The Intersection of Trauma, Faith, and Addiction among Women in Recovery at the Walter Hoving Home

Jessica West

Department of Community Care and Counseling, Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

Liberty University

2024

The Intersection of Trauma, Faith, and Addiction among Women in Recovery at the Walter Hoving Home

Jessica West

Department of Community Care and Counseling, Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

Liberty University

2024

Approved by:

Jeremiah Sullins Ph.D., Committee Chair

_____

Frederick Milacci Ph.D., Committee Member

_____

Abstract

The association between substance use disorders (SUDs), childhood trauma, and post-traumatic stress disorder (PTSD) is becoming increasingly evident. There are faith-based programs available to assist women in overcoming addiction; however, there is presently no research examining the relationship between trauma, faith, and addiction among women in such programs as the Walter Hoving Home (WHH). Through a multiple regression analysis, this quantitative study evaluated the relationship between these three variables of interest among women in recovery. This study collected data through an anonymous Qualtrics survey with a self-report questionnaire, the Adverse Childhood Experiences Questionnaire (ACEs), Tobacco Alcohol Prescription medication and Other Substance (TAPS Tools) assessment, Spiritual Beliefs and Interest Scale (SIBS), and Trauma Symptom Checklist (PCL-5). The researcher used a multiple regression analysis to determine the impact of the predictor variables *substance use severity risk*, *length of time in the program*, *adverse childhood experiences*, and *religious faith* on the dependent variable, *current levels of trauma symptoms*. After the multiple regression analysis, the researcher ran multiple independent sample *t*-tests to either confirm or deny findings in the regression. The multiple regression analysis required a sample size of 85; after removing one outlier, the research included 84. This study addressed the gap in the literature by examining the relationship that exists between a person's religious faith and their duration of time in faith-based programs for addiction and its significance regarding current trauma symptoms for women in recovery. Recommendations for future research include expanding investigations to include men, program alumni, and other faith-based addiction treatment programs outside of the WHH.

Keywords: women, recovery, addiction, substance use, trauma, faith-based treatment, PTSD, C-PTSD

Dedication

I dedicate this study first to my Lord and Savior Jesus Christ, the One who saved me and rescued me from the grips of addiction, depression, hopelessness, and despair 13 years ago. I also want to dedicate this research to my husband, James West, and my three beautiful children Abigail, Annabelle, and Noah. One reason I have ventured in furthering my education is to be a blessing to my family and to show them that "All things are possible to those who believe" (Mark 9:23).

I also dedicate this to the men, women, and children I have ministered to and counseled at Adult and Teen Challenge and Walter Hoving Home that are desperately searching for freedom from addiction and desire wholeness and healing through Jesus Christ. I pray this research will bring much needed insight into how trauma, addiction, and faith interplay and how we can improve our care to those placed before us.

Acknowledgments

I would like to acknowledge and thank Beth Greco, the CEO of the Walter Hoving Home, as well as Diane Swansen, the National Director for Women's Programs, for allowing me to work with the women and children in their programs and to do my research with their sites. I would not have been able to accomplish this great of a task without their support during this season of my life. I would also like to acknowledge my chair, Professor Jeremiah Sullins. He has been exceptionally encouraging and supportive throughout my entire dissertation journey.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

Brief Family Therapy (BFT)

Cognitive Behavioral Therapy (CBT)

Complex Post-Traumatic Stress Disorder (C-PTSD)

Post-Traumatic Stress Disorder (PTSD)

Solutions Focused Therapy (SFT)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Substance Use Disorder (SUD)

Walter Hoving Home (WHH)

Chapter One: Introduction

Overview

Research increasingly recognizes that substance use disorders (SUDs) are associated closely with childhood trauma and post-traumatic stress disorders (PTSD; Leza et al., 2021). In this research, "addiction" pertains to an increased use of, dependence on, and amount and frequency of a substance despite adverse consequences (Goldstein & Volkow, 2011). Faith-based programs are available to help women overcome addiction issues; however, there is currently no research examining the relationship between trauma, faith, and addiction among women in these types of programs, such as the Walter Hoving Home (WHH). This quantitative study aimed to understand the associations among these three variables of interest among women in recovery through a multiple regression analysis by answering the following research questions: (a) is addiction severity risk a significant predictor of current trauma symptoms among women in recovery, (b) are adverse childhood experiences a significant predictor of current trauma symptoms among women in recovery, (c) is faith a significant predictor of current trauma symptoms among women in recovery, and (d) is length of time in the WHH a significant predictor of current trauma symptoms among women in recovery? This chapter provides a comprehensive overview of the study of interest, background information, problem statement, the purpose of the study, significance of the study, research questions, definitions, and summary.

Background

Traumatic experiences and symptoms can have pervasive and astounding negative effects on the victims that are suffering. These symptoms comprise re-experiencing traumatic memories, avoiding trauma cues, amplified negative emotions and cognitions, and hypervigilance (American Psychiatric Association [APA], 2022). Furthermore, de Jongh et al. (2016) listed

emotional dysregulation, dissociation, and impairment in interpersonal relationships as additional symptoms.

The National Center for PTSD reported 25%–75% of those who have endured traumatic experiences that were violent or abusive in nature report alcohol misuse, while one-tenth to one-third of those who have lived through an accident, sickness, or disaster-associated trauma report alcohol misuse, particularly if they are troubled by physical pain or consistent health problems. Additionally, the reports revealed depression and problematic alcohol use enhance the risk of attempted suicide among PTSD-affected veterans over 65 years old. Women who experienced traumatic life events have an increased risk of developing alcoholism: this affects 8 out of 100 women as opposed to 4 out of 100 men. Also, studies have found people who disclosed sexual abuse are more probable than others to suffer from substance-related issues. Adolescents who have been abused sexually are 4.5 times more at risk for alcohol use disorder, four times more at risk to develop cannabis use disorder, and nine times more at risk to have problems with hard drugs (National Center for PTSD, n.d.).

