A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences

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Abstract

This qualitative phenomenological study explored and described the shared experiences of individuals impacted by an autoimmune disease and their exposure to adverse childhood experiences. The theory guiding this study was Vygotsky's social constructivist theory, utilizing Kaiser Permanente's Adverse Childhood Experience study as a guide to create awareness amongst physicians and mental health professionals, leading them to a more holistic approach when treating patients affected by an autoimmune disease. This was a qualitative study using Husserl's transcendental phenomenology (TPh). The data collection methods used in the study included questionnaires, individual interviews, and document analysis. These forms of data were analyzed through member-checking, triangulation of data, and peer debriefing.

Keywords: adverse childhood experiences, autoimmune disease, phenomenological study, Kaiser Permanente

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List of Abbreviations

Adverse Childhood Experiences (ACE)

Affective Disorders (ADs)

American Association of Christian Counselors (AACC)

Autoimmune Disease (AD)

Autonomic Nervous System (ANS)

Coronavirus Disease 2019 (COVID-19)

Chronic Obstructive Pulmonary Disease (COPD)

Hypothalamic Pituitary Adrenal Axis (HPA-Axis)

Kaiser Permanente (KP)

Sexually Transmitted Infections (STIs)

Skills Training in Affective and Interpersonal Regulation (STAIR)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Systemic Lupus Erythematosus (SLE).

The Centers for Disease Control and Prevention (CDC)

Chapter One: Introduction

Overview

The link between adverse childhood experiences (ACEs) and a spectrum of health issues in adulthood, including autoimmune diseases (AD), has evoked deep concern for Dr. Nadine Burke Harris. Notably, Felitti and Anda's ACEs study have established a robust connection between ACEs and autoimmune diseases (Burke Harris, 2018, p.24). Dr. Burke Harris expounds that the distressing incidents associated with ACEs can cause chronic inflammation, which, in turn, contributes to the onset of autoimmune disorders. The persistent stress resulting from ACEs can also impair the immune system, elevating susceptibility to infections and autoimmune ailments (Burke Harris, 2018, p.35-38). The gravity of addressing and treating childhood trauma cannot be overstated, as it can prevent the long-term health consequences that emanate from such ordeals.

The Adverse Childhood Experiences (ACE) Study, carried out by Vincent J. Felitti and Robert F. Anda in 1998, presents significant insights into comprehending the enduring effects of ACEs, underscoring the significance of timely intervention and prevention (Felitti & Anda, 1998). Furthermore, the study has exposed that the ramifications of ACEs go beyond individual health outcomes and possess wide-ranging socio-economic implications that can lead to national adversity (Bellis et al., 2017). Despite the extensive body of research linking ACEs to adult morbidity and mortality, little attention has been given to addressing the unique needs of individuals affected by autoimmune diseases (Waite & Ryan, 2019), highlighting the urgent need for further investigation in this area.

Greater awareness of ACEs and their effects is needed within the medical community to offset long-term complications, address child abuse, and support that population. The current

study aims to describe the shared experiences of individuals suffering from an autoimmune disease and their exposure to adverse childhood experiences. The chapter contains the background, situation to self, problem statement, purpose statement, the significance of the study, definitions, and the research questions posed.

Background

Nations recently endured a global pandemic (COVID-19), mitigated after approximately 24 months of quarantine and isolation. Nonetheless, there is a hidden epidemic brewing at a global level that has yet to be addressed: ACEs (Van der Kolk, 2015).

Historical Context

The term "ACE" was first introduced in the early 1990s by Dr. Vincent Felitti, a physician who was investigating the underlying factors contributing to obesity (Asmundson & Afifi, 2019). The inception of the ACEs study was the collaborative effort of Vincent Felitti, who was leading the Department of Preventive Medicine at Kaiser Permanente, and Robert Anda, a researcher at the Centers for Disease Control and Prevention (Felitti, 2002).

The study aimed to investigate the association between adverse childhood experiences and adult health outcomes. The Adverse Childhood Experiences Study found compelling evidence linking early-life trauma to various physical and mental health issues in adulthood. Individuals who had encountered four or more adverse childhood experiences exhibited a higher susceptibility to chronic diseases, mental illness, and substance abuse.

Felitti (2002) discovered that many of his patients had experienced a wide range of traumatic experiences in their childhoods, including abuse, neglect, and other forms of trauma. These experiences were found to be strongly associated with obesity and other health problems

later in life. Since then, the definition of ACE has been expanded to include any experience that creates a sense of fear, helplessness, or worthlessness.

The Centers for Disease Control and Prevention (CDC) defines Adverse Childhood Experiences (ACEs) as distressing experiences that occur during childhood, either directly or indirectly, before the age of 18 (CDC, 2021). ACEs comprise various forms of abuse, including verbal, physical, and sexual abuse and exposure to familial dysfunction due to substance abuse, violence, incarceration, and mental health issues.

Social Context

ACEs can profoundly impact an individual's physical and mental health across the lifespan. According to the CDC-Kaiser ACE Study (1998), individuals who have encountered ACEs are at a heightened risk of suffering from chronic diseases, mental health issues, and substance abuse problems. Moreover, they are more likely to engage in risky behaviors such as drinking and driving or engaging in unprotected sex. Positive and negative childhood experiences have enduring consequences for health and wellbeing, shaping an individual's developmental trajectory (Asmundson & Afifi, 2019).

According to research by Shonkoff (2016), the early years of life play a critical role in laying the foundation for later learning, behavior, and health outcomes. Positive experiences during early childhood have been associated with improved academic and occupational achievements, as well as enhanced physical and mental wellbeing. Conversely, negative experiences during childhood have been linked to an increased risk of developing chronic health conditions, engaging in criminal behavior, and experiencing academic difficulties. This highlights the crucial importance of ensuring positive early childhood experiences to promote better long-term outcomes.

According to Dr. Jack Shonkoff (2016), Director of the Center on the Developing Child at Harvard University, early adverse experiences can interfere with the development of a robust foundation in the brain, leading to structural and functional changes and resulting in a phenomenon known as toxic stress. This is because experiences such as childhood trauma can impede the formation of neural pathways, which can manifest in challenges with impulse control, emotion regulation, and attachment formation. Furthermore, individuals who have experienced Adverse Childhood Experiences (ACEs) may be at increased risk of developing mental health problems later in life.

According to Shonkoff (2016), the developing brain in early childhood is malleable, and experiences during this time can significantly shape its development. He posits that poverty, abuse, and neglect can lead to brain changes with lasting consequences for cognition, emotion, and behavior. Dr. Shonkoff argues that it is essential to provide support to children who have experienced trauma to enable them to develop into healthy adults.

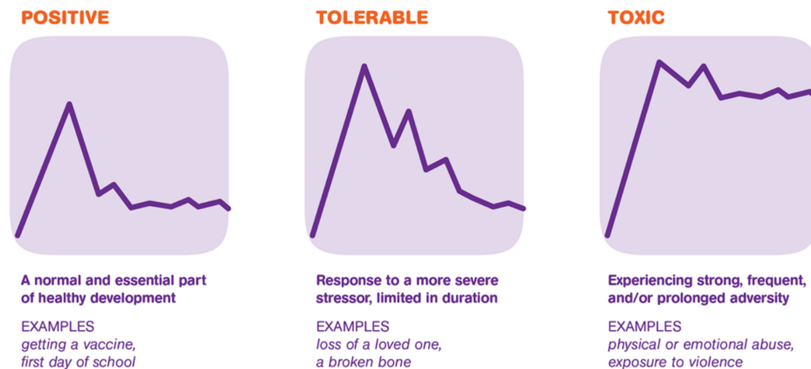
Shonkoff (2016) further explains that toxic stress occurs when a child is exposed to prolonged high levels of cortisol, the stress hormone. Such exposure is common in situations of violence, neglect, or other traumatic experiences, and it can lead to a range of physical and mental health problems, including behavioral issues and increased susceptibility to chronic diseases such as obesity and heart disease. His research has found that the earlier a child experiences toxic stress, the more likely they are to encounter negative health outcomes later in life.

Shonkoff (2016) describes three primary types of stress (Figure 2): positive stress, tolerable stress, and toxic stress. Positive stress, also known as eustress, is transient and beneficial, providing motivation to meet deadlines or perform well in critical situations.

Tolerable stress, or distress, is also temporary but more challenging to cope with, such as the loss of a job or going through a divorce. Toxic stress is chronic and immensely harmful, resulting from exposure to violence, abuse, or neglect, and can profoundly impact physical and mental health. Toxic stress can trigger the fight-or-flight response of the sympathetic nervous system and chronic dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis.

Figure 1

Types of Stress Responses



Waite & Ryan, 2019

Shern et al. (2016) suggest that toxic stress leads to three key changes in the brain: (a) heightened activity in the amygdala, resulting in increased fear and anxiety; (b) decreased activity in the prefrontal cortex, impairing executive function and self-regulation; and (c) alterations in stress hormone levels, disrupting normal development. These changes can have enduring effects on physical and mental health.

Theoretical Context

The Adverse Childhood Experiences (ACE) Study, carried out by Vincent J. Felitti and Robert F. Anda in 1998 included 17,000 participants who were queried about their exposure to

various adverse experiences (refer to Table 1), including abuse, neglect, and household dysfunction. The results have been striking, with nearly two-thirds of participants reporting at least one ACE and one in six reporting four or more ACEs. Furthermore, a strong dose-response relationship between ACEs and adverse health outcomes in adulthood was identified. Specifically, individuals with four or more ACEs were twice as likely to experience chronic lung disease and cancer in adulthood, compared to those without ACEs.

In addition to the distressing emotional effects of Adverse Childhood Experiences (ACEs), research has shown that individuals who have experienced four or more ACEs are at an increased risk for a variety of negative outcomes. These include a threefold increase in the likelihood of depression and suicide attempts and a greater likelihood of engaging in risky behaviors such as smoking, excessive alcohol consumption, illicit drug use, and unprotected sex. These behaviors, in turn, are linked to chronic diseases such as heart disease and stroke. What's more, those with four or more ACEs were found to have twice the risk of developing autoimmune-related diseases (Felitti et al., 1998), underscoring the importance of addressing childhood trauma as a public health concern.

The study has also spurred a new wave of research on the epigenetic effects of ACEs. These findings have significant implications for the development of targeted interventions and preventive strategies aimed at reducing the burden of ACEs and their related health consequences. These were the findings:

Abuse

- Emotional – recurrent humiliation (11%)
- Physical – beating, not spanking (28%)
- Contact Sexual Abuse – (28% women, 16% men: 22% overall)

Neglect

- Physical (10%)
- Emotional (15%)

Household Dysfunction

- Mother was treated violently (13%)
- A household member was alcoholic or drug abuser (27%)
- A household member was imprisoned (6%)
- A household member was chronically depressed, suicidal, mentally ill, in psychiatric hospital (17%)
- Not raised by both biological parents (23%)

Table 1

ACEs score

Adverse Childhood Experience (ACE) Questionnaire
Finding your ACE Score ra hbr 10 24 06

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often** …
Swear at you, insult you, put you down, or humiliate you?
or
Act in a way that made you afraid that you might be physically hurt?
Yes No If yes enter 1 ________

2. Did a parent or other adult in the household **often** …
Push, grab, slap, or throw something at you?
or
Ever hit you so hard that you had marks or were injured?
Yes No If yes enter 1 ________

3. Did an adult or person at least 5 years older than you **ever**…
Touch or fondle you or have you touch their body in a sexual way?
or
Try to or actually have oral, anal, or vaginal sex with you?
Yes No If yes enter 1 ________

4. Did you **often** feel that …
No one in your family loved you or thought you were important or special?
or
Your family didn't look out for each other, feel close to each other, or support each other?
Yes No If yes enter 1 ________

5. Did you **often** feel that …
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
or
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Yes No If yes enter 1 ________

6. Were your parents **ever** separated or divorced?
Yes No If yes enter 1 ________

7. Was your mother or stepmother:
Often pushed, grabbed, slapped, or had something thrown at her?
or
Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?
or
Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
Yes No If yes enter 1 ________

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
Yes No If yes enter 1 ________

9. Was a household member depressed or mentally ill or did a household member attempt suicide?
Yes No If yes enter 1 ________

10. Did a household member go to prison?
Yes No If yes enter 1 ________

Now add up your "Yes" answers: ________ **This is your ACE Score**

Centers for Disease Control and Prevention and Kaiser Permanente

Screening/Assessment Tools | October 2006

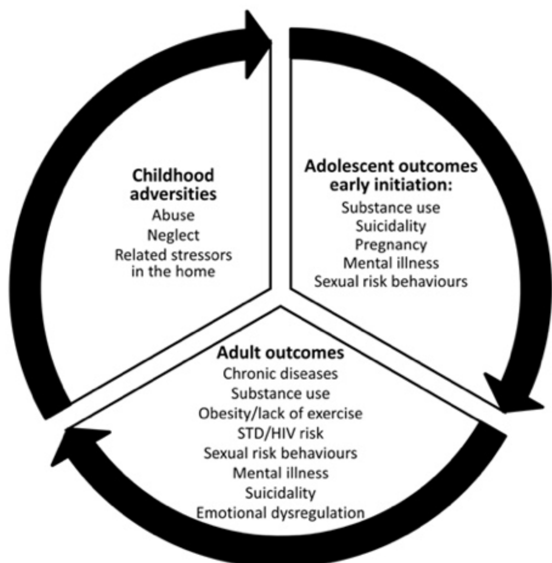
The ACE study also found that the effects of adverse childhood experiences are cumulative; each additional experience increases the risk of developing health problems in adulthood. While the Adverse Childhood Experiences Study only looked at a small sample of individuals, it provides valuable insight into the long-term effects of early life trauma (see Fig.

2). The findings of the study suggest that addressing childhood trauma could have a significant impact on public health.

The ACEs study also revealed that childhood trauma is one of the greatest threats to America and its health system. Van der Kolk (2015) claims that this widespread epidemic (ACEs) is sweeping through America under the radar, unnoticed. Bellis et al. (2017) suggest that ACEs have a long-term effect on the individual's mental and physical health. In addition, the results of ACEs reverberate at a social and economic level with the potential to generate nationwide hardship.

Figure 2

The cycle and impact of ACEs across the lifespan and generations



Asmundson & Afifi, 2019

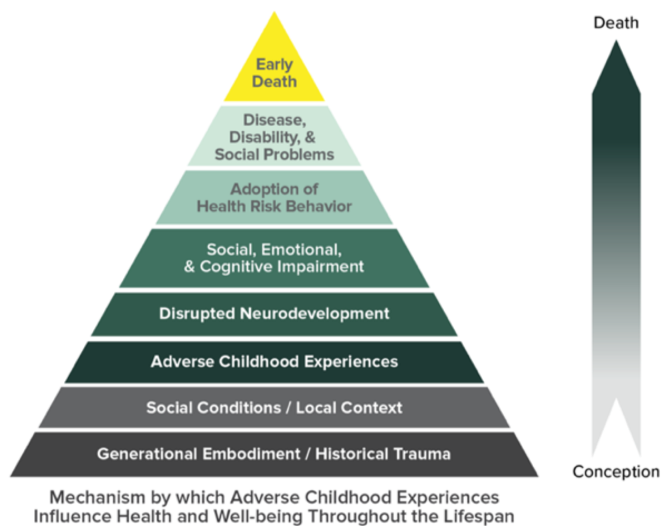
Kaiser Permanente's study released data that corroborated the assumption that adverse childhood experiences cause disease development, decreased quality of life, and elevated mortality rates (Bellis et al., 2017). Many qualitative studies have been performed concerning the connection between autoimmune diseases and adverse childhood experiences (Ittoop et al., 2020;

Macareno et al., 2022; Morris et al., 2019). In addition, numerous studies have been conducted to show the connection between adverse childhood experiences (ACEs) and specific autoimmune diseases and developmental disorders (Horton et al., 2022; Yang et al., 2020; Zarse et al., 2019).

The comparative analysis of the ACE study has unearthed a direct connection between childhood experiences and adult mental and physical health, as well as an elevated mortality rate within a cohort representing approximately 16% of the US population (Felitti, 2002). Furthermore, Felitti (2002) posits that the findings within the ACE study refute the adage of "time heals all wounds" and the dismissive "just get over it" approach. As depicted in Figure 3, the conceptual framework of the Kaiser Permanente ACE Study showcases the developmental trajectory that culminates in increased susceptibility to risk factors that can trigger diseases while negatively impacting overall physical and mental well-being.

Figure 3

The ACE Pyramid



CDC-Kaiser ACE Study |Violence Prevention|Injury Center|CDC, n.d.

Autoimmune diseases are a diverse group of disorders in which the immune system attacks the body's own organs and tissues. While there are more than 80 distinct types of

autoimmune diseases, the most common ones include Hashimoto's thyroiditis, Graves' disease, rheumatoid arthritis, and Crohn's disease. The precise etiology of autoimmune diseases is typically unknown, but it is believed to involve a complex interplay of genetic and environmental factors (Smith & Germolec, 1999).

In the United States alone, an estimated 50 million individuals are affected by autoimmune diseases (Preventing Adverse Childhood Experiences, 2021). Despite the considerable attention devoted to these conditions, much remains to be understood about their pathophysiology. One contributing factor is that the bulk of research on autoimmune diseases is quantitative in nature, with a focus on numerical data and statistical analyses. Consequently, direct experiences of individuals with these conditions have not been sufficiently explored.

The scarcity of research exploring the experiences of individuals with autoimmune diseases is regrettable since such investigations could yield valuable insights into the lived reality of these conditions, potentially informing the development of more effective treatments and improving the quality of life for millions of affected individuals.

Moreover, given the strong association between ACEs and the development of autoimmune diseases, there is a pressing need to expand our knowledge of the experiences of those who have endured ACEs and subsequently developed these disorders. Such knowledge would enable health professionals to provide more effective care to those affected by autoimmune diseases (Waite & Ryan, 2019).

Situation to Self

Drawing from my ontological stance, it is posited that adverse childhood experiences engender negative repercussions on an individual's health during their adult life. It is argued that experiences during early development profoundly impact an individual's identity and worldview,

thereby significantly influencing their overall physical and mental health in the long term. This perspective is reinforced by empirical evidence (Anda et al., 2008), as a mounting body of research highlights that early exposure to trauma, abuse, or neglect can lead to enduring health issues.

Adverse childhood experiences have been linked to an increased risk of developing chronic illnesses like heart disease and diabetes (Van der Kolk, 2015). Furthermore, research indicates that individuals who have experienced adverse childhood experiences are more likely to suffer from mental health issues such as depression, anxiety, and substance abuse as adults (Bellis et al., 2017). While this ontological perspective does not serve as conclusive proof of the influence of early life experiences on adult health, it provides a compelling argument for prioritizing positive experiences for children during their formative years.

Creswell and Poth's (2018) epistemological stance asserts that the subject possesses knowledge and understanding. The researcher is responsible for gaining proximity to the subject to comprehend their perspectives. They note that researchers who study particular populations or groups often employ this stance. However, they also point out that this stance can lead to potential biases by the researcher and misinterpretations of the data. Creswell and Poth (2018) argue that researchers must address this epistemological assumption when designing research methods and analyzing data. Overall, their insights provide a valuable starting point for understanding the epistemological perspective that the subject has knowledge and understanding.

My personal experience with this topic stems from being a widower of someone who endured adverse childhood experiences and suffered from an autoimmune disease, specifically Non-Hodgkin's Lymphoma, in adulthood. In this current study, I will discuss my own experiences and how they motivated my desire to learn more about the topic, reflecting my

axiological viewpoint. The current study is conducted using a social constructivism theoretical framework, which seeks to understand the world and the meaning of life experiences.

To mitigate this potential bias given my personal experience with the focus of my research, I will implement a rigorous process known as bracketing throughout the study. Bracketing serves as a methodological tool to suspend personal biases, preconceptions, and assumptions that may arise from my own experiences with the topic under investigation. It involves a deliberate and conscious effort to set aside my subjective perspectives and emotional attachments, allowing for a more objective and impartial exploration of participant perceptions.

By employing bracketing, I aim to create a clear demarcation between my personal experiences and the analysis of participant perspectives. This intentional separation helps to maintain the integrity and rigor of the research, as it ensures that my personal biases do not unduly influence the interpretation of the data or the formulation of conclusions. By temporarily setting aside my own subjective lens, I can more effectively approach the research with openness and intellectual curiosity, striving for a comprehensive understanding.

The research is focused on the perspectives of participating individuals being interviewed, without any initial theory that could bias the outcome. According to Gergen (2015), social constructivism contends that human beings are social creatures, and their understanding of the world is heavily influenced by their social relationships and interactions. This perspective posits that reality is not an unchanging and objective entity but is constructed through the interplay of social processes and human interaction.

In contrast to the realist perspective, which assumes that reality exists independently of human interpretation, social constructivism emphasizes that meaning and knowledge are created and maintained through social interactions and shared understandings.

Constructivism proposes that our understanding of the world is shaped by our experiences and interactions with others and that reality is not fixed but rather is constantly being negotiated and redefined through our social interactions. When people with different perspectives interact, they bring their own unique interpretations, which are then negotiated to develop a new understanding of the situation. Thus, constructivism asserts that reality is socially constructed (Phillips & Burbules, 2016). This theory has implications for various domains, including education, psychology, and politics, and provides a useful lens for understanding how we create and interpret the world around us.

Problem Statement

The problem is a scarcity of qualitative research concerning individuals suffering from an autoimmune disease and their exposure to ACEs. Many qualitative studies have been performed concerning the connection between autoimmune diseases and adverse childhood experiences (Ittoop et al., 2020; Macarenco et al., 2022; Morris et al., 2019). In addition, numerous studies have been conducted to show the connection between adverse childhood experiences (ACEs) and specific autoimmune diseases and developmental disorders (Horton et al., 2022; Yang et al., 2020; Zarse et al., 2019).

Nonetheless, most studies are quantitative and fail to explore the direct experiences of individuals suffering from an autoimmune disease and their exposure to adverse childhood experiences. There is no question that autoimmune diseases can be devastating. They can cause a wide range of symptoms, from pain and fatigue to digestive problems and mental health issues. Conducting a qualitative study that focuses on the first-hand experiences of individuals with autoimmune diseases and their exposure to ACEs will help fill this gap and provide valuable insights into the prevention and treatment of these conditions.

Purpose Statement

This phenomenological study will describe the shared experiences of individuals suffering from autoimmune diseases along with their exposure to adverse childhood experiences. At this stage in the research, adverse childhood experiences will be generally defined as exposure to physical, emotional, and sexual abuse; neglect; and household dysfunction such as domestic violence, mental illness, or substance abuse before the age of 18 (Felitti, 1998). The theory guiding this study is Vygotsky's social constructivist theory and utilizing Kaiser Permanente's Adverse Childhood Experience study as a guide to create awareness amongst physicians and mental health professionals, leading them to a more holistic approach when treating patients affected by an autoimmune disease. This is a qualitative study using Husserl's transcendental phenomenology.

Significance of the Study

Regarding Adverse Childhood Experiences, Felitti (2002) posed two important questions "how will these childhood experiences play out decades later in a doctor's office?" and "how does one perform reverse alchemy, going from a normal newborn with almost unlimited potential to a diseased, depressed adult…how does one turn gold into lead?"

Traumatic life-altering experiences occurring during childhood within the familial framework have grave and long-term implications. Adverse Childhood Experiences, specifically, pose a serious threat to the individual, potentially producing repercussions into adulthood (Chang et al., 2019). Childhood exposure to abuse, neglect, and violence, or growing up in a dysfunctional home in which there is substance abuse, mental health issues, or intrafamilial violence, elevates the likelihood of developing an autoimmune disease in adulthood (Dube, 2010).

The CDC (Preventing Adverse Childhood Experiences, 2021) revealed that exposure to four or more ACEs compared to individuals with zero exposures are six times more likely to suffer from clinical depression, four times more likely to have difficulty keeping a job, and three times more likely to suffer a heart attack. ACEs have been associated with substance abuse, diabetes, cancer, risky sexual behaviors, sexually transmitted infections, suicidal ideation, and premature mortality in adulthood.

Exposure to traumatic, stress-inducing experiences during the most formative years can potentially affect the child's neurodevelopment generating long-term repercussions. (Brown et al., 2014). Miller et al (2020) state that ACEs can potentially impact the neurological, immune, endocrine, and genetic regulatory systems leading to detrimental outcomes on the individual's mental and physical health.

Trauma is a serious public health problem that often has lasting effects on individuals' physical, mental, and behavioral health. A growing body of research has shown that adverse childhood experiences (ACEs) are a major risk factor for trauma (Van der Kolk, 2015). ACEs include such things as abuse, neglect, and household dysfunction. Health professionals have a responsibility to be knowledgeable about ACEs and to use trauma-informed practices when treating patients who have experienced them (Waite & Ryan, 2019).

However, it is also important to consider the socio-ecological factors that may be implicated in an individual's health. These factors include poverty, racism, and violence. By taking these factors into account, health professionals can provide more comprehensive and effective care for their patients.

By understanding the distant root cause of maladaptation, professionals are better able to establish a strong therapeutic relationship and support an individual's progress (Garner 2016).

Allostasis is the body's ability to maintain equilibrium through compensatory mechanisms. When an individual experiences adversity, their allostatic load increases, which can lead to maladaptive behavior. If left unaddressed, these maladaptive behaviors can become ingrained and lead to further adversity.

However, by understanding the allostatic process and the adversities that may have led to the individual's current state, professionals can provide targeted interventions that can help to reduce the allostatic load and improve the individual's overall well-being. In turn, this improved well-being will help to facilitate positive behavioral change and promote long-term success.

Research Questions

Many adverse childhood experiences have been identified (Felitti, 1998). These include physical, emotional, and sexual abuse; neglect; and household dysfunction such as domestic violence, mental illness, or substance abuse. Each of these experiences can profoundly affect a child's development, leading to an increased risk for physical and mental health problems in adulthood.

Research Question One

What are the shared experiences of individuals impacted by an autoimmune disease and their exposure to adverse childhood experiences?

The present study aims to investigate the shared experiences of individuals impacted by autoimmune diseases and their exposure to ACEs. By exploring the experiences of this population, we can gain insights into the potential mechanisms underlying the association between ACEs and autoimmune diseases. This understanding is crucial for developing effective interventions and treatments for individuals affected by autoimmune diseases with a history of ACEs. (Wegman & Stetler, 2009)

Research Question Two

What are the participant's perceptions regarding the influence of their exposure to adverse childhood experiences on their overall individual development?

Adverse childhood experiences can have a direct impact on the autoimmune system. This is because ACEs can cause changes in the way the body regulates stress, making it more likely to overreact to threats. In addition, ACEs can alter the brain's structure, making it more difficult to control emotions and cope with stress healthily. As a result, individuals who have experienced ACEs are more likely to develop autoimmune diseases in adulthood (Van der Kolk, 2015).

Research Question Three

What are the participants' perceptions on the direct impact of adverse childhood experiences on the autoimmune system of individuals in adulthood and the underlying reasons behind it?

