not to answer any questions during the semi-structured interview or to withdraw at any time without affecting those relationships. You do not need to explain to anyone, including the researcher or health department staff members, the reasons why you would like to withdraw from the study. No one will ask you why, and you are under no obligation of any kind to provide your rationale for withdrawing from the study.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. If you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study. You will not be contacted in the future concerning this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Angela Revis. You may ask any questions you have now or later by contacting the researcher via email or phone. The researcher's email address is xxxxxx@liberty.edu, and her phone number is xxx-xxx-xxxx. You may also contact the researcher's faculty sponsor, Tracy Baker, Ph.D., at xxxxx@liberty.edu.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and want to talk to someone other than the researcher, you are encouraged to contact the IRB (Institutional Review Board). The physical address of the IRB is: Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; the phone number is 434-592-5530, and the email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered, and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By electronically signing this document, you agree to participate in this study. Ensure you understand what the study is about and what tasks you will be expected to perform before signing. You will be emailed a copy of this document for your records. The researcher will also keep a copy of this electronically signed informed consent with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record me as part of my participation in this study.

_____

Signature

_____

Date

APPENDIX C: Written Site Permission

OFFICIAL SITE AUTHORIZATION FORM FOR RESEARCH

Teresa Ellen
Pitt County Public Health Director
Tonya N. Daniel, MHL, LCCE, FACCE, CD/BDT(DONA), IBCLC
NC Baby Love Plus Program Supervisor
Division of Public Health, Infant and Community Health Branch
Pitt County Office Park
201 Government Circle
Greenville, NC 27834
NC Department of Health and Human Services
xxx-xxx-xxxx Pitt County Health Department
xxx-xxx-xxxx Office

Dear Ms. Ellen and Ms. Daniel, 08/5/2023

As a graduate student in the Department of Community Care and Counseling at Liberty University, I am conducting research as part of the requirements for obtaining an Ed.D. The title of my research project is The Implications of Adverse Childhood Experiences (ACEs) on Adults' Health, and the purpose of my research is to determine the implications of ACEs on the physical and mental health of adults from low socio-economic statuses and their perception of the effectiveness of existing trauma-based treatment strategies and interventions.

I request your involvement by screening potential participants and sending a recruitment email to those who meet the inclusion criteria. If you agree to be involved in the research, you will be sent the full inclusion criteria for study participants. Those who agree to be interviewed via Zoom will follow the steps on page three and be contacted by the researcher. When recruiting participants, a simple screening using the California Surgeon General's ACE screening tool should be used to identify patients who have experienced ACEs at the Health Department. In addition, your organization may opt out of this research within 30 days, and participants may opt out at any point.

All participants must have access to a computer and internet to participate fully in the study. After the initial screening from the health department, you will email participants the recruitment email that contains a link to an electronic informed consent and scheduling app, Calendly.com. Please explain to potential participants that they must electronically sign the informed consent before their scheduled Zoom interview is confirmed, as the researcher will verify this before confirming interview slots with participants. The health department and I will receive a copy of the informed consent. Each participant will then schedule a semi-structured interview with the

researcher using the scheduling software, Calendly.com. However, the scheduler will only register a pseudonym. Participants' names will not appear in the researcher's calendar or confirmation email to maintain confidentiality. The researcher will use the data to analyze themes that correspond directly to the purpose of the study and research questions. Participating in this study is entirely voluntary, and participants are welcome to discontinue participation at any time. After the research study, participants that complete the interviews and member checking of their respective transcripts will receive a $50 Visa gift card.

Thank you for considering my request. If you grant permission, please sign the following page and let me know the earliest date you will be available to begin recruitment. Please email xxxxx@liberty.edu if you have additional questions or concerns.

Sincerely,

Angela C. Revis
Doctoral Candidate, Liberty University

Site Authorization Signature Page

Title of the Project: The Implications of Adverse Childhood Experiences (ACEs) on Adults' Health
Principal Investigator: Angela C. Revis, Doctoral Candidate, Liberty University

The researcher conducting this study is Angela C. Revis. You may ask any questions you have now or at any time during this study. If you have questions, please contact Angela Revis at xxxxxx@liberty.edu. By signing this document, you agree to invite program participants to the study. After contacting health department clients, they will determine whether to proceed as a participant by taking the study's next steps.