Considering the research establishing a strong link between trauma and addiction, it is essential to note the drug epidemic is at an all-time high. The statistical and demographic findings from the most recent 2021 National Survey on Drug Use and Health are astounding. In the year 2021, a total of 61.2 million individuals, including approximately 21.9% of the population aged 12 or over, engaged in the consumption of illicit substances throughout the previous twelve-month period. Cannabis emerged as the most prevalent illicit substance, with a staggering 52.5 million individuals reporting its usage. Approximately 40% of young adults aged 18 to 25 engaged in the consumption of illicit substances within the previous year, whereas approximately 33% of those within the same age group reported cannabis usage during the same

time frame. In 2020, a total of 9.2 million individuals aged 12 and above engaged in the improper utilization of opioids. Also, in the former year, a total of 46.3 million individuals aged 12 or above, which accounts for 16.5% of the population, satisfied the relevant DSM-5 criteria for a substance use disorder. 29.5 million individuals were identified as having an alcohol use disorder, while 24 million were identified as having an SUD (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023).

Furthermore, the prevalence of individuals meeting the criteria for a substance use disorder within the past year, encompassing both alcohol use disorder and other controlled substance use disorder, exhibited the highest rates among young adults aged 18 to 25 in comparison to both younger individuals and adults aged 26 and above. Lastly the survey revealed in the year 2021, a significant majority of individuals (94%) who were above 12 years old with an SUD did not undertake any form of therapy for their addiction problems (SAMHSA, 2023).

Historical Context

Although funding for research on substance use has risen significantly since the 1960s—predominantly due to the National Institute on Drug Abuse (NIDA), as well as the National Institute of Mental Health (NIMH) providing grants—noteworthy research commenced prior to this date. Insights into the research findings and policies on drugs brought forth alterations of shifting public and expert minds toward addiction research (Musto, 1996). The most advanced drug-related interests and benefits are the result of scientific and technological advancements. Aside from alcohol, the initial substance showing addictive qualities separated naturally from the environment was morphine. Morphine was obtained from crude opium in 1806 by the German

chemist F.W.A. Serturner. Approximately 10% of this opium-derived substance comprises pure opium, and it has transformed pain management to this day (Musto, 1996).

In 1875, Levinstein conducted the earliest comprehensive studies of morphine addiction. He recognized two aspects of addiction to opiates that would interest scientists: the user's obsession with the drug, which made its attainment the user's top priority even though their life situation deteriorated, and the peculiar withdrawal syndrome that could be thwarted by administering more opiates. Opioid use disorder remains an epidemic not only nationally, but globally as well. Contemporary research reports that opioid use disorder (OUD) has affected or presently affects three million Americans and sixteen million people worldwide (Azadfard, 2022). The National Center for Drug Abuse Statistics (NCDAS) reports over nine million U.S. citizens above age 12 abuse opiates at minimum once within year. Also, 50% of Americans over 12 years old have used drugs at least once, and there have been 200,000 deaths to overdoses since the year 2023 (NCDAS, n.d.).

Research on trauma also has developed over time. Van der Kolk (2000) explained that an understanding of traumatic experiences as an influential aspect of mental health disorders has ebbed and flowed in the past one hundred years. Research on the traumatic causes of dysregulated emotions began in the final years of the 1800s. At the Hospital de la Salpêtrière in Paris, Jean-Martin Charcot (1887) proposed for the first time that the symptoms of allegedly "hysterical" patients were rooted in traumatic experiences. A student of Charcot, Pierre Janet, depicted 591 patients in his first four books, 257 of which experienced traumatic histories in the development of their psychological pathology (Crocq & Verbizier, 1988; Janet 1889). Janet was the earliest to indicate people experienced penetrating emotions during traumatic events, which hindered the integration of the traumatic experience. Because of this, memories are dissociated

from everyday consciousness and volitional control (Janet, 1925). Janet (1925) described how disintegrated and dissociated traumatic memories tend to re-emerge through extreme emotional responses, hostile actions, and bodily pain and may be recognized as the return of constituents of the traumatic incident.

Social Context

From a social standpoint, trauma and substance use both are gendered globally. Substance use disorders (SUDs) encompassing uncontrolled and controlled substances affect twice as many men as women and are clinically and functionally debilitating (Arnaudo et al., 2017). However, once women begin using drugs, they consume more than men, resulting in more significant adverse effects on their health and society. According to a recent National Survey on Drug Use and Health, 45% of illegal drug users aged 12 or older in America are women (SAMHSA, 2017). One-third of SUD sufferers are female, but only one-fifth of drug treatment patients are female (SAMHSA, 2017). This suggests women face gender-specific obstacles to access, as well as to treatment participation (Fonseca et al., 2021). Once women receive addiction treatment, such as in a faith-based residential program like WHH, it is crucial to comprehend the underlying causes of their dependency. Frequently, traumatic experiences lie at the root of these addiction disorders.

Despite being commonly associated with sexual assault and war, trauma can arise from various contexts and various circumstances can cause it. Traumatic experiences comprise being included in or observing a major accident, bullying, natural disasters, and the death of a loved one (Theisen-Womersley, 2021). Even when trauma survivors struggle with mental conditions such as PTSD or anxiety, personal faith is associated with positive outcomes. Religion and faith are helpful in trauma and addiction recovery alike. In addition, studies indicate, among trauma

populations, intense spirituality frequently is associated with fewer symptoms and clinical problems (Lovett & Weisz, 2020).

The chosen research site, the WHH, is a long-term, faith-based drug and alcohol program that opened in 1967 to help New York City women find freedom from drug use and get off the streets (WHH, 2022). Adult and Teen Challenge is a worldwide faith-based program for men and women in recovery that is comparable to the WHH (Runcan & Lupşa, 2020). Various Adult and Teen Challenge programs worldwide report a high success rate among graduates, making these programs some of the most successful recovery programs. The WHH, like Adult and Teen Challenge, offers a variety of spiritually-based activities to aid in the recovery of its female residents, such as prayer, worship, Bible study, and spiritual mentoring (Lear, 2013).

Over many years of working with women in faith-based addiction programs, I have observed traumatic experiences and symptomatology consistently. Trauma is predominant among women who use substances, and research on this subject would benefit them greatly in their journey to health and wholeness. Conducting trauma-informed research will help improve clinical care for drug-using women (DeCarlo et al., 2021). Trauma-informed treatment, training, and research are all essential concepts to consider among women seeking treatment for addiction in faith-based programs.

Theoretical Context

The biopsychosocial model of addiction makes assumptions that underpin studies on trauma, faith, and addiction for women in recovery. Engel, a specialist in internal medicine with a background in psychotherapy, first proposed the biopsychosocial model in 1977. This paradigm postulates a variety of biological, psychological, and social factors greatly affect how people as a whole function in relation to disease or how they perceive it. Engel presented it as a

complete model that could be used instead of the then-dominant biomedical paradigm in the field.

