

THE IMPACT OF ADVERSE CHILDHOOD EXPERIENCE (ACE) ON VICTIMS' SELF-
PERCEPTION AND CHARACTER DEVELOPMENT IN ADULTHOOD.

by

Josephine Owusu

Liberty University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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ABSTRACT

Adversity experienced in childhood is known to have debilitating consequences that permeate subsequent life experiences and predict adulthood wellbeing. The intensity and nature of this impact vary, however. Empirical and practical knowledge also point to the significant role of self-perception in determining one's view of others, character development, and life experiences. Research has suggested associations between childhood adversities and self-perception, although this knowledge is scanty and inconsistent, with similarly minimal evidence on their correlation with character development. This study set out to examine how adverse childhood experiences (ACEs) influence victims' self-perception and character development in adulthood. It employed a mixed method approach with a sample of 208 respondents, from which 10 were selected for the qualitative component. The quantitative study used standardized measures including the Childhood Trauma Questionnaire-Short Form (CTQ-SF) in an online survey to collect data, which were analyzed using bivariate, simple linear regression and mediation analysis methods. Semi-structured interviews and thematic analysis were employed for the qualitative investigation. Findings from the quantitative analyses revealed no significant negative relationship between ACEs and self-perception or moral character development. The qualitative investigation portrayed both negative and positive relationship among ACEs, self-perception, and moral character. The negative relationship implied higher ACEs result in lower self-perception and lower moral character, and the positive relationship suggested higher ACEs result in higher self-esteem and higher moral character. The findings highlighted areas for further studies, added to existing literature, and offered significant directions for clinical work.

Keywords: adverse childhood experiences, self-perception, character development, childhood maltreatment, adulthood wellbeing

Dedication

This work is dedicated to my late parents Mr. Michael Kwasi Ossei and Mrs. Alixcia Adwoa Ossei, who raised and nurtured me to be who I am today. The strength of character, faith and humility you instilled in me, has helped me to buoy over many life circumstances. The work is also dedicated to Osei Owusu, who has stayed true and steadfast in his unconditional support, friendship and love. To Neal and Tracey, this is for you, for being my rock, and for demonstrating how far you would go to help throughout the journey. Yes, it is all over now, by God's grace. I can be fully present now when you visit, and heartily go for those walks.

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I would like to acknowledge family and friends for their support and encouragement, including Nana Bosompra (PhD), whose insights and quiet constant reassurance have been well appreciated.

Above all, I thank the Almighty God, His son our Lord Jesus Christ, and the Holy Spirit of God, for holding my hand, and showing me the way through it all. I could not have done any of this without You by my side. Thank you.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

One of the wonders of humanity is the development from infancy to adulthood. This however places the infant or child in a vulnerable state, as he or she progresses through, and endures, the various stages of development. Unfortunately, many children at this very sensitive stage also face horrendous experiences that include maltreatment, trauma, and/or misfortunes, often referred to as adverse childhood experiences (ACE). These difficult early life experiences not only place children in a precarious state developmentally (Chainey & Burke, 2021; Doi et al., 2022; Hambrick et al., 2019), but they have also been found to compromise victims' adulthood wellbeing (Bowlby 1944; Hawkins et al., 2021; Pilkington, 2020). In spite of the known negative consequences, research has also shown positive outcomes in certain circumstances. A significant attribute of ACEs is their universal prevalence. About 50% of those under 18 years old in the US are known to have been exposed to at least one ACE, and approximately 33% have endured multiple ACEs (Sacks & Murphey, 2018). A study in Wales found a prevalence of 47% (Manyema & Richler, 2019), while 85% of a Brazilian adolescent cohort was found to have at least one ACE.

In spite of the expansive empirical work on ACEs, there is very limited literature on how they impact self-view and/or subsequent character development. Exploring the associations between childhood adversity, self-perception, and character development in adulthood is the focus of this study. A clearer understanding of the nature and strengths of the proposed relationships will pave the way for apt clinical directions, as well as add significantly to existing literature on this dimension of ACEs.

Background

Scientists have always been interested in childhood development, early life anomalies and trauma, their prevalence, and how they intersect normal human development. It was, however, the ground-breaking study by Vincent Felitti and colleagues in 1998 on the topic that propelled its present popularity. The study established, among other findings, a strong relationship between childhood abuse or household dysfunction in childhood and several of the leading causes of death in adulthood. Felitti and team (1998) coined the phrase “adverse childhood experiences” (ACEs) and identified 10 forms of childhood adversities. They introduced the ACE questionnaire and the ACE score, the latter measuring the sum of defined ACEs, as an indicator of risk for health problems in adulthood (Felitti, 1998; Groenwold et al., 2021; King, 2020; Manyema & Richler, 2019).

Consequences of ACE

The ensuing popularity of ACEs as a topic, among researchers after Felitti’s (1998) work, led to numerous studies, which illuminated many of the negative consequences of this early life dilemma. ACEs have been found to elevate cognitive risk and emotional, social, and educational deficits in childhood (Crouch et al., 2019; Hawkins et al., 2021; Mansueto et al., 2021; Najman et al., 2020; Neelakanten et al., 2019), as well as impact the family as a unit (Russin & Stein, 2021). Research has established that these debilitating effects not only affect victims at the time of incidence, but also permeate into adulthood, resulting in health issues and mood/mental health disorders including depression, heightened anxiety, alcohol and substance dependencies among others (Gee, 2020; Haahr-Pederson et al., 2020; Hawkins et al., 2021; Hughes et

al., 2017; Mansueto et al., 2021; Oh et al., 2018; Wood-Jaeger et al., 2018; Zhang et al., 2020). Moreover, research has underscored the lack of tailored interventions that address the impact of ACE in childhood (Lorenc et al., 2020; Mancini, 2020; McCarthy et al., 2021), which could be contributing to the longevity of effects and permeation into adulthood.

More recent studies have illuminated possible cross-generational influences. A study conducted by Moog and colleagues (2018) found that newborns of mothers with ACE had significantly smaller intracranial volume (ICV) as compared to mother's who did not experience ACE. This study and other follow-up investigations (Ximenas et al., 2019) have evidently revealed an even more extended influence of ACEs. Nevertheless, not all outcomes of ACE have been found to be negative.

Post Traumatic Growth

One of the complex dimensions of ACE is the discovery that some victims of ACE do not experience difficult consequences (Bannink, 2014; Hambrick et al., 2019; Tranter et al., 2021). Recent literature has drawn light on factors that may mitigate the harmful effects of ACE, and some have even found an elevated level of functioning after, and as a result of, the experience of ACE (Bannink, 2014; McGee et al., 2019). Some researchers have attributed the environment (low versus high risk, poverty, immigration status, and/or institutionalized care) as contributing to the nature of the impact of ACE (Frimpong-Manso & Bugyei, 2019; Manhica et al., 2020; Meroc et al., 2019, Zeider & Kamplar, 2021). Religion has also been known to influence the impact of childhood adversity (Henderson, 2016; Jung, 2017).

The established longevity and pervasive nature of the effects of ACE might lead one to assume a predictable influence on one's self perception and personality development. However, empirical evidence and practical knowledge of the complex nature of human development thwart such presumptions (Bowlby, 1948; Lerner, 2020). As noted earlier the impact and experience of ACE may vary by victim and context. Moreover, a person's self-view is known to involve a myriad of factors and mechanisms (Fiske & Taylor, 2021; Nucci, 2018), even as they are invariably influenced by previous life experiences.

Self-perception and ACE

Self-perception generally comprises complex cognitive representations of the self, that vary in different circumstances (Fiske & Taylor, 2021). Individuals are known to generally know how they perceive themselves. Cederbaum and colleagues (2020), however, asserted that adverse childhood events could disrupt the development of self, which influences the ability to form positive enduring relationships. Other contemporary research that has associated ACE with self-perception include Newcombe-Anjo and Barker's (2017) study, which examined factors that compromise adulthood wellbeing of ACE victims from a person-centered approach. These studies, among others, suggest that childhood trauma can have a negative impact on how victims view themselves, both at the time of incidence and in adulthood (Okur et al., 2019; Pilkington et al., 2020). Childhood trauma is believed to lead to feelings of worthlessness, self-erasure, social anxiety, and self-objectification, among others, that invariably result in low perceptions of self (Cederbaum et al., 2020; Okur et al., 2019). Other findings, as mentioned earlier, have also found a possible positive impact on self-perception (Tranter et al., 2021),

thereby highlighting the complexity of the influences of ACEs. A negative or positive self-perception, brought on by childhood adversity, is likely to influence, not only how one relates to the self, but also how one relates to others, and to the world, which is generally foundational to one's personality (Fiske & Taylor, 2021). Significant research has also linked self-perception to character development (Cederbaum et al., 2020; Ellemers et al., 2019; Lapsley et al., 2020).

Character Development and ACE

Character may be defined as the cluster of abilities and traits that enable a person to act as a moral agent (Nucci, 2018). Moral agency is known to emerge in childhood and comprise reflections of positive as well as negative self-actions and experiences from others. Others (Baehr, 2017) have clustered character into four features, which are moral, civic, intellectual, and performance characters. Larry Nucci (2018) conceptualized character as emerging from the interrelation between the self-system and character system, in his character self-system framework. This might imply that a compromised self-view, that may be brought on childhood abuse and trauma, could jeopardize the ensuing character development. Moreover, the framework alludes to a possible bidirectional relationship between the self, character, and the environment, drawing on the RDS metatheory, thereby suggesting a possible direct negative association between the child's (marred) context, and subsequent character development. Cederbaum and colleagues (2020) affirmed a link between ACEs and narcissistic personality, through the mediation of self-objectification and dissociation.

On the other hand, proponents of posttraumatic growth have asserted that positive character development could emerge from ACEs in some circumstances, based on the

premise that victims in certain cases are able to expand their psychosocial functioning beyond their previous performance level, in the face of adversity, in order to cope with it (Bannink, 2014; Caver, 1998; Tranter, 2021). This is believed to propel growth and exuberance, which could result in positive character growth. Mediating factors that have been associated with such positive outcomes have included resiliency (Zeidner & Kampler, 2020), event centrality (Tranter et al., 2021), and religious upbringing (Henderson, 2016; Jung, 2017; Yamashiro, 2022), among others.

Undoubtedly one's character plays a significant role in how one relates to others, to the world, and even to the self. This underscores the relevance of ascertaining its links with the well-entrenched and prevalence social issue of early life adversity. There is, however, very scanty literature on the pattern and direction of these interrelationships, if they do exist. The quest is further grounded by biblical insights that suggest a link between adversity and both negative and positive outcomes.

Biblical Worldview

Scripture is very clear on the attributes of a good character. Christians are urged to exhibit humility, gentleness, patience, and to relate with others with love (Ephesians 4:1-2). Biblical authors have linked character traits to the gifts of the Holy Spirit (Galatians 5:22-23, ESV; Poljak Lukek et al., 2023). Romans 5:3-5 states that character emerges from endurance, which is engendered by suffering, trials, and adversity (ESV). Some recent studies have also suggested a link between early life trauma and heightened sense of duty, and daring self-awareness, if the negative experiences are converged with religious education in childhood (Yamashiro, 2022).

Nevertheless, the Bible instructs: “train up a child in the way he should go; even when he is old he will not depart from it” (Proverbs 22:6, ESV). This appears to imply that the experiences accorded to a child would be manifested in his or her adulthood. In other words, childhood negative experiences can have negative outcomes in adulthood. Moreover, Paul cautions in Ephesians (6:4) that fathers (parents) should not provoke their children. These biblical truths seem to underscore a link between childhood experiences and adulthood outcomes, while portraying the elements of good character. The present study intends to illuminate a clearer pathway whereby these biblical insights, together with the known constructs and empirical findings, link together from a scientific perspective, to provide an enhanced knowledge and understanding of how ACEs associate with self-view and character development.

Problem Statement

Childhood adversity has been researched extensively and has frequently been linked with compromised wellbeing in adulthood (Crouch et al., 2019; Hawkins et al., 2021; Mansueto et al., 2021; Najman et al., 2020; Neelakanten et al., 2019), how victims experience life (Pilkington et al., 2020), as well as some aspects of personality outcomes (Schouw et al., 2020; Talmon & Ginzburg, 2019). ACEs have been found to influence health problems such as heart diseases and diabetes, as well as mental health disorders, including depression, anxiety, eating disorders and substance use disorders among others (Chainey & Burke, 2021; Manyena & Richter, 2019; Oh et al., 2018). Adverse childhood experiences (ACEs) are now believed to impact the brain structure of infants of maternal victims (Moogh et al., 2018; Ximenas et al., 2019), thereby illuminating its effects even across generations. That notwithstanding, studies have also revealed some positive

outcomes which include a more secure sense of personal strength, renewed appreciation of life, and creativity, among others (Bannink, 2014; Tranter et al., 2021).

Nevertheless, more recent research has focused on how ACEs influence victims' view of themselves and their consequent personality development (Schouw et al., 2020; Simpson et al., 2020; Talmon & Ginzburg, 2019). There is, however, a dearth of knowledge and empirical work on the nature of the relationships among these variables. Studies have identified a link between ACE and self-blame (Okur et al., 2019), narcissism (Talmon & Ginzburg, 2019), and personality (Schouw et al., 2020), all of which can shape one's character.

From a biblical point of view, there are passages that support positive outcomes of adversity, seeing it as a means to build character (Romans 5:3-5). With respect to adversity in childhood, the Bible encourages Christians to treat children with care and reverence, as the way they are raised could predict their adulthood (Proverbs 22:6). Studies have also revealed that faith and religion can mitigate the negative impact of childhood adversity (Henderson, 2016; Jung, 2017). These differing findings and perspectives underscore the need to gain a more in-depth and encompassing understanding of the influences of ACEs on the self and character formation.

The limited existing research work on the subject, have utilized either quantitative (Hawkins et al., 2021; Lee & Markey, 2022) or qualitative methods (Frimpong-Manso & Bugyei, 2019; McGee et al., 2020). This study employed a mixed methods approach, that combined the two methods, in order to attain specific measurable dimensions of the concepts and relationships, as well as the rich subjective data, the qualitative component would offer. Mixed methods research is known to provide pragmatic advantages when

examining complex research questions (Driscoll et al., 2007). As well, they have been found to produce research outcomes that are stronger than either qualitative or quantitative designs on its own (Malina et al., 2011). Mixed methods studies are also known to enhance and explain complicated and contradictory survey responses (Driscoll et al., 2007).

By adopting a mixed methods approach, this study facilitated the acquisition of substantive knowledge from different dimensions of the experience of childhood adversity and the possible varied subjective nature of its impact on one's self and character development. Moreover, the evident lack of mixed methods research on the topic engendered the acquisition of new unattained knowledge and understanding, which would invariably add significantly to the existing literature.

Purpose of the Study

The purpose of the study was to examine the relationship between adverse childhood experiences, self-perception, and moral character development in victims' adulthood, within the northwestern region of Toronto, Canada. It was a mixed methods, cross-sectional investigation that adopted a correlational design for the quantitative component, and a phenomenological study for its qualitative segment.

Research Question(s) and Hypotheses

Research Questions

Quantitative

RQ1: Is there a negative relationship between adverse childhood experiences and self-perception?

RQ 2: Is there a negative relationship between adverse childhood experiences and moral character?

RQ 3: Does self-perception mediate the relation between adverse childhood experiences and victims' moral character development in adulthood?

RQ 4: Does self-perception moderate the relationship between adverse childhood experiences and victims' moral character development in adulthood?

Qualitative

RQ 5: How do victims of adverse childhood experiences describe the link between their adverse childhood experiences and their character formation in adulthood?

Hypotheses

Hypothesis 1: There is a negative relationship between adverse childhood experiences and self-perception.

Hypothesis 2: There is a negative relationship between adverse childhood experiences and moral character.

Hypothesis 3: Self-perception mediates the relationship between adverse childhood experiences and moral character development in adulthood.

Hypothesis 4: Self-perception moderates the relationship between adverse childhood experiences and moral character development in adulthood.

Assumptions and Limitations of the Study

The study assumed participants would be honest, truthful, and forthcoming in their responses. This was reinforced in the introductory letter to participants, which highlighted the practical and psychological benefits of providing factual answers. Nonetheless, the sensitivity of the topic may have led to possible socially desirable

responses and other biases, which is discussed further in the next paragraph, under limitations. Another assumption was that participants would have a good recollection of their early life experiences, given much of the data was attained retrospectively.

In terms of limitations, the delicate nature of the subject was expected to pose recruitment challenges. Childhood adversity is not an issue people would readily want to talk about, so difficulties rallying participants who are willing to divulge such difficult details from their early life were anticipated. It was prudent to adopt strategies to offset this possible recruiting impediment, which included the use of purposive and snowball sampling methods. Moreover, given the retrospective nature of the responses, and the significant reliance on participants' memory as previously indicated, the data were vulnerable to distortions such as recall and misclassification biases. As a cross-sectional study, an additional significant limitation that was anticipated was the inability to derive causal relationship or inferences between the variables being studied. Although the benefits of a mixed methods design are well established, it is also known to be time consuming and expensive, which was a definite challenge under the circumstances of the present study. That notwithstanding, mixed methods research has been found to provide additional subjective data that offer valuable insights into expected and unexpected relationships, among other advantages.