I have read and understood the above information. I have asked the necessary questions and have received answers. I officially grant permission for researcher Angela C. Revis, site permission for her study, and access to contact clients who will participate in the study.

_____	_____
Full Name (Print)	Full Name (Print)
_____	_____
Position	Position
_____	_____
Date	Date
_____	_____
Signature	Signature
_____	_____
Full Name (Print)	Full Name (Print)
_____	_____
Position	Position
_____	_____
Date	Date
_____	_____
Signature	Signature

APPENDIX D: ACEs Aware Screening Survey

Adverse Childhood Experience Questionnaire for Adults
California Surgeon General's Clinical Advisory Committee

aces aware
SCREEN. TREAT. HEAL.

Our relationships and experiences—even those in childhood—can affect our health and well-being. Difficult childhood experiences are very common. Please tell us whether you have had any of the experiences listed below, as they may be affecting your health today or may affect your health in the future. This information will help you and your provider better understand how to work together to support your health and well-being.

Instructions: Below is a list of 10 categories of Adverse Childhood Experiences (ACEs). From the list below, please place a checkmark next to each ACE category that you experienced prior to your 18th birthday. Then, please add up the number of categories of ACEs you experienced and put the *total number* at the bottom.	
1. Did you feel that you didn't have enough to eat, had to wear dirty clothes, or had no one to protect or take care of you?	☐
2. Did you lose a parent through divorce, abandonment, death, or other reason?	☐
3. Did you live with anyone who was depressed, mentally ill, or attempted suicide?	☐
4. Did you live with anyone who had a problem with drinking or using drugs, including prescription drugs?	☐
5. Did your parents or adults in your home ever hit, punch, beat, or threaten to harm each other?	☐
6. Did you live with anyone who went to jail or prison?	☐
7. Did a parent or adult in your home ever swear at you, insult you, or put you down?	☐
8. Did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?	☐
9. Did you feel that no one in your family loved you or thought you were special?	☐
10. Did you experience unwanted sexual contact (such as fondling or oral/anal/vaginal intercourse/penetration)?	☐
Your ACE score is the total number of checked responses	

Do you believe that these experiences have affected your health? ◯ Not Much ◯ Some ◯ A Lot

(California, 2023)

APPENDIX E: Recruitment Email

Dear Potential Participant,

As a graduate student in the Department of Community Care and Counseling at Liberty University, I am conducting research as part of the requirements for a Doctor of Education degree. My research aims to understand how adverse childhood events (ACEs) affect adults' mental and physical health and how survivors perceive the effectiveness of current treatment interventions better. I am writing to invite you to join my study.

Participants must be 18 years of age or older, understand and speak fluent English, have an income at or below 200% of the federal poverty limit, have a diagnosed medical, mental health, or co-existing diagnoses, and be identified as an adult with adverse childhood experiences (ACEs) through an ACE screening tool used by public health department staff. Finally, participants must meet the minimum client treatment compliance rate and have access to a computer and the Internet.

Participants will be asked to complete a short Qualtrics survey (it should take no more than 5 minutes) by clicking the link at the bottom of this email. After completing the Qualtrics survey, and if you are determined to be eligible for participation in the study, you will receive a second email with a link that will take you to Docusign to review and electronically sign the informed consent. The informed consent contains a great deal of important information, specifically about your right to withdraw from the study at any time for any reason. Reviewing and signing that document should take 10-15 minutes at most. Finally, after reviewing and electronically signing the informed consent, you can choose a date and time for your semi-structured interview by clicking on the Calendly link at the bottom of this email. This simple step should take you no more than two or three minutes. You will receive a confirmation email from Calendly once the researcher has approved the date and time of your interview.