Additionally, research over many years has examined the benefits of incorporating spirituality into the treatment of addiction and trauma. Pargament's religious coping theory explains religion's role in coping with difficult life circumstances, such as addiction. According to Pargament, the crucial role of religion is in essence spiritual, and because spirituality is critical in life, "it cannot and must not be explained away" (2007, p. 31). Pargament also characterized coping as "the pursuit of meaning during times of stress" (1997, p. 90). Additionally, in 2007, Pargament and Raiya defended that "religious coping strategies are ways of understanding and coping with negative life events that are associated with the sacred" (p. 23). Moreover, Pargament has asserted religion's ability to embrace holy issues also contributes to coping (1997, 2007, & 2011).

The WHH has been helping adult women overcome addiction issues since 1967 by incorporating faith and spirituality into the program's structure. Traumatic histories and symptoms among the women who enter the program continue to be a prevalent observation and concern. With the opioid epidemic at an all-time high affecting three million Americans and sixteen million people worldwide (Azadfard, 2022), more studies on the interaction of trauma, faith, and addiction need to be conducted. Understanding how these three variables co-exist is a crucial starting point for gaining insight into the extent of the need for trauma-informed faith-based care within programs such as the WHH.

Problem Statement

Investigating the relationships among trauma, faith, and addiction among women in recovery in residential faith-based treatment programs has yet to be accomplished. According to

Arnaudo et al. (2017), most women seeking addiction therapy exhibit symptoms of trauma from physical or sexual abuse. Lotzin et al. (2019) found that nine out of ten women with SUDs experience at least one type of sexual, physical, or emotional abuse or neglect during their lifetime. Despite these statistics, most people with substance use disorders whose childhood trauma profiles have been examined to date are men (Lotzin et al., 2019). Therefore, expanding research to women with SUDs in the faith-based community will help to further understand how trauma, faith, and addiction affect women in recovery at these types of programs.

The problem is that many of the women in faith-based drug and alcohol programs such as the WHH also have co-occurring trauma that may influence their recovery success (Arnaudo et al., 2017; Basedow et al., 2020); further research is needed to understand to what extent. If traumatic experiences have not been addressed and processed appropriately, women in recovery may be exposed and susceptible to re-traumatization (Lovett & Weisz, 2021). For instance, women who have experienced a traumatic event may develop emotional dysregulation, which can influence a potential relapse (Covington et al., 2008). There are currently no studies within faith-based substance use treatment facilities such as the WHH identifying the role trauma and emotional dysregulation play in addiction and how faith influences recovery among women. Furthermore, there are no studies collecting data among women in recovery at the WHH to survey trauma, faith, and addiction and their relationships to one another.

Purpose Statement

The purpose of this study was to expand research on trauma, addiction, and faith and to gain insight into how these variables coexist among women in recovery at the WHH. A postpositivist framework with an epistemological assumption guided the research, which collected objective data through an anonymous survey method and multiple regression analysis

and conducted *t*-tests to gain helpful knowledge on trauma, faith, and addiction. The theory guiding this study was Pargament's premise regarding religious coping, which is the belief that religion and spirituality play a vital role in supporting a person through stressful life circumstances such as trauma and addiction (Pargament, 2011).

The independent predictor variables were addiction severity (TAPS Tools) scores, adverse childhood experiences (ACE) scores, faith (SIBS) scores, and a time in program scale. The dependent variable was the (PCL-5) trauma symptom scores. The population in the study was women ages 18 and older currently residing in the WHH, a long-term, faith-based drug and alcohol program. The women interested in participating in the study voluntarily engaged in an online survey link where they answered the assessment questions chosen for this research. The study analyzed the responses through a multiple regression analysis.

Significance of the Study

According to data from the Centers for Disease Control and Prevention (CDC), women are more likely than men to undergo childhood trauma and experience events that cause complex post-traumatic stress disorder (CDC, 2019). Complex post-traumatic stress disorder (C-PTSD) is a disorder in which a patient experiences some symptoms of post-traumatic stress disorder (PTSD) and added symptoms such as difficulty in governing emotions, feeling very angry, continuously feeling hollowness or hopelessness, regularly feeling suicidal, and avoiding friendship and others (CDC, 2019). Women have an increased risk over men to develop PTSD symptoms, even though it typically takes longer to diagnose the illness. Also, women are more probable than men to be sensitive to triggers that evoke memories of past trauma. Like many other physical and mental health conditions, PTSD presents differently in women than in men (Sekoni et al., 2021). For instance, women have more internalizing disorder diagnoses such as

anxiety or depression (Sekoni et al., 2021). Furthermore, complex trauma and C-PTSD may be significantly more prevalent among women of color, for whom systematic racism promotes toxic environments that may influence mental health problems (Sekoni et al., 2021).

Trauma survivors are also known frequently to self-medicate with drugs and alcohol, either consciously or subconsciously, to dull the pain, cope with survivor's guilt, or forget what occurred (Theisen-Womersley, 2021). This practice can lead to a full-fledged addiction as survivors require more and more substances to achieve the same effects. Some individuals may be unaware they have PTSD, especially if they deny it or are oblivious to the effects of the traumatic event (Theisen-Womersley, 2021). Childhood trauma, which can comprise physical and sexual abuse, as well as emotional and physical neglect, is a risk factor for mental health issues. Trauma suffered as a child accounts for around 30% of psychological problems (Blanco et al., 2020). Furthermore, substance use disorder is one of the most prevalent mental illnesses that develop after stressful situations such as childhood trauma (Blanco et al., 2020).

In faith-based programs, it is essential to comprehend the relationship between addiction and trauma to provide better care and appropriately target treatment needs for those seeking assistance for drug and alcohol problems. Treatment plans for addiction disorders increasingly are addressing co-occurring mental health issues, such as PTSD or anxiety-related disorders, (Arnaudo et al., 2017). Gaining insight into the relationship between mental health and addiction may aid individuals seeking freedom from their substance use disorder.

The significance of my study was predicated on examining the relationship between trauma, addiction, and faith among female residents in faith-based drug and alcohol programs. This research brings insight to the faith-based community into how these three variables relate to one another among women seeking help for their addiction disorder. It also highlights the

prevalence of trauma among women seeking recovery and implies the need for trauma-informed training among staff and care for the residents in the program. The multiple regression analysis and subsequent *t*-tests conducted revealed the strength of the relationship that exists between faith and the program on trauma symptoms for women in the program. Replicability of my study may extend the research to other faith-based programs that service men and WHH alumni to examine the relationships among faith, addiction, and trauma within other demographics.