Social constructivism is a theory that emphasizes the importance of shared experiences and stories in the development of human knowledge. According to this theory, humans rely on their social interactions to construct meaning and understanding. This process is ongoing and dynamic, as new experiences and perspectives can challenge existing beliefs and ideas. Social constructivism has been influential in various fields, from education to psychology (Creswell & Poth, 2018).

Definitions

1. *Acute* - An acute condition is any sudden and severe illness or injury that requires prompt medical attention. While the symptoms of an acute condition may initially seem mild, they can quickly become severe and even deadly (Waite & Ryan, 2019).
2. *Adverse Childhood Experience* – Traumatic life experiences occurring before the age of 18. These include physical, emotional, and sexual abuse; neglect; and household

dysfunction such as domestic violence, mental illness, or substance abuse. Each of these experiences can have a profound effect on a child's development, leading to an increased risk for physical and mental health problems in adulthood (Felitti, 1998).

3. *Autoimmune Disease* - A condition in which the body's immune system mistakenly attacks healthy tissue. There are more than 80 different types of autoimmune diseases, ranging from relatively mild conditions, such as allergies and asthma, to more serious diseases, such as lupus and Multiple Sclerosis. Some autoimmune diseases are chronic, which can last for years or even a lifetime. Others are acute, meaning they appear suddenly and then go away after a period of time. Although the exact cause of autoimmune diseases is unknown, they are believed to result from a combination of genetic and environmental factors (Van der Kolk, 2015).
4. *Chronic* - A chronic condition is a long-term health condition that requires ongoing management. Chronic conditions can vary in severity (Waite & Ryan, 2019).
5. *Cortisol* - Hormone that is produced by the body in response to stress. It helps to regulate the body's metabolism and immune system, and it also plays a role in the stress response When the body is under stress, cortisol levels increase, leading to many health issues (Bellis et al., 2017).
6. *HPA-Axis* - The hypothalamic-pituitary-adrenal (HPA) axis is a complex system that helps the body respond to stress. It consists of the hypothalamus, pituitary gland, and adrenal glands. The HPA axis releases hormones that help the body deal with stress (Van der Kolk, 2015).
7. *Toxic Stress –*Toxic stress occurs when an individual experiences prolonged exposure to high levels of Cortisol. Over time, toxic stress can lead to physical and mental health

problems, including behavioral issues and increased risk for chronic diseases such as heart disease and obesity (Shonkoff, 2016).

8. *Trauma* - A series of events or experiences that overwhelm our ability to cope. This can include everything from neglect and abuse to chronic stress and exposure to violence. Trauma changes the way our brains process information and can lead to a variety of mental and physical health problems (Felitti, 1998)

Summary

Numerous quantitative studies have been conducted to show the correlation between adverse childhood experiences (ACEs) and specific autoimmune diseases and developmental disorders (Horton et al., 2022; Yang et al., 2020; Zarse et al., 2019). However, there is very little qualitative research concerning individuals suffering from an autoimmune disease and their exposure to ACEs. Vygotsky's social constructivist theory, coupled with the Kaiser Permanente's Adverse Childhood Experience study, will serve as a guide to create awareness among physicians and mental health professionals, leading them to a more holistic approach when treating patients affected by an autoimmune disease. The purpose of this phenomenological study will be to describe the shared experiences of individuals suffering from autoimmune diseases along with their exposure to adverse childhood experiences

Chapter Two: Literature Review

Overview

Adverse childhood experiences (ACEs) have been linked to toxic stress, which can lead to negative health outcomes that persist throughout an individual's lifespan. Nearly half of the children in the United States have experienced at least one ACE, with those who have experienced three or more being particularly susceptible to a range of health-related impairments. ACEs have been associated with psychological disorders such as depression, anxiety, behavior and mood disorders, substance abuse, and suicide. Studies have found a positive association between increased exposure to ACEs and a heightened propensity to experience physical and mental health issues and substance abuse during early adulthood, irrespective of gender.

ACEs have also been linked to the development of autoimmune diseases such as systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), and multiple sclerosis (MS). Epigenetic changes resulting from ACEs have been identified as a potential mechanism by which ACEs can lead to autoimmune diseases. Understanding the impact of ACEs on an individual's health is crucial for health professionals in providing effective care and interventions for those affected. (Kivity et al., 2019; Mosley-Johnson et al., 2018; Petruccelli et al., 2019; Suderman et al., 2014; Waite & Ryan, 2019)

ACEs can have far-reaching effects on development, including increased risk-taking, maladaptive coping mechanisms, and decreased social support (McLaughlin et al., 2012). Exposure to childhood adversity can lead to health-risk behaviors, such as smoking, alcohol and drug abuse, and unhealthy eating habits (Brown et al., 2009). Protective factors, such as positive relationships with caring adults and social support, can mitigate the effects of childhood

adversity on development (Masten & Narayan, 2012). Interventions aimed at strengthening protective factors and mitigating the negative effects of ACEs have shown promise in reducing the risk of negative outcomes, including improvements in mental and physical health outcomes (McLaughlin et al., 2015).

Exposure to childhood adversity can have significant and lasting effects on brain structure and function. Childhood trauma is associated with alterations in gray matter volume, changes in functional connectivity, and epigenetic effects on gene expression (Dannlowski et al., 2012; McLaughlin et al., 2016; Turecki & Meaney, 2016). Early-life adversity can dysregulate the hypothalamic-pituitary-adrenal (HPA) axis, leading to alterations in brain structure and function, including changes in the hippocampus and prefrontal cortex size and white matter connectivity (Teicher & Samson, 2016). Exposure to chronic stress and trauma during critical periods of development can lead to alterations in the prefrontal cortex, hippocampus, and amygdala functioning, which can have lasting effects on behavior, emotion regulation, and cognition (McCrory et al., 2017).

Childhood trauma is also linked to poor health outcomes in adulthood, including health anxiety, immune disorders, and a range of chronic diseases (Reiser et al., 2014; Ramiro et al., 2010; Sapolsky, 2004). The more severe the adverse experiences a child is exposed to, the greater the likelihood they will engage in risky behaviors and develop poor health. Protective factors, such as positive relationships with caring adults and social support, can mitigate the effects of childhood adversity on development, and early detection and targeted interventions may effectively prevent or reduce health anxiety (Reiser et al., 2014).

Understanding the effects of ACEs can help healthcare professionals provide more effective care for individuals who have experienced ACEs and are at increased risk of developing mental and physical health problems.

Adverse Childhood Experiences (ACEs) have been found to have significant short- and long-term impacts on neurological functions, immune and endocrine systems, and genetic regulatory systems. Research shows that women with a history of ACEs incurred healthcare costs that were 21% higher compared to those with no ACEs history. Adults with a history of ACEs are also more likely to frequently visit primary care, emergency, and inpatient care. (Miller et al., 2020).

ACEs have been associated with a higher likelihood of poor physical and mental health, substance abuse, and earlier onset of mental health issues such as mood disorders, anxiety, and substance abuse. Early intervention is critical, as mental health implications during adolescence or early adulthood can exacerbate long-term physical health issues. (Mersky et al., 2013).

ACEs have been found to dysregulate the hypothalamic-pituitary-adrenal (HPA) stress response system, leading to physical and mental health issues such as mood and anxiety disorders and pain-related medical conditions. Early life adversity can also influence the development of the immune system, leading to changes in immune function and inflammation that persist into adulthood. (Sachs-Ericsson et al., 2017; Shonkoff et al., 2012; Danese & Lewis, 2017).

Despite the serious consequences of ACEs, there are interventions that can help mitigate their effects. Supportive relationships and experiences, such as secure attachment and positive parenting, can buffer the effects of ACEs and promote resilience. Interventions that focus on stress management, coping strategies, and emotional regulation can help individuals manage the

effects of ACEs and promote overall well-being. (National Scientific Council on the Developing Child, 2014).

Theoretical Framework

From an ontological perspective, adverse childhood experiences (ACEs) negatively impact the health of individuals in their adult lives. This view is supported by a growing body of research, including the original ACE Study conducted by Dr. Vincent Felitti and the Centers for Disease Control and Prevention (CDC) in the 1990s, which found a strong connection between ACEs and poor health outcomes in adulthood. In line with this ontological view, the epistemological assumption of this study is that the subject, or the individual with autoimmune disease and a history of ACEs, knows their own experiences and the researcher's role is to understand and interpret them. Creswell and Poth (2018) note that phenomenological qualitative research, which is the approach used in this study, is particularly well-suited for understanding the subjective experiences of individuals.

This research method enables a comprehensive understanding of the participants' health and well-being, taking into account their personal histories and perceptions. As a result, the findings from this study can contribute to more tailored interventions and support systems for individuals facing these challenges. Furthermore, the insights gained can help inform healthcare professionals and policymakers in their efforts to address the complex interplay between adverse childhood experiences and adult health outcomes.

As someone who has been personally affected by the impact of adverse childhood experiences (ACEs), my experience of this issue comes from being a widower to someone who had endured ACEs and later suffered from Non-Hodgkin's Lymphoma (an autoimmune disease) as an adult. This personal connection to the topic has given me a deeper understanding and

"closeness" to the issue and motivated me to explore the relationship between ACEs and autoimmune diseases more deeply.

My personal values and beliefs will be evident in the study through the discussion of my own experiences and how they have influenced my desire to learn more about this topic. It is important to note that the study and research have been conducted from a social constructivism perspective, emphasizing understanding the world and the meanings of life experiences constructed through social interactions and relationships. According to Creswell and Poth (2018), this perspective directs the research toward understanding how the experiences and meanings of life are constructed through social interactions and relationships.

It is also essential to consider the context and culture of the individuals being studied and how the social constructs of society might influence their experiences and life views. By examining cultural and social factors, researchers can identify potential external influences on the participants' experiences and perceptions, revealing the intricate relationship between the environment and personal history. Consequently, this comprehensive approach can lead to more effective interventions and policies that address the diverse needs of individuals affected by ACEs and autoimmune diseases.

The purpose of adopting a social constructivist perspective in the current study is to focus on the participants' own perspectives and interpretations of the situation (Creswell & Poth, 2018). The research design is centered on the experiences and views of the interviewed individuals, with no specific hypotheses guiding the outcome. This approach allows for a more comprehensive understanding of the phenomenon being studied based on the participants' perceptions and experiences.

The framework used in this study is the concept of adverse childhood experiences (ACEs) proposed by Felitti et al. in 1998. The theory posits that there is a direct connection between an individual's health risks and the likelihood of developing diseases in adulthood, and this finding is influenced by the duration of exposure to emotional, physical, or sexual abuse and household dysfunction during childhood (between the ages of 0-17).

The initial study by Felitti et al. (1998) included a sample of 13,494 participants who completed a health screening and responded to a questionnaire about their adverse childhood experiences. This theory is widely accepted and has been extensively researched and studied, providing a solid foundation for understanding the impact of ACEs on health outcomes in adulthood.

Adverse Childhood Experience Study

The study evaluated seven categories; psychological, physical, or sexual abuse; violence against the mother; living with family members who were substance abusers, mentally ill or suicidal, or ever imprisoned. Such categories were compared to adult risk behavior, health, and disease measures. Felitti et al. (1998) study revealed a strong connection between the length of exposure to traumatic life events during the most formative childhood years and various risk factors for several significant causes of death in adults.

Ontological View

My ontological stance on the matter is that adverse childhood experiences (ACEs) harm individuals' health in their adult lives. Creswell and Poth (2018) posit that the epistemological assumption in this regard is that the individuals, who have experienced ACEs, possess an in-depth understanding of their own experiences and the researcher's role is to gain proximity and understanding of the issue through the lens of the individuals themselves.

Social Constructivism

The current study was conducted within the framework of social constructivism, which is also known as interpretivism. The social constructivist paradigm aims to comprehend the world and the meanings of individuals' life experiences. Rather than focusing solely on the object of inquiry, social constructivism is directed toward understanding the participants' perspectives on the phenomena being studied (Creswell & Poth, 2018). Thus, the research methodology is centered on the views of the participants, who are interviewed in-depth to elicit their unique perspectives. The research is not theory-driven; rather, it is guided by the insights and perspectives of the participants.

Berger and Luckmann's seminal work *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (1967) posits that individuals construct a social reality through everyday interactions and negotiations with others. Their arguments suggest that perception of "reality" is not an objective, universal truth but rather a product of our social interactions and agreements. This concept has been influential in diverse academic disciplines, including education, psychology, sociology, and anthropology. Social constructivism is often utilized as a theoretical framework in qualitative research, which acknowledges the role of individual subjectivity and cultural context in knowledge production. Furthermore, social constructivism shares similarities with postmodernism, emphasizing the importance of understanding how social and cultural factors construct knowledge and reality.

Related Literature

In this chapter, a thorough examination of the pertinent literature related to the current study is provided, with a focus on the interplay between adverse childhood experiences (ACEs), autoimmune diseases, and the value of phenomenological qualitative research in shedding light

on these issues. This literature review aims to offer a comprehensive synthesis of the existing knowledge, pinpoint areas that warrant further exploration, and lay the groundwork for our investigation. By scrutinizing the conceptual frameworks, empirical evidence, and methodological strategies in the field, our aim is to accentuate the importance of our research question and contribute meaningfully to the ongoing scholarly debate. This assessment of relevant literature is instrumental in framing the current study, as it enables positioning the findings within the larger academic context and engaging with the broader discourse on the subject matter.

Adverse Childhood Experiences

A body of evidence implicates adverse childhood experiences (ACEs) as a contributor to toxic stress, which in turn can result in a range of negative health outcomes that persist throughout an individual's lifespan. Disturbingly, nearly half of the children in the United States have experienced at least one ACE, and those who have experienced three or more are particularly susceptible to a variety of health-related impairments. The list of ACEs is not limited to those initially proposed by Felitti and continues to expand. The effects of toxic stress on an individual are influenced by multiple factors, including the intensity of the ACEs experienced, environmental conditions, and protective factors that may mitigate the harmful effects of ACEs (Thompson et al., 2020).

A large body of research has suggested over the years that there is sufficient evidence to indicate that individuals who suffered from adverse childhood experiences develop more physical and mental health problems in later years and can also be at greater risk of premature mortality compared to those that have not been exposed to ACEs (Felitti et al., 1998; Hughes et al., 2017; Merrick et al., 2017). In addition to becoming a detrimental factor affecting their

health, ACEs have close ties to developing psychological disorders as individuals age. They are at an increased risk for depression, anxiety, behavior and mood disorders, substance abuse, and suicide (Mosley-Johnson et al., 2018).

An increasing amount of evidence suggests that early life experiences can play a role in the development of suicidal thoughts and behaviors (Dube et al., 2001). Epidemiological studies have shown that individuals who have been exposed to Adverse Childhood Experiences (ACEs) such as sexual and physical abuse and exposure to parental domestic abuse have a significantly higher prevalence of suicidal ideation and suicide attempts (Fuller-Thomson et al., 2016).

The findings underscore the significance of acknowledging and remedying the effects of adverse childhood experiences (ACEs) on mental health and overall well-being, particularly in the context of suicide prevention. Therefore, healthcare professionals are advised to adopt a comprehensive approach to treating individuals with a history of ACEs. This approach should encompass an appreciation of the potential consequences of such experiences on mental health, and an assurance of the provision of suitable resources and support.

A thorough comprehension of the etiology of autoimmune disease and its potential association with adverse childhood experiences (ACEs) is crucial to ameliorating the significant loss of life that results from this condition. ACEs are defined as potentially traumatic life experiences or stressful events that occur within the first 17 years of an individual's life. To this end, the Centers for Disease Control and Prevention and Kaiser Permanente have established three primary categories of ACEs, each of which comprises several subcategories: abuse, neglect, and household challenges (Molden, 2021).

The results indicate a positive association between increased exposure to adverse childhood experiences (ACEs) and a heightened propensity to experience physical and mental

health issues and substance abuse during early adulthood, irrespective of gender. While the physical health consequences of ACEs may not be evident until later in life, mood, anxiety, and substance abuse problems often emerge during adolescence. Importantly, numerous investigations have emphasized the importance of ACE screening by pediatricians, as this approach can facilitate enhanced preventive measures and timely interventions for those impacted (Petruccelli et al., 2019).

Autoimmune diseases are characterized by a loss of self-tolerance and the subsequent production of autoantibodies, leading to tissue damage and organ dysfunction (Kivity et al., 2019). A growing body of literature suggests a link between ACEs and the development of autoimmune diseases, although the exact mechanisms behind this relationship remain unclear (Dube et al., 2010). However, it has been hypothesized that ACEs may lead to alterations in the hypothalamic-pituitary-adrenal (HPA) axis, resulting in chronic stress and subsequent dysregulation of the immune system (Anda et al., 2008). Studies have also found that individuals with a history of ACEs have higher levels of pro-inflammatory cytokines, which are known to contribute to the pathogenesis of autoimmune diseases (Kiecolt-Glaser et al., 2011).

One of the most well-studied autoimmune diseases in relation to ACEs is systemic lupus erythematosus (Lim et al., 2018; Malspeis et al., 2019). SLE is a chronic inflammatory disease that affects multiple organ systems and is characterized by the production of autoantibodies. Several studies have found that individuals with a history of ACEs have an increased risk of developing SLE later in life (Cooper et al., 2019; Kivity et al., 2019). A study by Alcocer-Varela et al. (2007) found that childhood sexual abuse was significantly associated with SLE, and a meta-analysis by Kivity et al. (2019) found that individuals with a history of ACEs had a 1.5-fold increased risk of developing SLE.

Other autoimmune diseases that have been linked to ACEs include rheumatoid arthritis (RA) and multiple sclerosis (MS). A study by Lin et al. (2019) found that individuals with a history of childhood maltreatment had a higher risk of developing RA, and a study by Munger et al. (2011) found that childhood adversity was associated with an increased risk of MS.

It is worth noting that while the literature on the association between ACEs and autoimmune diseases is growing, there are still several gaps in our understanding of this relationship. For instance, it is unclear whether the relationship between ACEs and autoimmune diseases is causal or correlative and if types or timings of ACEs are more strongly associated with autoimmune diseases than others. Nonetheless, the evidence (Dube et al., 2009) thus far suggests that addressing ACEs in childhood and adolescence may be an important avenue for preventing or reducing the risk of autoimmune diseases later in life.

Mounting evidence suggests that ACEs may be linked to the development of autoimmune diseases (Bremner et al., 2021). While the exact mechanisms underlying this relationship remain unclear, studies have found that ACEs may lead to chronic stress and dysregulation of the immune system, contributing to autoimmune disease pathogenesis. Further research is needed to understand this relationship better, but in the meantime, addressing ACEs in childhood and adolescence may be a crucial strategy for reducing the burden of autoimmune diseases.

Epigenetics

According to Waite and Ryan (2019), individuals who confront trauma or severe stress during their lifetime may experience epigenetic changes that can have long-lasting effects on their physical and mental health. These changes can impact gene expression, altering the body's response to stress and increasing the risk for chronic diseases. Understanding the epigenetic

effects of adverse childhood experiences is crucial for health professionals in providing effective care and interventions for those affected.

Epigenetic changes have been identified as a potential mechanism by which ACEs can lead to autoimmune diseases (Waite & Ryan, 2019). Epigenetic modifications refer to changes in gene expression that do not involve changes to the underlying DNA sequence (Feinberg, 2018). Instead, epigenetic changes involve modifications to the way that DNA is packaged within the cell, which can either promote or inhibit gene expression (Feinberg, 2018).

Research has shown that ACEs can lead to epigenetic changes that have been linked to autoimmune diseases (Waite & Ryan, 2019). For example, studies have found that children who experienced abuse or neglect had altered DNA methylation, an epigenetic modification that regulates gene expression (Turecki & Meaney, 2016). These alterations in DNA methylation have been associated with an increased risk of developing autoimmune diseases such as lupus and rheumatoid arthritis (Turecki & Meaney, 2016).

Furthermore, exposure to early life stress has been found to alter the expression of genes related to the immune system, which can contribute to the development of autoimmune diseases (Suderman et al., 2014). Studies have shown that individuals who experienced childhood abuse or neglect had increased expression of genes related to inflammation and decreased expression of genes related to immune regulation (Suderman et al., 2014). These changes in gene expression have been associated with an increased risk of developing autoimmune diseases (Suderman et al., 2014).

In addition, the stress of ACEs can lead to dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis and the immune system, which can contribute to the development of autoimmune diseases (Kiecolt-Glaser et al., 2011). Studies have found that individuals who

experienced childhood abuse or neglect had dysregulated HPA axis function and increased inflammation, which have been linked to autoimmune diseases such as lupus and multiple sclerosis (Kiecolt-Glaser et al., 2011).

Overall, the research suggests that ACEs can lead to epigenetic changes and dysregulation of the immune system and HPA axis, which can increase the risk of developing autoimmune diseases later in life (Nemeroff, 2016). Understanding these mechanisms can help health professionals provide more effective care for individuals who have experienced ACEs and are at increased risk of developing autoimmune diseases.

Childhood

Exposure to significant childhood adversity has far-reaching effects on youth development and can have profound and lasting implications for individuals' physical and mental health outcomes. According to Felitti et al. (1998), ACEs are prevalent in the United States, with nearly two-thirds of adults reporting at least one ACE. McLaughlin (2016) notes that the prevalence of childhood adversity is high, affecting approximately 50% of the child population in the United States, as indicated by multiple epidemiological surveys. These surveys demonstrate the critical need for addressing and mitigating the negative effects of ACEs.

According to a nationally representative survey, nearly 60% of children in the United States have experienced at least one ACE, and approximately one in six children have experienced four or more ACEs (Bethell et al., 2019). This highlights the prevalence of ACEs and the critical need for addressing and mitigating their negative effects on child development and health outcomes.

It is important to note that ACEs are not distributed equally across populations, with some groups experiencing higher rates of adversity than others. For example, children living in

poverty are more likely to experience ACEs, as are children who belong to racial and ethnic minority groups (Mersky et al., 2018). These disparities underscore the importance of addressing the social determinants of health and promoting health equity to reduce the negative impact of ACEs on child development and health outcomes.

A study by Anda et al. (2006) found that exposure to childhood trauma is associated with a higher risk of developing chronic health conditions in adulthood. The study found that individuals who reported four or more ACEs had a four to twelve-fold increased risk of developing chronic health conditions, including heart disease, cancer, and respiratory disease. Research has also shown that ACEs are associated with a higher risk of developing obesity and metabolic disorders in adulthood. A study by Danese et al. (2013) found that individuals who experienced childhood adversity had a higher risk of developing metabolic syndrome, a cluster of risk factors that increase the risk of developing heart disease and diabetes.

The effects of childhood adversity on mental health have been well-documented. Research has linked ACEs to an increased risk of developing a range of mental health problems, including depression, anxiety, post-traumatic stress disorder (PTSD), and substance abuse disorders (Felitti et al., 1998; McLaughlin et al., 2012). McLaughlin et al. (2014) suggest that childhood adversity can impact the brain's development and lead to dysregulation of the body's stress response systems, resulting in long-term negative impacts on mental health.

Furthermore, exposure to childhood adversity has also been linked to physical health outcomes, as noted by Felitti et al. (1998). The authors found that individuals who experienced four or more ACEs had a higher risk of developing chronic diseases, such as cardiovascular disease, respiratory disease, and diabetes. Other studies have shown that childhood adversity can lead to alterations in immune function, including increased inflammation and dysregulation of

the immune system, which can increase the risk of developing chronic diseases (Miller & Chen, 2010).

The long-term negative effects of ACEs can manifest in a range of behaviors and outcomes, including increased risk-taking, maladaptive coping mechanisms, and decreased social support (McLaughlin et al., 2012). Furthermore, individuals who experienced childhood adversity are more likely to engage in health-risk behaviors, such as smoking, alcohol and drug abuse, and unhealthy eating habits, as Brown et al. (2009) noted. These behaviors can further increase the risk of developing physical health problems.

Despite the negative effects of ACEs, research has shown that protective factors, such as positive relationships with caring adults and social support, can mitigate the effects of childhood adversity on development (Masten & Narayan, 2012). Interventions aimed at strengthening protective factors and mitigating the negative effects of ACEs have shown promise in reducing the risk of negative outcomes, including improvements in mental and physical health outcomes (McLaughlin et al., 2015).

Exposure to significant childhood adversity has far-reaching effects on youth development and can have profound and lasting implications for individuals' physical and mental health outcomes. ACEs are prevalent in the United States, highlighting the critical need for addressing and mitigating the negative effects of childhood adversity. Although the negative effects of ACEs are well-documented, protective factors, such as positive relationships with caring adults and social support, can mitigate the effects of childhood adversity on development. Interventions aimed at strengthening protective factors and mitigating the negative effects of ACEs have shown promise in reducing the risk of negative outcomes.

ACEs are prevalent in the United States, with nearly 60% of children experiencing at least one ACE. Addressing the negative effects of childhood adversity is critical to promoting health and well-being in children and reducing the burden of chronic disease in adulthood.

Adversity and Brain Development

A study by Dannlowski et al. (2012) found that childhood adversity is associated with alterations in brain structure and function in adults. Specifically, individuals who experienced early-life stress had reduced gray matter volume in regions of the brain involved in emotional regulation, including the prefrontal cortex and amygdala. The study also found that individuals who experienced childhood adversity had altered activity in the amygdala and insula in response to emotional stimuli.

In addition, a meta-analysis conducted by McLaughlin et al. (2016) found that exposure to childhood adversity is associated with alterations in the functional connectivity of brain regions involved in emotional regulation and stress response. The study found that individuals who experienced ACEs had decreased functional connectivity in the amygdala and prefrontal cortex, which may contribute to difficulties with emotion regulation and increased risk for mental health problems.

Moreover, research has shown that exposure to early-life adversity can have epigenetic effects on the brain, altering gene expression and potentially leading to long-lasting changes in brain structure and function. For example, a study by Turecki and Meaney (2016) found that exposure to childhood adversity was associated with changes in DNA methylation patterns in the hippocampus, a brain region involved in memory and cognitive function.

Several studies have shown that early-life adversity is associated with brain structure and function alterations. For example, one study found that children who experienced abuse or

neglect had reduced gray matter volume in regions associated with emotional regulation and social cognition (Hanson et al., 2010). Another study found that individuals who experienced childhood adversity had reduced hippocampal volume, which is associated with memory and cognitive function (Teicher et al., 2016). These changes in brain structure have been linked to a range of negative outcomes, including cognitive deficits and mental health problems.

In addition to structural changes, early-life adversity can also lead to alterations in brain function. Studies have found that individuals who experienced ACEs had differences in neural activation patterns in regions associated with emotion regulation and stress response (McLaughlin et al., 2015). These changes can lead to difficulties with emotion regulation, increased stress reactivity, and an increased risk of developing mental health problems later in life.

Waite and Ryan (2019) suggest that adversity in childhood can have significant and long-lasting effects on brain development. They note that the brain is particularly vulnerable during critical periods of development, and that exposure to chronic stress and trauma during these periods can have lasting effects on brain structure and function. Specifically, they suggest that adverse childhood experiences (ACEs) can lead to changes in the brain's structure, such as alterations in the size of the hippocampus, prefrontal cortex, and amygdala, as well as changes in white matter connectivity (Bick & Nelson, 2016).