The study will require you to participate in a one-on-one, audio-recorded Zoom interview that should last between 45 and 60 minutes. Then, you will receive a digital transcript of the interview to review and ensure that everything said is contained in that transcript. That step should only take about 15-20 minutes. You will receive this transcript within 72 hours of interview completion. Please contact me immediately if there are any discrepancies or errors in the transcript. If the transcript appears accurate, please respond to the email saying you approve the transcript within 48 hours of receipt. Remember that your name or identifying information other than your pseudonym will not appear on the transcript. Also, if any information disclosed during our interview could potentially jeopardize your confidentiality, it will be removed from the transcript. If you have any questions or are concerned about your confidentiality, please contact me anytime.

After the study ends, you will receive a list of therapeutic resources should you need emotional or medical support. Finally, participants who complete the full study, including member checking the digital transcripts, will receive a $25 Visa gift card. You may claim your gift card after you have completed your participation in the study; you do not need to wait for all participants to complete it. The details of how to claim your gift card will be emailed to you after you complete all of the required steps.

Sincerely,

Angela Revis
Doctor of Education Student
xxxxxxx@liberty.edu
xxx-xxx-xxxx

Qualtrics Survey Link: https://liberty.co1.qualtrics.com/jfe/form/SV_0wCUZh1VO54v6U6

Calendly link: https://calendly.com/arevis2

APPENDIX F: Semi-Structured Interview Guide

Introduction

Hello. I want to thank you so much for helping us with this project today. You are being asked about negative experiences in your childhood that may have affected your current health. Also, you will be asked about any mental health treatment you've received and what you found to be helpful and what wasn't as helpful. During the interview, I will be referring to these negative childhood experiences as "ACEs," which is short for adverse childhood experiences.

First, I would like to ask you general questions about your thoughts on ACEs. Next, I want to ask you about some of those experiences and your current health. You absolutely do not have to reveal details of any events, if you don't want to do so. Those details are not necessary for the purpose for the purpose of the study. Most importantly, keep in mind that you can stop this interview at any point if you are uncomfortable or for any reason at all without any explanation. Then, I will ask you if you have received any mental health treatment of any kind and if you feel that treatment was effective in any way. Last, I'll ask you about what types of treatments or exercises were most beneficial to you.

Your input is invaluable in this study because you are the expert on ACEs, your health, and what works and what doesn't. As a researcher, I'm hoping that your input could help others suffering with health conditions related to ACEs. Also, I hope that your input improves mental health treatment so that it focuses on what works for you. If you have any questions, don't hesitate to ask now or at any point during our interview.

The interview will last about 45 minutes to an hour. Because I respect your time, I will do my best to stay on topic and focus the questions on the subject. However, do not feel restricted in any way in your responses. There are no right or wrong answers. As a reminder, I will be

recording these sessions to analyze the data from our time together. This recording will remain confidential and will be destroyed after the research is published or after 3 years. Your name will not be used anywhere in this research. You have been assigned a participant number to maintain your confidentiality. If you don't have questions, let's begin.

Begin recording Zoom session:

This is participant ID [Insert number here] present for the qualitative research study. Do I have your full permission to record this interview? I want to confirm again that you have read and signed a consent form. Have you done that?

Questions:

1. How would you describe your childhood, including family life and school?
    a. Would you describe any part of your childhood as abusive, traumatic, or neglectful?
    b. When you think about your childhood, specifically any events or situations that were most difficult for you, how do you feel about those involved in that situation?
2. At what age did your physical health issue(s) start?
    a. Do you think that your childhood, or the way you were raised, may have contributed to your physical health issue(s) in any way?
3. At what age did your mental health issue(s) start?
    a. Do you think that your childhood, or the way you were raised, may have contributed to these mental health issues (s) in any way?
4. Do your physical or mental health issues cause problems in any areas of your life or work? If so, tell me about them.

5. Do you think you would have these physical or mental health issues if you hadn't had traumatic or difficult childhood experiences?

Short pause: I know some of those questions can be tough. Let's take just a minute to relax, these next questions are about any previous treatment you've sought and how you felt about the treatment you received. Do you have any questions? Are you feeling okay to continue?