Research Questions

This quantitative study sought to understand the strength of the relationship among trauma, faith, and addiction among women in recovery residing in the WHH, a faith-based drug and alcohol program. Specifically, the study explored the research questions below:

RQ1: Is addiction severity risk a significant predictor of current trauma symptoms among women in recovery?

RQ2: Are adverse childhood experiences a significant predictor of current trauma symptoms among women in recovery?

RQ3: Is faith a significant predictor of current trauma symptoms among women in recovery?

RQ4: Is length of time in the WHH a significant predictor of current trauma symptoms among women in recovery?

Definitions

The following are terms and definitions that are important to this dissertation. These terms are used throughout the study.

Addiction: A persistent, relapsing disorder distinguished by obsessive drug seeking and use regardless of harmful consequences, which results in changes to the brain and neurotransmitters (Goldstein & Volkow, 2011).

Complex Trauma: A group of symptoms linked to affect dysregulation and relational problems stemming from repeated exposure to trauma over long periods of time (Cook et al., 2005; Herman, 1992).

Faith: An absolute and entire dependence on and submission to God (Fowler, 1981; McCraw, 2015).

Post-traumatic Stress Disorder (PTSD): The DSM-5 defines post-traumatic stress disorder as a disorder that progresses in selected persons who have witnessed or been involved in a devastating, horrific, or threatening incident (APA, 2022).

Recovery: Recovery is the experience of individuals and families affected by severe alcohol and other drug related problems who use internal and external sources of support to find consistent and sustained sobriety, heal from the damage substance use has inflicted, embark on managing their susceptibility to such problems, and foster productive and purpose-filled lives (White, 2007). Individuals in “recovery” have entered into the action and maintenance phase of the stages of change model (Barry, 1999).

Substance Use Disorder (SUD): According to the DSM-5, a substance use disorder is characterized by repeated patterns of symptoms following the persisted use of a substance regardless of its harmful consequences (APA, 2022).

Trauma: An incident or series of events perceived as physically or psychological life-threatening with enduring effects on a person’s physical, mental, spiritual, and social life (SAMSHA, 2014, p. 7).

Summary

A vast amount of literature has concluded there is a significant link between past traumatic experiences and addiction disorders (Arnaudo et al., 2017; Basedow et al., 2020), while studies also have shown faith to be a positive cornerstone in the treatment of both addiction and trauma (Bryant-Davis et al., 2013; Egan et al., 2022). The relationships among these three variables has yet to be investigated among women in the WHH; therefore, this study expands research to comprehend how trauma, faith, and addiction associate with one another to help women in recovery and the faith-based community gain insight into to what extent co-occurring trauma needs to be addressed alongside the addiction.

The Teen Challenge program, a faith-based drug and alcohol program after which the WHH is modeled, has achieved successful outcomes in SUD treatment. The first study Hess (1976) conducted revealed an 86% success rate in abstinence from drugs and alcohol among program graduates. Another study conducted in 1992 evaluated Teen Challenge of Chattanooga over a 15-year period and found the program's graduates had a 67% success rate (Thompson, 1994). Other studies have noted success rates ranging from 39% to 92% (Bicknese, 1999). It is well established that programs such as the WHH are a faith-based alternative to conventional substance abuse treatment. Although treating addiction disorders in faith-based programs has been shown to be effective (Hardeman et al, 2011), there are no studies to date examining their effectiveness in treating trauma. Because trauma and addiction are so closely related, it is essential to examine this trauma as well (Leza et al., 2021).

There are numerous evidence-based approaches to trauma that can integrate with the spiritual practices and principles faith-based programs employ. These methods consist of cognitive behavioral therapy (CBT), cognitive processing therapy (CPT), eye movement

desensitization reprocessing (EMDR), relaxation training, and psychoeducation (Watkins et al., 2018). The study clarifies the importance of trauma-informed training for program staff and the demand for qualified Christian therapy to treat SUD and trauma-related disorders using evidence-based, spiritually aligned practices.

Chapter Two: Literature Review

This chapter begins with an overview of trauma, faith, and addiction among women. Following the overview, I discuss two theoretical frameworks: the biopsychosocial theory of addiction and the theory of religious coping. Many women seeking help for their addiction issues display signs of trauma (Arnaudo et al., 2017), and previous studies have associated traumatic histories with SUDs (Basedow et al., 2020). In connection with this, unprocessed traumatic experiences can trigger women in recovery and potentially retraumatize them (Lovett & Weisz, 2021). There is currently no research investigating the relationships among trauma, faith, and addiction among women in faith-based drug and alcohol programs such as the Walter Hoving Home (WHH). The analysis of these variables will bring much-needed insight into how communities need to address trauma along with co-occurring addiction issues. This chapter provides a comprehensive literature review on trauma, faith, and addiction among women.

Understanding the dynamic between addiction and trauma in faith-based programs is essential to providing better care to those seeking help for their drug and alcohol problems. Treatment plans for addiction disorders increasingly are addressing co-occurring mental health issues, such as PTSD or anxiety-related disorders (Arnaudo et al., 2017). Understanding the relationship between mental health and addiction while addressing underlying mental health concerns is essential in treating addiction disorders. My research highlights that faith-based addiction programs would benefit from incorporating professional Christian mental health counseling to address trauma issues for women in the program.

Theoretical Framework

It is critical to recognize the theoretical framework of a research investigation. Grant and Onsaloo (2014) described the theoretical framework as the underpinning from which a researcher

forms the way they collect and analyze information for their research. In addition, the theoretical framework serves as a foundation for interpreting, assessing, and creating means to examine a problem. The theories guiding this research included the biopsychosocial theory of addiction and the theory of religious coping.

Biopsychosocial Theory of Addiction

Engel (1977), a professional in the field of internal medicine who also had psychotherapy training, constructed the biopsychological model of addiction. This model hypothesizes many components—namely biological, psychological, and social ones—significantly contribute to the overall functioning of individuals concerning disease or their perception of it. Engel presented it as a comprehensive model, an alternative to the prevailing biomedical paradigm within the field at that period.