One way that ACEs can affect brain development is through the dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis. The HPA axis plays a critical role in the body's stress response, and exposure to chronic stress and trauma can lead to dysregulation of this system. Dysregulation of the HPA axis has been linked to changes in brain structure and function, including alterations in the hippocampus and prefrontal cortex size and changes in

white matter connectivity (Teicher & Samson, 2016). Furthermore, dysregulation of the HPA axis has been associated with an increased risk of developing mood and anxiety disorders and other mental health problems (Teicher & Samson, 2016).

In addition to changes in brain structure, ACEs can also affect brain function. Studies have shown that exposure to chronic stress and trauma during critical periods of development can lead to alterations in the prefrontal cortex, hippocampus, and amygdala functioning, which can have lasting effects on behavior, emotion regulation, and cognition (McCrory et al., 2017). For example, individuals who have experienced ACEs may have difficulty regulating their emotions, controlling their impulses, and forming attachments with others, which can contribute to the development of mental health problems later in life (McCrory et al., 2017).

Waite and Ryan (2019) suggest that ACEs can have significant and long-lasting effects on brain development. These effects can manifest as changes in brain structure and function, dysregulation of the HPA axis, and alterations in behavior, emotion regulation, and cognition. Understanding these effects can help health professionals provide more effective care for individuals who have experienced ACEs and are at increased risk of developing mental health problems.

Finally, recent research has explored the potential role of inflammation in the link between childhood adversity and alterations in brain structure and function. A study by Slopen et al. (2018) found that exposure to early-life stress was associated with increased levels of inflammatory markers in adulthood, which were, in turn, associated with reduced gray matter volume in regions of the brain involved in emotional regulation and stress response.

Taken together, these studies suggest that exposure to early-life adversity can have significant and lasting effects on brain structure and function, including alterations in gray matter

volume, changes in functional connectivity, and epigenetic effects on gene expression. The potential role of inflammation in these effects is an emerging area of research that warrants further investigation.

ACEs and Physical Health Outcomes

Research suggests that exposure to multiple forms of childhood abuse (ACEs) and household dysfunction can increase the likelihood of developing health anxiety in adulthood (Meng et al., 2016). Health anxiety, also known as somatic symptom disorder, is a condition characterized by excessive and persistent worry about one's health, despite having no or only mild medical issues. Early detection and targeted interventions for individuals with a history of exposure to multiple types of ACEs may effectively prevent or reduce health anxiety (Reiser et al., 2014).

Additionally, it is crucial for healthcare professionals to consider ACEs' impact on mental health when treating individuals with health anxiety and provide appropriate support and resources. Furthermore, cognitive-behavioral therapy (CBT) may be especially beneficial for individuals who have experienced ACEs and developed health anxiety.

Research indicates a strong connection between childhood trauma and poor health outcomes in adulthood. Studies have found that the more severe the adverse experiences a child is exposed to, the greater the likelihood they will engage in risky behaviors and develop poor health. The most commonly reported forms of child abuse include psychological abuse, neglect, and neglect of basic needs. This is supported by research conducted by Ramiro et al. (2010). It is important to note that physical abuse, emotional abuse, and neglect can have severe and long-lasting effects on a child's development and overall well-being.

The research of Sapolsky (2004) suggests that childhood stress, though not fully understood, may lay the foundation for immune diseases in adulthood. Studies have found that children who have experienced abuse have elevated levels of glucocorticoids and a reduction in the prefrontal cortex size, which is the brain's most evolved and complex region. These findings indicate that the impact of childhood stress on the immune and neurological systems can have long-term and far-reaching consequences on an individual's health and well-being.

Numerous studies have extensively explored the holistic well-being consequences of Adverse Childhood Experiences (ACEs) on adult individuals (Felitti et al., 1998; Hughes et al., 2017; Merrick et al., 2017). As per Felitti's (2002) definition, ACEs refer to traumatic incidents experienced during childhood that can adversely affect the child's growth and development. Existing evidence has indicated that children who are exposed to negative psycho-social encounters during their formative years may experience long-term impairments in their immune and metabolic systems, consequently raising the risk of developing age-related ailments (Danese et al., 2009b; Dube et al., 2010; Felitti, 2002).

Robert Sapolsky's (2004) book "Why Zebras Don't Get Ulcers" explicates the association between human chronic stress exposure and a broad range of health complications, including immune disorders. Sapolsky posits that the stress response, activated in zebras and humans, is designed to be a short-term reaction to acute stressors, such as evading predators. In zebras, the stress response is promptly deactivated once the threat has subsided. However, in humans, chronic stressors such as occupational or relational difficulties can sustain the stress response for prolonged periods.

Sapolsky (2004) explains that when the stress response is activated, it causes the release of stress hormones such as cortisol and adrenaline. These hormones can harm the immune

system, leading to inflammation in the body, which is a risk factor for many diseases. He also notes that chronic stress can cause shrinkage in the prefrontal cortex, which is the part of the brain that is responsible for decision-making, attention, and impulse control. This shrinkage can lead to cognitive impairment and psychiatric disorders.

Sapolsky (2004) observes that early life exposure to adverse events can elevate the likelihood of developing mental health disorders such as depression and anxiety in adulthood. Additionally, he contends that such experiences may heighten the risk of substance abuse, other behavioral anomalies, and chronic physical illnesses, such as heart disease and diabetes, in later life. In sum, Sapolsky posits that the implications of childhood abuse and adverse experiences are enduring and may exert significant ramifications on an individual's physical and mental well-being throughout their lifespan.

A substantial body of research supports Sapolsky's observations about the long-term effects of childhood adversity. For instance, studies have shown that children who experience adverse events such as abuse, neglect, or household dysfunction are more likely to develop mental health issues, substance use disorders, and chronic physical health conditions in adulthood (Felitti et al., 1998; Anda et al., 2006). Furthermore, these experiences can impact the brain's development, leading to structural and functional changes that persist into adulthood (Teicher et al., 2016).

Research has also suggested that the effects of childhood adversity can be intergenerational, as parents who have experienced trauma may be more likely to expose their children to adverse experiences or exhibit maladaptive parenting practices (Hillis et al., 2018). However, early intervention and support can mitigate the negative effects of childhood adversity,

underscoring the importance of identifying and addressing these experiences early in life (Shonkoff et al., 2012).

Overall, the impact of childhood adversity on physical and mental health is a complex and multifaceted issue that requires further investigation and a comprehensive, multidisciplinary approach to prevention and treatment.

ACEs and Mental Health Outcomes

The various dimensions of adverse childhood experiences have significantly different outcomes for adult mental health and health behavior. Moreover, household dysfunction is directly related to poor health behaviors and poorer socio-economic achievement in adulthood. Maltreatment and sexual abuse, on the other hand, predicted BPD, PTSD, and suicidal behavior (Westermair et al., 2018).

The impact of adverse childhood experiences on an individual's adult mental and physical health is well-documented. According to the book *Adverse Childhood Experiences: Using Evidence to Advance, Practice, Policy, and Prevention* (Asmundson & Afifi, 2019) the various dimensions of these experiences, such as household dysfunction and maltreatment or sexual abuse, can have a significant impact on an individual's mental and physical well-being. For instance, household dysfunction has been found to be related to poor health behaviors and socioeconomic achievement in adulthood.

Additionally, maltreatment and sexual abuse have been linked to a higher risk of mental health conditions such as Borderline Personality Disorder, Post-Traumatic Stress Disorder, and suicidal behavior. Furthermore, these experiences can also have a negative impact on an individual's physical health throughout their lifetime (Felitti et al., 1998).

Children whose parents have a history of four or more Adverse Childhood Experiences (ACEs) indicators on the ACE score, as identified by the ACE study, have a higher likelihood of developing behavioral problems such as hyperactivity and emotional disturbances when compared to children whose parents did not have any ACEs. According to Schickedanz et al., (2018), maternal ACEs have a stronger association with child behavior problems than paternal ACEs. Furthermore, parents who have experienced ACEs are more likely to raise children with behavioral and health issues. This highlights the importance of addressing ACEs not only for the individual but also for future generations as well. Additionally, it highlights that these behavioral issues are not only limited to children, but also to adults and their parenting skills which can be affected by the ACEs they have experienced.

Research has shown that individuals who have experienced ACEs are more likely to experience chronic conditions such as heart disease, obesity, and diabetes (Felitti et al., 1998). These findings suggest that health systems and providers should consider the impact of childhood trauma when working with patients and consider implementing trauma-informed practices. This approach recognizes the prevalence and impact of trauma and aims to create a safe and supportive environment for patients where their trauma is acknowledged and addressed.

Additionally, a collaboration between sectors such as healthcare, social work, and education is vital to address ACEs and their effects and provide comprehensive and holistic support to individuals who have experienced ACEs. This information is highlighted by Sonu et al., (2019) in their study that focuses on the long-term effects of childhood adversity and the need for interdisciplinary and collaborative efforts to address ACEs.

Recent research suggests and demonstrates that Adverse Childhood Experiences (ACEs) harm the individual’s short- and long-term neurological functions and immune and endocrine

systems, directly impacting the genetic regulatory systems. ACEs can also affect the individual's overall healthcare expenses throughout their adulthood. Specifically, women exposed to ACEs growing up involving physical and sexual abuse incurred healthcare costs that were 21% higher in comparison with other women with no ACEs history. In addition, adults with a history of ACEs are more likely to frequently visit primary care, emergency, and inpatient care (Miller et al., 2020).

The present study's findings align with previous research, in that greater exposure to Adverse Childhood Experiences (ACEs) is associated with a higher likelihood of poor physical and mental health and substance abuse in early adulthood. The effects of ACEs were found to be consistent across gender (Dube et al., 2009). Additionally, the research suggests that while physical health conditions resulting from ACEs may not manifest until later in adulthood, the onset of mental health issues such as mood disorders, anxiety, and substance abuse tends to occur earlier, specifically in late adolescence.

This highlights the importance of addressing ACEs and its effects in adolescence or early adulthood, as mental health implications during these developmental stages can exacerbate long-term physical health issues. This is depicted in the study conducted by Mersky et al., (2013), which emphasizes the need to focus on the long-term effects of ACEs and the importance of early intervention.

The impact of Adverse Childhood Experiences is far-reaching, affecting cognitive and physical domains. Disrupting the hypothalamic-pituitary-adrenal (HPA) stress response system is among the most detrimental effects. Chronic stressors associated with ACEs have been found to alter physiological and behavioral responses to stress, resulting from the dysregulation of the HPA axis and the immune system.

This can also increase the risk of developing mood and anxiety disorders and pain-related medical conditions. These findings are supported by the research of Sachs-Ericsson et al., (2017), which highlights the detrimental effects of ACEs on the HPA stress response system and the subsequent impact on physical and mental health.

Adverse childhood experiences (ACEs) are associated with deleterious outcomes across both cognitive and physical domains. Dysregulation of the hypothalamic-pituitary-adrenal (HPA) stress response is among the more harmful consequences of ACEs. Chronic stressors linked with ACEs can modify an individual's physiological and behavioral responses to stress, resulting from dysregulation of both the HPA axis and the autoimmune system. Additionally, ACEs can elevate the risk of developing mood and anxiety disorders and pain-related medical conditions (Sachs-Ericsson et al., 2017).

The HPA axis is a complex system that plays a crucial role in the body's response to stress. Chronic activation of the HPA axis, which can occur in response to ACEs, can lead to dysregulation of the system and altered cortisol secretion patterns. Dysregulated cortisol secretion can, in turn, impact brain development and lead to structural and functional changes in the brain that persist into adulthood (Shonkoff et al., 2012).

Moreover, the immune system is also impacted by ACEs. Research has suggested that early life adversity can influence the development of the immune system, leading to changes in immune function and inflammation that persist into adulthood (Danese & Lewis, 2017). These changes can contribute to the development of various health conditions, including autoimmune disorders, cardiovascular disease, and other chronic illnesses.

Despite the serious consequences of ACEs, there are interventions that can help mitigate their effects. For instance, research has shown that supportive relationships and experiences,

such as secure attachment and positive parenting, can buffer the effects of ACEs and promote resilience (National Scientific Council on the Developing Child, 2014). Moreover, interventions that focus on stress management, coping strategies, and emotional regulation can help individuals manage the effects of ACEs and promote overall well-being.

Overall, ACEs represent a significant public health concern, and addressing them requires a comprehensive, multidisciplinary approach that emphasizes prevention, early intervention, and support for affected individuals and families.

ACEs, Sexual Violence and Sexual Health

Adverse Childhood Experiences (ACEs) have been linked to a wide range of negative health outcomes, including those related to sexual health. Research suggests that individuals who have experienced ACEs, particularly those related to sexual violence, may be at an increased risk for sexual health problems such as sexual dysfunction, unwanted pregnancies, and sexually transmitted infections (Ports et al., 2016). Additionally, individuals who have experienced sexual violence in childhood may be more likely to engage in risky sexual behaviors in adulthood, which can further increase their risk for these types of health problems. Furthermore, ACEs are associated with mental health issues such as depression and anxiety, which can negatively impact sexual function, satisfaction, and overall well-being (Asmundson & Afifi, 2019b).

Studies have found that Adverse Childhood Experiences (ACEs), such as physical abuse or parental incarceration, are prevalent. These exposures are linked to a wide range of high-risk behaviors, including having more sexual partners and starting sexual activity at an early age. They also have negative health consequences in adulthood, including sexually transmitted infections and ischemic heart disease (Bertolino et al., 2020).

Bertolino et al. (2020) state that members of the lesbian, gay, or bisexual community are disproportionately affected by Adverse Childhood Experiences (ACEs) compared to their heterosexual counterparts. This difference may contribute to the disparities in health risk factors and outcomes that this population faces in adulthood. After accounting for ACEs, some of the health disparities between lesbian, gay, or bisexual individuals and heterosexuals, such as alcohol abuse, either disappear or decrease. These findings suggest that ACEs play a significant role in the health disparities that exist between these groups in adulthood.

Children and adolescents who have been exposed to early trauma, such as abuse and neglect, are at a heightened risk for experiencing violence throughout their lifetime, with a growing risk for poorer health and social outcomes. Therefore, it is crucial to comprehend the intertwined causes of violence and why specific individuals are more susceptible to experiencing violence throughout their lives. This understanding can aid in addressing and preventing violence in all its forms throughout all stages of life (Ports et al., 2016).

Ports et al. (2016) underscore the profound association between adverse childhood experiences (ACEs) and sexual victimization in adulthood. Notably, they suggest that the effects of various forms of childhood adversity are interrelated, and efforts to prevent sexual violence should therefore consider how other forms of childhood trauma, beyond childhood sexual abuse, can heighten the risk of re-victimization.

To achieve effective prevention of sexual violence and improve sexual health outcomes, it is necessary to address the underlying causes of ACEs. Childhood adversity can lead to long-term negative outcomes for health, relationships, and well-being, including sexual health. A growing body of research has demonstrated that ACEs, including but not limited to childhood sexual abuse, can have profound impacts on sexual health and behavior.

For example, a study by Steinberg and colleagues (2013) found that individuals who had experienced ACEs, including childhood physical or emotional abuse, were more likely to engage in risky sexual behaviors, such as unprotected sex, early sexual debut, and multiple sexual partners. Additionally, a review of the literature by Senn et al. (2017) found that individuals with a history of ACEs were more likely to experience sexual dysfunction, including difficulties with sexual arousal, pain during sex, and dissatisfaction with their sexual lives.

Prevention efforts that aim to mitigate the negative impacts of ACEs and reduce the risk of sexual violence and poor sexual health outcomes must focus on addressing the root causes of childhood adversity. This includes ensuring access to safe and stable environments, trauma-informed care, and support for families and children who have experienced trauma. It also includes education and awareness programs that promote healthy sexuality and relationships and interventions that aim to improve coping strategies and resilience in individuals who have experienced ACEs.

Research has shown that interventions that focus on building protective factors, such as social support and positive coping skills, can help mitigate ACEs' negative impacts and promote healthy sexual development (Larkin et al., 2012). For example, a study by Duffy and colleagues (2019) found that an intervention that combined peer support with stress management strategies was effective in reducing sexual risk behaviors among adolescents who had experienced ACEs.

By addressing the underlying causes of ACEs and implementing interventions that promote resilience and healthy coping strategies, we can work to prevent sexual violence and promote healthy sexual development across the lifespan. Fostering supportive environments and nurturing relationships can help children and adolescents build a strong foundation for emotional well-being. Additionally, promoting education and awareness around the consequences of ACEs

can empower communities to actively engage in creating safe spaces and supporting resources for individuals affected by childhood adversity.

ACEs and Violence in Adulthood

Adverse childhood experiences (ACEs) have been linked to a wide range of negative outcomes in adulthood, including increased risk of violence perpetration and victimization. In a study by Widom & Czaja (2014), individuals with a history of childhood maltreatment, including physical abuse, sexual abuse, and neglect, were more likely to perpetrate violence against others in adulthood. A separate study by Smith et al. (2018) found that individuals with a history of ACEs were also more likely to experience violence victimization in adulthood, including intimate partner violence, sexual assault, and non-partner violence.

The link between ACEs and violence in adulthood is complex and multifaceted. In a review of the literature, Edwards et al. (2018) identified several pathways through which ACEs can increase the risk of violence perpetration and victimization, including maladaptive coping strategies, impaired social functioning, and disruptions to brain development. For example, individuals with a history of ACEs may be more likely to use violent behavior as a way to cope with stress and trauma. They may also struggle with social skills and have difficulty forming healthy relationships, increasing the risk of involvement in violent situations.

Preventing violence in adulthood requires a multifaceted approach that addresses the underlying causes of ACEs and promotes healthy development across the lifespan. For example, a study by Klika and Herrenkohl (2013) found that early childhood interventions that promote positive parent-child relationships and support families can help mitigate the negative impacts of ACEs and reduce the risk of violence perpetration in adulthood. Similarly, a study by Schilling aet al. (2019) found that school-based interventions that promote social-emotional learning and

healthy relationship skills can reduce the risk of violent victimization in adolescence and young adulthood.

Hypothalamic Pituitary Adrenal Axis (HPA-Axis)

Our bodies react to environmental changes through a stress response, which helps us adapt to the stressor and maintain balance. A crucial part of this reaction is the HPA axis, a complex system that controls various bodily functions such as metabolism, immunity, and the ANS through a series of neuroendocrine pathways. The HPA axis comprises a sequence of hormonal reactions triggered by feedback loops in the hypothalamus, pituitary, and adrenal glands (Sheng et al., 2021).

The hippocampus, amygdala, and medial prefrontal cortex are critical limbic structures that play a crucial role in the mechanisms that contribute to mental health disturbances. Research suggests that prolonged hyperactivity of the sympathetic nervous system and sustained allostatic load along the HPA axis and its connections may underlie the development of adult psychopathology resulting from early childhood trauma (Murphy et al., 2022).

Murphy et al. (2022) state that the negative impact of stress experienced during childhood can lead to increased sympathetic activity and prolonged wear and tear on the HPA axis and its related structures, such as the hippocampus, amygdala, and medial prefrontal cortex which plays a role in memory, behavior, and emotions. Studies in literature show mixed results on whether the HPA axis is overactive in adolescents who have gone through childhood trauma. It is believed that the changes in the HPA axis may vary depending on the specific type of trauma and more research is needed in this area.

The hypothalamic pituitary adrenal (HPA) axis is a key stress response system that plays a critical role in the body's response to stress. When an individual experiences stress, the HPA

axis is activated, releasing cortisol and other stress hormones that help the body cope with the stressor. However, when an individual experiences chronic stress, such as ongoing childhood abuse, the HPA axis can become dysregulated. This dysregulation can result in prolonged exposure to high levels of cortisol, which can have negative effects on the brain and body.

The dysregulation of the HPA axis in response to childhood abuse can have significant long-term implications for individuals. In his book *The Body Keeps the Score*, Robert Sapolsky notes that individuals who have experienced childhood abuse are at a higher risk of a range of physical and mental health problems, including depression, anxiety, cardiovascular disease, and immune system dysfunction. Sapolsky argues that the dysregulation of the HPA axis is a key factor in the development of these health problems, as prolonged exposure to high levels of cortisol can lead to changes in the brain and body that increase the risk of these conditions.

The proper functioning of the HPA axis and the ability to handle stress in adulthood relies on certain critical developmental stages. The HPA axis starts to form during fetal development and becomes different between males and females in puberty due to hormone variations. Exposure to excessive hormones or stress in early life can negatively impact the development of the HPA axis and cause abnormal functioning in adulthood, increasing the likelihood of adult illnesses (Sheng et al., 2021). The HPA axis is an intricate system of neuroendocrine pathways and feedback loops that maintains the balance of our bodily functions.

Abnormal development of this system can result in long-term changes in the synthesis of neuropeptides, neurotransmitters, and hormones in the central nervous system and periphery. These changes can disrupt a range of functions in adulthood, such as behavioral, neuroendocrine, autonomic, and metabolic. In this review, we will explore the regulation and development of the HPA axis and how disruptions in the normal fetal environment, such as maternal stress, can

increase the risk for various neurodevelopmental disorders in adulthood, such as depression, anxiety, and schizophrenia.

Sapolsky (2004) delves into the intricate relationship between adverse childhood experiences, including child abuse and neglect, and the functioning of the hypothalamic-pituitary-adrenal (HPA) axis. He posits that chronic stress stemming from such experiences leads to an over-activation of the HPA axis, resulting in the constant secretion of cortisol. This, in turn, has a myriad of negative consequences on physical and mental health. Chronic cortisol secretion can damage the hippocampus, a key area of the brain involved in memory and learning, leading to chronic inflammation, thereby increasing the risk of chronic health conditions such as heart disease and diabetes. Furthermore, he suggests that this chronic stress can result in the development of mental health issues such as depression and anxiety in adulthood.

In his book *The Body Keeps the Score*, Bessel van der Kolk (2015) examines the relationship between childhood abuse and chronic health issues in adulthood, with a focus on the functioning of the hypothalamic-pituitary-adrenal (HPA) axis. The HPA axis is a critical component of the body's stress response system, and traumatic experiences, such as child abuse, can disrupt its normal functioning. This dysregulation can lead to a variety of physical and psychological health problems in adulthood, including chronic pain, depression, anxiety, and post-traumatic stress disorder (PTSD).

Research has shown that childhood abuse is a significant risk factor for a range of negative health outcomes in adulthood. For example, a study by Norman et al. (2012) found that women who had experienced childhood abuse were more likely to have chronic pain conditions, such as fibromyalgia and chronic fatigue syndrome. Similarly, a review of the literature by Felitti

and Anda (2010) found that individuals who had experienced childhood abuse had a higher risk of a range of health problems, including heart disease, obesity, and autoimmune disorders.

Addressing the underlying trauma and addressing dysregulation of the HPA axis can be essential in promoting healing and recovery for individuals who have experienced childhood abuse. A study by Cloitre et al. (2010) found that a specific form of psychotherapy, called Skills Training in Affective and Interpersonal Regulation (STAIR), was effective in reducing PTSD symptoms and improving emotional regulation in women who had experienced childhood abuse. Another study by Williams et al. (2012) found that a mindfulness-based stress reduction program was effective in reducing symptoms of depression and anxiety in individuals with a history of childhood abuse.

ACEs and Autoimmune Diseases

Adverse Childhood Experiences (ACEs) have been linked to disruptions in the biological systems responsible for maintaining physiological stability during environmental changes, a process referred to as allostasis. Research (Teicher et al., 2003) has shown that individuals who have experienced abuse during childhood exhibit a reduction in the volume of the prefrontal cortex, increased activation of the HPA axis, and elevated levels of inflammation compared to individuals who have not been exposed to ACEs.

Furthermore, adults with a history of abuse have been found to exhibit a reduction in the volume of the hippocampus, a key area of the brain involved in memory and learning, and elevated levels of inflammation, when compared to individuals without a history of abuse (Danese & McEwen, 2012). These findings indicate that ACEs can significantly impact the brain and the body's physiological systems and lead to long-term physical and mental health issues in adulthood.

The mechanism by which Adverse Childhood Experiences (ACEs) influence the development of Affective Disorders (ADs) is closely related to impairments in emotional awareness and regulation. Recently, the construct of alexithymia has gained increased attention among the various variables investigated in this context. Alexithymia refers to difficulty in cognitively processing affective stimulation, resulting in deficits in regulating and controlling emotions and the comprehension of the physiological connection of emotions. Such deficiencies are linked to the inability to identify and express one's own feelings and a tendency to focus on external events rather than internal experiences.

Studies have suggested that individuals who have experienced ACEs are more likely to develop alexithymia and have an increased risk of developing mental health issues such as depression and anxiety (Macareno et al., 2021). This highlights the importance of addressing emotional regulation and alexithymia in individuals who have experienced ACEs and the need for interventions focusing on emotional regulation and expression.

Adverse Childhood Experiences (ACEs) have been extensively researched and have been found to have a significant impact on an individual's physical and mental health. As highlighted by Brown et al. (2014), individuals who have experienced ACEs are more likely to engage in risky sexual behaviors, which can increase the risk of contracting sexually transmitted diseases and developing chronic illnesses such as cancer, obesity, depression, COPD, liver disease, and ischemic heart disease.

Additionally, ACEs have been linked to developing autoimmune diseases, conditions in which the immune system mistakenly attacks the body’s cells and tissues. Studies have suggested that individuals who have experienced ACEs are more likely to develop autoimmune diseases such as lupus, multiple sclerosis, and rheumatoid arthritis (Felitti et al., 1998). This is

likely due to the chronic stress resulting from ACEs, which can lead to disruptions in biological functions and negatively impact overall health. This highlights the importance of addressing ACEs and their effects, not only on mental health but also on physical health, and the need for interventions that focus on preventing and managing chronic illnesses and autoimmune diseases.

Adverse Childhood Experiences (ACEs) can profoundly impact an individual's physical and mental health, activating the stress response system and disrupting the development of the nervous, immune, and metabolic systems. This means that exposure to abuse and dysfunction within the family unit can have long-lasting effects on an individual's health that manifest during adolescence and persist into adulthood.

Studies have shown that individuals who have experienced ACEs are at an increased risk of developing a variety of chronic health conditions, including autoimmune disorders such as lupus, multiple sclerosis, and rheumatoid arthritis (Dube et al., 2010) as well as cardiovascular disease, chronic destructive pulmonary disease, substance abuse, and depression. This highlights the importance of addressing ACEs and their effects on physical and mental health throughout an individual's lifetime, as well as the need for interventions that focus on preventing and managing chronic health conditions, including autoimmune disorders.

While the exact mechanisms are not fully understood, research has identified several autoimmune diseases that are associated with ACEs. One study found that individuals who experienced childhood abuse or neglect were more likely to develop autoimmune diseases such as rheumatoid arthritis, lupus, and multiple sclerosis (Felitti et al., 1998). Similarly, a meta-analysis of 27 studies found a positive association between ACEs and the development of autoimmune diseases such as type 1 diabetes, celiac disease, and inflammatory bowel disease (Dube et al., 2019).