6. Have you ever been to a counselor, therapist, psychiatrist, or mental health professional?
    a. If yes, why did you go?
        i. What was your experience like?
    b. If no, why not?
7. What do you think of mental health treatment in general?
    a. How would you describe your family's attitude, especially when you were a child, of mental health treatment?
8. If you have received mental health treatment, do you think the mental health treatment you received was based on the things you wanted to discuss?
    a. Why do you think that?
    b. Could you give me some examples?
9. If you are a person of color, did your mental health provider ever discuss race or race-related issues during your time with them?
        i. If so, what did you talk about?
        ii. Was that provider a person of color?
            1. Would it have mattered if that person was not of color?
10. If you are a person of color, do you think that the treatment you received addressed issues that affect your community?

Thank you so much for talking to me today. I am so appreciative. Do you have any questions for me? I wanted to remind you that I will transcribe these interviews onto paper and send them to you for something called member checking. Member checking is when you look over the transcripts and ensure that what is printed on the transcript is what you said or meant to say. If you need help, please let me know. It's no problem at all to fix any errors on the transcript. The most important thing is that what I have on that transcript is what we talked about, and you feel okay with those transcripts matching our time here today.

APPENDIX G: Terms of Use for ACEs Aware Screening Survey

Restrictions on Access and Use

In accessing or using this website and its content, users agree to comply with this TOU policy as well as applicable laws, rules (including but not limited to the California Rules of Court), regulations, and court orders. This website and its content are protected by applicable copyrights, and other proprietary and intellectual property rights. Users do not acquire any ownership rights in the content or this website. Users may download publicly-available content on this website only for their personal, non-commercial use, provided that: (i) users keep intact all copyright and other proprietary notices; and (ii) if users copying or use of copyrighted materials on this website is other than "fair use" under federal copyright laws, they must seek permission directly from the copyright holder.

Users' access to and use of this website and its content may be terminated at any time without notice. Users may not do any of the following:

1. violate any copyrights, and other proprietary or intellectual property rights of this website or its content;
2. engage in any data mining, or use "bots" or similar data gathering and extraction tools or methods in connection this website or its content;
3. decompile, reverse engineer, disassemble, lease, sell, distribute, or reproduce this website;
4. transmit, post, or otherwise make available: (a) content that is unlawful, false, inaccurate, harmful, obscene, or otherwise objectionable, including but not limited to any content that infringes on any intellectual property right or proprietary right; (b) viruses, Trojan horses or other harmful programs or material; or (c) advertising or promotional materials, "spam," or any other form of solicitation;
5. misrepresent your affiliation with or impersonate any person or entity;
6. interfere with or disrupt this website, or attempt to circumvent this website's security features;
7. remove or modify any copyright notices, other proprietary notices, or references to this website or its content; or
8. misrepresent this website or its content, or misinform others about the origin or ownership of this website or its content.

If a user establishes an account on this website, they are responsible for maintaining the confidentiality of their user ID and password and are responsible for all activities that occur under their password or user ID. Users agree to: (i) log out from their account at the end of each session; and (ii) immediately notify ucaan@ucla.edu and incidents@dhcs.ca.gov of any unauthorized use of a user's password or user ID or any other breach of security.

Users are responsible for all content that they transmit or otherwise make available to this website. Users' access to and use of this website may be monitored, including but not limited to, for the purpose of identifying illegal or unauthorized activities.

APPENDIX H: Therapeutic Resources

Thank you for your willingness to participate in this qualitative research on Adverse Childhood Experiences (ACE). The information participants provide during their virtual interviews will contribute to the efforts of offering enhanced treatment strategies and interventions to improve the well-being of those who have experienced trauma. Please remember that this research has a virtual format, and each participant ***must have access to a computer and the Internet*** to partake in this study.

HEALTH DEPARTMENT RESPONSIBILITIES

The authorized personnel of the health department will complete the following steps.

1. The health department will ***complete the initial participant screening*** based on the inclusion criteria listed below. The health department staff will utilize the ACE screening tool developed by the California Surgeon General to evaluate potential participants for an ACE. Recruiting at least 30 potential qualifying participants is recommended to diversify the sample population and provide sufficient participants to achieve data saturation. Only those who fully complete the study and member checking will be eligible for the $25 Visa gift card.