Theoretical Foundations of the Study

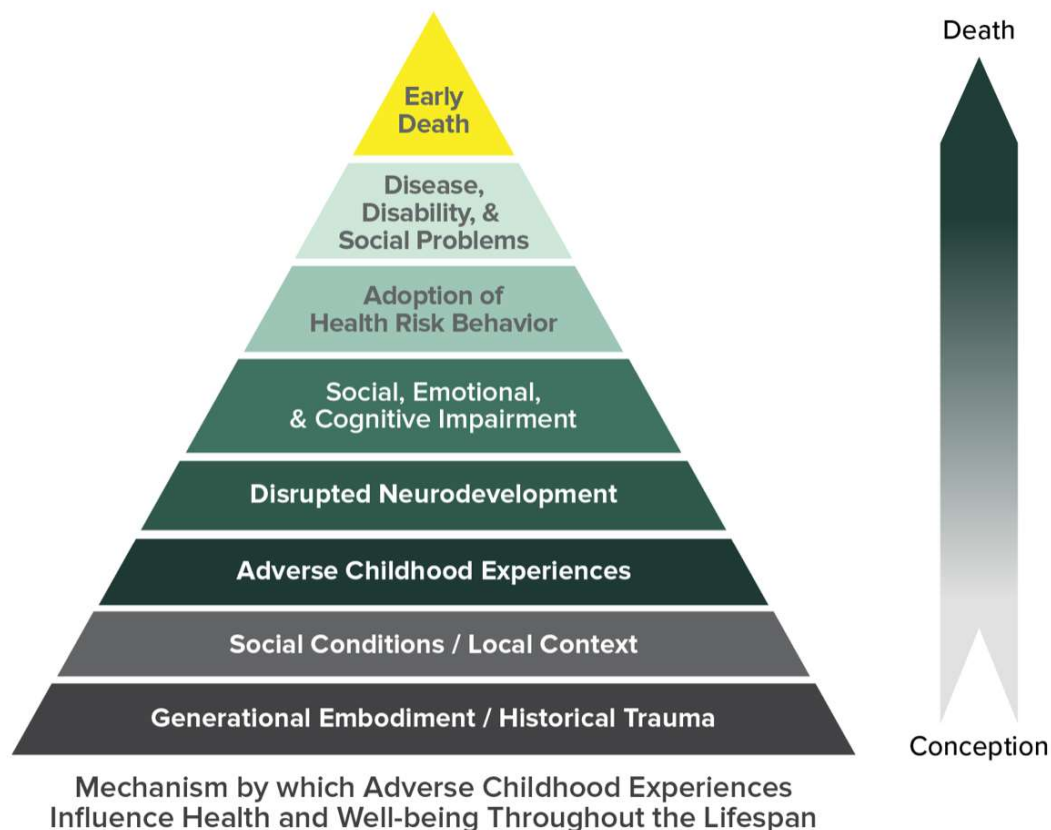
An examination of the relationships between such complex constructs, undoubtedly requires an understanding of established models and theories that ground the investigation and give credence to the proposed associations. Theories are known to integrate existing facts that are organized in a way that pave the way for the generation of

new information (Lerner, 2018). There are several theories that could explain the concepts and hypothesized relationships. However, three key models have been selected to underlie and guide the study. These are the adverse childhood experience (ACE) framework, the relational developmental systems (RDS) metatheories, and the character self-systems theory.

The ACE model

The adverse childhood experiences theory is a framework that links early life stress and trauma to subsequent psychomedical wellbeing in adulthood. It was developed by Vincent Felitti and his colleagues in their ground-breaking study that affirmed an association between ACEs and the leading causes of death in adulthood. The framework offers a risk-based model which stipulates that exposure and experience of potentially traumatic events in early life has a dose-dependent effect on health disruptions, mental and physical ailments during childhood which permeates into adulthood (Felitti et al., 1998; Lorenc et al., 2020; McGee et al, 2020). The framework emphasizes on the impact of childhood adversity on neurodevelopment particularly the prefrontal brain region (Bernard et al., 2021), which is associated with executive function. The model uses the ACE pyramid (Figure 1) to graphically explain the nature and consequences of childhood adversity.

At the base level of the pyramid is historical trauma, which refers to trauma experienced by parents or previous generations that could increase the propensity toward impaired psychological functioning and/or disease. Historical trauma has been found to significantly influence current context, socio-economic resources as well as parenting and care-giver competencies. Research has found an association between parental childhood

Figure 1:*The ACE Pyramid**(Material found in the public domain)*

adversity and poorer infant health outcomes (Racine et al., 2018). Once ACE is experienced it may impair victims' neurodevelopment as previously noted, which could in turn disrupt the social, emotional, and cognitive functioning in adolescence and adulthood, leading in many cases to the adoption or higher inclination toward health risk behaviors such as substance use, alcohol dependency, and eating disorders. These tendencies invariably heighten the risks for diseases, psychological and physical functioning that could eventually lead to early death (Bernard et al., 2021; Felitti et al., 1998).

The impairment in victims' neurological development is significant to this study, as much of the disruption occurs in the prefrontal lobe (Bernard et al., 2021). This region of the brain is associated with executive function, which includes important cognitive processes for self-view and character development, including self-regulation, self-monitoring, inhibition, empathy, and perspective taking (Hudani, 2021; Nucci, 2017).

The Relational Developmental Systems (RDS) Metatheory

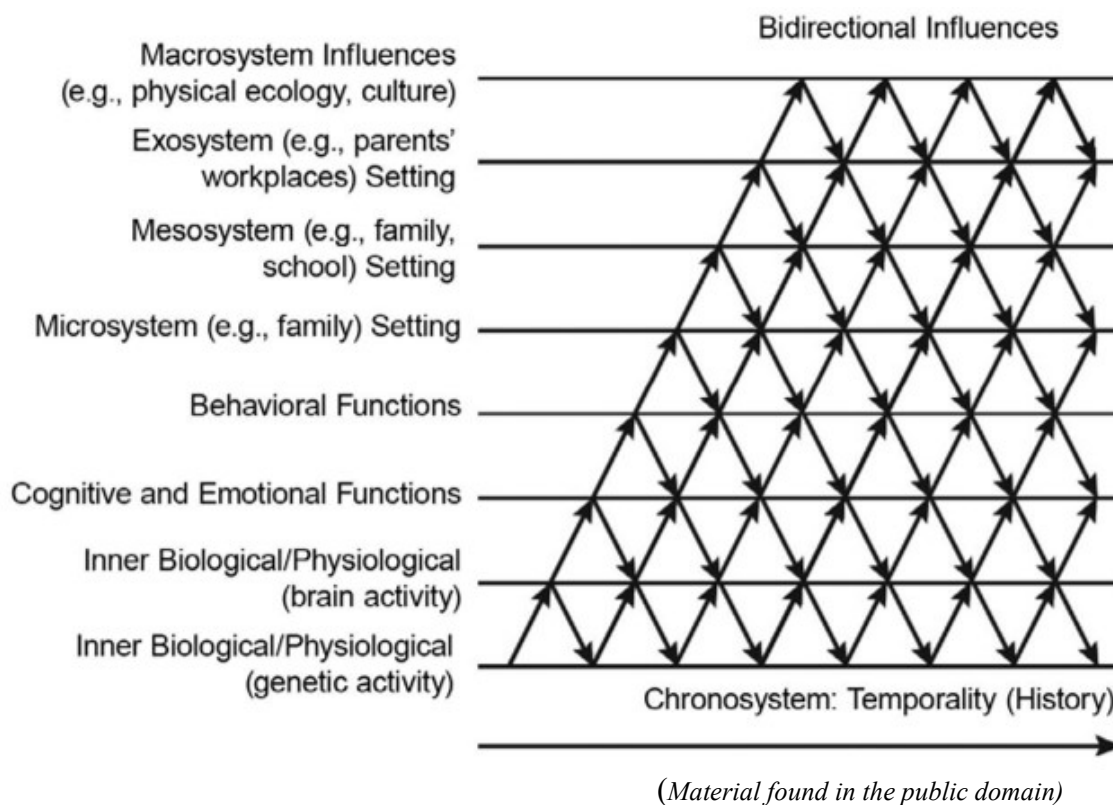
The RDS metatheory consists of a group of theories and models that emphasize the interrelation of the individual with his or her context, as a foundational basis and source of development. It therefore encompasses a theory of a set of theories, hence the designation as a "metatheory" (Lerner, 2018). The theory was developed by a group of developmental scholars in the late 20th century including Overton (2011), Lerner (2018), and J. Brandtstadte (2006). It postulates among other assumptions that change across the lifespan comes about as a result of mutually dependent interconnection between the individual and his or her context. There is therefore a constant chain of processes and actions, even as it also acknowledges that aspects of the individual may remain the same throughout the life course (Lerner, 2018). The theory proposes that human development "is a synthesis between processes that promote change, and processes that promote constancy" (Lerner, 2018, p. 8).

The RDS metatheory believed to have emerged from the process-relational paradigm, which focuses on process, emergence, holism, relational analysis, and the use of multiple perspectives (Overton, 2011). Within this perspective the living being is viewed as naturally active (not passive), self-generating, self-organizing, complex, and adaptively creative. The RDS theory emphasizes accordingly on the integration and

coactions between the individual and the different layers of the context, which forms the whole developmental system. Please see Figure 2.

Figure 2

Fused Bidirectional Relations within the RDS Metatheory



The framework is relevant to our study in two important ways. Firstly, it explains why a traumatic experience emanating from a child's context would significantly impact their subsequent and entire developmental trajectory, in particular as it pertains to the self-perception and character formation over time. Secondly, the metatheory's firm disfavor of the reductionist or "split" approach to explaining development with models such as the Five Factor Theory championed by McCrae and colleagues (1992) that state that certain virtues such as the five big traits (conscientiousness, agreeableness,

neuroticism, openness to experience, and extraversion) are fixed, and biologically inherent, promotes the view that personality traits and self-view are fluid processes. This departure from the “split” approach (Overton, 2011), further draws light on a contemporary model that perceives character as a developmental system (not static virtues), which emerges from an interrelation between competing structures within the individual and the ecology of his or her context (Nucci, 2018).

The Character Self-Systems Framework

Nucci (2017, 2018) developed the Character Self-systems model on the premise that character comprised of two components, namely the self-system and the character system. The self-system is perceived as consisting of moral agency and moral identity, while the character system, which is located in the larger self-system, is composed of four sections. These are moral cognition, other-regarding social-emotional capacities, self-regarding social-emotional capacities, and moral critical engagement (Nucci, 2018).

Please see Figure 3.

Figure 3:

The Relationship between the Character System and the Self System (Nucci, 2018)

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The character system is perceived as being active and constantly altering itself to accommodate social and emotional experiences. It is believed to maintain a dynamic association with one’s context and generates decisions and actions that align within the system but may vary in different contexts (Nucci, 2018). This character system is proposed to maintain consistent interactions with the self-system, Cothat help to sustain a harmonious relationship between the two. The theory posits that the dual coactional

interaction between the character system and the self- system, is what generates growth in character, personality, and sense of self (Nucci, 2017, 2018).

The theory clearly showcases the significant role context plays in the development of character and the self-system, which encompasses self-perception (Nucci, 2018). Early life trauma inadvertently impacts the growing infant, child, or adolescent victim's context, with significant empirical evidence affirming some of the noxious internal and external (environmental) consequences (Chainey et al., 2021; Criddle et al., 2022; Hawkins et al., 2021). The character self-system model therefore explains the plausibility of the relationships between difficult early life experiences and eventual character outcomes and respective self-views of victims and validates the need to explore these relationships further. The present study sets out to ascertain the nature and dimensions of these relationships, if they indeed exist.

A Synergy of the ACE Model, RDS and Character Self-System Framework.

The ACE model clearly depicts and explains why trauma in childhood can have a significant impact on adolescence and adulthood outcomes of victims. It not only discusses the environmental consequences, but it also draws attention to the neurological implications of early life trauma, highlighting of such anguish on the prefrontal lobe of the brain, typically known to be responsible for executive function among other operations. In so doing, the ACE model aligns with the RDS metatheory in emphasizing the integrations and coactions between the internal mechanisms, such as genes and brain development, and the different layers of the external environment, or the individual's context. The RDS metatheory appears to go a step further to provide details on how the integration occurs. It emphasizes the fact that the association between the environment

and a person's inherent mechanisms is not an interaction but an integration, which implies the components merge as a whole, not as distinct entities. The RDS metatheory underscores the constant coactions between the various levels of internal and external structures, which alter the original structures, and give way to the emergence of the new development (Lerner, 2018; Overton, 2011).

It is against this backdrop that the character self-model evolves. Nucci (2017, 2018) draws heavily on the RDS metatheory, noting "this definition of character conforms to the relational system meta model" (Nucci, 2018, p. 74). According to him, character should be viewed in terms of coherence, rather than consistency and static traits across contexts (Nucci, 2018). The character self theory, however, extends beyond the RDS metatheory by taking into account the fact that a person performing as a logical and consistent moral agent within an unjust social environment may conduct themselves in ways that may be socially flawed and defiant, hence his advocacy for fairness and societal transformation as an integral, even if transcendent, character component (Nucci, 2018).

Biblical Perspectives

From a biblical viewpoint, children are perceived as God's creation, made in His own image (Genesis 1:27), which places immense value on each of their lives. Furthermore, Scripture emphasizes God's love for all human beings equally (1John 3:1), although He depicts a special concern for the weak and the vulnerable, such as children (Luke 18:16). Child maltreatment undermines an individual's worth. As image bearers, God has also assigned responsibilities to each of person. Parents are to take care and nurture children and not provoke them (Ephesians 6:4). In a broken world, however,

individual and societal flaws have resulted in horrendous experiences for even the most vulnerable. Nonetheless, the God-given responsibility to guide and protect His creation, to nurture and to save the vulnerable, still holds. This can be achieved in various ways including understanding the tenets and relationships between the inevitable societal ills, and related variables, and the avenues by which to ameliorate or avert their impact; as well as incorporate biblical truths in one's work, in a way that enhances understanding and foster hope. For instance, Scripture affirms that adversity could enhance character, through the endurance brought on by suffering (Romans 5:3-5), which invariably calls for an in-depth understanding of how these constructs and associated relationships occur, and are able to turn adversity into positive outcomes.

Definition of Terms

The following is a list of definitions of terms that are used in this study.

Adverse childhood experience (ACE) is defined as any individual or environmental experience that disrupts a child's sense of safety, stability or bonding, from birth to the age of 17 years. (CDC, 2020; Filletti et al., 1998).

Character is defined as dispositional tendencies that incline an individual to act consistently across situations as moral agents (Nucci, 2018).

Self-perception is defined as cognitive representations of one's self, which are formed over time, and varies in different circumstances (Fiske & Taylor, 2021).

Significance of Study

Avenues to enhance understanding of the complex issue of early life adversity, buffer its impact, and potentially decrease its occurrence, is evidently significant from many angles. The rich in-depth idiographic information combined with the structured

statistically analyzed data garnered from this mixed methods study is likely to offer specific and relevant knowledge on how victims experienced their early life adversity. It would additionally illuminate how these experiences influence their self-view and character development and demonstrate the directions and strengths of these relationships.

Understanding these relationships will not only add immensely to existing literature; it might also provide avenues for enhanced clinical understanding. This would invariably pave the way for targeted interventions that address issues related to self-perception and character in the context of adverse childhood experiences.

Studies on such entrenched and sensitive issues are likely to open up and facilitate dialogue, encouraging victims to speak up and acknowledge their difficult experiences, rather than suppress or dissociate from them, which has been found to often compromise developmental and emotional wellbeing (Talmon & Ginzburg, 2019). Furthermore, an enhanced understanding of the topic is likely to generate more public and governmental attention to the issue, thereby promoting relevant policy and funding decisions.

Summary

To sum up, this chapter introduced the tenets of the study. It provided a brief history to adverse childhood experiences (ACEs), drawing attention to its permeating prevalence and debilitating consequences, while pointing out established positive outcomes in certain circumstances. It provided a background to the constructs and why a relationship between childhood adversity, self-perception, and character development is conceivable, and merits considerable understanding. Scriptural insights including how the Bible perceives child rearing, early life adversity, suffering, and character formation,

were explored to provide an appropriate biblical grounding for the study

The chapter outlined the purpose of the study, which is to examine the relationship between ACEs, self-perception, and character development. It delineated the research questions and associated hypotheses. The Chapter discussed the three theoretical models that underpin the investigation, including the ACE model, the Relational Developmental Systems (RDS) metatheory, and the Character Self-Systems framework. It explained the assumptions and limitations of the research and highlighted the relevance of the outcome in providing further understanding of the optics of ACEs, as it illuminated effective clinical pathways for successful interventions.