Chang et al. (2019) highlighted that individuals who have experienced emotional abuse during childhood are at an increased risk of developing depression in adulthood. Furthermore, research has shown that children subjected to physical abuse are more likely to engage in risky behaviors, such as smoking, and are at an increased risk of developing chronic diseases and mental health issues. Additionally, individuals who have been exposed to domestic violence, community violence, or sexual abuse are more likely to develop Post-Traumatic Stress Disorder (PTSD) in comparison to those who have not been exposed to Adverse Childhood Experiences (ACEs).

These negative effects are likely due to emotional dysregulation and the elevation of cortisol levels, which can damage various physiological systems, such as the metabolic, nervous, immune, and cardiovascular systems. This highlights the need for interventions that address the long-term consequences of ACEs, including emotional regulation and the prevention and management of chronic diseases and mental health conditions that are associated with childhood abuse and neglect.

These negative effects are likely due to emotional dysregulation and elevated cortisol levels, which can damage various physiological systems, such as the metabolic, nervous, immune, and cardiovascular systems. This highlights the need for interventions that address the long-term consequences of ACEs, including emotional regulation and the prevention and management of chronic diseases and mental health conditions that are associated with childhood abuse and neglect.

It is important to note that the relationship between ACEs and autoimmune diseases is complex and may involve a range of biological, psychological, and social factors. For example, chronic stress and inflammation associated with ACEs may contribute to the development of

autoimmune diseases through dysregulation of the immune system (Danese & McEwen, 2012). Additionally, ACEs may lead to maladaptive coping strategies and unhealthy behaviors that can further increase the risk of developing autoimmune diseases (Felitti et al., 1998).

In conclusion, while more research is needed to fully understand the link between ACEs and autoimmune diseases, current evidence suggests that childhood adversity may increase the risk of developing autoimmune diseases such as rheumatoid arthritis, lupus, and multiple sclerosis. Understanding the mechanisms underlying this relationship is critical for developing effective interventions and treatments for individuals who have experienced ACEs and are at increased risk for autoimmune diseases.

Summary

The connection between Adverse Childhood Experiences (ACEs) and autoimmune diseases (ADs) is well-established. Yet, a dearth of research examines the subjective experiences of individuals suffering from these conditions and their exposure to ACEs. By adopting a qualitative approach, healthcare professionals can gain a more comprehensive understanding of the origins of ADs and provide a more holistic treatment approach.

It is worth noting that individuals suffering from autoimmune diseases and inflammatory disorders are more likely to have experienced ACEs than the general population. Given the high rates of psychiatric disorders among this population, it is imperative for clinicians to consider the impact of ACEs and implement trauma-informed care strategies (Wan et al., 2021). A greater understanding of the importance of integrating medical treatment with appropriate therapeutic approaches can be gained by raising awareness about the emotional implications of autoimmune diseases in adulthood.

The problem is a need for qualitative research concerning individuals suffering from an autoimmune disease and their exposure to ACEs. Many quantitative studies have been performed concerning the connection between autoimmune diseases and adverse childhood experiences (Macarenco et al., 2022; Morris et al., 2019; Ittoop et al., 2020). In addition, numerous studies have been conducted to show the direct connection between adverse childhood experiences (ACEs) and specific autoimmune diseases and developmental disorders (Horton et al., 2022; Yang et al., 2020; Zarse et al., 2019).

Nonetheless, most studies are quantitative and fail to explore the direct experiences of individuals suffering from an autoimmune disease and their exposure to adverse childhood experiences. It can be contended that including the individuals' voices and experiences would provide a deeper understanding for medical and mental health professionals.

Chapter Three: Methods

Overview

The study used a phenomenological approach to explore the relationship between adverse childhood experiences (ACEs) and autoimmune diseases in adulthood. This qualitative research approach was ideal for examining the unique and complex experiences of individuals being treated for autoimmune diseases and their connection to ACEs. Semi-structured interviews were conducted with 10 participants who met the inclusion criteria of having an autoimmune disease and a history of one or more ACEs. The study took place at a non-profit clinic in the southernmost part of Texas, which provides healthcare services to underserved populations.

Given the exploratory nature of the research question, a qualitative methodology was the most appropriate choice (Bouncken et al., 2021; Creswell & Poth, 2017; Denny & Weckesser, 2018). Specifically, the phenomenological approach was employed to capture the essence of the participants' experiences. As Shank (2005) noted, qualitative research is a systematic empirical inquiry into meaning, where researchers aim to understand the experiences of others.

According to Denzin and Lincoln (2000), qualitative research is characterized by an interpretative and naturalistic approach, wherein researchers study things in their natural settings, attempting to make sense of phenomena in terms of the meanings people bring to them. Including the voices and experiences of individuals who have lived with an autoimmune disease and experienced ACEs provided a deeper understanding for medical and mental health professionals.

To address the research questions, the study explored how ACEs impact an individual's overall development and immune system in adulthood, the role of social constructivism in shaping beliefs and ideas about stress and coping mechanisms, and the shared experiences of

individuals with autoimmune diseases and a history of ACEs. The study's small sample size allowed for a more detailed and nuanced exploration of the participants' experiences and perceptions, contributing to a more in-depth understanding of the impact of ACEs on autoimmune diseases.

Overall, the study's use of a phenomenological approach and purposive sampling technique provided a rich and detailed description of the experiences of individuals with autoimmune diseases and a history of ACEs, shedding light on the complex relationship between childhood adversity and adult health outcomes.

To describe the shared experiences of these individuals, Husserl's transcendental phenomenology was applied. Moustakas (1994) defines this phenomenological approach as a qualitative research methodology that seeks to understand human experiences. Transcendental phenomenology involves setting aside preconceived ideas and observing phenomena through unclouded and unbiased lenses, allowing the true meaning of the phenomena to emerge within their own identity.

The application of transcendental phenomenology to this study allowed for a better description and understanding of the experiences of individuals living with autoimmune diseases and their previous exposure to ACEs in a comprehensive and holistic manner. The research design involved in-depth interviews with participants to elicit their narratives, which were then analyzed through a process of reduction, categorization, and interpretation (Moustakas, 1994).

The researcher, who has extensive experience as a counselor, strove to create a supportive and non-judgmental environment that encouraged participants to share their experiences openly and candidly. The data collection methodology encompassed self-evaluation and self-assessment data, where participants undertook an ACE quiz/assessment to evaluate their

childhood exposure to ACEs. Semi-structured interviews were conducted with participants to better understand their experiences with the phenomenon. The interviewing style was conversational, providing a degree of freedom and adaptability while ensuring that the same general information was collected from each participant. The study's findings provided valuable insights into the interplay between childhood adversity and adult health outcomes, particularly in the context of autoimmune diseases.

Design

The study employed a phenomenological approach to explore the relationship between adverse childhood experiences (ACEs) and autoimmune diseases in adulthood. This approach enabled an in-depth exploration of the lived experiences of individuals currently being treated for some form of autoimmune disease, with a particular focus on the role of ACEs in their illness.

Phenomenology, a qualitative research approach that seeks to understand the essence of human experiences (Creswell, 2013), was chosen for its ability to allow the researcher to explore the participants' subjective experiences and perspectives of their illness and its relation to their childhood experiences. Phenomenology aims to describe the structure of experiences as they are experienced by the participants, rather than imposing preconceived notions or theoretical frameworks on the data (van Manen, 2014).

The rationale for using a phenomenological approach in this study was based on the premise that the experiences of individuals with autoimmune diseases and a history of ACEs are unique and complex. Employing a phenomenological approach allowed for a rich and detailed description of these experiences, providing valuable insights into the relationship between ACEs and autoimmune diseases. By focusing on the participants' subjective experiences, the study shed

light on the ways in which ACEs may contribute to the development and progression of autoimmune diseases.

The data collection method for this study was in-depth, semi-structured interviews with participants who had been diagnosed with an autoimmune disease and had a history of ACEs. The interviews were conducted in a private and comfortable setting, allowing the participants to feel at ease and share their experiences openly and candidly. The interviews were audio-recorded and transcribed verbatim to ensure accuracy and fidelity of the data.

The phenomenological approach was a suitable research design for exploring the relationship between ACEs and autoimmune diseases. By focusing on the lived experiences of individuals with autoimmune diseases and a history of ACEs, the study provided valuable insights into the complex interplay between childhood adversity and adult health outcomes. The data collection method of in-depth interviews allowed for a rich and detailed exploration of the participants' experiences, contributing to a more nuanced understanding of the impact of ACEs on autoimmune diseases.

Research Questions

1. **What are the shared experiences of individuals impacted by an autoimmune disease and their exposure to adverse childhood experiences?**
2. **What are the participant's perceptions regarding the influence of their exposure to adverse childhood experiences on their overall individual development?**
3. **What are the participants' perceptions on the direct impact of adverse childhood experiences on the autoimmune system of individuals in adulthood and the underlying reasons behind it?**

Setting

The setting for this study is a non-profit clinic located in the southernmost part of the state of Texas. The clinic provides comprehensive primary medical, counseling, and integrated behavioral health services to uninsured individuals and those with limited access to healthcare. It is considered a safety net clinic, playing an important role in providing healthcare to underserved populations who may have difficulty accessing healthcare services.

The organizational structure of the clinic is hierarchical, with a board of directors overseeing the clinic's operations. The clinic's medical director is responsible for overseeing the physicians and medical staff, while the counseling and support staff are overseen by the director of counseling and support services. All physicians at the clinic are volunteers who donate their time to provide healthcare to those in need, and the counseling and support staff are grant-funded licensed professionals with a shared mission to provide healthcare to all.

The clinic's location in the southernmost part of the state of Texas makes it an ideal setting for this study. The Rio Grande Valley region has some of the highest rates of chronic diseases in Texas (Texas Department of State Health Services, 2020), including diabetes, obesity, and heart disease, and the clinic's dedication to providing comprehensive healthcare services to underserved populations aligns with the goals of the current study of understanding the experiences of individuals with autoimmune diseases who have a history of adverse childhood experiences.

As a fundamental ethical principle in research, participant confidentiality and privacy must be upheld to the highest standards. By assigning pseudonyms to the clinic and individuals, we ensured their identity remains concealed and protected from potential harm or unwanted

exposure. This measure also assured participants that their information will be handled with the utmost care and sensitivity, fostering a sense of trust and respect in the research process.

Participants

The study aimed to explore the experiences of individuals diagnosed with an autoimmune disease who also have a history of adverse childhood experiences (ACEs). The sample for the study was selected using a purposive sampling technique, appropriate for qualitative research, which involves selecting participants based on specific characteristics related to the research question (Creswell & Poth, 2017).

Participants were recruited from the South Texas Clinic, providing healthcare services to uninsured and underinsured individuals in the southernmost part of Texas. The inclusion criteria for the study were individuals diagnosed with an autoimmune disease and having a history of one or more ACEs as defined by the Adverse Childhood Experiences Study (Felitti et al., 1998). Participants also had to be 18 years of age or older and able to provide informed consent.

To ensure the study captured the full range of experiences and perspectives of the participants, the final sample size was determined by data saturation. However, an estimated range for the sample size was anticipated to include 6-15 participants, aligning with the recommended sample size for phenomenological research (Creswell & Poth, 2017). Utilizing a small sample size allowed the study to achieve a greater level of depth and nuance in exploring the participants' experiences and perceptions, leading to a more comprehensive understanding of the phenomenon under investigation.

Demographic information, including age, gender, ethnicity, and socioeconomic status, was collected and described in narrative form to provide context for the study participants. Additionally, pseudonyms were used to protect the participants' confidentiality and privacy.

To uphold the highest standards of credibility and validity within this study, all interviews conducted with participants were transcribed verbatim. This meticulous approach to transcription was imperative to capture the nuanced expressions, emotions, and experiences shared by the participants accurately. By transcribing the interviews word-for-word, we ensured that the analysis remained faithful to the participants' original voices and narratives, thus providing a solid foundation for the study's findings and conclusions.

The clinic's medical and counseling staff were asked to provide information about patients who met the inclusion criteria to identify potential participants. Participants were then invited to participate in the study through an informational letter that provided a brief overview of the study's purpose and procedures. If a participant agreed to participate, they were asked to sign an informed consent form prior to participating in the study.

Procedures

The research investigated the effects of adverse childhood experiences (ACEs) on the progression of autoimmune diseases during adulthood. This was achieved by conducting a phenomenological study to explore the experiences of individuals diagnosed with an autoimmune disease and to examine their history of ACEs. Adhering to best practices in qualitative research, participants were chosen through purposive sampling techniques, ensuring selection based on their relevance to the research questions rather than availability.

The sample size for the study ranged from six to fifteen participants, depending on the point of saturation. The process of data saturation played a critical role in determining the final sample size. Data saturation was reached when further data collection and analysis no longer yielded new information or insights. This approach allowed the researcher to gather data from individuals with the most relevant experiences and insights, thus enhancing the richness and

depth of the collected data.

An ACE evaluation was employed as an initial screening instrument to accurately identify study participants with a history of adverse childhood experiences. Each participant was required to have experienced at least one ACE, verified via this ACE assessment. This evaluation, widely acknowledged for quantifying the effects of childhood trauma and stress, served to preliminarily identify suitable study participants without being used for further or more in-depth analysis.

The ACE assessment generated a measure of adversity-related risk by evaluating the prevalence and severity of ACEs experienced by an individual (Bethell et al., 2017).

Following this, participants were interviewed, utilizing the results of their ACE score assessment to elicit detailed information regarding their childhood experiences, leading to the creation of individualized narratives. To ensure confidentiality, interviews were conducted in a private office at the South Texas Clinic, audio-recorded, and subsequently transcribed.

To enhance the credibility and validity of the research findings, member checking was employed as a vital component of the study. This form of triangulation involved returning to participants to seek their feedback and validation on preliminary findings and interpretations derived from their data.

After conducting the interviews and analyzing the data, a follow-up phase was initiated, wherein participants were provided with summaries or excerpts of their individual narratives. This served as an opportunity for participants to review the information and offer feedback, corrections, or additional insights regarding their experiences of ACEs and the impact on their autoimmune diseases.

To ensure ethical research practices, participants received informed consent forms before

the interviews began. They were informed of their rights and provided with an opportunity to ask questions or raise concerns. Interviews, expected to last approximately 120 minutes, were conducted using open-ended questions to elicit a wide range of feedback. The interviews were designed to explore the impact of ACEs on the development of autoimmune diseases, informed by existing literature on the topic.

The Researcher's Role

The role of the researcher in the study was critical in ensuring the maintenance of ethical standards and the establishment of validity. The study took place in a counseling setting, an area in which I have extensive experience. Nevertheless, I deliberately avoided any connection to the research site to prevent potential biases or undue influence. The site was discovered through a peer counselor who serves as the site's director.

The primary objective of the study was to augment knowledge and awareness of the relationship between adverse childhood experiences and the onset of autoimmune diseases in adulthood. This was achieved by exploring the experiences of individuals affected by these factors. As the primary investigator of the study, I was uniquely invested in the research question due to a personal connection. Specifically, my late wife battled an autoimmune disease for 15 years, which motivated me to explore the impact of childhood trauma on the development of chronic illness. While medical professionals provided treatment to address her physical symptoms, the underlying psychological and emotional effects of childhood trauma were never fully addressed. This personal experience led me to question whether a more holistic approach to healthcare that addresses patients' mental and emotional needs may be necessary to prevent and manage chronic illness more effectively.

As the primary investigator of this study, having worked as a counselor for over 12 years, my extensive experience in assisting individuals to overcome the negative effects of childhood trauma was beneficial in establishing rapport with study participants and creating a safe and supportive environment for them to share their experiences. I acknowledged the significance of bracketing to ensure that my personal beliefs and biases did not influence the participants' responses or the overall analysis of the data.

I recognized the importance of remaining neutral and objective throughout the study to create a non-judgmental and supportive environment for participants to share their experiences freely. By employing bracketing techniques, I was able to set aside any personal biases or assumptions that might affect my interpretation of the data, ensuring that the study's findings were grounded in the participants' actual experiences.

Data Collection

The data collection methodology encompassed self-evaluation, self-assessment, and reflection data. Participants undertook an ACE Quiz/Assessment to evaluate their childhood exposure to adverse childhood experiences. ACEs assessment pertains to exposures to negative experiences that can undermine the safety, stability, and nurturing qualities of a child's primary relationships and environment. These experiences may pose a risk for trauma and chronic stress linked to healthy development and well-being.

The assessment of ACEs generated a measure of adversity-related risk (Bethell et al., 2017). The data thus gathered were employed to identify patients at the greatest risk for toxic stress and to execute the following stages of a more comprehensive and individualized assessment for each of them. A comprehensive ACE screening involved assessing for the triad of Adversity, which encompasses the ACE score.

In order to augment the credibility and veracity of the research findings, the utilization of member checking was implemented as an indispensable element within this study. As a method of triangulation, member checking entailed revisiting the participants to solicit their invaluable feedback and validation regarding the preliminary findings and interpretations derived from their comprehensive dataset.

By integrating member checking, the study embraced a meticulous approach that acknowledged the significance of participant perspectives and their expertise as primary sources of information. This process not only fortified the robustness of the study's outcomes but also served as a crucial means to ensure the accuracy and authenticity of the conclusions drawn.

Interviews were recognized as the primary source of qualitative research, allowing researchers to comprehend each participant's point of view and better understand experiences within a phenomenon, as per Creswell and Poth (2018). The study implemented a semi-structured interview process to accomplish this goal. This approach offered participants the opportunity to explore and express issues they deemed necessary, as stated by Longhurst (2003). The interviewing style for this study was conversational, providing a degree of freedom and adaptability.

However, the same general information was collected from each participant, as per McNamara (2009). Yin (2018) emphasized that to obtain unbiased interview questions, they must be constructed in such a way that participants can share their experiences. To facilitate the interview process, it was recommended that questions be sent to participants in advance, enabling better interview facilitation.

1. How would you describe your background and personal/professional experiences?
2. How would you describe your current life situation, and are there any important factors

or events that have recently impacted your life that you would like to discuss?

3. What additional information or topics would you like to discuss about yourself that you believe would be pertinent to our conversation?
4. How would you describe your physical and mental health, and are there any challenges or concerns you would like to discuss?
5. How would you describe your childhood experiences up until age 17, and what significant events or memories stand out to you from that time in your life?
6. What other thoughts or perspectives would you like to contribute to our discussion that we have not yet explored?
7. Of the traumatic events you experienced during childhood, which ones did you feel had the biggest impact on your life?
8. What made those events particularly significant for you?
9. On a scale of 1 to 10, how likely do you think it is that the traumatic experiences you endured as a child have affected your mental and physical health as an adult?
10. What steps have you taken to address the impact of these experiences on your life, and are there any specific professional services or treatments that you have found helpful in this process?
11. How often have you been prescribed medication as part of your treatment plan?
12. What coping mechanisms have you found helpful in managing any mental health challenges you may be facing?
13. How do you believe your childhood experiences have impacted your ability to form and maintain relationships with others?
14. Have you experienced any positive outcomes or personal growth as a result of

overcoming the challenges you faced during your childhood?

15. Based on your own experiences, what advice would you offer to someone who is trying to heal from a traumatic childhood?
16. What are you looking forward to in the near future?

Thank you for sharing your experiences with me and for taking the time to participate in the current study.

Questionnaire

Questions 1, 2, and 3 aimed to comprehensively understand the participants' backgrounds, current life situations, and any additional information they believed was relevant to the conversation. Collectively, these questions provided an opportunity for participants to contextualize their experiences and perspectives within their personal and professional lives, essential for understanding the impact of childhood trauma on chronic illness development.

Questions 4, 9, and 10 aimed to explore the participants' physical and mental health and any challenges or concerns they faced. Collectively, these questions offered insights into potential health outcomes related to childhood trauma and identified potential interventions or resources that could help individuals who have experienced childhood trauma.

Questions 7 and 8 aimed to explore the traumatic events the participants experienced during childhood and the specific types of childhood trauma that may be related to the participants' current health outcomes. Collectively, these questions provided an opportunity to identify potential interventions or resources that could help individuals who have experienced specific types of childhood trauma.

Questions 11, 12, and 13 all aimed to explore potential interventions or coping mechanisms that could help individuals who have experienced childhood trauma. Collectively,

these questions offered insights into potential strategies for managing mental and physical health challenges and social and emotional development related to childhood trauma.

Questions 14 and 15 aimed to explore potential positive outcomes related to childhood trauma and identify strategies to promote resilience and growth. Collectively, these questions provided insights into the potential for individuals who have experienced childhood trauma to develop resilience and thrive despite adversity.

Finally, Question 16 aimed to provide an opportunity for participants to express their future goals and aspirations. This question offered a positive note to end the interview and highlighted the potential for individuals who have experienced childhood trauma to develop resilience and thrive despite the adversity they faced.

Overall, these questions were designed to provide a comprehensive understanding of the participants' experiences, perspectives, and potential interventions related to childhood trauma and the development of chronic illness. By exploring these questions, the study hoped to gain insights into effective interventions and policies to mitigate the adverse impact of childhood trauma on chronic illness development.

Data Analysis

As the researcher, I analyzed the interview data by identifying significant statements, concepts, or themes that emerged from the data. I then labeled these significant statements, concepts, or themes and organized them into categories to identify patterns and themes related to the research question. Once the categorization process was complete, I used Braun and Clarke's (2006) approach to thematic analysis to analyze the themes and identify key concepts and patterns in the data. This involved reviewing the data multiple times to identify recurring patterns

or themes, refining these themes to ensure they accurately represented the data, and then using the themes to develop an overall interpretation of the data.

The study involved recording interviews with participants' permission and taking detailed notes. The interviews focused on how childhood experiences may be connected to autoimmune diseases in adulthood.An interview template with a list of questions was used to help organize the data, and the study used thematic analysis to identify patterns and themes in the information collected.

The goal of the study was to gain a better understanding of how childhood experiences may impact health later in life. By using this approach, the study aimed to generate new knowledge and insights into this potential link. The research prioritized accuracy and validity by using rigorous data collection and analysis methods.

This study incorporated member checking as an essential component to enhance the credibility and reliability of the research findings. Member checking, employed as a triangulation method, involved revisiting the participants for their invaluable feedback and validation regarding the initial findings and interpretations derived from their comprehensive dataset.

By integrating member checking, the study adopted a meticulous approach that recognized the importance of participant perspectives and acknowledged their expertise as primary sources of information. This process strengthened the robustness of the study's outcomes and played a critical role in guaranteeing the accuracy and authenticity of the drawn conclusions.

Trustworthiness

Lincoln and Guba (1985) developed a framework that provided rigor and trustworthiness to qualitative data, comprising four components: credibility, dependability, confirmability, and

transferability. Trustworthiness was essential in qualitative research as it supported the idea that the findings were "worth paying attention to" (Lincoln & Guba, 1985).

Credibility referred to the believability of the data collected, crucial in ensuring the study's intended purpose (Patton, 1998). Lincoln and Guba (1985) proposed several methods to establish credibility, including prolonged engagement, observation, triangulation, peer debriefing, and member checking. For the study, debriefing and member checking were used to enhance the credibility of the findings.

Dependability and confirmability were also critical components of ensuring trustworthiness in qualitative research. Dependability referred to the consistency and replicability of the findings in another study (Lincoln & Guba, 1985). The study's qualitative nature aligned with the existing literature and was evaluated by Liberty University's dissertation committee to guarantee validity and dependability. Conversely, confirmability referred to the level at which other researchers could confirm or validate the results (Baxter & Eyles, 1997).

This component ensured that the data and interpretations were not biased and accurately represented the participants' perspectives. Various methods, such as member checking, engagement through participant observations, and corroborating the participants' perspectives, were utilized to establish confirmability (Creswell & Poth, 2018).

In addition, the approach of bracketing was incorporated into the research methodology. Bracketing is a widely employed technique in qualitative research, focusing on recognizing and addressing any preconceived notions or biases that the researcher might hold regarding the subject matter being studied. By consciously acknowledging these potential biases, the researcher was able to temporarily set them aside and approach the data collection and analysis process with a fresh and unbiased perspective.

This deliberate act of bracketing helped minimize the chances of personal opinions or preconceptions influencing the research findings, ensuring that the conclusions drawn were based on objective observations and interpretations. Consequently, the adoption of bracketing added a layer of rigor and credibility to the research, enhancing the overall validity and reliability of the study's outcomes.

Credibility was emphasized by Patton (1998) as important for the quality and credibility in qualitative research, as these factors could significantly impact the study's intended purpose and its reception by the audience. One approach to ensure credibility in qualitative research was the framework proposed by Lincoln and Guba (1985). They suggested several strategies to establish credibility, including prolonged engagement, observation, triangulation, peer debriefing, and member checking.

Peer debriefing was a fundamental aspect of qualitative research, involving soliciting feedback and suggestions from experts in the research area. Furthermore, peer debriefing offered alternative perspectives and interpretations of the data, fostering transparency and credibility in the research process. Therefore, peer debriefing was an indispensable strategy in qualitative research, significantly enhancing the quality and credibility of the research. On the other hand, member checking involved sharing the findings with participants to verify their accuracy and ensure that their perspectives were accurately represented (Lincoln & Guba, 1985).

The study employed debriefing and member checking to establish credibility. Member checking involved sharing the data with the participants to ensure that their perspectives were accurately represented. Additionally, peer debriefing was utilized to obtain feedback from other researchers to enhance the credibility of the study findings. The study achieved high levels of credibility through these strategies, increasing the findings' validity and reliability.

Dependability and Confirmability

Lincoln and Guba (1985) proposed that dependability was directly linked to the consistency of the findings, which could be replicated in subsequent studies. The study's qualitative nature and approach aligned with the relevant literature, supporting the research's validity and dependability. The dissertation committee at Liberty University also evaluated the process to guarantee the study's validity and dependability.

Confirmability was another critical component of ensuring the trustworthiness of the research findings. Baxter and Eyles (1997) defined confirmability as the extent to which other researchers could confirm or validate the study's results, ensuring that the data and interpretations were not a product of the researcher's imagination. Creswell and Poth (2018) suggested that confirmability could reveal biases that might directly impact the study's quality. A variety of methods, including member checking, engagement through participant observations, and corroborating the participants' perspectives, were utilized to establish confirmability. By employing these strategies, the study achieved a high level of confirmability, ensuring that the results were trustworthy and supported by empirical evidence.

Transferability

Transferability was critical to generalizing research findings from one context to another. According to Shenton (2004), transferability referred to the "extent to which the findings of the study can be transferred to other settings or contexts" (p. 6). In other words, transferability was about assessing the degree to which the findings of one study could be applied to other contexts. As Yin (2018) noted, transferability was based on the concept of theoretical generalization, which referred to "the ability to draw inferences about a theory or concept beyond the immediate data from which it was generated" (p. 66).

Therefore, it was crucial for researchers to provide a detailed description of the study context, participants, and methods used in their research to facilitate the assessment of transferability by future researchers (Lincoln & Guba, 2011; Morse, 2015). Ultimately, transferability was crucial in determining the external validity of research findings, and researchers needed to carefully consider its implications for their study's broader applicability.

A series of strategies were implemented to ensure transferability in the study. Firstly, an in-depth description of the study's context, participants, and methodology was provided to facilitate the assessment of transferability by future researchers. Secondly, purposive sampling was used to ensure that participants represented a diverse range of perspectives and experiences relevant to the research question. This technique permitted the identification of common patterns and themes across various contexts, augmenting the transferability of the study's findings.