Engel's contribution shifted attention from the disease itself to the affected person. In 1980, Engel proposed the model's ultimate objective was to engage in treatment geared toward the biopsychosocial approach. In a short time, experts from several disciplines including medicine, psychology, and sociology readily embraced the concept of addressing substance abuse within the broader context of health. The biopsychosocial model of addiction posits the intermingling of psychological, sociocultural, genetic, and biological variables influences drug intake, and care professionals must consider them in efforts to prevent and cure addiction (Becoña, 2002; Skewes & González, 2013). Various existing addiction models have taken into account these factors to varying degrees (West & Brown, 2013), as there is an understanding of the interconnectedness among genetic-biological factors, environmental influences, and individuals' cognitive and behavioral patterns in both maintaining their well-being and succumbing to illness (Melchert, 2015).

The biological component encompasses the genetic and physiological factors that influence individuals' addiction disorders (Masaik, 2013). The psychological component of the approach incorporates considerations of psychology and mental health (Masaik, 2013). Lastly, the social component of the theory encompasses the theoretical framework of family systems, issues related to diversity and multiculturalism, and challenges to social justice (Masaik, 2013).

The research on trauma, faith, and addiction for women in recovery rests on assumptions the biopsychosocial model of addiction presents. This research acknowledges biological, psychological, and social factors play a role in women's acquisition and perpetuation of a substance use disorder and trauma symptoms. Specifically, this study examined how the social component of adverse childhood experiences and the biological component of trauma symptoms are related to women with addiction issues. This study also examined how levels of faith relate to trauma symptoms and assessed the strength of the relationship between the two variables. In this research, multimodal factors evoked addiction and trauma, and therefore, multimodal factors also can address such concerns.

Theory of Religious Coping

Kenneth Pargament, the pioneering theorist in religious coping, asserted the essential role of religion is, in essence, spiritual, and spirituality is a crucial aspect of life that "cannot and must not be explained away" (2007, p. 31). In addition, Pargament also explained coping as "the pursuit of meaning during stressful times" (1997, p. 90). Pargament and Raiya (2007) shared religious coping strategies are "ways of understanding and coping with negative life events associated with the sacred" (p. 23). Furthermore, Pargament stated religion's ability to address faith issues contributed to coping (1997, 2007, & 2011). Pargament et al. (2000) asserted religious coping includes five central functions: gaining comfort through closeness to God,

attaining nearness and intimacy with others, finding meaning in stressful situations, seeking to change life, and garnering self-control.

Tix and Frazier (1998) also explained religious coping involves using cognitive or behavioral strategies prompted by one's religious or spiritual beliefs in response to challenging life circumstances. Religious coping mechanisms often originate from a person's religious values, enabling them to create significance and develop positive and negative insights about stressful experiences in life (Gall & Cornblat, 2002). Additionally, religious coping is independent of secular coping mechanisms such as the cognitive reframing technique (Pargament et al., 2001). Krause's (1998) hypothesis suggested religion's presence in the practice of coping offered more meaning than secular methods of coping.

During challenging life circumstances, many individuals seek solace, assistance, and a sense of purpose and agency through their religious beliefs (Pargament & Ano, 2006). The predominant findings of several studies indicated individuals often use prayer, worship, and seek assistance from their religious group to manage distress (Pargament et al., 2005; Tatsumura et al., 2003). In line with what the theory of religious coping outlines, this research study hypothesized participants with greater levels of faith would experience lower levels of trauma systems. In this chapter, I examine the relationship between the two variables, confirming or denying what the theory of religious coping posits.

Related Literature

Trauma Overview

Theories of trauma emerged in the late 1800s, when Jean-Martin Charcot, a French neurologist, examined adult women with mental illness and deduced trauma activated their symptoms as opposed to biological abnormalities (Ringell & Brandell, 2011). As society

underwent both World Wars, the Holocaust, and the Vietnam War, research and health care workers recognized trauma as a legitimate problem that needed professional treatment (Ringell & Brandell, 2011). Nonetheless, the Diagnostic and Statistical Manual of Mental Disorders (DSM) did not include PTSD until 1980, and, at the time, psychologists did not consider childhood trauma as a possible cause for it (Ringell & Brandell, 2011).

Post-Traumatic Stress Disorder (PTSD)

In 2015, the American Psychiatric Association significantly modified the DSM-5 (Bernardy & Friedman, 2015). This revision notably impacted the diagnostic criteria and temporal framework for post-traumatic stress disorder (PTSD) and acute stress disorder (ASD), the latter of which pertains to an immediate response to trauma and loss. The period following a traumatic event may result in ASD and lasts about six months (Bernardy & Friedman, 2015). The manual deems such behaviors may be typical for the initial month following a traumatic event. A significant proportion of people who get specific interventions upon initial diagnosis exhibit favorable outcomes in the short term, with a success rate exceeding 75% (Bernardy & Friedman, 2015). Evidence-based therapies can reduce symptoms associated with PTSD to a level where the affected individual can engage in daily activities without significant impairment. However, the precise proportion of individuals with PTSD who can complete remission remains uncertain. Even among those who have symptom improvement through treatment, the effects on memory and psychological well-being following a traumatic trauma can persist (Bernardy & Friedman, 2015). During heightened stress or repeated exposure to traumatic events, individuals with PTSD frequently experience the reemergence of symptoms, necessitating ongoing psychological and possibly pharmacological interventions (Bernardy & Friedman, 2015).

Furthermore, PTSD is an anxiety disorder that arises as a defense mechanism to inhibit future physical or psychological harm to an individual (Sekoni et al., 2021). The nervous system becomes hypervigilant to possible dangers in a person's surroundings. Examples of traumatic occurrences may include sexual, mental, and physical abuse, terrorism, environmental catastrophes, watching another person suffer, car accidents, and interpersonal violence. These experiences may cause anxiety stress responses and adverse symptoms to the individual and their family members (Sekoni et al., 2021). A history of adverse life experiences is associated with substance use and mental health issues (Theisen-Womersley, 2021). Additionally, the depth of perception an individual has on an experience they deem traumatic may lead to a PTSD diagnosis, although the event itself typically may not be considered "traumatic" compared to other personal experiences (Sekoni et al., 2021; Theisen-Womersley, 2021).