CHAPTER 2: LITERATURE REVIEW

Overview

In this chapter I review and discuss research work and respective empirical outcomes pertaining to the impact of adverse childhood experiences or ACES and how they could potentially influence self- perception and character development. It will delve into what is known and has been established over time, to create the foundation on which the study could be anchored. It would thereby highlight the rationale for study and clarify why such an investigation is warranted.

It will begin with a discussion of the search strategies, databases, and terms used to obtain the research studies and pertinent knowledge acquired on the topic, including the relevant biblical foundations. To this end, limitations and exclusionary measures will be put in place to optimize the literary outcomes would be explored. This will be followed by a comprehensive scientific analysis of the constructs and proposed relationships, and the gaps that will be addressed by the current study. These will be further examined from a biblical point of view to highlight any biblical basis of the study. The chapter will conclude with a summary that paves the way and elucidates the need for the investigation.

Description of Search Strategy

There were multiple search protocols adopted for this literary research. The process began with identifying the time frame for inclusive studies that would best serve the purpose of the review. I focused on recent studies/articles completed within the last five years, except for groundbreaking studies that explain or highlight key aspects of the research topic and questions. I used well-known databases such as PsycINFO, ProQuest

and Credo, through the Liberty University library. I utilized Google Scholar on numerous occasions; and for biblical research, I accessed the Biblical Archeological Society Online Archive through the BAS Library. Furthermore, I employed online bible databases such as BibleGateway.com and OpenBible Info.

Search terms included “childhood adversity,” “childhood maltreatment,” “early life trauma,” “adverse childhood experiences,” “trauma and self-perception,” “ACE,” “character development,” “trauma and character formation,” and “protective factors of childhood adversity.” There were abundant research articles on the negative impact of childhood adversity but very scanty empirical work on the direct relationship between these outcomes and one’s self perception and character development.

Besides the peer-reviewed research articles, a few textbooks on self-perception and social cognition (Fiske & Taylor, 2021), theories of human development (Lerner, 2018), and posttraumatic success (Bannink, 2014), served as good sources of relevant literature. Moreover, grey literature including dissertations on related topics (Cortright, 2020; Hudani, 2021), shed perspectives on the literary arguments. The results from the various databases and other sources were collated in a spreadsheet format to facilitate screening and evaluation.

Review of Literature

The plight of maltreated children has historically concerned scientists and scholars over the years. Saint Augustine in his *Confessions* in the early 19th Century lamented over the trauma children endure (Stortz, 2004). A significant amount of scholarship and scientific work at this time, particularly within Western Europe and the United States, is believed to have focused on infancy (Lerner, 2018), culminating in the

creation of the Society for Research and Child Development (SRCD) in 1933 (Lerner, 2018). Subsequent research work on relevant topics such as attachment (Bowlby, 1944), shed light on the impact of early life relationships and adulthood outcomes. The work of Erik Erikson and his theory of psychosocial development illuminated the significance of early life environment or the context in which a child is raised, and their impact on the child's growth and subsequent developmental trajectories (Erikson, 1959; Lerner, 2018).

Other scholarly work including research on the impact of stress, poverty, and other social ills on childhood development (Aber et al., 1989; Burgess, 1952; Gil, 1975; Sinha, 1976; Suffridge, 1991; Watson, 1968), further drew attention to the permeating effects of early life misfortunes. Nonetheless, the recent expansive work on childhood adversity that has continued to gain momentum, was propelled by an experiment conducted by V. J. Felitti and his colleagues in 1998, that linked early life trauma with the leading causes of death in adulthood.

The Emergence of Adverse Childhood Experiences – The Felitti Study.

Often described as the “ACEs study,” the ground-breaking research conducted by Vincent Felitti and his colleagues (1998) set out to examine the relationship between health risk behavior and disease to the exposure to emotional, physical, or sexual abuse and household dysfunction. It found a strong relationship between the extent of abuse or household dysfunction in childhood, and numerous risk factors for several of the leading causes of death in adults. The study was the first to use the term adverse childhood experience (ACE) and also developed the ACE score as well as the ACE questionnaire. The study found correlations between ACE and lung cancer, risk of suicide, depressive disorders, ischemic heart disease among other serious health disorders (Kelly-Irving &

Delpierre, 2019). The underlying proposition of the study was that stressful or traumatic childhood experiences have negative neurodevelopmental effects that linger over the life course and heighten the risk of various health and social problems, resulting invariably to early death (Felitti et al., 1998). This thesis is what culminated into the famed ACE framework, which is one of the three theories that underpin the present study. The model among other assumptions, posits that traumatic events experienced in childhood or early life result in health disruptions, including mental and physical disorders at the time of incidence in childhood, which persist throughout the lifespan.

In their study, Felitti and colleagues (1998) identified 10 adversities, namely physical abuse, sexual abuse, emotional abuse, emotional neglect, divorce, substance abuse within the household, violence against mother, mental health issues within the household, and criminal behavior within the household. These were clustered under two major categories of abuse and household dysfunction. Despite its ground-breaking impact, the ACE study has been criticized on many grounds, including the restriction of childhood trauma to only 10 adversities to the exclusion of other known early life misfortunes such as poverty and low socio-economic status (Kelly-Irving & Delpierre, 2019), racial discrimination (Bernard et al., 2020), early life migration (Mancini, 2020) among others. Other criticisms leveled against the study is the use of retrospective data, which is usually vulnerable to recall bias. The popular ACE questionnaire has been found by some to be stigmatizing and not a comprehensive diagnostic tool (Kelly-Irving & Delpierre, 2019).

That notwithstanding, the ACE study paved the way for tremendous empirical interest in the complex, often debilitating and enduring effects of childhood adversities. It

is estimated that the number of articles that had “Adverse Childhood Experiences” in their title expanded from one in 1985 to two hundred publications in 2018 (Kelly-Irving & Delpierre, 2019). A recent study by Shannon Struck and colleagues (2021), that examined the relative health of research within the ACE field, by analyzing publications and features of peer-reviewed research on the topic, uncovered among other findings that there were 789 articles between 1998 and 2018 (Struck et al., 2021).

Beyond Felitti

A significant amount of the abundant literature that emerged after Felitti and colleagues (1998) supported the findings of the study (Chainey & Burke, 2021; Hawkins et al., 2021; Hughes et al., 2017; Pilkington et al., 2020 among numerous others), while a few refuted some of its claims or questioned the seemingly universal application of the findings (Bernard et al., 2021; Kelly-Irving & Delpierre, 2019). Donte Bernard and colleagues (2021) indicated the seminal study did not incorporate cultural differences, more specifically the unique burden of racial disparities and racism faced by Black children and youth (Bernard et al., 2021), which in their view may explain the relatively higher levels of depression, anxiety, posttraumatic stress symptoms, in addition to increased tobacco, alcohol, and marijuana use among the Black population. The authors went on to develop a culturally informed ACE’s model (C-ACE), which focuses on the permeating impact of racism, that is presented in the model as a sociocultural factor, with historical groundings that influence the differences in the experience of ACEs and the ensuing stress-related psycho-emotional outcomes within the Black population (Bernard et al., 2021). Nevertheless, the ACE framework, as postulated by Felitti and colleagues

(1998) in their study, was evidently the integral foundation for this culturally-based offshoot.

Neural and Cognitive Responses ACEs

One of the most significant arguments used to explain the correlations between ACEs and the debilitating outcomes on adulthood, particularly in the ACE study, is based on the biology of stress (Kelly-Irving & Delpierre, 2019). This stipulates among other assertions that exposure to ACEs stimulates physiological stress responses which, when activated over a long period of time, can jeopardize human biological processes including neurological, immune, and hormonal functioning (Bernard et al., 2021; Kelly-Irving & Delpierre, 2019). Heightened stress is known to change neuroendocrine hormones and reduce the regulation of cellular immune response through glucocorticoid and adrenergic signaling pathways (Lupien, 2018). This is believed to result in altered biological responses, which, occurring at a sensitive developmental stage such as childhood, would not only be even more debilitating, but could also extend over the entire life course (Kelly-Irving & Delpierre, 2019; Lupien, 2018).

In their article on the effects of chronic stress on the brain, Lupien and colleagues (2018) argued that exposure to stress is linked with reduction of the hippocampus and modulation, and chronic stress could result in the modulation of the amygdala and the frontal cortex. Since ACEs and other familial stressors are known to increase vulnerability to stress in adulthood (Rodriguez, 2021), it would be reasonable to suggest a significant impact of early life adversity on the brain anatomy and function of adult victims. Moreover, research has established an association between exposure and direct encounters of ACE with disruptions in neurodevelopment, particularly in hippocampus,

amygdala, and the pre-frontal cortex, three areas known for emotional regulation and memory processing (Lupien, 2018; Moog, 2018).

Moog and colleagues (2018) found a difference in the brain structure of infants of mothers who had a history of ACEs, which the authors explained, had resulted from the stress-related biological changes within the maternal ACE victims, that had gone through an intra-uterine transfer to their unborn infants (Moog et al., 2018). This was a longitudinal study, which employed a clinical convenience sample of 80 mothers, and their new-born infants. Thirty-five percent of the mothers were found to have experienced one or more childhood adversities. The structural magnetic resonance imaging used on the new-born infants, revealed a marked variation in the brain structure of the infants of mothers with a history of childhood adversity versus mothers who had not experienced early life adversity. Infants of mothers with ACEs were found to have a lower intracranial volume as compared to infants of mothers who had not been exposed to ACEs. The study was significant in many ways, two of which were, firstly, an acknowledgement of the intrauterine transfers of the effects of maternal early life experiences, and secondly, it highlighted the cross-generational influences of childhood adversity.

A systematic review study conducted by Rodriguez and colleagues (2021) that analyzed 122 studies, had examined the relationship between exposure to adverse childhood experiences and changes in brain structure and function, through neuro-imaging. It found notable changes in the structure, connectivity, and function of 21 cortical and subcortical areas, but more significantly, the prefrontal cortex, the amygdala, the hippocampus, anterior cingulate cortex, and the striatum. In their discussion,

Rodriguez and team (2021) suggested that in order to aptly understand how ACEs alter neuro-behavioral systems, it was important to consider genetic variations, environmental conditions, as well as epigenetic moderations. The authors concluded that persons exposed to early life adversity exhibit an impairment of neural networks, associated with perceptual, affective, social, and executive processing.

A recent study by Rebecca Trossman and her team (2021) set out to examine links between executive function and adverse childhood experiences and found that executive dysfunction mediated the correlation between childhood adversity and mental health issues. The authors utilized an undergraduate sample and community sample in two studies. The results did not, however, find executive function mediating the relationship between childhood adversity and health risk behaviors in the undergraduate sample.

The impact of ACEs on more global cognitive functioning was examined by Hawkins and her colleagues (2021) in their five-wave longitudinal study that set out to determine if deprivation form of ACEs (e.g., neglect) and threat forms of ACEs (such as physical or sexual abuse) as well as cumulative ACEs, were associated with poorer overall cognition function. ACEs were assessed at the third wave of the study, using a six-point scale that ranged from “this has never happened” (0) to “it has happened 10 or more times” (5). There were three indicators of cognition, which were short term memory, long term memory, and working memory. These were assessed with the Rey Auditory-Verbal Test (RAVLT) at the fourth and fifth waves of the study.

Hawkins and team (2021) found, among other outcomes, that neglect forms of ACE predicted lower number recall (short term memory), immediate recall (short term memory), and delayed word recall (long term memory). Sexual abuse was associated

with lower immediate recall (short term memory) and lower delayed word recall (long term memory). A higher number of cumulative ACEs was found to correlate with lower delayed recall (long-term memory) scores. Interestingly, the authors also discovered that males had lower short term and long term memory scores at ages 24 to 32 (the fourth wave), and individuals with clinically relevant depression were also found to have lower short term memory scores (Hawkins et al., 2021).

In a similar vein, Baiden and colleagues (2022) investigated the relationship between adverse childhood experiences and subjective decline in adulthood. This was a cross-sectional study that utilized a community sample of 50,277 adults between the ages of 45 and 79 years, in 15 states of the United States. The results indicated that 10.3% of the participants reported subjective decline within the past year of the study, and 14.5% had endured four or more childhood adverse experiences. The study affirmed a dose-response association between adverse childhood experiences and subjective decline. It revealed that participants who endured four or more adverse childhood experiences had higher (2.98 times) odds of having subjective cognitive decline, when compared with participants who had not experienced ACEs (Baiden et al., 2022).

ACEs on Mood Disorders and Mental Health Impairment

One of the most noted and acknowledged impact of ACEs is their effect on victims' mental health, at the time of incidence in childhood (Oeri & Roebbers, 2022), in adolescence (Nicol et al., 2020), and in adulthood (Pilkington & Younan, 2020; Simpson et al., 2020). A systematic meta-analysis by Pilkington and colleagues (2020) found a significant association between early maladaptive issues in adulthood, and childhood adversity. Out of the 124 meta-analyses conducted, 65 showed small to large significant

correlation between emotional neglect and early adaptive schemas; small to moderate correlations with emotional abuse and maladaptive schemas; and small correlations between maladaptive schemas and physical neglect, physical abuse, and sexual abuse. More specifically, a large correlation was found between maternal emotional neglect and emotional deprivation; a medium correlation with social isolation; and a small correlation with mistrust, abuse, and insufficient self-control. Paternal emotional neglect demonstrated a medium correlation with insufficient self-control. General emotional neglect from a parent or caregiver depicted medium correlations with emotional deprivation and mistrust and small correlations with social isolation, shame, and emotional inhibition (Pilkington et al., 2020).

Generally defined as patterns of impaired cognitions, emotions, memories, and bodily sensations, formed in childhood or adolescence, that permeate the life course (Pilkington et al., 2020), early maladaptive schemas have been attributed to several psychological impairments including depression, personality disorders, and attachment issues (Nicol et al., 2020; Pilkington et al., 2020). Pilkington and colleagues (2020) concluded that childhood adversity does predict cognitive distortions linked with low self-esteem, emotion regulation issues, diminished sense of autonomy, and interpersonal issues. In spite of the important findings, the systemic review may have omitted relevant studies that were not conducted in English, as the researchers were all monolingual. Moreover, as acknowledged by the authors, they did not conduct subgroup or meta-regression analyses, which could have illuminated mediating and moderating factors within the associations found (Pilkington et al., 2020).

Depression is known to be one of the most common mental health disorders and has been found to affect approximately 5% of adults globally (WHO, 2023). In the United States, it is believed about 21% of the adult population will develop depression in their lifetime (Hasin et al., 2018). Ample studies have established strong links between depression as well as other mood disorders, and childhood adversity (Hughes et al., 2019; Kim et al., 2021). Literature suggests that 40% of depression cases and 30% of anxiety cases in North America could be linked to adverse childhood experiences (Bernard et al., 2021).

A study by Youngmi Kim and colleagues (2021), that examined the relationship between ACEs and depression, clustered childhood adversities into four classes, namely: high adversity (high global experiences of abuse), low adversity (low levels of experience), child abuse (physical and emotionally abuse primarily observed), and parental substance use. The objective was to find out if and how depression mediates the prevalence of substance use among adult victims of ACEs. Utilizing latent class analyses, the authors found that victims within the high adversity class and the child abuse class were most likely to experience major depressive disorder in comparison to the low adversity class. The study, however, did not find depression as a mediating factor in the relationship between ACEs and substance use disorder in adulthood (Kim et al., 2021).

Childhood adversity is also believed to predispose victims to heightened anxiety and panic disorders (Binensztok, 2023; Kascacova et al., 2020). This is often premised on the notion that victims of ACE typically grow up in unstable, unpredictable environments, which leads them to question their surroundings and their safety, including whether they will be protected or not, whether their parents are under the influence, and

whether they would have access to food. They consequently grow up into adults who are ambivalent about their environment, frequently assessing it, uncertain about expectations and peoples' responses to danger (Kascacova, 2020). Moreover, there is evidence that changes in the brain and nervous system brought on by early life trauma result in hypervigilance of physical sensations, often which are associated with anxiety. Changes in the amygdala, which is known for responding to threats, among other activities, has been found to lead to adult ACE victims being more prone to detecting danger or threats that are not present (Binensztok, 2023).

A study by Kascakova and colleagues (2020) that utilized a representative sample of young adults in the Czeck Republic, as well as a clinical sample, found that emotional abuse, comprising emotional neglect and physical neglect, was strongly associated with anxiety in both the community and clinical samples. Similarly, a recent study that examined the associations among adverse childhood experiences, generalized anxiety, and social capital in rural Kenya (N = 400 women) found that cumulative ACEs predicted higher anxiety (Goodman et al., 2022). This relationship was statistically moderated by group-inspired interpersonal trust. It is worth noting, however, that since the participants were all female, the generalizability of the study may have been compromised. Nonetheless, the findings of the study support the established link between early life adversity and adulthood anxiety.