Moreover, member checking was conducted to verify the credibility and accuracy of the research findings with the participants. This process fostered a higher degree of transferability by ensuring that the research findings were reflective of the experiences and perspectives of the participants. Member checking was a valuable technique that could increase the credibility, trustworthiness, and transferability of qualitative research findings by providing an opportunity for participants to contribute to the interpretation of the data and validate the research findings.

Ethical Considerations

The initial step of the study involved contacting the gatekeeper to seek permission and gather data. A comprehensive proposal was presented to the gatekeeper for consideration. Upon receiving consent, potential participants received an email outlining the study's objectives, data collection procedures, analysis techniques, and case study dissemination. Participants could

discontinue participation at any juncture, and any information from such individuals would not be factored into the study analysis.

If a participant discontinued their participation, utmost care was taken to ensure their well-being, acknowledging the importance of their emotional journey. The participant's choice to withdraw from the study was respected and supported with empathy and compassion.

A thoughtful and considerate approach was taken to provide the necessary support. Participants who chose to discontinue their involvement were directed to the South Texas clinic. Participants were welcomed with open arms and treated with the utmost care and respect. The dedicated professionals at the clinic understood the potential impact of the research journey and were well-equipped to provide the necessary guidance and support. They possessed the expertise to help participants navigate their emotions, fostering healing and personal growth.

It was essential to prioritize participants' emotional needs and welfare, recognizing their courage in sharing their experiences. The heartfelt intention was to create an environment where participants felt heard, understood, and supported throughout their engagement in the study, whether they chose to continue or discontinue their participation.

All data were stored on a password-protected device, with hard copies securely locked to ensure confidentiality. Furthermore, participants' identities, including their names, phone numbers, email addresses, and any other personal information, were held strictly anonymous. Participation in the study was entirely voluntary, and those who chose to partake could rest assured that their confidentiality would be upheld throughout the process.

To bolster the veracity and precision of the collected data, the study incorporated participant verification procedures such as member checking or respondent validation. This rigorous process guaranteed the data's dependability, credibility, and accuracy and mitigated

potential biases. The confluence of these measures aligned with the ethical principles of the research, ensuring the highest standards of academic integrity, and culminated in a corpus of empirical evidence that was unequivocally trustworthy.

Summary

The investigation assumed a qualitative approach, which sought to elucidate the experiences of individuals grappling with autoimmune diseases and their childhood exposure to adverse childhood experiences (ACEs). Qualitative analysis entailed an exacting process of scrutinizing individual experiences within the milieu of a particular phenomenon. Employing a phenomenological research design, the study engaged individuals presently enduring autoimmune diseases and probed their childhood experiences, especially their exposure to ACEs between the ages of zero and seventeen.

Quantitative research methods were often inadequate in capturing the direct experiences of individuals coping with autoimmune diseases and their exposure to ACEs. This study's inclusion of participants' voices and experiences served to deepen medical and mental health professionals' understanding of the subject matter. The inquiry relied on the participating individuals' interviews and perspectives without predetermined theories dictating the study's outcome.

This study endeavored to comprehend the intricate experiences of individuals grappling with autoimmune diseases and their exposure to ACEs. Through a comprehensive examination of their experiences, this inquiry sought to provide invaluable insights that could inform the development of bespoke interventions and support for individuals living with autoimmune diseases.

Chapter Four: Findings

Overview

In this pivotal chapter, I reiterate the study's purpose and revisit the guiding research questions. Each participant is introduced through descriptive portraits, providing insight into their unique experiences with the phenomenon. The findings, gleaned from individual interviews, are presented in two sections: the first explores emergent themes, offering a narrative exploration of participants' experiences, while the second furnishes concrete answers to the research questions, all conveyed through the participants' own words. This chapter concludes with a comprehensive summary, setting the stage for an in-depth interpretation and discussion in Chapter Five.

Participants

While it is important to note that while each participant's life journey is inherently unique, they collectively share the common experiences of having endured Adverse Childhood Experiences (ACEs) and currently being diagnosed with an autoimmune disease. This participant group exhibits diversity across multiple dimensions, including age, ethnic backgrounds, and gender, as comprehensively detailed in Chapter Three. The selection and inclusion of participants adhered strictly to the established participant recruitment process and fulfilled all outlined requirements as expounded in Chapter Three.

To maintain the fidelity of their voices, all interview excerpts have been transcribed verbatim. Occasionally, I have introduced words or phrases into the participants' quotations solely for the purpose of clarification, with utmost care taken to preserve the integrity of their responses. To uphold anonymity, each participant is represented by a pseudonym. Below, I provide a descriptive profile of each participant, listed alphabetically by pseudonym, offering a

poignant glimpse into the unique personal circumstances that frame their encounters with the phenomenon under study.

The study's participants encompassed a diverse demographic range, with ages spanning from 30 to 55 years. This cohort consisted of six females and four males, reflecting a balanced gender perspective on the experiences being studied. Ethnically, the group was varied, including five Hispanic individuals, three Caucasian, and two African American participants, offering a wide lens on cultural backgrounds. Socioeconomically, the participants ranged from lower to middle-income brackets, providing insights into the experiences of individuals across different economic situations.

This demographic diversity allowed for a comprehensive exploration of the ways in which adverse childhood experiences impact the development and management of autoimmune diseases across a spectrum of societal segments.

Adrian

Adrian, a 34-year-old with a lean build and eyes that hint at past turmoil, comes from a mid-sized town. He navigated a tumultuous childhood overshadowed by an aggressive father's outbursts and a mother whose silence spoke volumes. Despite barely making it through high school and the scars of his youth, Adrian found refuge in bartending. However, as he began to face the day-to-day challenges of rheumatoid arthritis, his physical struggles became a painful reminder of the adversities he endured in his formative years.

When I first met Adrian, I noticed a certain weariness in his eyes that hinted at years of physical and emotional trials. His posture, slightly stooped, suggested the weight of personal burdens, and there was a gentle hesitancy in his voice as he began recounting his journey. The nuances in his tone, the occasional sighs, and the deepening of his gaze when discussing his

childhood made it evident that his past was a mixture of pain, growth, and resilience. Through it all, Adrian's spirit of endurance was palpable, showcasing a man who'd faced life's tempests but refused to be broken by them.

Interview

Talkin' 'bout my background? Grew up in a town. Not the fancy sort. Finished high school, by the skin of my teeth, and started bartendin'. That's been my life. 'cept recently, I hit a rough patch. Lost my job for a bit. Had to move back with mom, which is a damn drag.

Now, stuff 'bout me you might wanna know? I play the guitar, or I try to. I've got this shitty disease, Rheumatoid Arthritis. Hurts like hell. Hands don’t work right, and sometimes I can't even hold a pick. I take methotrexate, and let me tell ya, that stuff? It makes me feel worse than a hangover after a long night. Like I've been hit by a damn truck.

But what really weighs me down? My childhood. My dad... that guy was a piece of work. He was always mad. About what? Hell if I know. There were nights, too many to count, when he'd come home, liquored up, looking for a fight. The belt was his weapon of choice. Made me feel like absolute crap. Like I was nothin'. Lower than dirt. Every smack, every shout, it was like him saying I wasn’t worth shit. Makes it hard to think good 'bout yourself, y'know?

Mom was... there, but not really. She never stood up for me. Just watched, quiet-like. She had this look, y'know? Like she wanted to be anywhere but there. Her eyes were always down, submissive. Like a puppy that'd been kicked too many times. Sometimes, I'd wish she'd shout or scream, do something, anything. But she never did. Just faded into the background, silent. Even after, when it was just the two of us, she’d act like nothin’ happened. Made me feel even more alone.

Out of all the hell he gave me, the beltings were the worst. I felt... trashy? Like, why bother with anything? On how much those beatings screwed with me? Man, it's a straight-up 10. Ain't no doubt about it.

I tried getting help. Saw a therapist for a bit, but money’s tight. Bible's my go-to now. Grandma gave it to me. Makes me feel a bit better, especially when the pain from the arthritis hits hard. Meds? Yeah, I'm on 'em. But like I said, that methotrexate is a bitch.

How do I get by? Playing music helps. So does chattin' with some pals from the bar. But trust? That’s hard, especially with the ladies. Had an ex, real sweet, but my baggage? It was too much. It ain’t been all gloom, though. Made me tough, I guess. If someone was dealin' with the kinda crap I did, I’d say: Don’t keep it in. Find a way to let it out. Trust me, you’ll feel better." What's next? I'm hopin' to save some money, maybe find a better gig. And maybe, just maybe, find someone who gets me. Someone who can see past all the scars, y'know?

Brenda

Brenda, a 52-year-old African American woman with a poised demeanor, holds a history marked with turbulence. As a seasoned Certified Public Accountant, she's navigated through corporate boardrooms, but her childhood and early adult life were the real battlegrounds. Being one of six children born to a mother who had a different partner for each, Brenda grew up without the presence of her biological father. The darkness of those early years was further accentuated by her mother’s spiral into drug addiction, ultimately succumbing to AIDS.

Meeting Brenda for the first time was like encountering a gentle force of nature. Her eyes, a warm hazel, emanated a blend of strength and vulnerability. There was a timeless grace about her, perhaps from the wisdom she’d acquired over her years. Her silver hair, neatly pulled back, framed a face that was a map of both hardships and triumphs. Brenda's hands, while

showing signs of age, looked like they could still embrace the world and comfort those in need. The pendant around her neck – a simple cross – hinted at the deep faith she mentioned multiple times throughout our conversation.

As she spoke of her past, her voice carried a melodic cadence, punctuated with moments of melancholy, hope, and conviction. Every word, every pause, every expression painted a vivid picture of a woman who had navigated life's storms with an unwavering faith and an enduring spirit.

Interview

You know, when I think about my childhood, umm... it’s like trying to navigate through a thick fog. The men my mother brought into our home were, well, most were nightmarish. Between their inconsistent presences and, you know, the abuse... both physical and... *sigh*... sexual, it was like living in constant turbulence. Especially with my mom being, well, absent even when she was there, if that makes sense?

By the time I met my first husband, I was, I guess, conditioned to accept less than I deserved. The violence... it was like history repeating itself, only this time, it was, umm, intimate partner violence that landed me in the hospital. I remember thinking, 'This is not love. This is not what I want for my children.'

Speaking of which, diving into my work, my accounting, it was... is, like, my refuge. Amidst all the chaos, numbers brought clarity. But, my personal life, God... it was like my past always caught up. I've been married three times, and every time, trust became the breaking point. Betrayals, infidelities... it felt like my past was, um, echoing in my relationships. But nothing compared to the physical trauma of that first marriage. Those... those scars, they’re deep, like they're etched into my soul.

And then, in the midst of it all, I got diagnosed with Lupus. It was about, um, ten years ago. I remember feeling like it was some cruel joke. First the traumas, and then this? The fatigue, joint pain, and that damned butterfly rash... Lupus changed everything. It's not just the disease, it's the meds too. Plaquenil helps, but the side effects... and Prednisone? That's another battle in itself.

If I were to, like, rate how much my childhood traumas affected my mental and physical health? Probably an 8, maybe 9 out of 10. Therapy has been my salvation, along with my faith. Scriptures, you know? They've been a guiding light. One of my favorites is, "We are hard pressed on every side, but not crushed; perplexed, but not in despair; persecuted, but not abandoned; struck down, but not destroyed." - 2 Corinthians 4:8-9.

If there’s something, um, I'd like to tell anyone with a past like mine... find your anchor. My children, my work, my faith, they've kept me grounded. And for the future? I just... I just hope for healing, for peace. I want a different story for my kids. A story where love isn't tainted with pain.

Jesse

Jesse, a 38-year-old migrant from Guatemala, walked into the room with a demeanor that spoke volumes of a life laden with trials far beyond his years. The first thing I noticed was how weathered he appeared; his face etched with lines and a certain weariness that made him seem older than his actual age. There was a heaviness in his steps, a slowness that suggested a constant battle with both physical and emotional burdens.

His dress was simple, unadorned, but it was his posture that caught my attention – a noticeable slouch, as if the weight of his world rested squarely on his shoulders. As he began to

speak, his voice was low and carried a tinge of sadness, each word seeming to require effort, as if even speaking was a task too heavy in his current state of weariness.

Throughout our conversation, Ignacio's expressions seldom shifted from one of deep contemplation and melancholy.

When he spoke of his childhood and the life he left behind in Guatemala, there was a distant look in his eyes, a gaze that seemed to be fixed on some far-off memory or perhaps a reality he longed to forget. His occasional nods and faint smiles did little to mask the underlying sense of defeat and exhaustion that seemed to envelop him.

In meeting Jesse, I was struck by the stark reality of what it means to endure overwhelming adversity. His was not just a story of migration but a vivid illustration of how the relentless challenges of life can leave indelible marks on a person's spirit and demeanor.

Interview

My story, it's like a river that's run too fast, too rough. I'm Jesse, 38, born and raised in a small, forgotten pueblo in Guatemala. We were dirt-poor, ten siblings and I crammed into a shack, the middle child lost in the shuffle. My father, an alcoholic, was like a storm cloud over our home, his moods dark and unpredictable. I grew up on a small piece of land, tilling soil and tending to crops while my father lost himself in his vices.

Growing up, the air in our home was thick with tension. My father's violent outbursts, his affairs with women in the town were the talk of the pueblo, but we lived it, every day. Rumors swirled that he had raped my older sister. The fear, the shame, it was like living in a nightmare. Poverty wasn't just about going hungry; it was the constant feeling of helplessness, of being trapped.

At 16, life threw me into deeper waters. I got my girlfriend pregnant, and fear, more than love, pushed me into marriage. By 25, we had five kids, my little family squeezed into the chaos of my childhood home. My younger brother got mixed up with the wrong crowd, with the cartels, and suddenly, our home wasn't just unhappy; it was unsafe. The day the military mistook my youngest brother for someone he wasn't and took his life, that was the day I knew I had to leave.

Coming to America was an odyssey filled with danger and despair. I almost didn't make it. Finding myself homeless in a land where I couldn't speak the language was like living my worst fears. But I survived. I found work at an aloe farm, lived in a shed – it was a palace compared to the streets.

Two years ago, I was diagnosed with Scleroderma. It's a cruel twist, really. My body, which I've relied on all my life, is betraying me. My skin hardens, my joints scream in pain, and some days, just moving feels like a battle. The doctors have me on a regimen of immunosuppressants and pain management medications, including strong NSAIDs. They also prescribed topical therapies to ease the skin symptoms. It helps to some extent, but there's no cure. It's like throwing a cup of water on a wildfire.

Mentally, it's a rollercoaster. Between the pain and the memories of my childhood, the loneliness of being away from my family, it's a daily struggle not to fall into despair. But I have to be strong, for them. My hope is to bring them here, away from the dangers of our home country.

Growing up in such a volatile environment, witnessing violence and living in constant fear, it's left scars that run deep. On a scale of 1 to 10, the impact of those early experiences on my health,

I'd say it's a solid 9. It's shaped how I view the world, how I interact with others. Trust doesn't come easy, and opening up, letting people in, it's hard.

I've learned to find solace in small things – a day's work at the farm, a quiet moment under the stars. These moments, they give me a bit of peace. For anyone trying to heal from a childhood like mine, I'd say find these moments. Hold onto them. They're like beacons in the dark.

Looking forward, I dream of reuniting with my family, of holding my wife and kids again. I long to build a new life, a safe life, where the shadows of the past don't reach us. That's what keeps me going, the hope of a better tomorrow, a peaceful life.

Maria

Maria, at 25, navigates life with the hopes and dreams of offering her young daughter something more. Living in government housing and cleaning homes, every stroke of her scrub and every late-night study session for her GED is driven by determination. Still, beneath her strong exterior, Maria grapples with Hashimoto's disease, fatigue weighing down her shoulders, and the anger and confusion rooted in her turbulent past.

Upon entering the room, Maria's presence was immediately felt - a young woman with a spirit far older than her years. Her deep brown eyes seemed to hold stories that belied her age, eyes that occasionally drifted to a distant place when recalling painful memories. There was an inherent resilience about her, palpable in the set of her jaw and the firmness of her posture. Yet, beneath the surface, one could sense the vulnerability of a soul that had faced more than its fair share of life's battles.

Clasping her hands, often tightly, she spoke with a mixture of trepidation and determination. Her voice, though soft-spoken, carried weight, occasionally breaking when

discussing her daughter or her own childhood. Despite her struggles, there was an undeniable fire in Maria, a burning desire to forge a different path for herself and her child. Her story, though filled with challenges, was a testament to human resilience and the power of hope.

Interview

Umm, so, I guess I'll start at the beginning. My background? It's… well, it ain't pretty. I was raised by my abuela. My mom had me super young, like 15 or something, and was always either in jail or off doing who knows what. Never knew my dad. It was tough. We lived in this cramped space, and abuela did what she could with welfare and stuff, but there were three of us grandkids.

Right now? I'm living in this government place, trying to make things work, you know? Got my little girl, and she's, um, a handful. ADHD and everything. She's 5 now, got her after some mistakes I made. Recently, people have been saying stuff, you know? That maybe I ain't taking care of her right, and there's been talks about CPS. It scares me, thinking she might get taken away.

Umm, something else? Well, I guess it's hard for me, like, relationship-wise? All the men in my life have, I don't know, disappointed me? My baby's dad, he was just a fling. And I see these other moms, with families and stuff, and it makes me wonder if I'll ever have that, you know?

Physically, it's been rough. Right after having my daughter, I got diagnosed with Hashimoto's. Some thyroid thing. Makes me tired a lot. And mentally, I guess there's a lot of anger? And sadness. Feel abandoned a lot.

Growing up, I remember feeling alone, like all the time. My abuela tried, but she had her own stuff. She's very into church and wanted me to find God, but it just made me mad. Why would

He let all this happen to me, you know? My mom being how she was, her partners doing stuff to me. Those things, they hurt the most. Feeling like your own mom doesn't care? That's a solid 10 on that pain scale, no doubt.

To cope? I've tried talking to some folks, like counselors, but it ain't easy. Can't afford it much either. Mostly, I just try to focus on the future, you know? My girl. Getting my GED. That kinda stuff. Haven't really been on any meds or nothing. For coping, I clean. Sounds dumb, but it helps.

Relationships? Hard. Trust issues and all. But I'm working on it. I've learned a lot, even from the bad stuff. Gave me strength, I guess. For anyone going through similar stuff, umm, I'd say find something to focus on. For me, it's my daughter and studying. Gives me hope, you know? In the future? Just hoping for better days. Want to get a better job, maybe move out of this place. And for my girl, just want her to have a better life than I did.

Pedro

Pedro, a mechanic in his 30s, maneuvers through the complexities of life wearing the scars of a tumultuous childhood. Raised in a chaotic home with an often-absent mother and an abusive truck-driving father, he found himself growing up faster than he should, bearing the responsibilities of protecting his younger siblings. Now, as a divorced father of three, he battles the lasting impact of his early traumas, the daily challenges of Type I diabetes, and the echoes of a broken marriage, all while trying to reconcile with a God he feels abandoned him.

As Pedro walked into the room, there was an immediate sense of a man who'd lived life with his hands, a mechanic's roughened palms and grease-stained fingers evident of his craft. The weight of his life experiences seemed to have stooped his shoulders slightly. His eyes, dark and intense, gave glimpses into the hardships he'd faced, often darting away when discussing

particularly painful memories. At moments, especially when delving into deeply personal matters, his eyes welled up with tears, showing the raw pain of some memories.

Despite the slang and street-smart wisdom in his voice, there was a clear, underlying hurt when discussing his family and the challenges he'd faced. Every so often, a glint of fierce protectiveness flashed when he mentioned his children. Pedro's story was one of resilience, battles with external circumstances and internal demons, and a relentless push to protect and provide for those he loved.

Interview

Man, where to start with all this? Life’s been...well, it's been something. Growing up, it was mad rough, for real. Moms was either out chasing who knows what or passed out. I mean, she had her demons, you feel? And pops, well, he drove trucks, so he wasn't around much. But when he was? Bro, it was like walking on eggshells. He'd come home, already mad from whatever, and things would just...explode. He’d go off on moms, and if we kids made a peep, we’d get it too. I tried shielding my siblings from it all, being the eldest and all, but sometimes, it just wasn’t enough.

Now, I'm turning wrenches as a mechanic, doing my best to stay afloat. Got three kids from my marriage. Me and their moms, though? That ship's long sailed. It’s complicated, man. Stuff from my past, it just crept into my marriage, you know? Got trust issues, anger issues...and she said I was distant. We got love for each other, but sometimes, love ain't enough.

And then there's my Type I diabetes. Bruh, that thing's a beast. Always checking my blood sugar, making sure I got insulin. The hassle, the cost – it's mad draining. Sometimes I forget, or I just can’t afford the meds, and I crash. Feel weak and shaky. It’s messed with work a couple of times, and with being there for my kids. I won’t lie.

Mentally, I ain't at my best. All that chaos from when I was a kid, it’s stuck with me, man. Like, how can I trust folks when my own parents were like that, you know? And then, seeing my old man treat my mom like garbage, that’s messed up. Definitely a straight-up 10 on how that shaped me. And the God thing? Nah, I ain't about that. Felt like if there was one, He straight up ditched me, so I don’t mess with Him.

The way I cope? Few beers, maybe some harder stuff, just to get by. Tried talking to some peeps about it all, but that ain’t my thing. Meds? Just the insulin, that’s it. Relationships, especially my marriage, man, that’s been a trip. After all I seen and been through, opening up, trusting, that's hard. My marriage fell apart because of it, among other things. But lessons were learned. I know how I don’t wanna be, especially for my little ones.

What I’d tell someone else? Man, find your anchor. Something to keep you grounded. My kids are mine. I’m holding onto them, holding onto hope. And what’s next for me? Hopefully, some quiet, some peace, and a chance to give my kids a better life than I had.

Rhonda

Rhonda carries the weight of a tumultuous past, marked by challenges and loss. As a teacher assistant and a devoted church volunteer, she seeks solace in serving others and nurturing the next generation. The stories she shares from her youth echo resilience, while her present days speak of faith and redemption. With five adult children, eight cherished grandchildren, and a debilitating bout with Crohn's disease, Rhonda's journey is a testament to the strength of the human spirit and the healing power of faith.

When Rhonda entered the room, her poised and graceful demeanor immediately drew attention. There was a warmth in her eyes, betraying years of wisdom and resilience. Her hands, marked by the passage of time, gracefully gestured as she spoke about her experiences, showing

a life marked by service and dedication. As the conversation progressed, it was evident that beneath her nurturing exterior lay a reservoir of strength forged through trials. When discussing her childhood and the challenges of her past, her voice wavered, reflecting the scars left by painful memories.

The way she clasped her hands or took a moment to gather her thoughts before delving into traumatic events revealed the emotional weight they still held. Yet, in discussing her faith and family, there was an undeniable spark of hope and gratitude. Rhonda's narrative was a testament to the human spirit's ability to heal and find solace, even in the face of adversity.

Interview

Alright, so starting off, my background, yeah? I was raised without a dad around. My mom, bless her heart, got into a lot of trouble, landed in prison, and that's how I got to live with my grandma. Now, grandma, she had her own battles, you know? The home always felt heavy. She was struggling, always seemed like she was fighting her own demons. I think that weighed down on me, made me see the world differently, maybe even a bit darker than most kids my age.

Now, I work as a teacher assistant at a local school. On the side, I volunteer at my church, trying to give a bit of what I got back. But health-wise, I've been fighting this battle with Crohn’s disease since my 30s. And there're times, just in the quiet, I wonder if the emotional trauma, the stress from my childhood, from living in a house with so much unrest, might have been a trigger for it. The disease ain't just physical, you know? It's like my insides are rebelling, and my mind, it's constantly racing.

And, I should mention, when I was just 17, I got pregnant. The father was an older man. Once he heard, he just upped and disappeared on me. It's just one of those things you don't forget.

Growing up... well, it wasn't easy. The toughest memories? Watching my grandma battle her own troubles and the weight of those times, living under that cloud of constant struggle. If I had to rate it, say on a scale of 1 to 10, how much those years affected me? A straight 10. It hit both my mind and my body real hard.

"I've been to therapy sessions, tried sorting out those layers of hurt from back then. As for my Crohn's, doctors got me on meds, and it's been a part of my routine for ages now. With all this emotional weight, leaning into my faith has been my saving grace. It's my way to push through, my way to cope.

Growing up like I did, it's made it challenging to trust people. But I've pushed through, especially for the sake of my kids and their kids. Life hasn't handed me it easy, but I've always tried my best. Over the years, I've grown, bit by bit. I'm not that scared kid anymore. And for anyone out there struggling, find something solid, something real to cling to. For me, that's always been my faith and my family.

As for what's next? I just wish for some peace. Spend time with my grandkids, maybe even retire. It's the simple joys I'm looking forward to now.

Tina

Tina, a 40-year-old vibrant hairstylist with a personality as colorful as the strands she styles, carries the weight of a past marred by shadows of adversity. From a superficial glance, one might see her as an emblem of modern-day resilience; she exudes an undeniable zest for life, navigating her day-to-day with the same flair and precision she imparts to every haircut. However, behind her vivacious exterior lies a tale of childhood trauma, personal loss, and the scars left by witnessing domestic violence in her formative years.

Born to a military father who brought the horrors of war home and a submissive mother who bore the brunt of it, Tina's life was punctuated by moments that would define her perception of relationships and trust. The unfulfilled longing to be a mother, the relentless pain of an autoimmune disorder, and the shadow of a violent past converge to shape her narrative. Yet, despite all, Tina remains a testament to the enduring spirit of survival, seeking solace and hope in the simple joys of her work and the memories of better times.

As I sat with Tina, her story was reflected not just in her words, but in her demeanor. Her shoulders hunched slightly, as if bearing the weight of her past, and her hands, visibly affected by her disease, occasionally trembled. Her voice had an underlying tremor, particularly when recalling traumatic memories, and she would sometimes pause to wipe away a tear. Despite the pain evident in her posture and expressions, there was a fierce determination in her eyes, a testament to her resilience and strength.

Interview

You know, growing up, life was nothing short of a damn disaster movie. My pops, he served in the army, right? Got back from those tours, and I swear it was like living with a ticking time bomb. PTSD, they call it. I could never tell what'd set him off. Nights? Man, I remember so many damn nights of yelling and shouting.

I'd be in my room, right, and I'd sneak out just a little to see what was happening, and there he'd be, all up in my mom's face. He wasn't just loud; he was *violent*. My mom, bless her soul, ended up in the ER more times than I want to remember. I'd be there, hiding behind our old raggedy couch, clutching a pillow, praying he'd just tire out.

And if that wasn't a hard enough pill to swallow, my little sis, my heart, got leukemia. She was just six. Can you believe that? Life was so unfair. I still feel this void, this emptiness, where she used to be. It's like this aching pain that won't ever go away.