PTSD Prevalence and Comorbidities

Researchers have linked PTSD to mental health disorders such as depression and anxiety (Pawlowski et al., 2019; Zabag et al., 2019). PTSD, alone and in combination with other psychological disorders, can reduce a person's quality of life considerably (Carmassi et al., 2020). According to research, women have an increased likelihood to report PTSD, while more educated individuals are less likely to report experiencing PTSD (Sekoni et al., 2021); research is inconsistent regarding marital status (Radell et al., 2017; Zabag et al., 2019). Whereas certain research asserts that marriage reduces the likelihood of developing PTSD, other studies state the risk increases. Sekoni et al. (2021) found middle-aged women were at the greatest risk for acquiring PTSD. Also, Sekoni et al. (2021) found PTSD and unemployment rates were connected greatly.

Women have a higher probability than men of acquiring PTSD, although it generally takes more time for a diagnosis to be noted in them (Sekoni et al., 2021). Women also are inclined to be more vulnerable to prompts that bring up memories of past traumatic experiences (Sekoni et al, 2021). As with many other physical or mental health issues, PTSD appears different in women than in men (Sekoni et al., 2021). Sekoni et al. (2021) have hypothesized this may be because women are diagnosed with mental health problems related to PTSD, such as depression and anxiety, at higher rates than men.

While most researchers have studied the prevalence of PTSD in the United States and in Europe, few have focused on its role in other countries, such as in African nations. One study examining the occurrence rates of PTSD in South Africa found those who have lost loved ones have an increased risk for developing the disorder with lifetime and yearlong incidence rates at 2.3% and 0.7% (Ndungu et al., 2020; Ng et al., 2020). Another study of adult women in one territory of South Africa found an 11.6% prevalence rate of PTSD (Ng et al., 2020). Furthermore, female survivors of sexual assault who took a survey in South Africa reported having increased rates of PTSD (87%); this information gives us insight into how trauma affects various ethnicities (Ng et al., 2020).

Complex Post-Traumatic Stress Disorder (C-PTSD)

In 1992, Dr. Judith Herman acknowledged complex post-traumatic stress disorder, also known as C-PTSD, as a novel diagnosis that involved compound trauma sources and their influence on all parts of a person's life (Ringell & Brandell, 2011). In 2009, "complex trauma" referred to the consequence of several traumatic experiences and stressors, including disrupted attachment experiences with a person's primary caregiver (Ringell & Brandell, 2012). Untreated

C-PTSD can lead to addiction issues, employment problems, and poverty (Ringell & Brandell, 2011).

In 2005, Van der Kolk identified an additional diagnosis for the DSM: developmental trauma disorders, similar to C-PTSD (Ringell & Brandell, 2011). This disorder considers the effects of trauma stemming from early childhood, neglect, and abuse. Developmental trauma disorder is categorized by difficulties processing stimuli, challenges navigating emotions and interpersonal relationships, a leaning toward aggression, a lack of impulse control, and academic struggles (Ringell & Brandell, 2012; Van der Kolk, 2005). This research benefitted from working from a trauma-informed lens because of the close relationship between addiction and a history of traumatic stress.

C-PTSD symptoms resemble those of typical PTSD, such as intrusive memories, fear responses influencing avoidance behavior, and seclusion to circumvent the perceived danger. Nevertheless, individuals with C-PTSD may have added symptoms more specifically associated with C-PTSD (Sekoni et al., 2021). These additional symptoms can include negative self-identity, affect dysregulation, and relational issues. C-PTSD may mark women of color more significantly due to their experience of systemic racism, which promotes an emotionally harmful environment (Sekoni et al., 2021).

Addiction and Women

Substance use affects men and women alike worldwide. For example, SUDs including use of uncontrolled and controlled substances, which are clinically and functionally debilitating, impact two times as many men as women (Arnaudo et al., 2017). Nevertheless, once women begin using substances, they tend to use more than men, harmfully affecting their health and society at large (Arnaudo et al., 2017). According to the Substance Abuse and Mental Health

Services Administration (2023), over 26 million women aged 18 years or older, or approximately 20.4% of the U.S. population, acknowledged engaging in the consumption of illicit substances within one year. Women face distinct issues, obstacles, and high-risk concerns when dealing with addiction disorders.

Key Issues Women Face

Although the Substance Abuse and Mental Health Services Administration (SAMHSA, 2017) found, in the United States, 45% of illegal drug users who are 12 or older are women, early addiction studies revealed disparities in treatment, effectively excluding women (Pinedo et al., 2019). Many recent research studies on SUDs focus on men (Fonseca et al., 2021). Because of this, it was uncertain if addiction treatments were helping women. Subsequently, research has emphasized the influences gender has on substance use concerning treatment, an individual's health, and society as a whole (Machisa et al., 2017; Pinedo et al., 2019). Although some concerns are not gender-specific, the information currently accessible supports gender-tailored SUD preventative and treatment methods, improving their cultural success and significance. Now the National Institutes of Health (NIH) require all research to consider gender as an organic variable throughout study design, assessments, evaluations, and results (Waltz et al., 2021).

Mental, physical, and psychosocial impairments, as well as women's pregnancy status, temperaments, ethnicity, and sexuality, are all specific elements that affect women's drug use and recovery success (Pinedo et al., 2019). Research on these various factors is needed to develop effective strategies for women experiencing addiction. The main research focus customarily has been on prescription painkillers and alcohol for women, as they are the chief substances women take, and since, throughout pregnancy, they substantially impact the fetus (Pinedo et al., 2019). Nonetheless, a more dynamic framework is necessary to recognize the

impacts of different substances—including those such as opioids, cocaine, and alcohol—on a variety of people, such as women coping with societal stigma because they may labor in the sex industry or identify with a particular race or social class (Radell et al., 2017).

High-Risk Concerns for Women

Relationship complications among women with addiction are also a concern. Unhealthy interactions women foster in substance using environments can create issues. Some women with substance use problems at times manage their addiction through risky behavior such as prostitution or exchanging drugs for shelter (Neupane et al., 2017), food, and protection, but they frequently experience violence and may be forced into unsafe sexual activity (Ng et al., 2020).

The risk of comorbid disorders is prevalent among women with addiction disorders. Many women with addiction issues also experience post-traumatic stress disorder both because their addictions perpetuate situations that evoke trauma and because many have experienced trauma as children (Ng et al., 2020). PTSD can affect healthy emotion regulation, such as difficulty managing anger; thought processes, such as disturbances of memory, focus, and consciousness; as well as interpersonal skills by affecting intimacy and trust (Ndungu et al., 2020)—and all of these can be underlying triggers for substance use.