What is striking about the association between childhood adversity and mood disorders is the latter's capacity to alter one's self view, which may shape one's personality over time. Negative self-perception is believed to be one of the most prevalent symptoms of depression and other mood disorders, often found to strongly

correlate with the severity of the presenting symptoms (Gök & Yalçinkaya-Alkar, 2023; Orchard et al., 2021). In their scoping review that examined both qualitative and quantitative studies on self-evaluation, as an attribute of adolescent depression, Orchard and team (2021) found that young people viewed themselves more negatively and less positively when depressed. Moreover, the authors uncovered that the relationship between self-evaluation and depression was bidirectional (Orchard et al., 2021). In spite of these well-established negative consequences of childhood adversity, what compounds the complexity of the aftermath of ACEs, is the evidence of positive outcomes in certain circumstances.

Post Traumatic Growth

Ample research has uncovered instances where victims of ACEs have not encountered any negative outcomes at all, with some individuals even experiencing enhanced psychological functioning as a result of their early life trauma (Bannink, 2014; Hambrick et al., 2019; Tranter et al., 2021). Recent literature has drawn light on factors that may mitigate the harmful effects of ACE such as level of resilience; while some studies have drawn on the concept of “thriving,” often described as the ability to extend beyond one’s previous psychosocial functioning that results in growth such as physical and mental vigor and even blossoming in some cases (Bannink, 2014).

According to Charles Carver’s (1998) model on resilience and thriving, there are four levels of functioning after the experience of a negative event. These include submitting, surviving with a declined capacity to function (partial recovery), recovering to previous level of functioning, or recovering to a higher level of functioning (growth; Carver, 1998). In a study on event centrality and resilience within the context of

childhood adversity, Tranter and colleagues (2021) found that resilience and event centrality resulted in posttraumatic growth (PTG), which is defined as positive changes that arise from difficult life stressors. The study utilized a sample of 167 participants between the ages of 19 and 95 years, who completed online questionnaires. The results revealed, among other findings, that higher ACE scores significantly associated with posttraumatic stress. There was a significant positive association between emotional resilience, event centrality, posttraumatic stress, and posttraumatic growth. Mediation analysis, nonetheless, revealed a significant effect of ACEs on posttraumatic stress indicators, even as outcomes identified resiliency and event centrality as buffers of the negative effects of ACEs. The authors noted that “resilience was positively correlated with PTG, indicating that individuals with higher emotional resilience, may also report more PTG” (Tranter et al., 2021, p. 168).

Some researchers have attributed the environment (low versus high risk, poverty, immigration status and/or institutionalized care) as contributing to the type, intensity, and the impact of ACEs (Frimpong-Manso & Bugyei, 2019; Manhica et al., 2020; Meroc et al., 2019). A recent study on resilience and posttraumatic growth among children who have been exposed to terror attacks (Zeider & Kamplar, 2021) found that those residing in high risk areas reported a higher exposure to more intense trauma, as compared to those in low risk regions.

A qualitative study by McGee and colleagues (2020) explored factors that engender resilience among older adult victims of childhood, institutional adversity. Participants comprised 50 years or older Irish adults, who were institutionalized in their childhood. The authors conducted 17 interviews, the outcome of which was clustered into

three broad themes (features of childhood adversities, later life adversities and elements related to resilience), and 15 sub-themes (three related to childhood adversity, three with later life adversity, and nine with resilience). Outcomes revealed, among other findings, that various avenues for dealing with adversity were strongly linked with resilience, and these mechanisms in turn, contributed to the development of enduring resilience.

Religion has been found to also influence the effects of childhood adversity (Henderson, 2016; Jung, 2017). In a study that explored how religious practices mitigate the negative effects of ACEs, Jung (2017) employed a longitudinal investigation in five waves, with a sample of 3,034 participants, obtained from the National Survey of Midlife Development, in the United States (MIDUS). Data for the five waves were collected in 1995, 2004, 2006, 2013, and 2014, respectively. The study revealed, among other findings, that religious salience (the relative significance of religion in one's life), and spirituality (a belief, sense, or feeling of the existence of something greater than one's self), had a buffering impact on the difficult effects of childhood maltreatment.

The established longevity and pervasive nature of the effects of ACEs might lead one to assume a predictable influence on one's self perception and personality development. However, empirical evidence and practical knowledge of the complex nature of human development, as well as the discussed varied nature of outcomes, thwart such presumptions (Bowlby, 1948; Lerner, 2020). As noted earlier, the impact and experience of ACEs may vary by victim and context. Moreover, a person's self-view is known to involve a complex myriad of factors and mechanisms (Fiske & Taylor, 2021; Nucci, 2018), even as they are invariably influenced by previous life experiences.

Self-perception and ACE

Self-perception generally comprises complex cognitive representations of the self that vary in different circumstances (Fiske & Taylor, 2021). It is the second major variable of the study and may be characterized as the view people have about themselves, and the judgments they ascribe to those beliefs. Self-perception therefore encompasses self-concept (the image about one's self) and self-esteem (the judgment exacted on the perceived image). Individuals are known to intrinsically understand what their construct of themselves is (Fiske & Taylor, 2021). Nonetheless, the self-perception theory (SPT), developed by Daryl Bem (1972), posits among other assumptions that people develop attitudes and beliefs of themselves based on their behavior, particularly when there is lack of experience and/or when the emotional response involved is ambiguous. According to the theory, people may create attitudes through their behaviors without necessarily leaning on internal cognition or their emotional states (Bem, 1972). For instance, one may conclude they like soccer because of the realization that it is the sport one tends to watch. The theory has been criticized over the years for several reasons, including being “anti-introspectionistic” (Dico, 2018, p. 1), and also due to the more contemporary belief that cognition plays a significant role in attitude formation and, in many instances, influences behavior (Dico, 2018).

Nevertheless, empirical evidence has linked early life adversity to notions of self-view. In their study to examine the role of self-perception in connection with childhood adversity and romantic relationships in adolescence and early adulthood, Julie Cederbaum and colleagues (2020) asserted that adverse childhood events could disrupt the development of the self, which then influences the ability to form positive enduring relationships. This was a longitudinal study that utilized a large sample of youth from

active child welfare protective agencies cases as well as a comparison group (n = 306). Self-perception was measured in four domains, which were scholastic competence, social competence, behavioral conduct, and close friends. The findings revealed a significant association between adverse childhood experience and low self-perception in all domains (Cederbaum et al., 2020). Despite the laudable findings, there were a few limitations that may have compromised these outcomes. They included the lack of stated safeguards to avoid or minimize internal validity threats, the use of a self-created questionnaire to measure a key study variable (romantic relationships), and the employment of a clinical sample, which as the researchers noted, introduced factors such as the impact of the child welfare system that may have influenced the associations.

Shattnawi and colleagues (2022) examined the prevalence of adverse childhood experiences and their relationship with self-esteem (one of the components of self-perception) among school age children in Jordan. Utilizing a sample of 559 secondary school students, the study found among other results, that self-esteem scores were lower for students who reported physical abuse, household violence, emotional neglect, physical neglect, and bullying (Shattnawi et al., 2022). Similarly, Wu and team (2022) examined specific ACEs (physical abuse, physical neglect, emotional abuse, emotional neglect, and sexual abuse) and their impact on self-related resources such as self-esteem and self-compassion among Chinese youth, drawing on the stress process model. The authors found that psychological maltreatment was negatively associated with self-esteem and self-compassion. Wu and colleagues (2022) also uncovered that psychological maltreatment correlated negatively with life satisfaction, through self-esteem, and through the pathway from self-esteem to self-compassion.

A study by Henderson (2016) explored the links between childhood adversity, self-perception, and religion, among black Americans. This was a cross-sectional correlational study that utilized a sample of 5,191 black Americans, attained from the National Survey of American Life (NSAL). Self-perception was assessed on two components, namely, self-esteem, and personal mastery, while religion was categorized into organizational, non-organizational, and childhood religious socialization. The results supported the view that the impact of childhood adversity on self-perception can be moderated by religious involvement. Interestingly, the authors also found that childhood religious socialization could aggravate the harmful influence of childhood health, and economic adversity, on self-esteem, and personal mastery. The explanation given for this somewhat unexpected outcome was that people raised in religious households, who encounter difficulties in early life, can become disenchanted with and by religion. Nonetheless, the study affirmed that the harmful effects of health-related childhood adversity on self-esteem and self-mastery diminishes, as levels of religious involvement or religious coping increases among black Americans (Henderson, 2016).

Similarly, Cohrdes and Mauz (2020) explored the direct and indirect impact of childhood adversity on young adults' health-related quality of life (HRQoL), using a sample of 3,704 young adults in Berlin, Germany. Within the sample, 32.3% had experienced more than one ACEs, and 9.6% more than three ACEs. The authors employed the structural equation model for data analysis. They found, among other outcomes, that the damaging effects of ACEs on HRQoL were mitigated by protective factors, such as self-efficacy (the belief in one's capacity to engage in behaviors to attain desired outcomes), social support, and emotional stability.

In a more recent study, Vartanian, Nicholls, and Fardouly (2023) tested the identity disruption model that stipulates that early childhood adversity is associated with lower self-concept clarity, which is defined as the extent to which contents of an individual's self-concept is clearly defined, consistent, and stable (Vartanian et al., 2023). The authors conducted two studies, utilizing a sample of adolescents recruited through social media and from high schools. Findings depicted a significant association between self-reported early life maltreatment and lower self-concept clarity, while lower self-concept clarity was found to be associated with higher levels of internalization of appearance ideals and enhanced appearance comparisons.

Significant research has also linked self-perception to character development (Cederbaum et al., 2020; Ellemers et al., 2019; Lapsley et al., 2020). Moreover, there have been established links between early life adversity and some specific traits that have been found to generally influence character formation, which include enduring self-blame (Okur et al., 2019), self-disgust (Simpson et al., 2020), and narcissism (Talmon & Ginzburg, 2019), among several others.

Character Development and ACEs

As the third key variable of the study, character has been known to play a significant role, as a personal resource, that contributes to meaningful, fulfilling lives, and invariably leads to improved wellbeing and happiness (Seijts et al., 2022). The word character stems from the Greek word “charassein,” from which the noun, “kharaktēr,” which means “mark,” “distinct quality,” was derived, and subsequently developed into meanings such as “token,” “feature,” and “trait,” in the early 16th century (Merriam-Webster, 2002). Character has traditionally been viewed in terms of specific virtues that

together contribute to the optimal human behavior and social improvement it is associated with. In their well-known book, *Character Strengths and Virtues: A handbook and Classification*, Christopher Peterson and Martin Seligman (2004) identified 24 character strengths, which they categorized into six virtues, namely courage, humanity, justice, temperance, transcendence, and wisdom. The character strengths, the authors argued, served as pathways to attaining the distinguished virtues (Peterson & Seligman, 2004). Character strengths have been found to emerge through habitual actions that can be attained or developed; and stimulating these strengths (traits) through the consistent actions, is believed to lead to contented life (Seijts et al., 2022).

Contemporary literature has however begun to depart from this virtue-related view of character, to a more systemic, fluid perspective (Nucci, 2018). This change in the conceptualization of character is believed to have resulted from the inconsistencies in the identified virtues across cultures and over historical timeframes. Additionally, researchers have drawn light on the varied ways virtues are attained and applied in different contexts, and affirm that moral actions are more driven by judgments made within particular contexts, rather than a person's fixed abstract traits (Nucci, 2018; Seijts et al., 2022).

Character within this framework may be defined as the cluster of abilities and traits that enable a person to act as a moral agent (Nucci, 2018). Moral agency is known to emerge in childhood and comprise reflections of positive as well as negative self-actions and experiences from others (Nguyen & Crossan, 2021), thereby highlighting how negative experiences in childhood, usually inflicted by others, could influence one's character development over time.

In his character system model, one of the theoretical frameworks underlying the present study, Larry Nucci (2018) posited that character emerges from the self-system and the character system. According to the theory, the character system is found within the bigger self-system, and engages in a two-way mutual interaction, that results in character growth (Nucci, 2018). The character system is believed to have four components, which are basic cognition, other-regarding social-emotional capacities such as empathy and perspective-taking, self-regarding competencies including executive control and self-regulation of emotions and desires, and lastly, the dialogue and communication abilities necessary for moral change at the social level. The self-system, according to Nucci (2018), encompasses one's overall sense of agency and unique personal identity.

Baehr (2017) identified four features of personal character, namely moral (virtues inclined to wellbeing), civic (interests pertaining to community), intellectual (virtues that advance knowledge), and performance (virtues such as tenacity, grit, and patience). A few factors that have been found to influence character development in the literature have included mutual responsive orientation (shared cooperation and positive emotions between a child and mother); (Ramos et al., 2019), moral self-identity (Nucci, 2018), and character role models (Hundani, 2021). Undoubtedly, all of these factors could be altered or disrupted by early life trauma.

A review study by Rowell and Neal-Barnett (2021) examined the relationships between parental ACEs, parental emotional availability and discipline strategies, and children's psychopathology. It utilized the Preferred Reporting Items Systemic Reviews and Meta-Analysis (PRISMA) guidelines, and drew on the attachment theory, to review

26 studies on the subject. The results indicated a direct association between ACEs and parental emotional availability and discipline techniques. Depression and dissociation, which are established effects of ACEs in adulthood, were found to be potential mediators to this correlation. There was support for the direct association between parental ACEs, and children's internalizing and externalizing difficulties. Maternal anxiety, depressive symptoms, emotional availability, and children's difficult experiences were identified as possible mediating factors.

Drawing on Nucci's (2018) character self-model, which emphasizes the interaction between the environment and the active character system that constantly adjusts itself to social and environmental responses, it is reasonable to suggest a possible relationship between maternal disposition and parenting, and the character outcome of their offspring. The association between ACEs and character development, in this case, however, is intergenerational. The effects of the parent's ACEs, adversely impacts the child's environment, which in turn, influences the child's character formation.

In a similar vein, a study by Waikamp and colleagues (2021) examined the relationships among different types of childhood adversities, parental care and defensive styles, and the development of psychiatric symptoms. It employed a sample of 197 patients, between the ages of 18 to 67 years, who had sought treatment at an analytical psychotherapy clinic, between April 2015 and October 2016. Ninety-five percent of the participants were found to have experienced a traumatic event in their childhood. Findings revealed a positive correlation between most childhood adversities (including emotional and physical abuse, emotional neglect, and physical neglect), and a considerable number of the psychiatric symptoms of the patients (participants).

Undoubtedly, disruptions in a child's primary relationship, in addition to the experience of maltreatment, during that vulnerable developmental period, is bound to influence the personality and character that ensues. The Relational Developmental System (RDS) metatheories stipulates that development and growth emerges from the coactions of genetics, biological processes, and the environment (Lerner, 2018). This implies that what pertains in the child's environment will naturally be interwoven in the character, and other facets of his or her development.

A study conducted by Talman and Ginzburg (2019) found an association between ACEs and a narcissistic personality. The authors utilized a sample of 766 university students recruited from the internet who had experienced childhood maltreatment. They hypothesized that childhood maltreatment would be positively associated with narcissism. Their second hypothesis was that self-objectification would mediate the relationship between childhood maltreatment and narcissism. A third hypothesis asserted that dissociation would moderate the relationship between self-objectification and narcissism. Narcissism was categorized into two types, namely grandiose and vulnerable narcissism. Among other methods of analysis, the authors employed Spearman correlations to evaluate relationships between the variables, bootstrapping to measure mediation and moderating effects, and regressive analysis to examine grandiose versus vulnerable narcissism. The study revealed an association between self-objectification and both types of narcissism, which was found to be stronger among individuals with low levels of dissociation than those with high levels of dissociation. There was a positive correlation found between grandiose narcissism and vulnerable narcissism. The authors therefore affirmed a significant relationship between both grandiose narcissism and

vulnerable narcissism, and childhood adversity, through the mediation of self-objectification.

Criddle and Malm (2022) found a significant association between ACEs and self-concealment in social interactions, in a study to examine the relationships between childhood adversity, and personality outcomes in adulthood. The authors hypothesized that self-concealment and self-disclosure mediate the association between childhood adversity, and relationship closeness. They anticipated ACEs will correlate negatively with self-disclosure, and positively with self-concealment. Two samples were originally attained for the study. One comprised undergraduate students from a mid-western university in the United States, and the other was recruited from social media. The latter sample was eventually excluded however, due to the relatively small size, and inconsistencies in its demographic details. Participants ($n=203$) completed self-report questionnaires online, and data analysis methods included Pearson correlation, parallel mediation, and simple mediation procedures. Findings supported the study hypotheses. ACEs were positively correlated with self-concealment but not self-disclosure. It was also found that self-concealment mediated the relationship between ACEs and relationship closeness, as well as the relationship between ACEs and the fear of intimacy.

Lapsley and colleagues (2020) argue that moral development forms the basis of an individual's development and begins during the first months of life. According to the authors, early brain development lays the foundation for moral dispositional inclinations. "With only 25% of the brain developed at birth, caregivers in early life co-constructs with the infant, the brain's emotion structures and circuits" (p. 692). In their article on moral self-identity and character development, Lapsley and team (2020) described character as

an inerascable pattern of consistency and predictability that signifies lasting dispositional tendencies in behavior. Moral character, in their view, is distinguished by the possession of positive traits or virtues, that incline one toward the wellbeing of others, to fairness, justice, and/or other moral contemplations. These traits are perceived as the character strengths that lead to the moral aspects of a flourishing life (Lapsley et al., 2020).