Fast forward to now. Here I am, 40 years old, and trying to make something of myself as a hairstylist. But life, man, it just keeps on throwing punches. Got hit with Scleroderma. My damn hands, they hurt so much it feels like they're on fire every time I touch hair or hold scissors. They got me on these meds, Cellcept and some corticosteroids. And if I'm honest, they help, but just a smidge. Feels like they're just for show.

Sometimes, late at night, I can't help but think... did all that messed up stuff back in the day screw up my body? Like, could all that stress and trauma have messed with my insides? Set off this chaos in my body? I read somewhere that your mind can affect your health. If that's true, then my body's paying the bill for everything I've been through.

And you know, amidst all this, I can't shake off this gnawing feeling of... regret? Frustration? Never got married, never had kids. Saw too much to trust a man, especially after what my pops did. Thought I wanted to be alone, but the older I get, the more I wish I had a family of my own. But trust? That's hard to come by.

Did the therapy thing a few times, took some meds for the mental stuff. But relationships? Man, that's a whole other ball game. I've got walls so high; I sometimes feel trapped inside. But I learned one thing, though: resilience. If I had any advice for anyone going through rough times, it'd be this: Hold on tight to what you love and don't let go.

All said and done, I just want a break, you know? Some damn peace. Dream of taking a trip, feeling the breeze without any worries. But until then, I just push through, one damn day at a time.

Victor

Victor, a 65-year-old retired police officer, has lived a life of contrasts and challenges. Born in the shadow of the Vietnam War, as the middle child of a soldier father and a mother grappling with her own internal battles, Victor's journey was marked early on by absence, longing, and familial instability. His youthful days, which should have been filled with typical childhood joys, were instead punctuated by hushed arguments behind closed doors, a mother's melancholy, and the all-consuming weight of responsibility thrust upon his elder sister.

Despite these hurdles, Victor forged ahead, establishing a career in law enforcement, building a family, and facing a daunting battle with Hodgkin's Lymphoma. Through the years, the complex tapestry of Victor's experiences has woven together tales of resilience, heartbreak, survival, and the quest for understanding.

As Victor settled into his chair, there was a certain weight to his presence, one that suggested a lifetime of challenges faced and battles fought. His eyes, though tired, held a sharpness that hinted at resilience. Throughout our conversation, his tone carried a mix of resignation and quiet strength. There were moments, particularly when discussing his childhood and the struggles with his family, where I noticed his gaze drifting away, perhaps lost in the memories. His posture was slightly hunched, but every so often, he'd straighten up with a determined jolt, especially when discussing his fight against Hodgkin's Lymphoma.

As he spoke about his family, especially his father and the trauma of his formative years, there was a clear hint of longing in his voice, paired with sporadic tightening of his jaw, an unconscious display of suppressed anger or pain. His hands, rough and slightly trembling, frequently clenched when he delved into the more painful parts of his narrative, like the deterioration of his marriage or his brother's troubles.

However, when the topic shifted to his children and grandchildren, a softness came over him. His eyes lit up, and I could detect a hint of pride, even though there was also an unmistakable undertone of regret about the physical distance between them. It was evident that beneath the shield of a stoic retired officer, Victor bore a vulnerable heart, one that had been bruised but not broken. There were moments during the interview when his eyes welled up with tears, though he was quick to brush them away, always eager to push forward with his story.

Interview

Alright, let's dive deep then. Growing up? It wasn't the American dream, I'll tell you that. I'm Victor, 65 now. My dad was out in Vietnam for the majority of my childhood, leavin' us with ma. I'm the middle child, got two brothers and a sister. Pops? He was distant, even after he came back and started working construction. I always wanted his attention, his validation, but it was like shouting into a void.

Life right now? It's... well, it's quiet. Too quiet, maybe. Living in this trailer park, just me and my dog, Rusty. Kids are all grown and scattered across different states. Rarely see them or the grandkids. The wife left about 15 years ago, said I'd become just like my old man – distant and snappy. Let’s see, what else? Ah, health. Well, I've been at war with my body since 45. Hodgkin's Lymphoma. Went through the whole grind of chemo, radiation, the works. I was on my last legs until MD Anderson in Houston had this experimental treatment.

Now I'm on this "miracle pill", a type of chemo they said I'll need to be on for life. Over the years, I've started to piece together the dots, wondering if there's a link between all the trauma from my childhood and this damn disease. Feels like my body's way of processing all that pain.

Mentally? Well, it's a roller coaster. Some days are better than others. Childhood memories? Hell, where to start. With ma drowning her sorrows in booze and weed every day, my older sister stepped up as the mother figure. Most nights, behind their closed door, I'd hear my parents arguing, dad accusing ma of being unfaithful. Later found out he was battling PTSD. But the trauma that really did a number on me? One of my brothers getting mixed up in drugs, ending up behind bars not once, but twice.

On a scale of 1 to 10? I'd say a solid 8 on how much my childhood messed with my head and health as an adult. Ain't no kid should grow up like that, you know? I've seen a few therapists over the years, tried to unpack all that baggage. Some helped, some didn't.
Meds? Apart from the chemo, I've been on some antidepressants, off and on. Coping? I'd say my dog, Rusty, is my rock. Also, found some solace in fishing, lets me clear my head.

My childhood? It screwed with my ability to connect. My marriage ended 'cause I became cold, distant. Just like pops. But looking back, I did learn a lot. Made me tougher, more resilient. If someone asked me for advice, I'd say, Find your anchor. Whether it's a hobby, a pet, or therapy. Just find it and hold on. As for the future? I hope to maybe bridge the gap with my kids. Maybe take a road trip, visit them, the grandkids. See where life takes me.

Violet

Violet, a 50-year-old Mexican national, her complex tapestry of emotions was immediately apparent. There was a dignified strength about her, yet it was intertwined with an air of weariness that seemed to hang heavily in her eyes. Her voice carried a proud tone when she spoke of her children's professional achievements back in Mexico City, yet this pride often gave way to a deeper sorrow as the conversation moved towards her personal struggles and health issues. Violet’s body language shifted notably through our discussion.

Expressive and animated when reminiscing about her children, she conveyed her maternal pride with bright eyes and lively hand gestures. However, as the focus turned to her current life and her battle with Sjogren's syndrome, her posture deflated; her shoulders slumped, and her hands, previously so dynamic, clasped tightly together in her lap.

The emotional landscape of Violet’s narrative was a poignant blend of resilience and pain. Discussing her husband and her past with her father, her tone fluctuated between frustration and resignation. In these moments, she often averted her gaze, as if reliving those memories was a journey back to a dark, unwelcome place. The recounting of her childhood, marked by witnessing her father's abuse and violence, was delivered in a hushed, almost tremulous voice, with her hands visibly shaking.

Tears frequently brimmed in her eyes, especially when detailing the traumatic incidents of her father's outbursts and the debilitating effects of her illness. Yet, in each instance, she displayed remarkable composure, swiftly pulling herself back together, a testament to her enduring strength and fortitude. Violet’s emotional state visibly brightened when she spoke of her hometown, Mexico City. Her entire demeanor transformed when discussing her visits back home – it was evident that these trips were her sanctuary, a much-needed respite from her current trials.

In these moments, she seemed to transcend the confines of the interview room, her spirit momentarily unburdened and free. This connection to her roots and her family back in Mexico provided not just a contrast to her present struggles but also a source of hope and peace. Throughout the interview, Violet’s story unfolded as more than a chronicle of challenges; it was a narrative rich with hope, resilience, and an unwavering bond to her heritage and loved ones.

Interview

Life, you know, it throws curves. I'm 50 now, originally from the heart of Mexico City. Fifteen years ago, my husband and I, we uprooted our lives, moved to the U.S. to chase this business dream. But it's been hard, so hard. Like living in a world where you just don't fit. Back home, I have three kids. Two of them are doing incredibly well, professionals making their mama proud. But my other child, my eldest, he's the thorn in my heart – addicted, troubled, a constant source of worry.

Then there's my health – five years ago, I was diagnosed with Sjogren's syndrome. It feels like my body is betraying me. My joints, they ache all the time, and some days, it's a struggle just to get out of bed. It's not just the pain; it's the dryness too – my eyes, my mouth, like I'm turning to dust. I feel so fragile, so broken. The doctors try with their treatments, but it's like they're just scratching the surface. The medications, the painkillers – they help, but they can't fix me. I'm physically spent, and emotionally, it's taking its toll too. The pain, the constant discomfort, it's like a shadow that's always there.

My husband, he's got his demons too, drinks more than he should. Living with him, it's like being in a time loop, reliving the nightmares of my childhood every day. My father, he was a piece of work – an alcoholic, a womanizer. He never touched me inappropriately, but the physical violence I witnessed, the brutality he showed my mother, it's etched in my soul.
I remember being little, no more than six or seven, and hearing the shouts, the crashes. My mom would be on the floor, my dad standing over her, his face red with rage. He'd turn to us kids, his eyes wild, and we'd just freeze, knowing we could be next.

The worst was this one time – we were at the grocery store, and we ran into one of his mistresses. She mocked my mom, flaunting her boys, saying she gave my dad sons while my mom only had us girls. We ran out, terrified. Later that day, my dad came home in a rage. The

mistress had told him my mom slapped her kids. He burst in, shouting, and beat my mom so bad... I remember hiding, trembling, thinking he was going to kill her. It's a memory that’s deeply etched in my mind.

He was always angry, especially after he lost everything – his business, his respect. I guess that's why he was so mean, so violent. I'd lie in bed at night, just waiting for the next outburst. I can still hear the sound of his belt as he pulled it from his waist.

There were whispers, too, about his affairs. Mom said one of his lovers was a witch, and I'd have these nightmares, waking up in a cold sweat, thinking a witch was coming to take me away.

And then there's my boy, my eldest. He's fallen into drugs, been suicidal. I see so much of my father's pain in him, and it breaks me. I sometimes think my own traumas passed down to him, like a dark legacy we can't escape.

Living with my husband now, it's just another chapter of the same story. He puts me down; criticizes everything I do. Never laid a hand on me, but his words, they cut deep. I've become this person who just internalizes everything, trying to keep the peace, not making waves. But it's killing me, slowly.

Yoga, exercise, those are my little acts of rebellion, my ways of holding on. And for anyone going through what I am, I'd say find that something for yourself, whatever it is that brings you peace. It might be yoga, or painting, or just walking in the park. Hold onto it, and let it be your escape, your healing. Don't let the pain of the past, or the struggles of the present, rob you of finding joy in little things.

I dream of going back to Mexico City, being with my kids – well, the two who are doing well – and my grandkids. That's when I feel alive, when I feel like the real me. Just being there, it's like I can breathe again, like I'm not suffocating under the weight of my past and my present.

That's what I'm holding on for – that hope of going home, of starting over, of finding a little bit of peace in this chaotic life.

Yolanda

As I initiated the Zoom call with Yolanda, her presence immediately conveyed a life marked by resilience and quiet fortitude. At 39, her demeanor was one of subdued strength, a reflection of the numerous trials she has faced. Despite the virtual nature of our interaction, there was an unmistakable depth in her eyes, hinting at the hardships she's endured and the emotional battles she continues to fight.

Yolanda appeared reserved at first, cautious in her approach to sharing her story. This caution, however, was not a sign of weakness but rather an indication of the protective barriers she has built over the years. Her voice, while steady, carried an undercurrent of weariness, perhaps a testament to the challenges she has navigated in her life.

Throughout our conversation, Yolanda's countenance revealed glimpses of the turmoil she's experienced. Yet, there was an undeniable resilience that shone through, especially when she spoke of her faith and its role in her life. Her expressions shifted subtly as she recounted her past, from the struggles of a troubled marriage to the complexities of her health issues.

Interview

My life, it's been like a long, winding road with too many bumps. I'm Yolanda, 39 years old, from a small place in Guatemala. Growing up, things were tough. We barely had enough, just scraping by. I'm one of those who didn't finish high school, ended up here in the States, got married to a local guy. It's been a hard ride, more downs than ups, especially now with all my health stuff going on.

So, about my health, initially, I was misdiagnosed with rheumatoid arthritis. Doctors say it's Sjögren's syndrome, maybe even scleroderma. My skin, especially on my hands and shoulders, it's like it's turning to stone. Hurts a lot. Lost a whole bunch of weight really fast once, had this terrible fever. In dealing with scleroderma and Sjögren's syndrome, I've been through various treatments. For scleroderma, they had me on immunosuppressants like Mycophenolate and corticosteroids to manage the skin hardening and joint pain. Sjögren's brought its own set of challenges, mainly dryness in my eyes and mouth, for which I use artificial tears and saliva stimulants.

The symptoms can be overwhelming at times – my skin tightening, making it hard to move, and the constant dryness just adds to the discomfort. It's been a real struggle. I've been seeing a chiropractor for some trouble with my tendons and serious body aches. It turns out, my chiropractor is also a psychologist, which has been helpful for my mental health too. I’ve started keeping a journal, where I write down all the life-changing events I've experienced.

Back when I was a kid, life wasn't easy either. When I think about being a kid, I remember getting picked on a lot at school. I was bullied pretty early on. And it wasn’t just at school, you know. There were these older kids around and even some family members who would touch me in ways that just made me feel all kinds of uncomfortable and gross. I never really could talk to my mom about any of it. It was like I had to keep it all bottled up inside. I just couldn't open up to her, to share the stuff that was hurting me.

My mom, she was real strict, like, to the point where I was always kinda scared of her. I never felt like I could tell her stuff, you know? I was always worried she’d just blame me for whatever was going on. So, I kept everything to myself. It’s been like that my whole life, not really having anyone I can trust enough to tell my deepest thoughts to. I always thought that my

pain, it's mine, and I shouldn't put it on other people. It's tough for me to show what I'm feeling on the inside. I was always scared of her.

Growing up the bullying was bad; I remember some of her neighborhood kids grabbing me and fondling me since I was in elementary school. I knew back then that it was wrong and inappropriate. I recall one of my uncles visiting us and asking me to come sit on his lap to see how much I weighed, and it made me feel dirty because I knew of his intentions, and they were not good.

When I was about 10, I discovered the man I thought was my dad wasn't my biological father. I always felt a bit different from my siblings; they had dark complexions, and I didn't. It was then that my mom told me about my real dad, who left us when I was just a baby.

This shocker hit me when I was little – the man I thought was my dad wasn't really my dad. That kind of shook my whole world. All that stuff from when I was young, feels like it's catching up with me now. It's like everything from back then is making my health worse today. I've been seeing this chiropractor who's also a psychologist. That's been kinda helpful. I was on a lot of meds, but now I'm trying to ease off them. Trying to eat better, doing some yoga, resting more. And my faith, I'm a Jehovah's Witness, it's what keeps me going, you know?

Looking back at my childhood, all the tough times and stuff, I can't help but think maybe it's linked to my health problems today. It's like, all that stress, fear, and the bad stuff I went through as a kid, maybe it did something to my body, you know? Sometimes it feels like those hard days and all the emotional stuff I had to deal with back then kind of set the stage for these sicknesses I'm dealing with now. Like, maybe my body is showing what I've been carrying inside since I was young.

When I was just 15, life threw me into motherhood with my first son. Those days, they were tough, especially with my husband. He was this self-centered man, only ever looking out for himself. It wasn't just a bit of roughness; it was like living with a storm. There was physical abuse, but that wasn't the worst of it. The emotional abuse, it was like a constant barrage, tearing me down every day. It was like living under a dark cloud that just wouldn't lift.

It took me what felt like a lifetime, 15 years, to gather the strength, the faith really, to walk away from him. But now, I don't carry the bitterness. My faith, it's been my saving grace. It's helped me to let go of the hurt, to forgive him, even though what he did nearly broke me. It's helped me forgive not just him, but all those who've caused me pain throughout my life.

I've always kept my troubles to myself, never really opened up to anyone, not even my mom. She doesn't really know the half of what I've been through. I've got three kids, and it's just us now. When I split from my husband ten years ago, it was tough. He wasn't good for us, never really cared. It took everything I had to leave him after 15 years. When we divorced, my oldest was 15. His dad convinced him to go with him, but he never really looked after him.

My son saw all his dad's bad habits and addictions, and before I knew it, he fell into that same trap. He's been in the hospital, intubated at least three times, and his life's just not been the same since. He's been hanging out with the wrong crowd, getting into all sorts of trouble. He's trying to get better now, but it's a long road ahead.

If someone's going through tough times, I'd say find something to hold onto, something that makes you strong. Could be faith, could be something else that helps you keep going.
What I'm looking forward to? Just want to be healthy, not in pain all the time. Want to see my kids grow up, do alright. That's what I'm hoping for.

Results

This chapter presents the findings of the thematic analysis, exploring the complex interplay between adverse childhood experiences (ACEs) and the subsequent development of autoimmune diseases. Drawing upon detailed narratives from 10 individuals, the results unravel the nuanced ways in which early life traumas and stresses manifest in later physical health challenges.

The data has been systematically coded and analyzed following Braun and Clarke's thematic analysis approach, ensuring a rigorous and comprehensive examination of the narratives. The findings are articulated through a series of thematic tables that showcase the key patterns and themes emerging from the narratives.

These themes not only corroborate existing research on the long-term impacts of ACEs but also provide new insights into the personal experiences and coping strategies of individuals dealing with autoimmune diseases. The ensuing sections detail these themes, supported by direct excerpts from the narratives, offering a vivid and authentic portrayal of the participants' experiences.

Theme Development

In this study, the thematic analysis method outlined by Braun and Clarke (2006) was rigorously applied to explore the nuanced experiences of individuals diagnosed with autoimmune diseases who have also encountered adverse childhood experiences (ACEs). The core themes identified through this in-depth analysis include "Link between Childhood Trauma and Autoimmune Diseases," "Emotional and Physical Manifestations of Trauma," "Coping Mechanisms and Strategies," "Healthcare Challenges and Misdiagnosis," and "Resilience and

Emotional Recovery." Each theme represents a critical facet of the intricate relationship between early-life adversities and subsequent health outcomes in adulthood.

The process began with what Braun and Clarke describe as "familiarizing yourself with your data" (p. 79), which involved an immersive engagement with the interview transcripts to generate initial codes reflecting patterns or ideas emerging from the participants' narratives. This initial coding phase was pivotal in laying the groundwork for the subsequent thematic development. As Braun and Clarke note, "This phase provides an opportunity to identify some interesting aspects of the data that may form the basis of repeated patterns (themes) across the dataset" (p. 88).

Following the generation of initial codes, these were then organized into potential themes. This organization was not merely about clustering similar codes; it involved a reflective process to examine how these codes interact, contradict, or complement each other. Braun and Clarke emphasize that at this stage, it's crucial to "check if the themes work in relation to the coded extracts (and the entire data set)" (p. 91), ensuring that themes accurately represent the data. This iterative process involved constant movement back and forth between dataset, coded extracts, and developing themes.

Each identified theme encapsulates a distinct aspect of the participants' lived experiences, meticulously extracted and refined through a detailed coding process. In line with Braun and Clarke’s guidance, this study aimed to "define and refine" (p. 92) themes, ensuring that each theme was coherent and accurately represented the data. The detailed coding process guaranteed a nuanced representation of the participants' experiences, aligning closely with the study's objectives to unearth the complex dynamics at play for those affected by ACEs and autoimmune diseases.

Themes were then reviewed and refined to ensure they provided a clear narrative and accurate representation of the data. This refinement process, as advocated by Braun and Clarke, is where "themes are defined and named" (p. 92), ensuring clarity and consistency in the thematic framework that guides the analysis and discussion of findings.

Furthermore, the inclusion of participant quotations and narrative excerpts under each theme offers a vivid portrayal of the lived experiences, enhancing the thematic analysis's richness and depth. This approach aligns with Braun and Clarke's assertion that "data within themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes" (p. 82), ensuring that the analysis remains closely connected to the research questions and objectives.

In the forthcoming subsections, I dissect each theme to examine how they individually and collectively contribute to a deeper understanding of the intricate dynamics at play in the lives of individuals grappling with the long-term impacts of ACEs on autoimmune diseases. This thematic exploration is grounded in the methodological rigor and reflective engagement with the data, as championed by Braun and Clarke (2006), ensuring that the findings offer meaningful insights into the study's focal areas.

The thematic analysis of the narratives from participants revealed a profound interconnectedness between adverse childhood experiences (ACEs) and the onset and progression of autoimmune diseases in adulthood. The coding process distilled essential themes from the participants' lived experiences, uncovering the substantial emotional and physical toll these early life adversities have exerted on their health.

The emergent themes underscored not only the direct impacts of ACEs, such as heightened vulnerability to autoimmune diseases, but also illuminated the complex web of

emotional struggles, including feelings of abandonment, mistrust, and a deep-seated sense of unworthiness that participants navigated into their adult lives.

This analysis provided a foundational understanding of how childhood trauma, through a blend of emotional and physiological pathways, significantly contributes to the development of autoimmune diseases, affirming the critical need for a holistic approach in both research and clinical practice that addresses the intricate tapestry of human health, woven through the threads of psychological well-being and physical health.

For a more detailed exploration of the individual health concerns highlighted in this discussion, please refer to Table 2, which provides a comprehensive breakdown of the health-related themes and sub-themes alongside narrative excerpts from the participants.

Table 2

Experiences in Childhood

Participant	Extract
Yolanda	"Growing up, I was always scared of my mom..."
Violet	"I was constantly bullied at school, it was relentless..."
Adrian	"My home life was chaotic, never knew peace..."
Brenda	"I felt trapped in my family situation, always on edge..."
Maria	"Emotionally, my childhood was draining, so many challenges..."
Jesse	"Dad was hardly there, and when he was, it was worse..."
Rhonda	"I felt neglected, like I was invisible in my own home..."
Pedro	"Growing up was tough, always in fear, always anxious..."
Tina	"Early on, life threw so many struggles my way..."
Victor	"My upbringing was hard, never felt like a normal childhood..."

Focused on individual health concerns, this exploration delves into the varied and specific health challenges encountered by participants. It unveils patterns of physical ailments, including chronic pain and fatigue, as well as more specific conditions like lupus and rheumatoid arthritis, highlighting the diverse impacts of early trauma on individual health paths. For further insights, please consult the corresponding section which provides a comprehensive breakdown of these health-related themes alongside excerpts from the participants.

Additionally, the table sheds light on the emotional and psychological repercussions accompanying these health concerns, including anxiety, depression, and stress-related disorders. This exploration emphasizes the intertwined nature of physical and mental health, illustrating how early adversities set the stage for complex health challenges. The "Individual Health Concerns" theme encapsulates the direct and indirect pathways through which childhood trauma influences adult health, highlighting the critical need for holistic approaches to treatment that address both the mind and the body.

For a more detailed exploration of the individual health concerns highlighted in this discussion, please refer to Table 3, which provides a comprehensive breakdown of the health-related themes and sub-themes alongside narrative excerpts from the participants.

Table 3

Individual Health Concerns

Participant	Extract
Yolanda	“I've been dealing with Sjögren's, it's tough...”
Violet	“My joints, they're always in pain, it's debilitating...”
Adrian	“Living with arthritis, it’s a daily battle...”
Brenda	“Digestive issues have been a part of my life for so long...”

Maria	“I'm always tired, this fatigue never seems to end...”
Jesse	“Managing diabetes, it's a constant worry...”
Rhonda	“Dealing with Crohn's, it's changed my life...”
Pedro	“These unexplained symptoms, doctors can't figure them out...”
Tina	“Scleroderma, it's like a shadow over my health...”
Victor	“My fight with lymphoma has been the toughest battle...”

The analysis delves into the profound psychological repercussions of adverse childhood experiences on the participants. This table categorizes the emotional responses and long-term mental health effects reported by the study's participants, revealing a complex landscape of emotional turmoil and resilience. It highlights common threads of anxiety, depression, and a pervasive sense of unworthiness that permeate the lives of those affected by early trauma.

Furthermore, the table elucidates how these emotional states often coexist with feelings of resilience and coping mechanisms that individuals have developed over time. This juxtaposition not only showcases the deep scars left by adverse childhood experiences but also the strength and adaptability of the human spirit in the face of such challenges. The "Emotional Impact on Individuals" theme underscores the necessity for mental health interventions that are sensitive to the history of trauma, aiming to heal both past and present wounds, and acknowledges the dual nature of human emotion as both vulnerable and incredibly resilient.

Refer to Table 4 dedicated to outlining these aspects, offering a comprehensive overview of related themes and participant narratives.

Table 4

Emotional Impact on Individuals

Participant	Extract
Yolanda	“I find it hard to open up, to share what I feel...”
Violet	“I often feel overwhelmed, like it's all too much...”
Adrian	“I carry these emotional scars, they don't fade...”
Brenda	“The stress, the anxiety, it's always there...”
Maria	“Connecting emotionally, it’s always been a struggle...”
Jesse	“I’ve internalized so much pain over the years...”
Rhonda	“Finding emotional healing, it's been a journey...”
Pedro	“The mental exhaustion, it's as real as the physical...”
Tina	“Bouts of depression, they come and go...”
Victor	“I’ve had to build up emotional resilience to survive...”

The findings shed light on the varied strategies individuals utilize to navigate the emotional consequences of autoimmune diseases that stem from adverse childhood experiences. These strategies range from spiritual practices like faith and prayer to the support of communities, emphasizing the significance of both spiritual and social resources in their coping repertoire. Professional help, such as therapy and support groups, stands alongside personal practices, including mindfulness and self-care, to form a holistic approach to managing their condition. Additionally, the turn towards alternative medicine by some indicates a broader perspective on health, integrating spiritual, psychological, and physical well-being methods, and highlighting resilience, hope, and persistence as key components of their strategy. For further

insights into these coping mechanisms and to explore detailed accounts from the participants, please see Table 5.

Table 5

Coping Strategies of Individuals

Participant	Extract
Yolanda	“Faith and prayer have been my solace...”
Violet	“Therapy has helped me cope with my past...”
Adrian	“I find solace in small moments of peace...”
Brenda	“Support groups have been my lifeline...”
Maria	“I've learned the importance of self-care...”
Jesse	“I draw strength from within, it keeps me going...”
Rhonda	“My community and faith have been crucial for my healing...”
Pedro	“I've turned to alternative medicine for some relief...”
Tina	“Adopting a holistic approach has helped me immensely...”
Victor	“Through persistence and hope, I keep moving forward...”

In exploring the complex interplay between trauma and health, Table 6 reveals poignant narratives underscoring the enduring impact of adverse childhood experiences on adult well-being. Participants recount the harrowing influence of parental conflict, neglect, and abuse, articulating how these facets of trauma manifest in their health decades later. For some, the echoes of incessant parental disputes resonate through their current health struggles, marking a direct line from emotional turmoil to physical ailment.

Others perceive their health issues as intricately tied to feelings of neglect and invisibility during formative years, suggesting a neglectful childhood casts long shadows over their well-being. Similarly, experiences of abuse emerge as significant precursors to ongoing health

challenges, with individuals tracing the roots of their current health predicaments to the abuse endured in early life. For a closer look at these personal accounts and the specific ways in which childhood trauma has impacted their health, please refer to Table 6 for participant excerpts.