2. The health department will ***make initial contact*** with those who meet all of the study's inclusion criteria but do not meet the study's exclusion criteria.

3. The health department will ***assign a pseudonym*** to all qualifying participants. Pseudonyms will be provided to the researcher.

4. The health department will ***send the pseudonyms*** of those who meet the inclusion criteria and express interest in participating in the research study to Angela Revis (xxxxxx@liberty.edu).

5. The health department will ***send each participant the recruitment email,*** which includes the links to the Qualtrics survey, consent form, and scheduling calendar.

INCLUSION CRITERIA

Potential participants must meet all of these criteria to participate in the study.

1. All participants are at least 18 years old.
2. Participants' self-reported income is at or below 200% (federal poverty guideline).
3. Participants are identified as adults with adverse childhood experiences through the California Surgeon General's ACE screening tool used by public health department staff. **ACE Screening Tool:** https://www.acesaware.org/wp-content/uploads/2022/07/ACE-Questionnaire-for-Adults-Identified-English-rev.7.26.22.pdf
4. Participants have self-disclosed a diagnosed medical, mental health, or comorbid diagnosis.
5. Participants must be able to understand and speak English fluently.
6. Participants must meet the minimum client treatment compliance rate (56.2%) based on North Carolina state standards utilized by the Pitt County Health Department (Medicaid Managed Care Quality Measurement Technical Specifications Manual, 2022).
7. Participants must have access to a computer and the Internet.

RESPONSIBILITIES OF RESEARCHER

After completing the health department's responsibilities, the researcher will complete the following steps:

1. The researcher will receive a list of each participant's pseudonym who qualifies and confirm scheduling dates via Calendly.
2. When the study is complete, the researcher will send the participants their interview transcripts for member checking. Then, share the finalized collected data with the health department.

NEXT STEPS FOR THE PARTICIPANT

After a representative from the health department has contacted the potential participants, they may proceed with the following steps.

1. **STEP 1 (EMAIL):** After initial contact from the health department, each participant will receive a recruitment email. If they do not see this email, please ask them to check their spam folder.
2. **STEP 2 (QUALTRICS SURVEY):** The recruitment email will contain a link to a Qualtrics survey that will prompt the potential participants to respond to a few questions to ensure they meet the inclusion criteria and do not meet the exclusion criteria. If they meet the inclusion criteria, they will receive an email with a link to a DocuSign document, the informed consent.

3. **STEP 3 (INFORMED CONSENT):** After completing the Qualtrics survey, potential participants will receive a second email with a link to review and electronically sign the informed consent. Participants cannot proceed with the rest of the study until this form has been signed and submitted.

4. **STEP 4 (SCHEDULE):** The participant will request their preferred interview date and time through the Calendly link in the recruitment email. Once the signed consent form is reviewed and signed, the researcher will confirm the official interview date.

5. **STEP 5 (INTERVIEW):** Once a date and time have been chosen, each participant will receive a Zoom link via email and one reminder of the interview as the date approaches (3 days before the interview). The researcher will give the participant a brief interview overview at the beginning of the Zoom. The participant may ask questions or even opt out of this interview at any point. Interviewees will be reminded of their ability to stop interviews or participation in the study at any point. Finally, Zoom interviews will only rely on audio. There will be no video to provide additional participant confidentiality.

6. **STEP 6 (MEMBER CHECKING):** Participants will be sent written transcripts within 72 hours of completing the interviews. They will be asked to check the accuracy of the transcripts and report any inconsistencies. The participants will be asked to complete member checking, report any inconsistencies, and affirm the transcripts within 72 hours.

7. **STEP 7 (MENTAL HEALTH RESOURCE DOCUMENT):** After member checking, the researcher will send all participants a follow-up document that contains mental health resources.

8. **STEP 8: (PARTICIPATION COMPENSATION):** Once the interview and member checking have been completed, the researcher will share further instructions on securing the complimentary $25 Visa gift card.

You are all done! Easy as 1-2-3! Thank you, again, for your assistance in improving the well-being of all people.