In a review study to examine articles on the psychology of morality, Ellemers and colleagues (2019) examined publications from 1940 to 2017. Their objective was to ascertain issues that had been well-addressed, and areas that required further empirical work. Their search produced a total of 1,278 articles. The authors utilized content and standardized bibliometric analyses to review the articles, which were clustered into five themes. Their findings revealed that researchers had shown increasing interest in topics of morality, although actual studies on the topic continued to be sparse.

The authors identified “concern for others” as a key indicator of an individual’s moral character. They asserted that persons who were able to combine agency and goal attainment with expressions of social thinking and sharing were perceived as “moral exemplars” (Ellemers et al., 2019, p. 342).

A study by Fang and colleagues (2020) examined the relationships between moral disengagement, callous-unemotional traits, childhood maltreatment, and the role of empathy as a moderating factor. It utilized a sample of 839 Chinese college students, who completed the applicable questionnaires online. Findings depicted a significant positive correlation between moral disengagement and childhood psychological maltreatment. This relationship was partly mediated by callous-unemotional traits. Empathy was found to moderate the relationship between childhood psychological maltreatment and callous-

unemotional traits. The correlation between childhood psychological maltreatment and callous-unemotional traits was significant for participants with limited empathy, but not significant for those with higher levels of empathy (Fang et al., 2020).

An individual's moral character invariably determines how he or she relates to others and society, performs at work, and experiences life as a whole (Lapsley et al., 2020). Accordingly understanding the elements that contribute to its development and sustenance seems imperative. Nonetheless literature on the nature and strength of the relationships between ACEs and overall character building appears to be limited (Chainey & Burke, 2021; Hardy et al., 2017; Lapsley, 2020) and calls for further empirical work. This becomes even more vital, when research has also showcased positive consequences of ACEs, in certain circumstances (Callaghan et al., 2019; Lee & Markey, 2022), as previously discussed. These are outcomes that are incidentally also affirmed within biblical contexts (*ESV*, Romans 5:3-5).

Biblical Foundations of the Study

Throughout the Bible, children are depicted not only as God's images, but as delicate, vulnerable, impressionable, and special creations of God, who should be raised and treated with care, compassion, discipline, and love (Psalm 139: 15-16; John 16:21; Matthew:18:20; *ESV*). In Psalm 103:13, David compares the compassion God has for His people to the compassion a father has toward his child. Psalm 128:3 describes children as freshly planted olive trees around the table of a righteous man. Jesus took a child in the midst of His disciples in Mark 9: 36-37 and stated: "whoever receives one such child in my name receives me, and whoever receives me, receives not me, but him who sent me" (*ESV*).

It is, however, also evident that in spite of how they are portrayed, and the scriptural direction provided on how they should be treated, children face unbearable adversity, which as discussed previously, are often noxious and prevalent, with consequences that endure even across generations. Scripture acknowledges that experiences endured by children are reflected and carried into adulthood. Proverbs 22:6 affirms: “train a child in the way he should go, even when he is old he will not depart from it” (ESV). Similarly, Ephesians 6:1-4 encourages parents to “not provoke your children but train them with discipline and instruction about God” (ESV). Scripture entrusts adults (parents and caregivers) with the responsibility to: “be careful that you do not look down on these little ones. I say to you that their angels in heaven are always looking into the face of their father who is in heaven” (Matthew 18:20, ESV). This further draws light on the vulnerability of children and their particular susceptibility to the ills of a broken world.

Literature has affirmed that in many instances, maltreatment or trauma endured by children is a reflection of the tensions in the world around them (Poljak Lukek et al., 2023). In their paper on physical violence and scapegoating in the family from a biblical standpoint, within contemporary psychology, Paljak Lukek and colleagues (2023), highlighted two fundamental dynamics that perpetuate violence against children in the family. These, they asserted, were when the child is a scapegoat of unresolved conflicts in the family and secondly, when the child becomes “the ‘sacrifice’ or victim of dysregulated emotional responses of his or her parents” (Poljak Lukek et al., p. 1). According to the authors, parents can transfer unfulfilled desires and dreams to children, in which the “sacrifice” of the child, through corporal punishment, can generate a sense

of well-being. When parents and caregivers use physical punishment, they may be well-meaning, and may probably be applying Scripture (Proverbs 13: 24; Psalm 8:2; Proverbs 23:13-14). However, they may also be laying unbearable psycho-emotional burdens of their own choices on the child (Poljak Lukek et al., 2023). Consistent use of physical punishment has been found to lead to problems in the behavioral, emotional, and social development of the child (Stargel et al., 2022). Poljak Lukek and colleagues (2023) asserted further that physical punishment in contemporary parenting is a sacrifice of the child to attain a seeming sense of wellbeing in the family.

Nevertheless, the Bible does depict instances where the affliction of adversity has resulted in positive outcomes. This is showcased in the lives of biblical personalities including Joseph, Job, and Moses. There is therefore a seemingly implied link between early life experiences and adulthood outcomes throughout the Bible, even as these present examples demonstrate post-traumatic growth.

A study by Yamashiro and colleagues (2022) explored how American presidents perceive childhood trauma in relation to religious education. Presidents selected included Franklin Roosevelt, Harry Truman, Dwight Eisenhower, John Kennedy, Richard Nixon, Jimmy Carter, Ronald Reagan, George H. W. Bush, Bill Clinton, George W. Bush, Barrack Obama, and Donald Trump. This was a phenomenological study that used documents from presidential library archives, interviews and drew on the Vygotsky's *Perezhivanie* framework. Among other findings, the study found that childhood trauma heightened directive, dutiful, and daring self-awareness when intersected with religious education that involved Bible teaching by consistent mentors and regular church

attendance (Yamashiro et al., 2022). The authors concluded, among other assertions, that childhood trauma may be an impetus for spiritual, social, and leadership formation.

Pertaining to character development, Rieger (2022) examined the tenets of Christian character development by comparing the works of two well-known Christian authors: Ellen G. White and Rick Warren, and asserted that character from a biblical viewpoint is “honorific” and “desirable” (Reiger, 2022, p. 4). Drawing on Galatians 5:22, 23, Rieger (2022) suggested that the fruits of the spirit were the foundational ingredients of Christian character. He perceived character development as an active, dynamic process that required choice, will, and decision making. According to Rieger (2022), character developed over time, which implies that it could be intersected by other features, whether good or bad, during its evolution. In Matthew 7:17-18, Jesus affirms that a good tree cannot bear bad fruits, neither can a bad tree bear good fruits. When children are raised in difficult circumstances, and when they endure maltreatment and trauma, who they become as adults is bound to be influenced by their difficult earlier life experiences.

Nonetheless, Romans 5: 3-4 (ESV) affirms that one can rejoice in adversity, because suffering generates endurance, and endurance produces character, and character engenders hope, and hope would not put believers to shame, because of God’s outpouring spirit over His people. Evidently the associations between adverse experiences and subsequent outcomes are very complex. Unfortunately, the extant literature therein is sparse.

The present study is intended to shed clearer light on, and improve knowledge of, the associations between these earlier life adversities and adulthood self-perception and character formation in later years, and how these converge with known biblical insights.

It intends to provide a more grounded understanding of this complex social dilemma, from a Christian perspective.

Summary

The chapter explored what is known empirically and biblically about childhood adversity, self-perception, and character development, and how this knowledge relates to possible interrelations between the concepts. It explored the history of the literature on early life maltreatment, particularly with the emergence of the adverse childhood experiences (ACE) construct, introduced by Felitti and colleagues in 1998. This section discussed the prevalence and empirically established relationships between ACEs and negative consequences in medical, mental, and psycho-emotional wellbeing in adulthood, while also drawing light on some established positive outcomes, which further compound the effects of ACEs. It depicted how the negative consequences of ACEs at the vulnerable stage of childhood, interferes with victims' neural, emotional, social, and behavioral development over time, setting the stage for plausible relationships with self-perception and character development in adulthood. The chapter discussed the concepts of self-perception and character development, and how they intersect in the context early life adversity, shedding light on the significant lack of literature on the nature and direction of these possible relationships. The latter part of the chapter explored the biblical insights related to the constructs, and topic in general, that revealed the significance of children and their wellbeing within the Christian doctrine, albeit showcasing the promotion of physical punishment in, which Christian authors have affirmed, result from tensions in the family and the broken world at large. The biblical

perspectives additionally illuminated the attributes of a Christian character, and elaborated on how suffering can enhance character.

Undoubtedly the discussions within the chapter elucidated the complexity of the nature and outcomes of early life suffering, while highlighting the dearth of literature on the topic. Moreover, the scanty existing literature seems mostly garnered from quantitative investigation and some qualitative studies. The present study intends to adopt a mixed methods approach, to attain specific, measurable dimensions of the nature and strength of the proposed relationships, as well as rich subjective narratives on victims' perspectives that would be garnered from the qualitative component.

CHAPTER 3: RESEARCH METHOD

Overview

In brief, this chapter outlines the methods and procedures that were employed throughout the investigation. It will begin with an affirmation of the research questions and the hypotheses associated with the quantitative component of the study. It will describe the design, the recruitment process, and the composition of the participants that were enrolled. The chapter will examine the specific activities, involved in the project from the introduction of the research, through to data collection and analysis.

The instruments and measures utilized will be described and explained, as would the applicable data analysis methods, providing the rationale behind the choice of techniques and statistical approaches. The chapter will highlight and explain some of the boundaries or delimitations of the investigation, the inherent assumptions and the limitations that may have interfered with the outcomes. It will conclude with a summary that recaps the procedures discussed.

Research Questions and Hypotheses

Research Questions

There were four research questions for the quantitative component of the study, and one research question for the qualitative portion. The quantitative research questions were:

RQ1: Is there a negative relationship between adverse childhood experiences and self-perception in adulthood?

RQ 2: Is there a negative relationship between adverse childhood experiences and moral character in adulthood?

RQ 3: Does self-perception mediate the relation between adverse childhood experiences and victims' moral character development in adulthood?

RQ 4: Does self-perception moderate the relationship between adverse childhood experiences and victims' moral character development in adulthood?

The research question for the qualitative investigation was as follows:

RQ 5: How do victims of adverse childhood experiences describe the link between their adverse childhood experiences and their character formation in adulthood?

Hypotheses

The hypotheses stated below were associated with the quantitative study.

Hypothesis 1: There is a negative relationship between adverse childhood experiences and self-perception in adulthood.

Hypothesis 2: There is a negative relationship between adverse childhood experiences and moral character in adulthood.

Hypothesis 3: Self-perception mediates the relationship between adverse childhood experiences and moral character development in adulthood.

Hypothesis 4: Self-perception moderates the relationship between adverse childhood experiences and moral character development in adulthood.

Research Design

The study utilized a mixed methods approach. It comprised a correlational design for the quantitative aspect of the investigation, and a phenomenological design for the qualitative component. In addition to the scanty literature on childhood adversity, self-

perception, and character development, the few studies that exist in the subject area are either quantitative or qualitative studies. A mixed methods investigation has, however, been found to be superior in its ability to provide additional qualitative data that augment structured responses, which in turn, could illuminate insights into key and unexpected relationships (Driscoll et al., 2007). Moreover, mixed methods research is known to expand the scope of an investigation in a way that diminishes the weaknesses of either approach on its own (Malina et al., 2012).

The quantitative component of the study lends itself very well to a correlational design, due to the focus on measuring the relationships between the identified variables. Correlational research is known to be effective in examining bivariate and multiple relationships, as well as predictions within variables, and can more readily determine the direction and strength of each relationship (Martin & Bridgemon, 2012). The qualitative section will adopt a phenomenological approach, which is best suited for studies that aim to understand individuals' subjective or shared encounter with a phenomenon (Creswell & Poth, 2018), which in this case, is childhood adversity.

Participants

The first phase of candidates were recruited from community centers and churches within the Northwestern area of Toronto, Canada, after which, purposive and snowball sampling methods were employed to enroll other participants within the same region. This is a known high to medium risk neighborhood that comprises a diverse ethnic and multicultural population. The reason for the choice of this region is not only to enhance the ethnic diversity of the sample, but to also ensure the inclusion of participants from varied neighborhoods.

The study aimed to target a sample of about 200 participants. An a priori power analysis was conducted, using G*Power 3.1 (Faul et al., 2007), with an alpha of .05, and a squared multiple correlation ($R^2 = .09$) from the results of a previous similar study, which was used to find the estimated effect size. G* Power calculated the estimated effect size to be 0.0989011, which was transferred for the main power analysis calculation, using the linear multiple regression test. It revealed that a total sample size of at least 101 participants, was required to attain an actual power of .8022579, to correctly reject the null hypothesis. The targeted sample size was therefore larger than the power criteria. About 250 participants completed the online survey, although 42 respondents were excluded as a result of data cleaning ($n = 208$). Candidates were between the ages of 25 to 65 years old. 10 participants were selected from the sample of 208, to participate in the qualitative study.

The sample of 10 respondents for the qualitative study was selected from respondents who had agreed to participate, by answering the last question on the online survey, and subsequently making contact with the researcher. They did not need to have experienced ACEs to participate. Ten was chosen as an apt sample size to allow for an enhanced focus on the interview questions, elicit rich detailed descriptions, and facilitate the ability to delve more deeply into the information, if required. Saturation methods were considered to determine if more participants would be required beyond the proposed sample of 10. To this end, 12 participants were primed, with appropriate explanations provided, in the event that more or fewer participants and/or interviews became necessary, as a result of saturation. The sample of 10 turned out to be adequate and appropriate for the qualitative investigation.

Study Procedures

The study began with dissemination of information about what the investigation was about, and who were invited to participate. This was shared through letters, flyers and posters that were distributed to the congregation of the Church of Pentecost Canada, and the local community center. This initial information sharing phase facilitated the recruitment process. The letters and hand-outs contained appropriate contact information that enabled prospective respondents reach out to researcher when need arose. Appendix A shows a sample of an invitation letter, and an example of a flyer is displayed in Appendix B. Telephone conversations and virtual meetings were held with church councils and other community stakeholders to further promote recruitment.

The church leaders and community stakeholders were able to provide the email addresses of potential participants without divulging any personal details. Respondents in this initial group of participants were provided more information about the study, which included the flier, invitation letter and consent information. Please see a sample of a consent letter in Appendix C.

An online survey that comprised a conglomeration of the three measures (Childhood Trauma Questionnaire-Short Form [CTQ-SF], Adult Self-Perception Profile [ASPP] and Moral Character Questionnaire [MCQ]) was created on Qualtrics XM (<https://www.qualtrics.com>), and sent to participants, who were encouraged to pass it on to other potential participants within their church and/or community centers. Please see the link for the online survey in Appendix E. As shown, the online survey contained a consent section at the beginning, followed by the survey questions, which became available to participants only if they consented to participate in the study. The survey

concluded with a question inquiring about respondents' willingness to participate in the semi-structured interviews, and a brief synopsis of what it entailed.

The completion of the online survey for the quantitative investigation, therefore, preceded the semi-structured interviews, thereby adopting the sequential mixed methods design. Disroll et al. (2007) affirm that adopting an iterative or sequential approach, particularly where quantitative data is collected first, allows for further examination of ambiguous or interesting survey responses within the qualitative in-depth semi-structured interviews. This was found to be necessary and beneficial in this investigation given the outcome of the quantitative analyses.

Instrumentation and Measurement

The three main variables of the study, childhood adversity, self-perception, and character development, were measured using the Childhood Trauma Questionnaire- Short Form (CTQ-SF), the Adult Self Perception Profile (ASPP), and the Moral Character Questionnaire (MCQ) respectively. These are all well-known, established measures, with substantial reliability and validity scores. The qualitative component of the study adopted an interview protocol that included the date, location of the interview, and the questions that would elicit the qualitative data.

The Childhood Trauma Questionnaire – Short Form (CTQ-SF)

The variable, adverse childhood experiences (ACEs), was measured with the Childhood Trauma Questionnaire-Short Form (CTQ-SF; Berstein et Fink, 1998). This instrument comprises a 28-item scale that assesses five subscales of childhood maltreatment, which are physical, sexual, and emotional abuse; emotional neglect; and

physical neglect. It uses a 5-point scale (from 1- never true to 5- very often true). Scores are totaled with higher scores depicting higher levels of childhood adversity.

CTQ-SF has been found to have high validity and consistently high performance across different populations (Hagborg et al., 2022). Compared to the original scale, CTQ-SF is known to be more practical and financially viable, with a reliability subscale ranging from 0.61 (physical neglect) to 0.95 (sexual abuse). Internal consistencies have been found to be substantial to excellent. CTQ-SF is perceived to be the most widely used scale for childhood maltreatment and has been referred to as the “gold standard” for retrospective assessment of childhood trauma (Aloba et al., 2020).