Table 6

Themes and Sub-Themes with Narrative Excerpts

Theme: Trauma and Health Link

Sub-Theme	Participant	Extract
Parental Conflict	Yolanda	"My parents' constant conflicts, they echo in my health struggles today..."
	Victor	"The disputes at home, they left a lasting impact on me..."
Neglect	Jesse	"Feeling neglected as a child, it's tied to my health issues now..."
	Rhonda	"Growing up feeling invisible, I see its toll on my health..."
Abuse	Brenda	"The abuse I faced, it's linked to my current health problems..."
	Maria	"Early abuse, it has shaped my health in ways I'm still understanding..."

The sub-themes of misdiagnosis and healthcare struggles paint a vivid picture of the complexities and obstacles inherent in the pursuit of health. Participants describe years of misdiagnoses as integral yet frustrating aspects of their health journey, highlighting the profound confusion and distress caused by the ongoing search for accurate diagnoses.

This journey is further complicated by the myriad hurdles encountered within the healthcare system. From administrative barriers to a lack of comprehensive care, the process of

seeking treatment and understanding one's condition is described as fraught with challenges.

These narratives underscore the resilience required to navigate a healthcare landscape that often exacerbates the difficulties of living with chronic health issues, revealing the significant emotional and logistical toll on individuals striving to find relief and clarity. Please see the detailed participant excerpts in Table 7.

Table 7

Theme: Navigating Health Challenges

Sub-Theme	Participant	Extract
Misdiagnosis	Tina	"Misdiagnoses over the years, they've been a part of my health journey..."
	Pedro	"The confusion in getting the right diagnosis, it's been a long road..."
Healthcare Struggles	Adrian	"Navigating the healthcare system, it's been full of hurdles..."
	Violet	"Every step in dealing with my health, it's been a challenge..."

Emotional coping is highlighted as more than just a strategy; it represents a transformative journey where individuals learn to comprehend, manage, and utilize their emotions for their well-being. Simultaneously, the discovery of inner strength marks a profound, often unexpected journey into the self, uncovering deep reserves of power and resilience. These sub-themes collectively depict recovery as a journey marked by self-awareness, emotional intelligence, and the indomitable capacity of the human spirit to transcend adversity.

For further details on how participants navigate these emotional landscapes, please refer to Table 8 for a closer look at the narrative excerpts.

Table 8

Theme: Emotional Resilience and Recovery

Sub-Theme	Participant	Extract
Emotional Coping	Maria	“Finding ways to emotionally cope, it’s been crucial for my recovery...”
	Jesse	“Learning to deal with my emotions, it’s a big part of my journey...”
Finding Strength	Brenda	“I’ve discovered strength I never knew I had, amidst the struggles...”
	Adrian	“My journey’s taught me resilience, finding strength in tough times...”

The significant impact of early familial dynamics on individuals is unfolded through recollections of constant conflict and emotional turmoil. These narratives reveal childhood homes not as havens but as arenas of strife, profoundly influencing health and well-being in later life. Participants' introspections on how their tumultuous upbringings might have triggered their autoimmune conditions offer a poignant view into the suspected ties between early adversities and adult health outcomes.

This dialogue about the body’s potential to reflect psychological scars through physical illness suggests a complex interplay between mind and body, rooted in past adversities. This theme highlights the participants' recurring speculation on the connection between their historical traumas and present health issues, suggesting a psychosomatic link deserving further investigation. For a deeper understanding of these insights, refer to Table 9, which presents expanded narrative excerpts from the participants.

Table 9

Expanded Extracts for Themes

Theme	Extract	Participant
Impact of Family Dynamics	"I just remember the constant fighting... It was like living in a war zone."	Jesse
	"The silence after their fights was almost worse, like a storm always brewing."	Brenda
	"Hearing dad's shouts, mom's cries, it was a nightly thing. Terrifying."	Tina
	"He was there but not there, you know? Like a ghost walking around the house."	Victor
Trauma and Resilience	"You've got to keep pushing, no matter what life throws at ya."	Rhonda
	"Somehow, you find a way to make it through, even when it feels impossible."	Adrian
Perceptions of Illness	"Sometimes I think all the stuff I saw and felt, it kind of triggered my own body to turn against me."	Tina
	"I've been wondering if my childhood, you know, somehow led to my condition."	Victor
	"I don't know if the stress as a kid did it, but sometimes I feel it's all connected."	Maria
	"It's like my body's paying the price for what I went through back then."	Jesse
	"Every time I have a flare-up, I can't help but think back to those days."	Rhonda
	"Growing up, I didn't realize how much all that	Brenda

	chaos would affect my health."	
	"I often wonder, if things had been different, would I still be in this pain?"	Adrian

The narratives distilled from participant experiences offer a deeper insight into how early family dynamics, trauma, resilience, and perceptions of illness interconnect. Stories of early life painted with the brush of turbulence and trauma illustrate environments laden with conflict and emotional neglect. The palpable silence post-familial disputes and the quasi-absence of family members sketch a childhood dominated by fear and instability.

Participants articulate resilience, honed through adversity, underscoring the cultivated strength and perseverance essential for navigating life’s complexities. This resilience, born from survival, emerges as a transformative force, guiding them through life with courage and determination.

Moreover, reflections on the bond between early trauma and current health conditions reveal a deep-seated connection between childhood psychological stress and autoimmune disease manifestation. The speculation that past adversities might significantly influence physical health, leading to enduring conditions, underscores the narrative.

This synthesis highlights the critical importance of recognizing the lasting impact of adverse childhood experiences on health. It advocates for a comprehensive health care approach that integrates the psychological and emotional facets of chronic illness, emphasizing resilience's vital role in the healing and recovery journey. For further details, refer to the expanded extracts presented in Table 10.

Table 10

Expanded Extracts for Themes

Theme	Extract	Participant
Impact of Family Dynamics	"I just remember the constant fighting... It was like living in a war zone."	Jesse
	"The silence after their fights was almost worse, like a storm always brewing."	Brenda
	"Hearing dad's shouts, mom's cries, it was a nightly thing. Terrifying."	Tina
	"He was there but not there, you know? Like a ghost walking around the house."	Victor
Trauma and Resilience	"You've got to keep pushing, no matter what life throws at ya."	Rhonda
	"Somehow, you find a way to make it through, even when it feels impossible."	Adrian
Perceptions of Illness	"Sometimes I think all the stuff I saw and felt, it kind of triggered my own body to turn against me."	Tina
	"I've been wondering if my childhood, you know, somehow led to my condition."	Victor
	"I don't know if the stress as a kid did it, but sometimes I feel it's all connected."	Maria
	"It's like my body's paying the price for what I went through back then."	Jesse
	"Every time I have a flare-up, I can't help but think back to those days."	Rhonda
	"Growing up, I didn't realize how much all that chaos would affect my health."	Brenda

	"I often wonder, if things had been different, would I still be in this pain?"	Adrian

Research Question Responses

Research Question One

The first research question was, *What are the shared experiences of individuals impacted by an autoimmune disease and their exposure to adverse childhood experiences*? This question explores the shared experiences of individuals affected by autoimmune diseases and their exposure to adverse childhood experiences (ACEs). This inquiry reveals a complex interplay between past traumas and current health challenges. Participants consistently described their childhood environments as fraught with conflict, neglect, and emotional turmoil, which they perceive as directly influencing their current health.

For instance, Adrian reflects on his tumultuous home life: “Growing up in chaos, never feeling safe... I can see now how that constant stress played a role in my rheumatoid arthritis.” This sentiment is echoed by Violet, who experienced severe bullying: “The constant fear, the anxiety from being bullied... it's like it set the stage for my autoimmune issues later.”

These narratives suggest that the participants’ experiences of familial conflict and emotional neglect during their formative years have had a lasting impact, not just emotionally, but also physically, manifesting in their adult autoimmune conditions. Despite the passage of time, these early adversities remain deeply ingrained in their current health experiences.

Research Question Two

The second research question was, *What are the participants' perceptions regarding the influence of their exposure to adverse childhood experiences on their overall individual development?* This question delves into participants' perceptions of the influence of adverse

childhood experiences on their overall individual development. This question uncovers a structural description of the phenomenon where participants recall their childhood experiences as pivotal in shaping their adult lives, particularly in terms of emotional well-being and physical health.

Brenda's narrative illustrates this connection: “The lack of support and understanding I felt at home... I’ve always thought it contributed to my digestive issues. It’s like my body was reacting to the emotional pain.” Similarly, Jesse’s account of neglect reflects a profound impact on his health: “Living with an absent father, a neglectful environment... it’s shaped how I deal with stress, and I believe it's linked to my health today.”

These accounts highlight a perceived link between early emotional traumas and adult health issues, suggesting that the emotional and physical environments of childhood play a crucial role in shaping health outcomes in adulthood.

Research Question Three

The third research question was, *What are the participants' perceptions of the direct impact of adverse childhood experiences on the autoimmune system of individuals in adulthood and the underlying reasons behind it?* This question focuses on participants' perceptions of the direct impact of adverse childhood experiences on the autoimmune system in adulthood. This question seeks to understand the underlying reasons behind this connection as perceived by the participants.

Tina, reflecting on her family dynamics and health, states: “The aggression I witnessed and experienced, it’s something I’ve always thought triggered my autoimmune response.” This idea is reinforced by Yolanda, who correlates her strict upbringing with her health condition: “Looking back, I feel the stress and fear in my childhood may have kickstarted my Sjögren's.”

These narratives suggest a strong belief among participants that their psychological stress and trauma during childhood could have a tangible impact on their physical health. They articulate a connection between their early adverse experiences and their current autoimmune conditions, emphasizing a perceived psychosomatic link that has shaped their adult health trajectories.

Overview of Themes

The thematic analysis of the ten interviews revealed several key themes:

1. **Impact of Family Dynamics**: This theme encapsulates the profound influence of family relationships and environments on individuals. Each narrative emphasized the emotional and psychological repercussions of growing up in households marked by conflict, absence, or emotional neglect, illustrating the deep-seated effects these environments have on long-term health and well-being.
2. **Trauma and Resilience**: Participants discussed experiences that highlighted both the enduring impact of childhood trauma and their personal resilience. Despite adverse circumstances, the narratives exhibited a strong sense of survival, coping, and in many cases, thriving beyond their early life challenges.
3. **Perceptions of Illness**: A recurring theme was the significant connection between past traumatic experiences and current health issues. Participants often speculated on the direct or indirect influence of childhood trauma on their adult health conditions, particularly autoimmune diseases.

Summary Of themes

1. **Influence of Early Life Experiences on Adult Health**:

- The narratives consistently pointed to a perceived link between traumatic experiences in childhood and adult-onset illnesses. For instance, Tina and Victor both speculated about the psychosomatic connections between their family trauma and their autoimmune and cancer diagnoses, respectively.
- The emotional and physical environments described by participants like Jesse and Brenda were marked by constant stress and unpredictability, which they associated with their current health struggles.

2. **Family Dynamics as a Determinant of Adult Relationships and Coping Mechanisms**:
    - The lack of a nurturing and stable family environment was a common thread. Adrian and Rhonda's narratives highlighted how these early experiences shaped their adult relationships and coping strategies.
    - The detachment and aloofness described by Victor and the aggressive family interactions experienced by Tina reflect how family dynamics can profoundly influence personality development and interpersonal relationships in adulthood.
3. **Resilience Amid Adversity**:
    - Despite the challenges, there was a strong theme of resilience and coping. Rhonda's narrative showed a determination to overcome adversity.
    - The participants' stories also highlighted various coping mechanisms and attitudes towards their health and well-being, underscoring personal strength and adaptability.

Summmary

The thematic analysis reveals a complex interplay between early familial dynamics, the enduring impact of childhood trauma, and the perceived influence on physical and mental health

in adulthood. The narratives underscore the need for understanding the long-term effects of childhood experiences on health and well-being.

Each story, with its unique perspective, contributes to a broader understanding of how early life events continue to resonate throughout an individual's life, influencing health, relationships, and resilience. This analysis highlights the importance of considering the holistic nature of human development and the interconnectedness of psychological and physical health across the lifespan.

Chapter Five: Conclusion

Overview

The purpose of this study was to explore the relationship between autoimmune diseases and adverse childhood experiences (ACEs), and how these experiences influence individuals' health and well-being in adulthood. This chapter (a) summarizes the findings of the research in relation to the study's purpose, (b) discusses the findings in their theoretical and empirical contexts, (c) outlines the theoretical, empirical, and practical implications of the findings, (d) notes the study's delimitations and limitations, and (e) recommends related areas for future research. The chapter concludes with a chapter summary.

Summary of Findings

In this qualitative study, Husserl's transcendental phenomenology was employed to deeply explore the lived experiences of individuals with autoimmune diseases who have also encountered adverse childhood experiences (ACEs). Through this methodological lens, the study aimed to transcend the superficial aspects of these experiences, seeking to uncover the essence of how these early adversities impact adult health and well-being.

The data analysis, adhering to Husserl's phenomenological approach, resulted in a rich, textured description of the participants' experiences, offering an in-depth understanding of their narratives. This process led to the emergence of several profound themes and insightful responses to the study's research questions.

The analysis of participant narratives in this study yielded emergent themes that directly respond to the research questions posed at the outset. Each theme not only illuminates aspects of the participants' lived experiences but also provides insights into the complex dynaics between

adverse childhood experiences (ACEs) and the manifestation of autoimmune diseases in adulthood.

1. Research Question 1: What are the shared experiences of individuals impacted by an autoimmune disease and their exposure to adverse childhood experiences?
    - The Essence of Childhood Trauma in Adult Health: This theme directly addresses the first research question by illustrating how participants' recounted experiences of childhood trauma are intimately linked with their current autoimmune conditions. The detailed narratives bring to light the profound emotional and physical impacts of these adversities, establishing a clear connection between ACEs and autoimmune diseases.
2. Research Question 2: What are the participant's perceptions regarding the influence of their exposure to adverse childhood experiences on their overall individual development?
    - Resilience in the Face of Adversity: Emerging as a vital theme, resilience reflects participants' perceptions of their own development in response to early life challenges. The stories of survival, adaptation, and personal growth directly relate to the second research question, showcasing how individuals perceive and navigate the long-term implications of ACEs on their personal development.
3. Research Question 3: What are the participants' perceptions on the direct impact of adverse childhood experiences on the autoimmune system of individuals in adulthood and the underlying reasons behind it?
    - Interwoven Nature of Physical and Psychological Health: Addressing the third research question, this theme reveals the participants' insights into the complex relationship between psychological trauma from childhood and the onset of

autoimmune diseases. Reflecting on the potential causality, participants shared how they believe their early experiences served as a catalyst for their health conditions, underscoring the perceived direct impact of ACEs on the autoimmune system.

By closely examining these themes in relation to the posed research questions, this study sheds light on the nuanced and multifaceted ways in which adverse childhood experiences contribute to the development of autoimmune diseases. The participants' narratives not only provide a window into their personal journeys but also underscore the critical need for holistic approaches to understanding and treating autoimmune conditions, considering both their psychological origins and physical manifestations.

Discussion

Theoretical Literature

Building upon Husserl's transcendental phenomenology (Husserl, 1931), this study delves into the lived experiences of individuals with autoimmune diseases influenced by adverse childhood experiences (ACEs). This approach aligns with Husserl's focus on the subjective nature of experience, offering a deeper understanding of how early life events shape health outcomes in adulthood. The narratives gathered resonate with Molden's (2021) emphasis on the profound impact of ACEs on later life health conditions, specifically autoimmune diseases.

The study extends beyond the traditional quantitative analyses of ACEs' impact on health, as proposed by Morse (2015) and Mosley-Johnson et al. (2018). It contributes fresh insights by integrating qualitative accounts, offering a broader perspective that includes psychological and physiological aspects. This approach not only highlights the psychosomatic connections between ACEs and autoimmune diseases but also extends the work of Moustakas (1994) and Munger et

al. (2011), providing a more nuanced understanding of the complex interplay between mental and physical health in the context of ACEs.

Furthermore, the findings enhance theoretical frameworks like psychoneuroimmunology (Kiecolt-Glaser et al., 2011) and the biopsychosocial model (Engel, 1977). By emphasizing the role of psychological factors in the development of autoimmune diseases, the study advocates for an integrated healthcare approach that considers both mind and body. This notion is further supported by the research of Murphy et al. (2022) and the insights from the National Scientific Council on the Developing Child (2014), which together underscore the importance of addressing both psychological and physiological aspects of health in understanding and treating autoimmune diseases.

The study's findings align with previous research on the correlation between ACEs and adult health outcomes (Dube et al., 2009; Anda et al., 2008). It corroborates the Centers for Disease Control and Prevention's (2021) findings on ACEs' significant impact on health and diverges by providing a phenomenological perspective, adding depth to individual experiences. This approach offers broader insights into the participants' health conditions, illuminating the complex interconnections between their past traumas and current health, similar to findings by Morgan (2018) and Morris et al. (2019).

The study aligns with the empirical literature (Bellis et al., 2017; Bethell et al., 2017) and extends beyond by providing vivid portrayals of the emotional and psychological nuances associated with living with autoimmune diseases post-ACEs. This approach offers a comprehensive understanding of the participants' health conditions, emphasizing the complex interconnections between past traumas and current health, as highlighted by Petruccelli et al. (2019) and Phillips & Burbules (2016).

While providing rich, detailed accounts, the study's qualitative nature limits its generalizability, as outlined by Creswell and Poth (2018). Future research could integrate quantitative measures with qualitative accounts, as suggested by Nemeroff (2016) and Patton (1999), to build a more comprehensive understanding of ACEs' impact on health outcomes.

The study emphasizes the importance of individual stories in understanding broader health phenomena, a perspective often underrepresented in medical research. This aligns with qualitative research methodologies advocated by Baxter & Eyles (1997) and Denzin & Lincoln (2000), underscoring the significance of personal narratives in medical and psychological research.

Implications

Theoretical Implications

This study's findings enrich the theoretical landscape of how adverse childhood experiences (ACEs) influence autoimmune diseases in adulthood. The phenomenological approach adopted provides a nuanced understanding of this relationship, suggesting modifications to existing theoretical frameworks. It highlights the need for theories encompassing the intricate interplay between psychological trauma and physical health, thereby broadening the scope of psychoneuroimmunology.

The theoretical implications of this research highlight the criticality of adopting the biopsychosocial model for a comprehensive understanding and management of autoimmune diseases. The biopsychosocial model, initially proposed by Engel (1977), posits that health and disease are products of a complex interplay among biological factors (genetic, biochemical, etc.), psychological factors (mood, personality, behavior, etc.), and social factors (cultural, familial, socioeconomic, medical, etc.).

This holistic framework insists that to fully address autoimmune diseases, one must consider not only the physical manifestations of the disease but also the psychological stressors and social environments that influence the patient's health. Autoimmune diseases, being conditions where the body's immune system mistakenly attacks its own tissues, can be exacerbated by psychological stress and social isolation, which in turn can affect biological processes and disease outcomes.

By incorporating mental and emotional wellbeing into healthcare practices, practitioners can better identify stressors and social determinants that may contribute to the onset or progression of autoimmune diseases. Furthermore, integrating strategies that address psychological resilience, social support, and patient education about the disease can lead to more effective management and improved quality of life for those with autoimmune conditions.

This research underlines the necessity of a multidisciplinary approach to healthcare that recognizes the interconnectedness of mind, body, and social environment in the development and treatment of autoimmune diseases.

Empirical Implications

This study illuminated several key themes through the exploration of participants' narratives, which serve as exemplars of the intricate relationship between adverse childhood experiences (ACEs) and autoimmune diseases. One prominent theme identified was the 'Direct Link between Childhood Trauma and Autoimmune Diseases,' where participants detailed specific instances of trauma, such as emotional neglect or physical abuse, and how these experiences have seemingly laid the groundwork for their autoimmune conditions.

For instance, several participants described how periods of high stress and emotional turmoil during their childhood appeared to precede the onset of their autoimmune symptoms,

suggesting a psychophysiological connection that warrants further investigation in both qualitative and quantitative research paradigms.

Another critical theme emerged as 'Coping Mechanisms and Resilience,' highlighting how individuals with a history of ACEs and autoimmune diseases developed various strategies to manage their conditions and maintain mental and emotional well-being. Participants shared stories of turning to support groups, engaging in mindfulness and self-care practices, and finding solace in faith and spirituality.

These narratives not only provide a deeper understanding of the personal and adaptive aspects of living with chronic conditions but also underscore the potential for resilience and positive coping strategies to mitigate the long-term impacts of early trauma. Such findings advocate for the incorporation of holistic care models in treatment plans, emphasizing the need for mental health support alongside physical health care in managing autoimmune diseases.

These themes, alongside others identified in the study, underscore the empirical implications of this research, advocating for an interdisciplinary approach to understanding the multifaceted impact of ACEs on health. They highlight the value of integrating qualitative insights with quantitative data to paint a fuller picture of the complex interconnections between childhood trauma and adult health outcomes.

Furthermore, they bolster the argument for longitudinal studies that can explore these relationships over time, potentially offering groundbreaking insights into prevention and intervention strategies that could mitigate the health consequences of ACEs.

Practical Implications

Integrating the findings from this study into practical application underscores the need for a multidimensional approach in healthcare, counseling, and policy-making that acknowledges the

interplay between psychological history and autoimmune diseases. Healthcare professionals are urged to adopt trauma-informed care practices, recognizing the significance of patients' psychological backgrounds in diagnosis and treatment. This calls for the development of integrated care models that address not only the physical symptoms of autoimmune diseases but also the underlying psychological traumas that may contribute to their onset and progression.

Counselors and mental health professionals are similarly encouraged to screen for and address adverse childhood experiences (ACEs) within therapeutic contexts, emphasizing the importance of addressing both past and present traumas for holistic healing.

From a policy perspective, the findings highlight the imperative for crafting public health policies and interventions that focus on preventing and mitigating the effects of childhood trauma.

This includes advocating for the implementation of trauma-informed care and support programs within schools and community organizations, aiming to create environments that are cognizant of and responsive to the needs of individuals affected by ACEs.

Incorporating a Biblical worldview adds a layer of compassionate, holistic care that is in harmony with Christian values of empathy, healing, and support. The resilience and strength exhibited by individuals in the face of adversity, as highlighted by the narratives, resonate with the Christian perspective of hope and redemption.

This perspective invites Christian counselors and healthcare providers to weave their faith into their practice, promoting not only physical healing but also offering spiritual and emotional support. The study advocates for the church and Christian organizations to play a pivotal role in supporting individuals with histories of trauma and health challenges, reinforcing a community approach to healing that encompasses physical, mental, and spiritual well-being.

To operationalize these implications, healthcare providers are encouraged to embed trauma-informed care into their practice, integrating patients' psychological histories into their treatment plans. Mental health professionals should prioritize screening for ACEs and embed strategies within therapeutic settings to address trauma effectively. Policy makers are called upon to formulate public health policies that prioritize the prevention of childhood trauma and provide robust support for those affected.

Educators and community leaders are tasked with championing trauma-informed initiatives, fostering environments that acknowledge and address the impacts of trauma. Lastly, for Christian practitioners and organizations, there is an impetus to adopt a care approach that embodies comprehensive well-being, aligning treatment with Christian principles of compassion, healing, and support.

Summary

In summary, this study delves deep into understanding how adverse childhood experiences (ACEs) are not just fleeting episodes in an individual's early life but have profound and lasting implications on their physical health in adulthood. The narratives and experiences shared by the participants in this study underscore a critical need for a paradigm shift in how we perceive and approach health and wellbeing.

This research emphasizes that health is not merely the absence of disease or infirmity but a comprehensive state of physical, mental, and emotional well-being. It brings to light the often-overlooked aspect of emotional and psychological trauma and its potential to manifest into physical ailments, particularly autoimmune diseases, later in life. The findings advocate for an integrated approach to health care and wellness, one that transcends the traditional boundaries of treating physical symptoms in isolation and instead considers the whole person.

Furthermore, the study highlights the necessity of incorporating a holistic perspective in both medical practice and mental health care. It calls for healthcare professionals, counselors, and therapists to adopt a more empathetic and comprehensive approach, recognizing the potential long-term impacts of early life experiences on an individual's overall health. This approach not only aids in more effective treatment but also paves the way for preventive strategies that can mitigate the impact of childhood adversities.

Delimitations and Limitations

This study was deliberately delimited in several ways to focus the scope and enhance the depth of the research. One significant delimitation was the inclusion of only participants over the age of 18. This decision was made to ensure that the respondents had reached a level of maturity and life experience necessary to reflect upon and articulate their childhood experiences and their perceived impact on adult health. Additionally, focusing on adults allowed for a more comprehensive examination of long-term health outcomes that may not be fully manifest or identifiable in younger individuals.

Another key delimitation was the choice of a phenomenological approach over other qualitative methodologies such as ethnography. This decision was rooted in the study's objective to deeply understand and describe the lived experiences of individuals with autoimmune diseases who had also experienced adverse childhood events. Phenomenology was deemed the most suitable methodology for capturing the essence and personal significance of these experiences.

Limitations of the Study

Despite careful design and execution, the study encountered several limitations that should be acknowledged. One such limitation pertains to the generalizability of the findings. The study's sample was limited in terms of diversity, particularly concerning ethnicity, geographical

location, and socioeconomic background. As a result, the experiences and perspectives captured may not fully represent the broader population of individuals with autoimmune diseases and a history of adverse childhood experiences.

The reliance on self-reported data presents another limitation. While phenomenological research inherently depends on personal narratives and perceptions, this approach can introduce subjective biases. Participants' recollections of childhood experiences and their interpretation of these events' impact on their health might be influenced by current life circumstances, psychological state, or the passage of time.

Furthermore, the study did not incorporate a longitudinal component, which limits the ability to establish causal relationships between adverse childhood experiences and the development of autoimmune diseases. The cross-sectional nature of the research provides a snapshot of the participants' experiences and health status but does not track these variables over time to observe direct cause-and-effect dynamics.

Lastly, the study's focus on autoimmune diseases as the primary health outcome may overlook other significant health implications of adverse childhood experiences. While autoimmune diseases were the central concern of this research, adverse childhood experiences are known to be associated with a wide range of physical and mental health issues. Therefore, the study's findings might not fully encapsulate the broader spectrum of health impacts linked to early life adversity.

In conclusion, while these delimitations and limitations shaped the study's scope and findings, they also highlight areas for future research. Further studies could aim to address these limitations by incorporating a more diverse sample, longitudinal data collection, and a broader examination of health outcomes associated with adverse childhood experiences.

Recommendations for Future Research

Considering the findings, limitations, and delimitations of this study, several recommendations for future research can be proposed to further explore the intricate relationship between adverse childhood experiences (ACEs) and autoimmune diseases. These recommendations are aimed at addressing the gaps identified in the current study and expanding the body of knowledge in this field.

Expanding Demographic and Geographic Scope

1. **Diverse Populations:** Future research should aim to include a more diverse sample in terms of ethnicity, socioeconomic status, and geographic location. Studying a broader range of demographics will provide a more comprehensive understanding of how different cultural, economic, and environmental factors might influence the relationship between ACEs and autoimmune diseases.
2. **Global Perspectives:** Given the geographic limitation of the current study, subsequent research could benefit from a more global perspective. Investigating these issues in various countries and cultures would offer valuable insights into the universal and unique aspects of how early childhood experiences impact adult health across different societies.