For women experiencing addiction, pregnancy is another high-risk concern. During pregnancy, it is crucial to consider both the physiological concerns and therapeutic effects of opioid agonist treatments on the distribution of the drug in the body and the potential effects of neonatal withdrawal. Sociocultural risks for pregnant women with addictions come in the form of stigma and can affect parenthood. Ideally, these issues should be addressed during pregnancy through women's health care and family planning (Robinson & Ickowicz, 2022).

Additionally, it is crucial to gain insight into how a woman's addiction changes from youth to adulthood (Robinson & Ickowicz, 2022). Women's substance uses and outcomes are influenced by comorbid issues such as depression, trauma, anxiety, psychological issues, HIV, and socioeconomic status. Research in the future will need to contemplate medical along with cognitive therapies, like treating hepatitis C, or utilizing "housing first" ideas for women who are homeless, and financial initiatives to help combat socioeconomic issues (Robinson & Ickowicz, 2022).

Obstacles to Addiction Treatment for Women

Although both researchers and social programs have made tremendous progress, more work is needed in the area of research on women with addiction problems. For example, despite the official acknowledgement of opioid misuse as a worldwide concern and the allocation of funds to address the epidemic in response to increasing opioid overdose deaths, including among women, resources primarily have focused on police efforts to restrict drug amounts and on the advancement of opioid-free pain management (Christie et al., 2017). These approaches do not highlight the needs of women who also have co-occurring physical, mental, and socioeconomic illnesses and barriers such as hepatitis C, depression, and HIV (Ng et al., 2020), trauma, and homelessness, nor do they extend harm-reduction initiatives to these needs (Pinedo et al., 2019). While integrative case management mostly helps women, SUD treatment services seldom incorporate these collaborative services (SAMHSA, 2017). Furthermore, this information highlights the need to assess and treat trauma among women in faith-based recovery, providing a more collaborative approach in treating the whole person.

As substance use policies and patterns develop over time, central concerns affecting women can include cannabis, e-cigarette, and opioid injection usage (Phillips et al., 2017).

Focused research and treatment methods for therapy and prevention are needed to attend these concerns (Meyer et al., 2019). Likewise, studies must address the education, stigmatizations, and specialized care needed for women who are pregnant (Arnaudo et al., 2017). Individuals and policy makers in Montana propositioned to “clamp down” on and incarcerate pregnant women using drugs. Numerous organizations met this proposal with passionate defiance (Faherty et al., 2020). Many states consider pregnant women using substances to be engaging in a form of child abuse that falls under mandatory reporting (Faherty et al., 2020). But as an alternative of outlawing substance use behavior, pregnant women should have better ease of access to addiction treatment, as is now the case in some U.S. states (Faherty et al., 2020).

Moreover, not only are there various obstacles for women to gain access to proper SUD treatment, but once they reach it, they also may encounter care that is not individualized to their specific needs. Originally, SUD programs prioritized men’s needs over women’s, partially due to the stigmatization linked with women using alcohol and drugs (Pinedo et al., 2019). When more women started seeking help for their SUD issues, social bias suggested the same methods utilized for men would be just as helpful for women. Unfortunately, this is not always true. For example, SUD treatment for women must also consider family relationships (Pinedo et al., 2019). Women attending treatment programs often experience guilt for abandoning their family responsibilities and relationships (Pinedo et al., 2019).

Equally, self-worth and self-care must be incorporated into a woman’s treatment plan. According to one study, society stigmatizes women who struggle with substance use because it considers them as deviants from the established norms regarding their fittingness as mothers and caregivers (Ndungu et al., 2020; Pinedo et al., 2019). When a woman seeks out general health services, she may be hesitant to admit her alcohol or drug issues because she feels condemned by

her choices. This self-image frequently encompasses guilt and shame (Ndungu et al., 2020; Neupane et al., 2017).

Outside support groups should be considered in women's addiction treatment to help facilitate building healthy friendships and trust. Women's recovery thrives in socially interconnected environments (Pinedo et al., 2019). Such environments allow them to converse about their traumatic experiences more transparently and confront root causes of their addiction. Women's treatment needs differ from men's; therefore, they need access to gender-focused treatment. Gender-focused approaches to addiction treatment help women feel less judged (Pinedo et al., 2019). Women in SUD treatment also can benefit significantly from inclusive therapies, including stress and relaxation training, self-esteem improvement, and trauma therapy. Although substantial obstacles exist for women to get appropriate care, seeking help as soon as possible is vital to their recovery success. Endurance treatment outcomes are feasible with the correct care in place (Pinedo et al., 2019).

Common Addiction Treatment Modalities

Because addiction has many factors that influence its emergence, it is essential to have a wide range of treatment approaches to draw on when seeking treatment for this disorder. Common secular approaches include group and individual therapy. Motivational interviewing and solution-focused therapies are popular approaches therapists may utilize when helping someone with an addictive disorder. Cognitive behavioral therapy (CBT) is another evidence-based approach to help treat addiction disorders (Van Wormer & Davis, 2016).

Group Therapy

Group therapy is a therapeutic method addiction treatment programs use extensively, and several studies support it (Etheridge et al., 1997; National Institute on Drug Abuse [NIDA],

2003; Weiss et al., 2004). Groups provide various benefits to both the treatment program and its clients. For instance, they are cost-effective and can help reduce clients' feelings of isolation, enhance their social skills, and offer support and encouragement. Weiss et al.'s (2004) comprehensive review of therapy and substance use has indicated group therapy and individual therapy are equally effective.

Individual Therapy

Many treatment programs also have employed individual counseling in drug addiction treatment widely, although less often than group therapy (Center for Substance Abuse Treatment, 2013). While it is true group participants often must maintain anonymity, clients who engage in individual treatment could develop a distinct degree of trust with their mental health counselor since the counselor has legal and ethical obligations to the therapeutic relationship (Center for Substance Abuse Treatment, 2013). Moreover, in individual treatment, clients are afforded personalized attention. Therapists can prioritize their needs more than in group settings (Center for Substance Abuse Treatment, 2013).

Motivational Interviewing (MI)

Both individual and group settings can use motivational interviewing (MI), which is based on the transtheoretical model (TM) Prochaska and DiClemente proposed in 1982. The transtheoretical model presents a conceptual framework that characterizes behavior change as a multifaceted process with several phases. The primary objective of MI is to assist individuals in progressing through various stages of behavior change (Wahab, 2005). MI achieves this by establishing a supportive and nonjudgmental environment while also guiding individuals to examine their intrinsic drives, willingness, and self-assurance levels for change, as well as any inconsistency they may have toward change (Miller & Rollnick, 2002).