The Adult Self Perception Profile (ASPP)

The self-perception variable was measured with the Adult Self-Perception Profile (ASPP), which contains 50 questions on 11 subscales. It was created by Messer and Harter (2012) and draws on Harter’s model of self-concept that highlights the multidimensional notion of self-evaluation in addition to one’s overall sense of self-worth. The 11 subscales are dimensions of self-concept isolated through factor analysis, and include, sociability, morality, household management, sense of humor, physical appearance, athletic ability, adequacy as a provider, intimate relationships, nurturance, intelligence, and job competence. Each subscale has 4 items, which are scored from 1 to 4. A score of 1 indicates low competence, while a score of 4 depicts high competency.

The internal consistency as measured by coefficient alpha is .63 to .92, which is appreciably high. Reliability has been found to be .92 for the total scale, and .53 to .82 for the individual subscales. Construct validity, when the scale is compared to Rosenberg’s (1965) self-esteem scale, reflected a Pearson r of .48 ($p = .001$). A test – retest Pearson

ranged from .70 to .86 for all subscales (Dimmitt, 1995). The questionnaire was assessed for readability using the Grammatik statistical analysis, and scored 68, which is approximately grade 6 to 10 level of reading, showcasing an expanded utility of the scale. Average readability is known to be 8th grade level (Dimmitt, 1995).

The Moral Character Questionnaire (MCQ)

The Moral Character Questionnaire is a scale that measures global moral character primarily, although it also evaluates moral character across six moral domains, namely, honesty, compassion, fairness, loyalty, respect, and purity. Each of these subscales assesses core personality dispositions, including behavior, motivation, cognition, and identity, in a total of 30 items. To attain a score for each subscale, an average is taken of a participant's responses on all the items on that subscale. For a global morality score, an average is taken on a participant's responses across all items from the subscales that are perceived to constitute global morality.

MCQ is a fairly new scale developed by Furr and colleagues (2022), which is based on contemporary personality theory that stipulates among other assumptions, that personality traits emerge from the interactions of genetics and the environment. Furr and team (2022) asserted that moral character is fundamental to one's identity and associated with a multitude of behaviors.

The inventory has been found to have a strong convergent validity and is perceived as an effective, and psychometrically robust, measure for moral character development (Furr et al., 2022). Internal consistency estimates revealed a strong reliability for the global moral character scale, with alpha figures >0.80 (Furr et al., 2022). Test-retest stability (with intervals from 17 to 52 weeks), suggested a high

stability ($r \geq 0.59, p < .001$). For the present study, the global moral character score was utilized.

The Interview Protocol

The qualitative aspect of the study entailed one on one semi-structured interviews to garner the in-depth subjective material for the qualitative data analysis. Due to the informal and open-ended nature of the questions, an interview protocol was utilized, to offer structure and consistency. Besides structure, interview protocols are also known to ensure candidates have similar or consistent interview experiences as well as facilitate the consolidation and analysis of data. Appendix D shows a sample interview protocol.

The 10 interviewees were determined by their response to the last question on the online survey, indicating an interest to participate in the interviews, and their subsequent contact with the researcher to confirm same. Each interview took about 20 to 25 minutes to complete. The interviews were conducted virtually and in person. Eight interviews were completed virtually and two were conducted in person.

Operationalization of Variables

The variables, as they pertain to the quantitative component of the study were operationalized as follows:

Adverse childhood experiences – is a ratio variable, and was measured by total score on the Childhood Trauma Questionnaire – Short Form (Berstein et al., 2003).

Self-perception - is an interval variable, that was measured by the total mean scores of the subscales of the Adult Self Perception Profile (Messer & Harter, 2012).

Character development – is an interval variable, which was operationalized by the average of scores across all items on the six subscales on Moral Character Questionnaire that constitute global moral character.

Data Analysis

Quantitative Analysis

The analytical methods employed to examine the quantitative data included bivariate analysis, simple linear regression, mediation and moderation analyses, all of which were conducted on the Statistical Package for Social Sciences (SPSS), version 28. The bivariate analysis examined the relationship between the dependent variable and either of the two independent variables. The simple linear regression analysis examined the dimensions of the relationship found between ACEs and moral character development.

To examine the possible mediation and moderation relationships, bootstrapping methods were used, employing the Hayes' "PROCESS" approach (Hayes, 2012). The PROCESS macro procedures on SPSS, have been found to be widely used to measure mediation and moderation relationships (Hayes, 2012; Talmon & Ginzburg, 2019).

Qualitative Analysis

The qualitative component of the study involved a review of the interview transcripts to identify important sentences, phrases, and quotes that depict the essence of participants' respective views of their childhood experiences. These significant statements were clustered into meaning and themes. The analyses adopted the Moustakas approach to phenomenology, which among other things, focuses more on the description

of the phenomenon by participants, and less on interpretations by the researcher (Creswell & Poth, 2018).

Within the Moustakas approach, the significant statements and themes are used to create a description of the participants' experiences, which is also known as textual descriptions (Moustakas, 1994). Other strategies within this method that were used for the analysis, included bracketing (where the investigator intentionally distances him or herself from participants' experiences, in order to attain a fresh perspective). Utilizing the Moustakas approach for analyzing data has been found to offer a more structured process, particularly for beginner researchers (Cresswell & Poth, 2018).

Delimitations, Assumptions, and Limitations

A study on a broad and pervasive topic such as childhood adversity, required some boundaries, specifications, and limitations to enhance focus, clarity, and manageability. A few delimitation features that helped to gird this investigation included the age range of participants, the specific geographical area that was studied, and the time frame of the study.

The age range of participants was restricted to 25 to 65 years old. The reason, in part, was to ensure that participants were clearly outside of the child-adolescent cohort, and also not elderly enough for their wellbeing to be significantly impacted by their age. The site of the study, northwestern region of Toronto, Canada, was selected to not only curb the perimeters of the study, but to also ensure that the multi-cultural composition of that specific area was incorporated. The study was conducted within approximately three to four- month period, which enhanced the structure and timelines for its procedures and completion.

It was assumed that participants were honest and factual in their responses. Moreover, since this is a retrospective investigation, it was also be assumed that participants reasonably recalled their early life adversities and reported them accordingly.

Nonetheless, studies of this nature are prone to recall and misclassification biases, which involve an inability to remember past experiences, that could result in being placed in the wrong category or group within the study. Misclassification bias could have also occurred because variables were inaccurately operationalized. Another limitation of the study was the inability to identify causal relationships due to its cross-sectional design.

Summary

In conclusion, the chapter delineated the various procedures the study undertook to accomplish its objective of examining the relationships between early childhood adversity, self-perception, and character development. It affirmed the research questions and hypothesis that were tested, and described the research design employed, which encompassed a mixed methods approach, with correlational and phenomenological methods for the quantitative and qualitative components respectively. Participants and avenues by which they were recruited were outlined. This was followed by the step-by-step operations conducted, from the first contact with participants to data collection procedures for both methods. Specific measuring instruments used, and how variables were operationalized and measured, were explained.

The chapter described the data analysis methods employed. These included regression analysis and bootstrap macro “PROCESS” for the quantitative study, and the Moustakas’s phenomenological approach for qualitative data analysis. The delimitations, assumptions, and limitations of the study were described to showcase the structure,

boundaries, and factors that may have culminated and/or influenced the results and conclusions of the study.

CHAPTER 4: RESULTS

Overview

The purpose of the study was to examine the relationship between adverse childhood experiences and victims' self-perception and moral character development in adulthood. It employed a sample of 208 participants recruited through purposive and snowball sampling methods, from the northwestern region of Toronto, Canada. The investigation utilized a mixed method approach that encompassed a correlation design and a phenomenological study for its quantitative and qualitative components respectively. Data were collected through an online survey created using Qualtrics software (<https://www.qualtrics.com>), and semi-structured interviews. Eight of the interviews were conducted virtually, and two completed in person.

There were five research questions in total. The quantitative component aimed at answering four questions which were:

RQ1: Is there a negative relationship between adverse childhood experiences and self-perception in adulthood?

RQ 2: Is there a negative relationship between adverse childhood experiences and moral character in adulthood?

RQ 3: Does self-perception mediate the relation between adverse childhood experiences and victims' moral character development in adulthood?

RQ 4: Does self-perception moderate the relationship between adverse childhood experiences and victims' moral character development in adulthood?

The four hypotheses formulated to correspond to the quantitative research questions were:

Hypothesis 1: There is a negative relationship between adverse childhood experiences and self-perception in adulthood.

Hypothesis 2: There is a negative relationship between adverse childhood experiences and moral character in adulthood.

Hypothesis 3: Self-perception mediates the relationship between adverse childhood experiences and moral character development in adulthood.

Hypothesis 4: Self-perception moderates the relationship between adverse childhood experiences and moral character development in adulthood.

The qualitative investigation responded to the fifth research question, which was as follows:

RQ 5: How do victims of adverse childhood experiences describe the link between their adverse childhood experiences and their character formation in adulthood?

The analysis of the quantitative data utilized SPSS Version 28. An alpha of 0.05 was used for all the analyses in this domain. Data cleaning methods such as the Series Mean approach was adopted to address and impute missing values. Cases with more than 10% of missing data were excluded however, which resulted in the elimination of 42 respondents. The missing data that were imputed included 7 for CTQ-SF, 39 for ASPP, and 12 for MCQ. With respect to the qualitative investigation, the Moustakas' approach to phenomenological analysis was utilized to examine the data, which included identification of important statements and thematic clustering.

Descriptive Results

Majority of the participants were 35 years or older (61.1%), and 36% were between the ages of 25 and 30 years (see Table 1). The gender of participants comprised 69 females (57.0%), 52 males (52%), and 6 transgender (2.9%).

Table 1

Demographic Composition of Study Participants

Variables	Values	N	%
Gender	Female	69	57.0%
	Male	52	43.0%
	Transgender	6	2.9%
	Other	11	5.3%
	Prefer not to mention	4	1.9%
Age	18 -25	6	2.9%
	26 - 30	36	17.3%
	30 - 35	39	18.8%
	35 Or older	127	61.1%
Race /Ethnicity	American Indian	1	0.5%
	White	107	51.4%
	Hispanic	3	1.4%
	Black / African-American	49	23.65
	Asian	16	7.7%
	Two or more races	17	8.2%
	Other	15	7.2%
Education	Did not complete High Sch	2	21.0%
	High School Dip / GED	12	5.8%
	Vocational degree	8	3.8%
	Some college	42	20.2%
	Bachelor's degree	77	37.0%

Graduate degree	67	32.2%
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Race and ethnicity found within the sample included 107 (51.4%) who identified as White, 49 (23.6%) as Black or African American, 16 (7.7%) as Asian, 3 (1.4%) as Hispanic, and 1 respondent (0.5%) identified as American Indian. Participants with two or more races were 17 (8.2%) and 15 (7.2%) were of other races not on list of options.

A large proportion of the sample had a bachelor's degree (37.0%), while 32.2% had graduate level education. Participants with some college education made up 20.2%, and 5.8% had a high school diploma. All in all, the varied characteristics of participants met the desired composition of the sample, thereby affirming the reason for choosing the diverse community of northwestern Toronto as the research location.

The mean scores of the five types of childhood adversities assessed by the Childhood Trauma Questionnaire, were examined to ascertain the types of adversities presented, and how these were distributed across the sample. As shown in Table 2, an average of 11.6 ($SD = 2.19$) experienced physical abuse. Physical neglect had a mean of 16.26 ($SD = 1.93$), emotional abuse, a mean of 16.60 ($SD = 2.71$), sexual abuse, a mean of 19.87 ($SD = 2.41$), and emotional neglect had the highest mean of 26.01 ($SD = 4.41$).

Table 2

Mean Variation of the Five Adverse Childhood Adversities Among Participants.

		Physical Abuse	Physical Neglect	Emotional Abuse	Emotional Neglect	Sexual Abuse
N	Valid	199	199	199	199	199
	Missing	9	9	9	9	9
Mean		11.16	16.26	16.60	26.01	19.87

Median	12.00	17.00	17.00	26.00	21.00
Std. Deviation	2.19	1.94	2.72	4.42	2.41

Study Findings

Quantitative Analysis

The examination of the quantitative data began with bivariate analysis to address RQ 1 and RQ 2, using the Pearson product-moment correlation to assess the relationships between all pairs of variables in the study. The correlations found were: (1) A significant relationship between Total ACEs and Global Moral Character ($r = .167, p < .05$), (2) A non-significant relationship between Total ACEs and Global Self-perception ($r = -.097, p > 0.05$), and (3) A non-significant relationship between Global Self-perception and Global Moral Character ($r = -.003, p > 0.05$).

Table 3

Bivariate Relationships between Variables

		Total ACEs	Total Global Self-perception	Total Global Moral Charact
Total ACEs	Pearson Correlation	1	-.097	.167*
	Sig. (2-tailed)		.162	.016
	N	208	208	208
Total Global Self-perception	Pearson Correlation	-.097	1	-.003
	Sig. (2-tailed)	.162		.965
	N	208	208	208
Total Global Moral Charact	Pearson Correlation	.167*	-.003	1
	Sig. (2-tailed)	.016	.965	
	N	208	208	208

*. Correlation is significant at the 0.05 level (2-tailed).

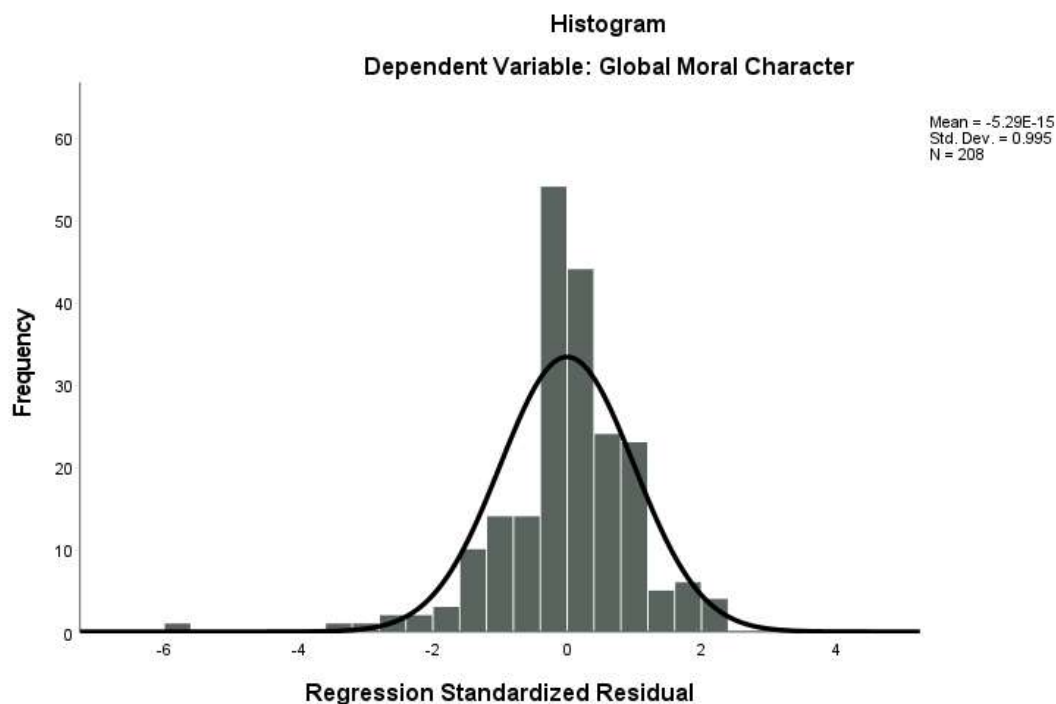
The significant relationship found between Total ACEs and Global Moral Character was positive, and of a low strength. See Table 3.

The results did not support hypothesis 1, which proposed a negative relationship between adverse childhood experiences and self-perception in adulthood. Hypothesis 2 predicted a negative relationship between adverse childhood experiences and moral character in adulthood, and this was also not supported. As noted earlier, the significant relationship found between adverse childhood experiences and moral character in adulthood, was positive, and not negative.

Simple linear regression analysis was conducted to ascertain the extent to which ACEs could predict moral character. Steps were taken to ensure the data met the

Figure 4

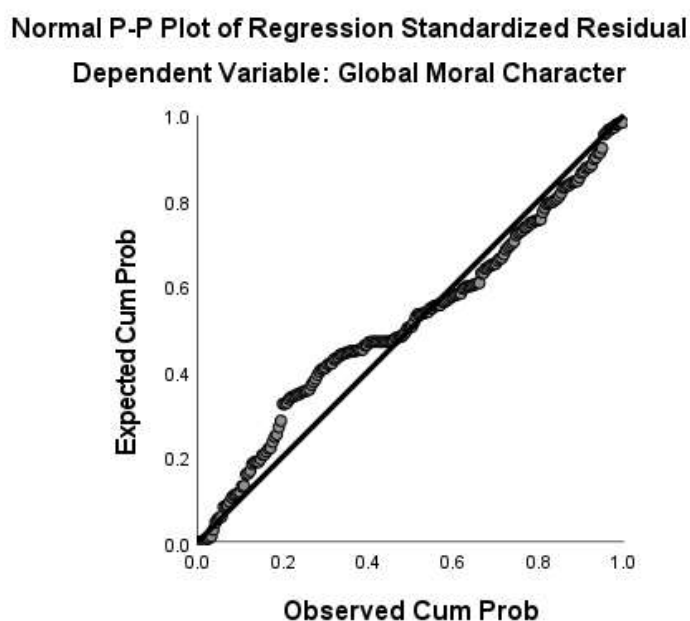
A histogram of Residuals of Moral Character predicted by Total ACEs



conditions of simple linear regression. These included plotting a P-P plot (Figure 4) and a histogram (Figure 5), to ensure a normal distribution of the data and to rule out extreme outliers.