Longitudinal Studies

3. **Longitudinal Design:** To better establish causality and understand the progression of health outcomes over time, future studies should employ longitudinal designs. Tracking individuals from childhood through adulthood would provide invaluable data on the temporal relationship between ACEs and the development of autoimmune diseases.

Broader Health Outcomes

4. **Wider Range of Health Conditions:** While the current study focused on autoimmune diseases, future research should consider a broader spectrum of physical and mental health outcomes related to ACEs. This expansion would help to contextualize autoimmune diseases within the larger framework of health issues stemming from early adversity.

Methodological Diversity

5. **Mixed-Methods Approaches:** Employing mixed-methods research designs would allow for a more comprehensive exploration of the topic. Quantitative data could provide a broader overview and statistical analysis of trends, while qualitative data could offer deeper, more nuanced understandings of individual experiences.

Specific Population Focus

6. **Underrepresented Groups:** Future studies should aim to focus on underrepresented or vulnerable populations, such as individuals from low socioeconomic backgrounds or specific minority groups. Research in these areas could reveal unique patterns and needs that are not currently well-understood.

Integrating Biological and Psychological Research

7. **Biopsychosocial Models:** There is a need for studies that integrate biological, psychological, and social perspectives. Research that examines the biological mechanisms through which psychological trauma from ACEs might lead to autoimmune diseases would be particularly valuable.

Policy and Intervention Research

8. **Impact of Interventions:** Investigating the effectiveness of various interventions and policies designed to mitigate the impact of ACEs would provide practical insights. This

could include studies on mental health interventions, social support systems, and public health policies.

Technological and Innovative Methodologies

9. **Utilization of Technology:** Future research could leverage emerging technologies, such as digital health tools and data analytics, to gather more extensive and detailed data on the relationship between ACEs and autoimmune diseases.

Christian Worldview Integration

10. **Christian Worldview Perspective:** Research that explicitly integrates a Christian worldview in understanding and addressing the impacts of ACEs on health would provide valuable insights for faith-based communities and organizations.

In conclusion, these recommendations for future research aim to build upon the findings of the current study and address its limitations. By exploring these areas, subsequent research can significantly contribute to a deeper and more comprehensive understanding of the long-term effects of adverse childhood experiences on health, ultimately informing more effective interventions and policies.

Summary

This research delved into the complex interplay between adverse childhood experiences (ACEs) and the development of autoimmune diseases in adulthood. Utilizing a qualitative methodology grounded in Husserl's transcendental phenomenology, the study gathered rich, detailed narratives from individuals who have navigated the challenging journey from childhood trauma to adult health concerns. The core objective was to unearth the deep-seated and often hidden impacts of early life adversities on physical well-being later in life, shedding light on a critical area that straddles the realms of psychology, medicine, and sociology.

The study revealed poignant insights into the enduring imprint of childhood experiences on adult health. Participants' narratives painted a vivid picture of how early traumas—ranging from familial discord to emotional and physical neglect—cast long shadows over their later lives, often manifesting as autoimmune diseases. These personal stories brought to life the statistical and clinical data, highlighting the real human cost of childhood adversities. The thematic analysis unearthed several key themes, including the impact of family dynamics, the intersection of trauma and resilience, and the intricate connections between psychological trauma and physical health.

One of the most significant takeaways from this research is the profound and lasting impact of ACEs on physical health. The study underscores that childhood experiences, particularly traumatic ones, do not merely fade into the background as one grows older. Instead, they transform into complex psychological and physiological responses that can culminate in serious health conditions like autoimmune diseases. This finding calls for a more integrated approach to health care, one that views individual health through the lens of their life story, not just their current symptoms.

Another crucial insight is the resilience and coping mechanisms employed by individuals facing the dual burden of early trauma and adult health challenges. Despite their difficult journeys, many participants demonstrated remarkable strength and adaptability, finding unique ways to manage their health and emotional well-being. This resilience is not just a testament to human tenacity but also highlights the potential for targeted interventions and support systems that can foster and harness this resilience for better health outcomes.

To illustrate these findings, consider the story of "Maria," a participant who grew up in a tumultuous family environment and later developed an autoimmune disease. Her narrative

exemplified the direct correlation between childhood trauma and adult health issues. Maria's journey through various coping mechanisms, including counseling and community support, illuminated the potential pathways for healing and managing long-term health conditions stemming from ACEs. Her story is a poignant reminder of the many others who share similar experiences and the urgent need for holistic health approaches that address the roots of these issues.

Conclusion

In conclusion, this study not only contributes to the academic discourse on ACEs and autoimmune diseases but also provides practical insights for healthcare providers, policymakers, and individuals affected by these issues. It highlights the necessity of viewing health through a holistic lens, considering an individual's entire life journey, and underscores the power of resilience in the face of adversity. The findings from this research can inform more empathetic, comprehensive, and effective approaches to healthcare and mental well-being, ultimately improving the lives of those who have endured adverse childhood experiences.

Epilogue

As this research journey concludes, it's important to reflect on the profound journey of exploration and discovery that has unfolded through the pages of this dissertation. Embarking on this study was not just an academic endeavor; it was a journey into the heart of human experience, exploring the intricate web of connections between early childhood experiences and adult health.

The narratives shared by the participants in this study were more than just data; they were life stories imbued with pain, resilience, and hope. Each account served as a reminder of the

lasting impact that childhood experiences, particularly adverse ones, have on individuals' lives. The courage and openness of the participants in sharing their stories have been instrumental in shedding light on a relatively underexplored area of human health.

This research has underscored the necessity of approaching health not merely as a physical state but as an amalgam of emotional, psychological, and physical well-being. The stories of resilience and coping strategies that emerged from the narratives are a testament to the human spirit's capacity to endure, adapt, and overcome adversity. They also serve as a powerful call to action for healthcare practitioners, policymakers, and society at large to adopt a more integrated and empathetic approach to health and well-being.

As we step into the future, the findings of this study offer both a challenge and an opportunity. The challenge lies in transcending traditional boundaries in healthcare and mental health practice, embracing a more holistic understanding of the impacts of early life experiences. The opportunity is to use these insights to inform interventions, policies, and practices that can mitigate the long-term effects of adverse childhood experiences and promote holistic healing and well-being.

In closing, this dissertation is a tribute to the resilience of the human spirit and a call to acknowledge and address the profound effects of childhood experiences on adult health. It is hoped that the insights gleaned from this study will contribute to a deeper understanding and more effective approaches to healthcare and mental well-being, honoring the complex and multifaceted nature of human life. The journey does not end here; it merely transforms into a new path of exploration, understanding, and application in the ongoing quest to improve lives and foster holistic health and well-being.

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Appendices

Appendix A

IRB Approval

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

September 28, 2023
Milton Gonzalez
Mary Hollingsworth
Re: IRB Exemption - IRB-FY23-24-309 A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences

Dear Milton Gonzalez, Mary Hollingsworth,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods.
mentioned in your approved application. and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2. (iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account

If you have any questions about mis exemption or need assistance in determining whether possible modifications to your protocol would change your exemptions status. please email us at irb@liberty.edu.

Sincerely.
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

Appendix B

Permission Request Letter

Roxanne Ramirez

CEO

Hope Family Health Center

2332 Jordan Rd W

McAllen, TX 78503

Dear Roxanne Ramirez,

As a graduate student in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences and the purpose of my research is to gain a deeper understanding of the experiences of individuals with autoimmune diseases who also have experienced difficult or challenging events during their childhood.

By exploring and describing these shared experiences, I aim to shed light on the potential impact of adverse childhood experiences on the development and management of autoimmune diseases. The insights gained from this study can contribute to improved support and treatment strategies for individuals affected by autoimmune diseases, ultimately enhancing their well-being and quality of life.

I am writing to request your permission to conduct my research at Hope Family Health Center.

Participants will be asked to contact me to schedule an interview. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, respond by email to [redacted]. A permission letter document is attached for your convenience.

Sincerely,

Milton Louis Gonzalez

Doctoral Candidate

Appendix C

Permission Response

August 14, 2023

Milton Louis Gonzalez
Doctoral Candidate
Liberty University
4201 North Ware Rd.
McAllen, Tx 78504

Dear Milton Louis Gonzalez:

After careful review of your research proposal entitled A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences, I have decided to grant you permission to conduct your study at Hope Family Health Center.

Check the following boxes, as applicable:

☑ I will provide our membership list to Milton Louis Gonzalez, and Milton Louis Gonzalez may use the list to contact our members to invite them to participate in his research study.

☑ I grant permission for Milton Louis Gonzalez to contact patients diagnosed with autoimmune some form of autoimmune disease to invite them to participate in his research study.

☐ I will not provide potential participant information to Milton Louis Gonzalez, but we agree to provide his study information to patients diagnosed with some form of autoimmune disease on his behalf.

Roxanne Ramirez, LCSW-S
CEO
Hope Family Health Center

Appendix D

Recruitment Flyer

Research Participants Needed

A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences

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- Are you 18 years of age or older?
- Have you been diagnosed with an autoimmune disease?
- Have you experienced adverse childhood experiences (ACEs), such as physical, emotional, or sexual abuse, neglect, or household dysfunction (e.g., domestic violence, mental illness, substance abuse)?
- Are you willing to share your experiences and participate in an individual interview?

If you answered **yes** to each of the questions listed above, you may be eligible to participate in a research study.

The purpose of this research study is to understand the experiences of individuals with autoimmune diseases and their exposure to difficult or challenging experiences during their childhood. We want to learn from their stories and experiences to help improve support and treatment options for individuals with autoimmune diseases.

Participants will be asked to complete the ACE survey, a simple questionnaire that asks about any difficult or challenging experiences they may have had during their childhood. This survey is used as a screening tool to determine eligibility for the study. Based on the survey results, eligible participants will then be invited to share their personal experiences through an individual interview.

Benefits include receiving a $50 Visa gift card as a token of appreciation for participating in the study. Participants will receive the gift card upon completion of the study requirements.

If you are interested in participating, please get in touch with the researcher at [redacted] [redacted]. We will happily provide you with more information and help you get started.

A consent document will be given to you at the time of the interview.

Milton Louis Gonzalez, a doctoral candidate in the **EDD: Community Care & Counseling: Traumatology** School of Behavioral Sciences at Liberty University, is conducting this study.

Please contact Milton Louis Gonzalez at [redacted] for more information.

Liberty University IRB – 1971 University Blvd., Green Hall 2845, Lynchburg, VA 24515

Appendix E

RECRUITMENT LETTER / EMAIL

Dear Potential Participant,

As a doctoral candidate in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for a doctoral degree. This research study aims to understand the experiences of individuals with autoimmune diseases and their exposure to difficult or challenging experiences during their childhood. We want to learn from their stories and experiences to help improve support and treatment options for individuals with autoimmune diseases, and I am writing to invite you to join my study.

Participants must be 18 years of age or older, have a diagnosis of an autoimmune disease, have experienced adverse childhood experiences, be willing to share their experiences and participate in an individual interview and be available for the duration of the study.
Participants will be asked to complete an initial screening survey to assess their eligibility, share their personal experiences through individual interviews, and potentially provide feedback on the study findings during the follow-up phase. It should take approximately 2 hours to complete the procedures listed. Names and other identifying information will be requested as part of this study, but participant identities will not be disclosed.

To participate, please contact me at [redacted] to schedule the screening process. If you meet my participant criteria, I will work with you to schedule a time for an interview.

A consent document will be given to you if you meet the study criteria at the time of the interview. The consent document contains additional information about my research.

If you choose to participate, you will need to sign the consent document and return it to me at the time of the interview.

Participants will receive a $50 VISA gift card upon completing the interview.

Sincerely,

Milton Louis Gonzalez
Doctoral Candidate

Appendix F

RECRUITMENT LETTER / EMAIL FOLLOW UP

Dear Potential Participant,

As a doctoral candidate in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for a doctoral degree. Two weeks ago an email was sent to you inviting you to participate in a research study. This follow-up email is being sent to remind you to contact me if you would like to participate and have not already done so. The deadline for participation is _______________.

Participants must be 18 years of age or older, have a diagnosis of an autoimmune disease, have experienced adverse childhood experiences, be willing to share their experiences and participate in an individual interview and be available for the duration of the study.

Participants will share their personal experiences through individual interviews. In this research study, after the interviews, participants will have an opportunity to review what they shared and ensure it's accurate. This is called "member checking." It means you can check if what we found matches your experiences. It's important because your input helps make the study better. It should take approximately 2 hours to complete the procedures listed. Names and other identifying information will be requested as part of this study, but participant identities will not be disclosed.

To participate, please contact me at [redacted] to schedule an initial interview. If you meet my participant criteria, I will work with you to schedule a time for an interview.

A consent document will be given to you at the time of the interview. The consent document contains additional information about my research.

If you choose to participate, you will need to sign the consent document and return it to me at the time of the interview. wants to complete the study procedures.
Participants will receive a $50 VISA gift card.

Sincerely,

Milton Louis Gonzalez

Doctoral Candidate

Liberty University

Appendix G

CONSENT FORM

Consent

Title of the Project: A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences

Principal Investigator: Milton Louis Gonzalez, 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. To participate, you must be 18 years or older, diagnosed with an autoimmune disease, and have experienced adverse childhood experiences such as physical, emotional, or sexual abuse, neglect, or household dysfunction. Additionally, you should be willing to share your experiences through individual interviews and be available for the duration of the study. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

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

The purpose of this study is to explore the stories of people who have an autoimmune disease and endured difficult times when they were younger, like experiencing abuse, neglect, or problems at home. By listening and learning from their stories, we hope to find better ways to support and help people with autoimmune diseases.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Individual Interview: Participants will engage in a one-on-one interview to share their experiences. Estimated time: 70 minutes.
2. Review and Feedback Session: Participants can review their interview transcripts and study findings, providing feedback for accuracy and agreement. Estimated time: 30 minutes.
3. Follow-up Phase: Participants will be invited to provide feedback on the summarized narratives of their individual experiences. Estimated time: 20 minutes.

   Total estimated participation time: 120 minutes.

How could you or others benefit from this study?

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

Benefits to society include: This research has the potential to impact individuals with autoimmune diseases positively. By better understanding their experiences, we can develop improved support systems and treatment strategies. This, in turn, can enhance their overall well-being and quality of life.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are similar to the risks you encounter in your everyday life. The risks involved in this study include the possibility of experiencing psychological stress when recalling and discussing prior traumatic events. However, to reduce these risks, I, as the researcher, will closely monitor participants throughout the interview process. If, at any point, a participant feels uncomfortable or distressed, the interview can be discontinued. Additionally, I will provide referral information for counseling services if needed to ensure appropriate support is available.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data collected from you may be used in future research studies and/or shared with other researchers. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed beforehand.
- Data will be stored on a password-locked computer. After three years, all electronic records will be deleted, and all hardcopy records will be shredded.
- Recordings will be stored on a password-locked computer for three years and then deleted. The researcher and members of his doctoral committee will have access to these recordings.

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

Participants will be compensated for participating in this study. At the conclusion of the interview, participants will receive a $50 Visa gift card.

Is study participation voluntary?

Participation in this study is voluntary. Your decision on whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting such relationships.

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. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

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

The researcher conducting this study is Milton Louis Gonzalez. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [redacted] You may also contact the researcher's faculty sponsor, Dr. Mary Hollingsworth, at [redacted]

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 would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our 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 signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy 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.

Appendix H

DEBRIEFING STATEMENT

Debriefing Statement

Title of the Project: A Phenomenological Study of Adult Patients with Auto-Immune Disease and Their Exposure to Adverse Childhood Experiences

Principal Investigator: Milton Louis Gonzalez, Doctoral Candidate, Liberty University

Thank you for being part of a research study.

You recently participated in a research study. You were selected as a participant because you met the criteria, which included having a diagnosis of an autoimmune disease and experiencing adverse childhood experiences. Participation in this research project was voluntary.

Please take time to read this entire form and ask any questions you may have.

What was the study about and why was it being done?

The purpose of the study was to understand how difficult experiences during childhood may affect individuals with autoimmune diseases. By listening to their stories, I hoped to gain insights into the potential impact of these early challenges on their health. This can help us find improved ways to support and treat people with autoimmune diseases, leading to better well-being and quality of life for them.

Why am I receiving a debriefing statement?

The purpose of this debriefing statement is to inform you that the true nature of the study or an aspect of the study was not previously disclosed to you.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous. Participant responses will be kept confidential through the use of pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.

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. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

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

The researcher conducting this study is Milton Louis Gonzalez . You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [redacted] . You may also contact the researcher's faculty sponsor, Dr. Mary Hollingsworth, at [redacted]

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 would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall Ste. 2845, Lynchburg, VA 24515 or email at 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.

Appendix I

ADVERSE CHILDHOOD EXEPERIENCES SCORE

Adverse Childhood Experiences (ACE) Questionnaire

ACE Assessment

Instructions: This questionnaire contains 10 questions that relate to personal experiences of childhood. Each 'Yes' answer counts as one point. If you are uncomfortable answering any question, feel free to skip it.

1. Physical Abuse:

Before the age of 18, was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that they had marks or were injured?

[ ] Yes [ ] No

2. Emotional Abuse:

Before the age of 18, was a parent or other adult in the household often or very often... Swore at them, insulted them, or put them down? Or acted in a way that made them afraid that they might be physically hurt?

[ ] Yes [ ] No

3. Sexual Abuse:

Before the age of 18, did an adult or person at least 5 years older ever... Touch or fondle you or have you touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with them?

[ ] Yes [ ] No

4. Physical Neglect:

Before the age of 18, did they often or very often feel that... No one in your family loved you or thought you were important or special? Or your family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [ ] No

5. Emotional Neglect:

Before the age of 18, did you often or very often feel that... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? Or your parents were too drunk or high to take care of you or take you to the doctor if they needed it?

[ ] Yes [ ] No

6. Mental Illness:

Before the age of 18, was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [ ] No

7. Incarcerated Relative:

Before the age of 18, did a household member go to prison?

[ ] Yes [ ] No

8. Mother Treated Violently:

Before the age of 18, was your mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[ ] Yes [ ] No

9. Substance Abuse:

Before the age of 18, did they live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[ ] Yes [ ] No

10. Divorce:

Before the age of 18, were your parents ever separated or divorced?

[ ] Yes [ ] No

Scoring: Add up the number of 'Yes' responses. The total number is your ACE score: ________

Appendix J

ADVERSE CHILDHOOD EXPERIENCES SCORES

Name	ACE Score	Types of Adverse Experiences
Adrian	6	Physical Abuse, Emotional Abuse, Physical Neglect, Emotional Neglect, Mother Treated Violently, Substance Abuse
Brenda	6	Physical Abuse, Emotional Abuse, Sexual Abuse, Emotional Neglect, Mother Treated Violently, Substance Abuse
Maria	7	Emotional Abuse, Sexual Abuse, Emotional Neglect, Mental Illness, Mother Treated Violently, Substance Abuse, Divorce
Jesse	6	Physical Abuse, Emotional Abuse, Physical Neglect, Emotional Neglect, Mother Treated Violently, Substance Abuse
Rhonda	5	Physical Abuse, Emotional Abuse, Sexual Abuse, Emotional Neglect, Substance Abuse
Tina	4	Emotional Abuse, Emotional Neglect, Mother Treated Violently, Substance Abuse
Victor	5	Emotional Abuse, Emotional Neglect, Mental Illness, Mother Treated Violently, Substance Abuse
Violet	5	Physical Abuse, Emotional Abuse, Emotional Neglect, Mother Treated Violently, Substance Abuse
Ignacio	6	Physical Abuse, Emotional Abuse, Physical Neglect, Emotional Neglect, Mother

Yolanda	5	Treated Violently, Substance Abuse Physical Abuse, Emotional Abuse, Sexual Abuse, Emotional Neglect, Divorce

Appendix K

ADRIAN'S ACE RESULTS

Adrian's ACE Assessment

1.Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that they had marks or were injured?

[x] Yes [ ] No

2.Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at them, insulted them, or put them down? Or acted in a way that made them afraid that they might be physically hurt?

[x] Yes [ ] No

3.Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle them or have them touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with them?

[ ] Yes [x] No

4.Physical Neglect:

Did they often or very often feel that... No one in their family loved them or thought they were important or special? Or their family didn't look out for each other, feel close to each other, or support each other?

[x] Yes [ ] No

5.Emotional Neglect:

Did they often or very often feel that... They didn't have enough to eat, had to wear dirty clothes, and had no one to protect them? Or their parents were too drunk or high to take care of them or take them to the doctor if they needed it?

[x] Yes [ ] No

6.Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7.Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8.Mother Treated Violently:

Was their mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9.Substance Abuse:

Did they live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10.Divorce:

Were their parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 6

Appendix L

BRENADA'S ACE RESULTS

Brenda's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that she had marks or was injured?

[x] Yes [ ] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at her, insulted her, or put her down? Or acted in a way that made her afraid that she might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle her or have her touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[x] Yes [ ] No

4. Physical Neglect:

Did she often or very often feel that... No one in her family loved her or thought she was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did she often or very often feel that... She didn't have enough to eat, had to wear dirty clothes, and had no one to protect her? Or her parents were too drunk or high to take care of her or take her to the doctor if she needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was her mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did she live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were her parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 6

Appendix M

MARIA’S ACE RESULTS

Maria's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that she had marks or was injured?

[ ] Yes [x] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at her, insulted her, or put her down? Or acted in a way that made her afraid that she might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle her or have her touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[x] Yes [ ] No

4. Physical Neglect:

Did she often or very often feel that... No one in her family loved her or thought she was important or special? Or her family didn’t look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did she often or very often feel that... She didn’t have enough to eat, had to wear dirty clothes, and had no one to protect her? Or her parents were too drunk or high to take care of her or take her to the doctor if she needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[x] Yes [ ] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was her mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did she live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were her parents ever separated or divorced?

[x] Yes [ ] No

ACE Score: 6

Appendix N

JESSE'S ACE RESULTS

Jesse's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that she had marks or was injured?

[x] Yes [ ] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at him, insulted him, or put him down? Or acted in a way that made him afraid that he might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle him or have him touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with him?

[ ] Yes [x] No

4. Physical Neglect:

Did he often or very often feel that... No one in his family loved him or thought he was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[x] Yes [ ] No

5. Emotional Neglect:

Did he often or very often feel that... He didn't have enough to eat, had to wear dirty clothes, and had no one to protect him? Or his parents were too drunk or high to take care of him or take him to the doctor if he needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was his mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did he live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were his parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 6

Appendix O

RHONDA'S ACE RESULTS

Rhonda's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that she had marks or was injured?

[x] Yes [ ] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at her, insulted her, or put her down? Or acted in a way that made her afraid that she might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle her or have her touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[x] Yes [ ] No

4. Physical Neglect:

Did she often or very often feel that... No one in her family loved her or thought she was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did she often or very often feel that... She didn't have enough to eat, had to wear dirty clothes, and had no one to protect her? Or her parents were too drunk or high to take care of her or take her to the doctor if she needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was her mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[ ] Yes [x] No

9. Substance Abuse:

Did she live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were her parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 5

Appendix P

TINA'S ACE RESULTS

Tina's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at her? Or ever hit so hard that she had marks or was injured?

[ ] Yes [x] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at her, insulted her, or put her down? Or acted in a way that made her afraid that she might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle her or have her touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[ ] Yes [x] No

4. Physical Neglect:

Did she often or very often feel that... No one in her family loved her or thought she was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did she often or very often feel that... She didn't have enough to eat, had to wear dirty clothes, and had no one to protect her? Or her parents were too drunk or high to take care of her or take her to the doctor if she needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was her mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did she live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were her parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 4

Appendix Q

VICTOR'S ACE RESULTS

Victor's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that he had marks or was injured?

[ ] Yes [x] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at him, insulted him, or put him down? Or acted in a way that made him afraid that he might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle him or have him touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with him?

[ ] Yes [x] No

4. Physical Neglect:

Did he often or very often feel that... No one in her family loved him or thought he was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did he often or very often feel that... He didn't have enough to eat, had to wear dirty clothes, and had no one to protect him? Or her parents were too drunk or high to take care of him or take him to the doctor if he needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[x] Yes [ ] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was his mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did he live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were his parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 5

Appendix R

VIOLET'S ACE RESULTS

Violet's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that she had marks or was injured?

[x] Yes [ ] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at her, insulted her, or put her down? Or acted in a way that made her afraid that she might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle her or have her touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[ ] Yes [x] No

4. Physical Neglect:

Did she often or very often feel that... No one in her family loved her or thought she was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did she often or very often feel that... She didn't have enough to eat, had to wear dirty clothes, and had no one to protect her? Or her parents were too drunk or high to take care of her or take her to the doctor if she needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was her mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did she live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were her parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 5

Appendix S

IGNACIO'S ACE RESULTS

Ignacio's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that he had marks or was injured?

[x] Yes [ ] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at him, insulted him, or put him down? Or acted in a way that made him afraid that he might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle him or have him touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[ ] Yes [x] No

4. Physical Neglect:

Did he often or very often feel that... No one in her family loved him or thought he was important or special? Or his family didn't look out for each other, feel close to each other, or support each other?

[x] Yes [ ] No

5. Emotional Neglect:

Did he often or very often feel that... He didn't have enough to eat, had to wear dirty clothes, and had no one to protect him? Or his parents were too drunk or high to take care of him or take him to the doctor if he needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was his mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at him? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[x] Yes [ ] No

9. Substance Abuse:

Did he live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[x] Yes [ ] No

10. Divorce:

Were his parents ever separated or divorced?

[ ] Yes [x] No

ACE Score: 6

Appendix T

YOLANDA'S ACE RESULTS

Yolanda's ACE Assessment

1. Physical Abuse:

Was a parent or other adult in the household often or very often... Pushed, grabbed, slapped, or had something thrown at them? Or ever hit so hard that she had marks or was injured?

[x] Yes [ ] No

2. Emotional Abuse:

Was a parent or other adult in the household often or very often... Swore at her, insulted her, or put her down? Or acted in a way that made her afraid that she might be physically hurt?

[x] Yes [ ] No

3. Sexual Abuse:

Did an adult or person at least 5 years older ever... Touch or fondle her or have her touch the adult's body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with her?

[x] Yes [ ] No

4. Physical Neglect:

Did she often or very often feel that... No one in her family loved her or thought she was important or special? Or her family didn't look out for each other, feel close to each other, or support each other?

[ ] Yes [x] No

5. Emotional Neglect:

Did she often or very often feel that... She didn't have enough to eat, had to wear dirty clothes, and had no one to protect her? Or her parents were too drunk or high to take care of her or take her to the doctor if she needed it?

[x] Yes [ ] No

6. Mental Illness:

Was a household member depressed or mentally ill, or did a household member attempt suicide?

[ ] Yes [x] No

7. Incarcerated Relative:

Did a household member go to prison?

[ ] Yes [x] No

8. Mother Treated Violently:

Was her mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? Or sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

[ ] Yes [x] No

9. Substance Abuse:

Did she live with anyone who was a problem drinker or alcoholic, or who used street drugs?

[ ] Yes [x] No

10. Divorce:

Were her parents ever separated or divorced?

[x] Yes [ ] No

ACE Score: 5