Figure 5

A Normal P-P Plot Depicting the Normal Distribution of Residuals



The linear regression analysis depicted an R value of .167, which was statistically significant ($p < 0.05$). The results of the analysis revealed that Total ACEs predicted Global Moral Character, $R^2 = .03$, $F(1, 206) = 5.92$, $p = 0.016$. The R^2 value of .03 indicated that 3% of the variance in moral character could be explained by total ACEs. Adapting the regression equation ($Y = a + bx$), $a = 3.04$, $b = .012$. Predicted moral character score = $3.04 + .012X$. This implied that for every unit increase in childhood adversity, it can be predicted that moral character would increase by .012 units.

Alternatively, an individual with a total ACE score of 20 for instance, would have a total moral character score of 5.44.

Mediation and moderation analysis were conducted next, using bootstrapping methods with PROCESS macro 4.0 (Hayes, 2022), to respond RQ 3 and RQ 4. The mediation analysis which explored hypothesis 3, that stated that self-perception mediates the relationship between ACEs and moral character. The analysis found this relationship statistically insignificant, $B = -.001$, 95% CI $(-.0016, .0016)$, $p > 0.05$. The bootstrap confidence interval included 0 $(-.0016$ to $.0016)$, which signified the lack of significance in the mediation relationship being tested. Hypothesis 3 was therefore not supported.

Table 4

Moderation Effects of moderation analysis with PROCESS macro

Model	Coefficient	Se	t	p	ULCI	LLCI
Constant	5.195	1.701	3.053	.003	1.840	8.549
Total ACEs	-.011	.018	-.635	.526	-.047	.024
Total Self-P	-.311	.236	-1.318	.189	-.777	.154
Interaction_1	.003	.002	1.334	.184	.002	.008

The moderation analysis was conducted to investigate RQ 4, and to verify the hypothesis (4) that self-perception moderated the relationship between ACEs and moral character in adulthood. The test of the interaction between total ACEs and the moderator (self-perception), was found to be .003, at a significance of .184 ($p > 0.05$), as shown in Table 4. $B = .003$, 95% CI $(-.022, .008)$, $p > 0.05$. The results determined self-perception

did not moderate the relationship between ACEs and moral character development, $F(1, 204) = 1.78, p = .18, R^2 = .008$.

Qualitative Analysis

The examination of the qualitative data adopted the Moustakas approach to phenomenological analysis (Creswell & Poth, 2018). It began with the transcription of the recorded information from the semi-structured interviews and observation notes from the 10 respondents. The data were then coded using Microsoft Excel. As depicted in Table 5, the data was initially coded into binary categories, which comprised the experience of ACEs and respondents' view of the impact of ACEs on adulthood self-perception and moral character. The third column in the table portrays important phrases, statements and comments culled from participants' responses. It is from these salient expressions that the general themes were generated. Five overarching themes were identified, from which four subthemes were further created. The five primary themes comprised, 1= ACEs and negative adulthood outcomes, 2 = isolated traumatic events, 3 = ACEs and positive outcomes, 4 = positive childhood experiences (PCEs) and positive outcomes, 5 = uneventful childhood experiences and mixed outcomes.

Theme 1 (ACEs and negative adulthood outcomes) comprised respondents who believed their childhood adversity has had a negative impact on who they have become as adults. One participant in this category indicated: "I never outgrew the anxiety and loneliness I felt growing up, in spite of the numerous people in the household. I still feel that emptiness and isolation, and have not done well in my relationships." Theme 2

Table 5

Coding and Thematic Analysis of Qualitative Data

(isolated traumatic events), involved those who experienced difficult events not formally classified as ACEs. One respondent who migrated to Canada from South America at six

Participants	ACEs Yes=1, No=2	ACEs Influence on Adulthood. Agree=1, Disagree=2	Key Words, Phrases & Statements	General Themes
Respondent 1	1	1	Extremely stressed about sister's passing	Major Trauma
Respondent 2	1	1	Never saw Auntie again after moving to Canada	Major Trauma
Respondent 3	1	1	Continues to feel the loneliness and emptiness	ACEs vrs Negative Outcomes
Respondent 4	1	1	Tendency to go through extremes	ACEs vrs Negative Outcomes
Respondent 5	1	1	Nothing really stands out in my childhood	ACEs vrs Positive Outcomes
Respondent 6	2	2	I am more socially competent now because of what I went through	No significant events vrs mixed outcomes
Respondent 7	1	1	It was dysfunctional with very few fun moments	ACEs vrs Negative Outcomes
Respondent 8	2	2	Mixed feelings - anxious and still seeking.	No significant events vrs mixed outcomes
Respondent 9	2	1	Large family, with lots of siblings	PCEs and Positive Outcomes
Respondent 10	1	1	Felt unliked by father, although environment was social, everyone felt welcome.	ACEs and Positive Outcomes

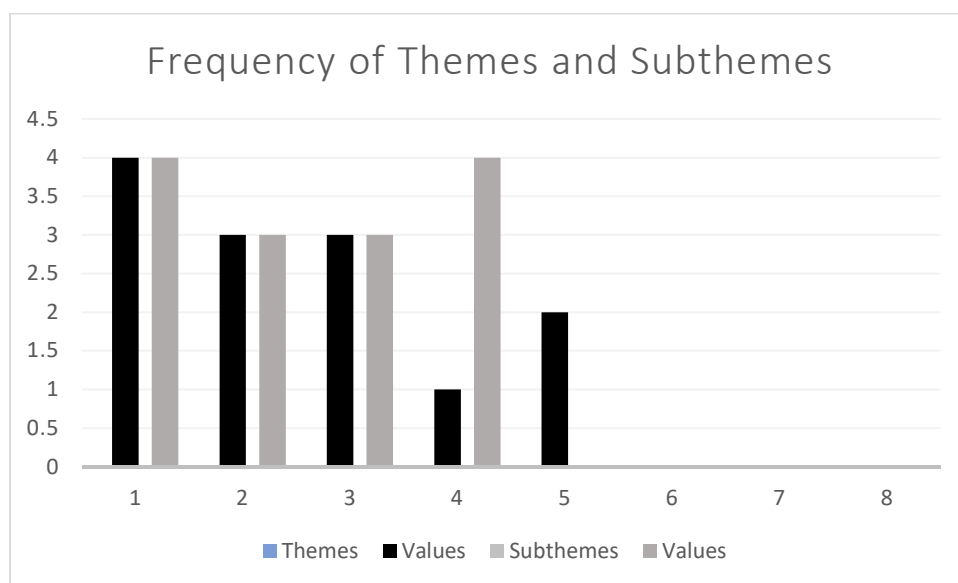
years old, noted: “I felt forced to join my parents, I hardly knew, in a new country, leaving my grandmother, who had raised me, and has continued to be my main support system.” Another participant from this category mentioned: “I never saw my aunt again after emigration, although she was the only parent I knew until age 12, when I moved to Canada.” Theme 3 (ACEs and positive outcomes), encompassed those who believed their childhood adversity led to positive outcomes in adulthood. This was captured in one participant’s statement: “my childhood trauma led me to strive harder, it made me more resilience, and more mature than my peers.” Theme 4 (PCEs and positive outcomes in adulthood) entailed interviewees who had positive experiences in childhood, and believed these had resulted in a more positive self-perception and character in adulthood. A participant in this category reported: “I was raised by a single mother, but there was no sense of need or lack of support. I was always surrounded by supportive extended family members, and this I believe led to my present remarkable social skills, which continue to serve me well in my personal and professional lives.” Theme 5 (uneventful childhood experiences and mixed outcomes) composed of participants who described their upbringing as uneventful. According to this group, their childhood was not negative nor positive. One respondent from this category noted “I have no vivid memories of my childhood, and I wonder sometimes, if that is why I lack emotional connections with those close to me, because there were no strong enough ties to remember from my childhood.”

The four sub-themes were subsequently generated from the above general themes. These included 1 = ACEs and negative character development, 2 = ACEs and positive character development, 3 = ACEs and negative character in adolescence but

positive character in adulthood, and 4 = ACEs and negative self-perception and negative character development (see Figure 6).

Figure 6

The General Themes and Subthemes created and their Frequencies

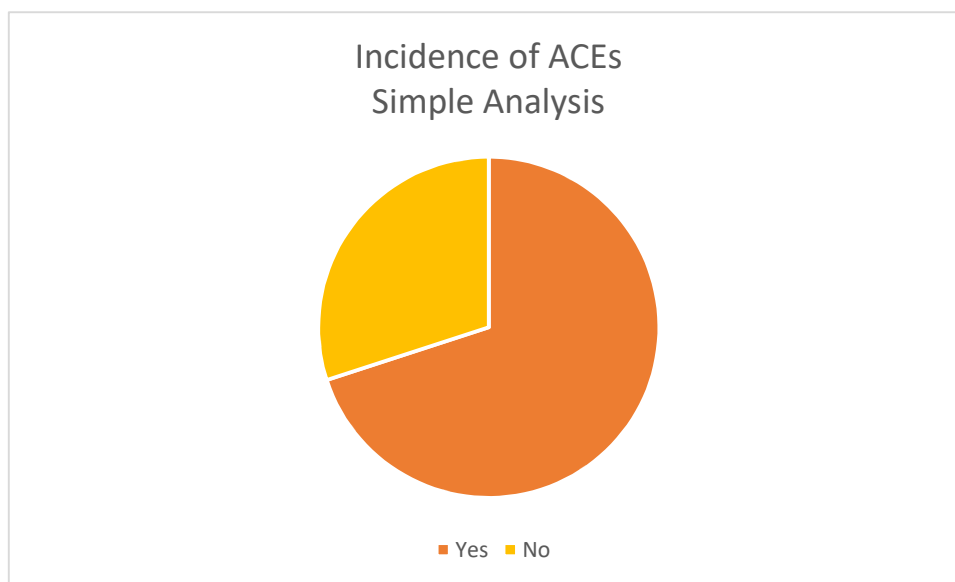


The findings revealed 70% of respondents ($n = 10$) had experienced childhood adversity, as depicted in Figure 7. There was 40% of participants ($n = 10$) who believed ACEs resulted in negative self-perception and character in adulthood, (theme 1, sub-theme 4). Thirty percent had experienced isolated traumatic events that are not generally identified as adverse childhood experiences (theme 2). These included the death of a sibling, childhood immigration, and extreme public shaming. Forty percent of participants were of the opinion that their childhood adversity had resulted in a negative moral character in adulthood (sub-theme 1). Thirty percent perceived ACEs produced positive character and self-perception (theme 3, sub-theme 2). Ten percent of respondents described a relationship between their positive childhood experiences (PCEs) and present

positive self-perception and higher moral character (theme 4). A few participants (20%) reported uneventful childhood experiences, with neither negative nor positive experiences that were striking enough to report (theme 5). One participant described her childhood as “a blur,” which she attributed in part to her present relational and emotional issues.

Figure 7

Prevalence of ACEs among Respondents of Qualitative Sample.



One distinct outcome observed was the cluster of participants (30%; $n = 10$), who believed their ACEs initially resulted in a negative self-perception and character in adolescence and then reversed to positive outcomes in adulthood (sub-theme 3). According to these respondents, there was a level of isolation, low self-esteem, and detachment from loved ones (usually parents and caregivers), which in their view led to negative behaviors, truancy, and in some cases inappropriate choices in friendship in adolescence. These issues, however, seemed to reverse in adulthood. One respondent described it as an “epiphany,” and an urgent need in young adulthood, to aspire and be

better, due to the adversity experienced in childhood. This raises the question whether one's developmental stage influences the impact of ACEs on character and self-perception.

Summary

The outcome of the data analyses for both the quantitative and qualitative components of the study was captured in this chapter. The quantitative examination revealed a significant relationship between total ACEs and moral character development in adulthood, although this relationship was positive, not negative as hypothesized. There was no significant correlation between total ACEs and self-perception in adulthood. Mediation and moderation analyses conducted with PROCESS macro revealed no significance in the proposed mediation and/or moderation effects of self-perception on the relationship between total ACEs and moral character development in adulthood in hypotheses 3 and 4.

The qualitative analysis found 80% of respondents believed ACEs influenced victims' self-perception and moral character in adulthood. Forty percent perceived ACEs resulted in lower self-perception and moral character, while 30% believed ACEs engendered higher self-perception and moral character. A small number of participants (10%) were of the opinion that positive childhood experiences (PCEs) were linked with higher self-perception and higher moral character development. Thirty percent of the sample alluded to an initial negative impact of ACEs on their self-perception and conduct in adolescence, and a subsequent change to a more positive self-view and higher moral character in adulthood. The correlations and non-significant relationships revealed in

both the quantitative and qualitative analyses are evidently intriguing, with some unexpected outcomes, which undoubtedly call for further deliberation and discourse.

CHAPTER 5: DISCUSSION

Overview

The purpose of the study was to examine the relationships between adverse childhood experiences (ACEs) and victims' adulthood self-perception and moral character development. It employed quantitative and qualitative investigations in a mixed methods design. This chapter reviews and explains the findings of the study. It examines how these align with the theoretical foundations and the existing literature that underlain the hypotheses and the investigative process.

The chapter will explore limitations encountered in the procedures that may impact the generalizability and utility of the findings. The implications of the outcome will be discussed, as would avenues for further investigation. The chapter will conclude with a summary of the discussed underlying meaning of the study and its relevance to theory, practice, and to the community at large.

Summary of Findings

The quantitative analyses found the proposed negative relationship between total ACEs and self-perception, and between ACEs and moral character, statistically insignificant. A significant relationship was found between total childhood adversity and moral character in adulthood, although this relationship was positive, thus refuting the hypothesized negative relationship between childhood adversity and moral character development. The findings did not support a significant mediation or moderation effect of self-perception on the correlation between total ACEs and moral character in adulthood.

The qualitative findings affirmed a relationship between childhood adversity, self-perception and moral character development, as reported by 40% of the respondents.

Thirty percent, however, supported a positive relationship between total ACEs and adulthood self-perception and moral character. The analyses revealed, additionally, that in some cases, the direction of the relationships changed between adolescence and adulthood.

Discussion of Findings

The refutation of hypotheses 1 and 2 that suggested a negative relationship between ACEs and self-perception, and a negative relationship between ACEs and moral character respectively, was unexpected. This is due to the substantial literature that have found significant negative correlations between ACEs, wellbeing, and personality outcomes in adulthood. A study by Kelly-Irving and Delpierre (2019) drew attention to the physiological stresses that are activated by exposure to ACEs, which have a negative impact on the neurological and hormonal functioning of victims. Lupien and colleagues (2018) suggested ACEs resulted in a reduction of the modulation of parts of the brain such as the hippocampus and amygdala, which are known for perceptual, affective, and executive functioning. Hawkins and colleagues (2021) found an association between cumulative ACEs and overall cognitive function, while Pilkington and team (2020) asserted a link between ACEs and cognitive distortions that are linked with low self-esteem, diminished sense of autonomy and interpersonal issues. ACEs have been variously linked with mood disorders particularly depression and anxiety (Goodman et al., 2022; Kascakova et al., 2020). Orchard and his team (2021) found that young people viewed themselves more negatively, and less positively when they are depressed. Vartanian and colleagues (2023) found a significant association between ACEs and lower self-concept. With respect to moral character, ACEs have been linked with traits such as

self-blame, self-disgust, and narcissism (Okur et al., 2019; Simpson et al., Talmon and Ginzburg, 2019). In a similar vein, Fang and colleagues (2020) found a significant correlation between childhood psychological maltreatment and callous-unemotional character traits.

Unanticipated as the results were, they were not surprising, as there is also growing literature that suggest a link between childhood adversity and positive outcomes in adulthood. The concept of posttraumatic growth discussed by Bannink (2014), and substantiated by other studies (Hambrick et al., 2020; Tranter et al., 2020), support the findings that ACEs may not necessarily result in negative outcomes in adulthood. As discussed earlier, a study by Yamashiro and colleagues (2022) found that childhood trauma could result in heightened dutiful and daring self-view in later life, when intersected with religious education. Although the coefficient of the positive relationship found between ACEs and moral character was small (.167), it was double-checked to ascertain if the relationship was truly linear, particularly given the mixed findings. Upon a visual analysis of the scatter plot, there was no pattern suggesting a curvilinear relationship. Additionally, a post hoc analysis to determine the impact of severity of ACEs on the relationship found between ACEs and moral character was conducted, using a t-test. The independent samples t-test showed that less severe ACEs ($M = 4.08$, $SD = .49$) reported higher levels of moral character ($t = -1.68$, $p = .047$, $d = -.23$), than more severe ACEs ($M = 4.18$, $SD = .40$).

The intriguing findings could have, nevertheless, also resulted from a Type II error, which may have led to a false acceptance of null hypotheses 1 and 2. Type II errors are known to result from a low statistical power, a small sample size, and instrumental

issues (Shreffler & Huecker, 2023). The statistical power for the study seemed appropriate given the a priori power analysis conducted before the start of the investigation, and the sample size was ample ($n = 208$), and substantially larger than the number recommended by the power analysis. There may have been instrumental issues, however, particularly pertaining to the self-perception scale (the Adult Self-Perception Profile). This measure is undoubtedly a well-established instrument with a very high internal consistency (.63 to .92) and a reliability of .92 for the total scale. Nonetheless, it appeared, many respondents found it complicated, due to the nature and structure of the questioning, and ended up not completing it. A number of the missing values were found in this section of the survey. Another reason for the consideration of a Type II error is the outcome of the qualitative analysis, which supported hypotheses 1 and 2, as will be discussed imminently.

The role of self-perception as a mediator and/or moderator on the relationship between ACEs and moral character development was found not to be statistically significant. This finding was again unexpected. Nevertheless, according to Nucci's (2018) Character Self-Systems framework, character and the self are not mutually exclusive. They are not separate entities that could engender mediation or moderation effects on each other. The model stipulates a co-existing, co-dependent association between the two that exist inseparately. In other words, the framework provides a basis for a coaction between the variables, implying that ACEs could affect one's character and self-perception conjointly, and not necessarily one or the other. In the same vein an aspect of one (in this case self-perception), may not be able to singularly influence the relationship between ACEs and moral character, given its co-existence with the latter.

This view is further supported by the relational developmental systems (RDS) metatheories that emphasize the integration and coactions between an individual's layers of contexts, which result in growth across the lifespan. Character growth is believed to result from the continuous coactions between the self-system and the character system.

The qualitative investigation revealed that 40% of participants (n = 10) believed that ACEs had a negative impact on self-perception and moral character development in victims' adulthood. One participant stated: "I felt alone and afraid as a child, growing up in a large household, comprising my immediate and extended family members, with everything revolving around my maternal grandmother. I was molested by an uncle, without anyone knowing, and when I disclosed to my mother, she did not believe me. I still feel alone and empty as an adult and have consistently failed in relationships. I find myself being impatient and hostile to others, including my daughter, which scares me!" This outcome aligns with the adverse childhood framework, which stipulates that exposure and experience of adversity and potentially traumatic events in childhood, has a dose-dependent effect on health disruptions, mental and physical disorders, that extend into adulthood (Filleti et al, 1998; Lorenc et al. 2020; McGee et al, 2020).

Interestingly the qualitative results also revealed that 30% of participants believed that ACEs resulted in positive outcomes in adulthood. This was captured in a participant's comment: "I am a stronger person now because of what I went through as a child. I was stretched, and that helps me now." This finding does align with the significant positive relationship found between total ACEs and moral character development in the quantitative analysis, and also substantiated by the post trauma growth model (Bannink, 2014).

One outcome that was most striking from the qualitative analysis, was the observation that some participants experienced a negative impact of their ACEs in their adolescence which, then reversed to a positive outcome in their adulthood. One respondent emphasized that he had a very negative view of himself due to what he had endured as a child. This however changed as he grew older: “I realized very quickly as I evolved from adolescence, that I was smart, I had worth, and my life depended on what I did, not necessarily what was done to me.” This participant reported he became a paediatric nurse, and then went back to school to become a paediatrician, and now employed as a staff physician in a community hospital. According to him, he had to move from truancy and apathy in his youth, to be in a position where he could help other children. All of which he attributed to the adversity he experienced as a child.

The compelling and seemingly opposing findings from both the qualitative and quantitative investigations are not only grounded in theory and existing literature as discussed, they are also embedded in biblical truths that appear equally antithetical. Scripture affirms that childhood treatment and experiences influences one’s adulthood. Proverbs 22:6 states: “Train a child in the way he should go; even when he is old, he would not depart from it” (ESV). This appears to transcend the general upbringing of a child, and denotes a link between the environment, how a child is raised or “trained”, and who he or she becomes in adulthood. Nevertheless, the biblical view that adversity sequentially produces endurance, good character, and hope (Matthew 5:3-5), substantiates the finding that positive outcomes can emerge from early life misfortunes. It would be essential to determine what circumstances generate which outcomes.

Religion has been found to be a viable protective factor (Henderson, 2016; Jung, 2017; Yamashiro et al., 2022), as has resilience (Carver 1998; Hambrick et al, 2019; Mcgee et al., 2020), environmental risk level (Frimpong-Manson & Bugyei, 2019; Manhica et al., 2020; Zeider & Kamplar, 2021), and event centrality (Tranter et al., 2021) among others. The questions that remain, and certainly require further work, include determining the direct impact of ACEs on victims' character and self-view, without the influence of the protective factors, as well as gaining a better understanding of these protective factors and how they can be engendered.

Implications

The findings of the study highlighted the prevalence of ACEs. About 70% of respondents from the qualitative study had experienced some form of adversity in their childhood. The mean variations of the incidences of the five adversities examined in the quantitative analysis are shown in Table 2. Both investigations revealed the enormity of the influence of ACEs in victims' adulthood. Eighty percent of those interviewed for the qualitative examination, believed their childhood adversity shaped their adulthood wellbeing. This adds immensely to existing literature and provides empirical evidence, to support policies pertaining to ACEs, the longevity of their impact, and the varied influences on self-view and character development.

The outcome of the project underscored the need for clinical work with adult ACE victims that presented with self-esteem, perceptual, personality, and morality issues, to focus on possible unaddressed early life traumas and adverse events. Research knowledge indicate a paucity in interventions with adult victims of ACEs in general (Giampetruzi et al., 2023; Neelakantan et al., 2018). As such creating new clinical

pathways to address these more specific dimensions of the dilemma, will add to the few available targeted intervention modalities, which would inevitably improve the wellbeing of the larger community of ACE victims. Furthermore, the finding that in some cases, there was a negative impact in adolescence that reversed into a more positive impact in adulthood, sheds light on the benefit of interventions that target victims at an earlier stage, such as at the time of incidence and in adolescence. This would call for enhanced public awareness of ACEs and their consequences, to facilitate the pursuit of early interventions by victims and families.

In light of the results partially supporting possible positive effects of ACEs, the study has highlighted the need to explore and gain further insights into factors that may generate the positive versus the negative outcomes. As noted earlier, there is growing study buttressed that need for an enhanced understanding of the protective elements that give rise to these outcomes.

In light of the mixed results, the study highlighted the need for more empirical work that would allow for the measurement of the variables over time, as in longitudinal designs, as well as control relevant variables, that may have had an impact on how the childhood adversity was experienced. Longitudinal research would also provide insights on the time order of cause and effect, and thereby illuminate the nature of the associations among the variables more vividly.

Limitations

There are several limitations associated with this investigation. Firstly, the well-established Childhood Trauma Questionnaire, known as the “gold standard” for retrospective assessment of childhood trauma (Aloba et al., 2020), with an outstanding

internal consistency ranging from 0.83 to 0.88, measured only five out of the ten known ACEs. This may have prevented some respondents from identifying themselves as ACE victims, when they probably were, particularly within the quantitative investigation, which would have invariably impacted the results.

The study consolidated three reputable instruments into one online survey for the quantitative data collection. This resulted in a lengthy questionnaire, with different questioning styles, that may have led to non-completion of certain sections of the survey, thereby resulting in several missing data, the exclusion of a number of participants (17%), and possible misclassification bias.

This was a cross-sectional study and as such could not measure the incidence of ACEs or their impact over time. It utilized retroactive data which are subject to recall bias and non-response bias. Cross-sectional investigations are unable to examine the temporal association between outcomes and risk factors, which may have had an impact on the heterogeneous findings. Moreover, the design hindered the determination of causal inferences.

The topic under study was delicate and involved, in some cases, very intense, traumatic experiences at a vulnerable stage in participants' life. While some participants were eager to share and vent, others struggled to divulge their difficult early life experiences. This may have led participants to provide perceived acceptable answers, thus, subjecting the data to possible social desirability, recall and/or habituation biases that would have influenced the study outcomes.

Furthermore, there were instances when the direction of the questioning had to be altered to accommodate and respond to changes in client's mood or demeanor. One

participant from the qualitative study noted: “You have reminded me of some difficult experiences with my father, which has made me sad.” In this case the direction of the questioning had to be changed to offer support, focus on the strengths in the participant’s story, and provide contact information for a community psychotherapy agency. Another participant indicated she started the online survey, but could not finish it, because it triggered difficult memories of her mother who had recently passed away.

The study location was restricted to Northwestern Toronto, Canada, which may have hindered its generalizability. Nonetheless, despite this limitation, the study samples contained exceptionally diverse participants, that allowed the investigation to encompass perspectives from across several ethnicities, levels of education and gender variations.

Recommendations for Future Research

The dissertation project highlighted the need for a replication of the investigation for two reasons. Firstly, a thorough search for a study on the relationships among ACEs, self-perception, and moral character development, did not yield any results, although there were a few that focused on either of the dependent variables, self-perception, and moral character development (Cederbaum et al., 2020; Criddle & Malm, 2022; Nguyen & Crossman, 2021; Shatnawi et al., 2022). Secondly the findings were unexpected, and partially opposing to the findings of substantial literature on the long term impact of ACEs on victims. There could be a direct replication that would utilize the same procedures, materials, and conditions to verify the findings, or a contextual replication that would employ different methods with the same concepts. A contextual replication could utilize a purely qualitative approach, with a sample comprising only ACE victims, which would provide a richer, more in-depth perspectives on their early life experiences.

A mixed methods approach with a self-constructed questionnaire may also be helpful. Although creating a survey that aptly measures the relevant variables with the appropriate reliability and validity strengths, may be quite onerous.

Future research could focus on identifying the protective factors that mitigate the impact of ACE from its incidence through victims' developmental stages to adulthood. In this case, a longitudinal investigation might be most beneficial, not only in assessing the effects over time, but also in providing possible causal inferences if they exist. Longitudinal studies might also offer insights and explanations for the outcome that suggested a change in the effects of ACEs between adolescence and adulthood.

Another important recommendation entails an exploration and subsequent creation of interventions that could aptly address the plight of ACE victims. Existing literature suggests very limited availability of interventions and resources that aim at addressing the effects of ACEs (Giampetruzi et al., 2023). According to Lorenc and colleagues (2020), even within the paucity of interventions, there are significant gaps in the evidence of their effectiveness. Their systematic review revealed among other findings, that CBT with victims of sexual abuse, had the strongest evidence of effectiveness, among other interventions such as parental training, other psychological therapies, cross-sector support, and life-skills training (Lorenc et al., 2020).

The authors (Lorenc et al., 2020) also discovered that most of the interventions were based on individual psychological symptoms, with minimal focus on the social routes that often mediate the negative consequences of childhood adversity. Since group work has been found to be more helpful in the treatment of PTSD and other trauma-related conditions (Chaulk & Podnar, 2022), the present recommendation is to explore

and create a group intervention that would take into consideration health behaviors, social relationships and life circumstances of victims, as it incorporates the sense of belonging, validation, and camaraderie typically associated with group therapies.

Summary

The dissertation study employed both quantitative and qualitative methods, to examine the relationships between adverse childhood experiences (ACEs), self-perception and moral character development in victims' adulthood. The quantitative investigation revealed no statistically significant relationship between ACEs and self-perception or moral character development, an outcome which was unexpected, but substantiated by a growing body of literature that ascribe to possible positive consequences of childhood adversity. The qualitative analyses, on the other hand, portrayed a negative as well as a positive relationship between ACEs, self-perception and moral character. The negative relationship, however, had a higher score (10%) over the positive relationship identified.

The findings were therefore mixed and equivocal, albeit unsurprising. The varied outcomes were supported variously by existing literature, theories and biblical insights. The study highlighted the need for further empirical work that replicate it, using the same methods and/or changing in design to verify the findings. Such studies will offer an enhanced understanding of the factors that may be mitigating or mediating the perceived varied consequences of childhood adversity. Furthermore, the outcome of the study highlighted directions for clinical work. It shed light on the need to appraise and develop intervention programs that incorporate not only victims' childhood traumas and the psychological harms and/or benefits therein, but also integrate their health outcomes,

social relationships and life situations, which may very well mediate the impacts of their earlier life suffering.

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APPENDIX A: Sample Invitation Letter

Dear Potential Participant,

As a doctoral candidate in the Psychology Department, at Liberty University, I am conducting research as part of the requirements for a PhD degree. The purpose of my research is to examine the relationships between childhood adversity and character development in adulthood, and I am writing to invite you, to join my study.

Participants must be between the ages of 25 to 65 years, and reside within the northwestern region of Toronto. Participants will be asked to complete about three questionnaires, and a few will participate in one on one, semi-structured interviews. Each questionnaire will take about 20 to 30 minutes to complete, and the interviews will be approximately 30-45 minutes long. Names and other identifying information will be requested as part of this study, but participant identities will not be disclosed.

To participate, please complete the screening survey attached, and return it by email to [REDACTED] or by placing it in the provided self-addressed envelope. You can also contact me at [REDACTED]

A consent document will be emailed, or mailed to you if you meet the study criteria. 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, as soon as you can, to Ms Snow, the coordinator at the community center, or send it directly to me in the enclosed, self-addressed envelope, or email it to [REDACTED]

Sincerely,

Josephine Owusu
PhD Candidate
[REDACTED]

APPENDIX B: Sample Study Flyer

Research Participants Needed

The Impact of Adverse Childhood Experiences (ACE) on Victim's Self-Perception and Character Development in Adulthood.

- Are you between the ages of 25 and 65 years old?
- Do you reside in the Northwestern Region of Toronto
 - Did you, or not experience childhood adversity

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

The purpose of my research is to examine the relationships between childhood adversity and character development in adulthood.

Participants will be asked to complete about three questionnaires, and a few will engage in one on one interviews

Benefits include the opportunity to share difficult experiences from the past, and to facilitate the development of programs for children and adults who have endured childhood trauma and adversity.

If you would like to participate, please contact the researcher at the phone number and email address provided below.

A consent document will be given to you a week before the study begins.

Josephine Owusu, a doctoral candidate in the psychology department. School of Behavioral Sciences at Liberty University, is conducting this study. **Please Contact Josephine Owusu, at** [REDACTED]

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

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

APPENDIX C: Sample Consent Note

Title of the Project: The Impact of Adverse Childhood Experiences (ACE) on Victim's Self-Perception and Character Development in Adulthood.

Principal Investigator: Josephine Owusu, Doctoral Candidate, Psychology Department, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be between the ages of 25 and 65, and reside in the northwestern region of Toronto, Canada. 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 the study is to examine the relationships between childhood adversity and character development in adulthood.

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. Complete three questionnaires that will take no more than a total of two hours to accomplish.
2. If you agreed to do so, you will participate in one on one interviews that will take no more than one hour to complete.

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 the opportunity to facilitate the development of programs for children and adults who have endured childhood trauma and adversity.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life. The risks involved in this study include the possibility of psychological stress from being asked to recall and discuss prior trauma. To reduce risk, I will describe the steps I will take to mitigate the risks, which would include, monitor participants, discontinue the interview if needed, and provide referral information for counseling services.

I am a mandatory reporter. During this study, if I receive information about child abuse, child neglect, elder abuse, or intent to harm self or others, I will be required to report it to the appropriate authorities.

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 will be stored on a password-locked computer and in a locked file cabinet. After five years, all electronic records will be deleted, and all hardcopy records will be shredded

Is study participation voluntary?

Participation in this study is voluntary. Your decision 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.

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 Josephine Owusu. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED] and [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Rolen, 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 [REDACTED], 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.

Printed Subject Name

Signature & Date

APPENDIX D: Sample Interview Protocol

Interview Protocol / Guide

Project: Examining relationship between childhood adversity, self- perception and character development.

Time of interview:

Date:

Place:

Interviewer

Interviewee:

Brief description of project: Employing a mix methods investigation to explore associations between adverse childhood experiences and adulthood self-perception and character development.

Questions:

1. How would you describe your childhood?
2. What events or experiences stand out for you in your childhood?
3. Were there any adverse experiences or maltreatment in your childhood?
4. How do you perceive yourself at the present time? Do you think you self-perception may have anything to do with your childhood experiences?
5. How would you describe your character or personality at present? Do you think it has been influenced by your childhood experiences?

Conclusion: Thank participants for participating in the interview. Provide reassurance with respect to confidentiality.

(Creswell & Poth, 2018)

APPENDIX E: Online Survey Link

https://liberty.co1.qualtrics.com/jfe/form/SV_56YChj4EecKNCqg

www.liberty.qualtrics.com