Solution-Focused Therapy (SFT)

DeShazer developed brief family therapy (BFT) in 1982, which later paved the way for Berg and several co-authors to develop solution-focused therapy (SFT; Visser, 2013). Initial interventions in BFT included *the continuation question*, *do something different*, *overcoming the urge task*, and *redefinition of stability as change* (Visser, 2013). Berg and his colleagues separated paths and further defined the SFT model in a variety of therapeutic contexts (Visser, 2013). This allowed for the solution-focused approach to be utilized not only in the family dynamic, but also in individual contexts. The fundamental basis of solution-focused therapy lies in the counselor's belief in the client's capacity to enact constructive transformations in their life using internal resources and abilities (Berg, 1995). The client does not receive a generic prescription for resolving problems, nor does the counselor explicitly instruct them to make changes (Berg, 1995). In the therapeutic process, it is common for the client to exert input by expressing their preferences and establishing the goals and successes of treatment (Berg & Miller, 1992; de Shazer, 1988; Walter & Peller, 2000). The counselor forms solutions by recognizing and leveraging what de Shazer (1988) has proposed to be nonproblematic instances or "exceptions" to the initial issue, rather than engaging in an in-depth analysis and deconstruction of the problem. These solutions nurture the client's talents and abilities and direct them toward achieving practical and attainable behavioral goals (Lewis & Osborn, 2004).

Cognitive Behavioral Therapy (CBT) for Addiction

Cognitive behavioral therapy for addiction aims to enhance comprehension of a person's conditioned cues, commonly referred to as "triggers," that are associated with or precede their drug abuse or addiction. Specifically, the cognitive model addresses automatic thoughts, distortions, and core beliefs that underlie mental health issues. CBT explains emotions and

behaviors result from how a person perceives or interprets an event. To change behaviors or feelings, a therapist guides the individual in their awareness of the automatic thoughts, distortions, or core beliefs and works with them to restructure and reframe the maladaptive cognitions. As a result, there is a positive change in emotions and behaviors that result from the self-destructive cognitions (Chand et al., 2023). The objective is to enable individuals to recognize and effectively manage potential situations or events that may elicit thoughts, emotions, and behaviors related to substance use (Beck, 2020). Additionally, CBT helps clients to build skills that will assist them in maintaining sobriety. These abilities include identifying triggers, using feasible and suitable avoidance strategies, and effectively coping with addiction-related issues and behaviors (Hofmann & Asmundson, 2017).

The Relationship Between Trauma and Addiction

Trauma can result from various circumstances, outside its common relations to war or sexual abuse: being involved in or observing a serious accident, extreme intimidation, grieving a loved one, and natural disasters are all examples of traumatic experiences (Theisen-Womersley, 2021). Some individuals may have undergone a traumatic experience without entirely comprehending how it may have impacted them psychologically and emotionally. Individuals with traumatic experiences often self-soothe with substances, whether consciously or unconsciously, to numb themselves from the emotional pain of the experience or survivor's guilt (Theisen-Womersley, 2021). Over time, these choices may result in a severe SUD as trauma survivors start to need increased amounts of the drug to have the same effects. Some individuals might not realize they have PTSD, specifically if they reject the idea of the effects the traumatic experience has had on them (Theisen-Womersley, 2021).

Childhood trauma, which can comprise physical or sexual abuse, as well as emotional or physical neglect, is a risk factor for mental illness and psychological problems. Childhood trauma accounts for about 30% of psychological disorders (Blanco et al., 2020). SUD is one of the most dominant mental disorders that emerges after difficult life experiences. An SUD is a clinically significant impairment brought on by a substance and encompasses health problems, isolation, and an inability to perform essential tasks at work, school, or home (Theisen-Womersley, 2021).

Childhood trauma is prevalent in men and women with SUD. For individuals with SUD, 22%–74% reveal at least one form of child abuse or neglect (Liu et al., 2021). Women have an increased likelihood to report severe childhood trauma, such as sexual assault (Blanco et al., 2020; Liu et al., 2021). An individual's experience of childhood trauma influences the origin, development, and level of SUD. For example, people who experience childhood trauma and develop alcohol use disorder do so at an earlier age and display more severe addiction symptoms than people who have not experienced childhood trauma (Blanco et al., 2020). PTSD also relates strongly to childhood trauma. PTSD includes symptoms such as hypervigilance, intrusive avoidance symptoms, intrusive memories, and memory triggers (Liu et al., 2021). Clinical symptoms are heightened in people with comorbid SUD and PTSD, and their interpersonal relationships are also poor in general (Liu et al., 2021).

Unlike substance use disorders, post-traumatic stress disorders affect women more than men. Evidence shows 3 in every 100 women encounter it at some point, compared to only 1 out of every 100 men (Arnaudo et al., 2017). After experiencing a traumatic or stressful event, women are more susceptible to developing PTSD than men. Biological variations between the sexes may explain this finding (Arnaudo et al., 2017). Conversely, other explanations could

include the fact that women are more likely to have exposure to severe interpersonal trauma, such as sexual assault (Arnaudo et al., 2017; Theisen-Womersley, 2021). Women with alcohol use disorder have around twice the occurrence of PTSD as men. Scholars also have found comparable associations between gender and SUD related to other substances besides alcohol. Women presented with twice as many incidences of PTSD as men if they had another SUD related to cocaine, opioid, cannabis, or sedative use (Neupane et al., 2017).

Kuksis et al. (2017) found a direct relationship between addiction severity and PTSD symptomology. Faith-based addiction treatment programs should assess female residents for trauma exposure, given the intimate ties between SUD and PTSD (Neupane et al., 2017). Because many individuals who have experienced past trauma describe various types of traumatic occurrence, it is important to consider various types and degrees of the trauma experienced in childhood (Theisen-Womersley, 2021). A careful assessment of such occurrences in women with SUDs may reveal existing mental health issues and the need for appropriate therapy to treat co-occurring disorders (Ng et al., 2020). Past research has not evaluated profiles of childhood trauma in women with substance use disorder and trauma exposure, nor have they compared them to ongoing health-related consequences.

So far, past research primarily has examined the childhood trauma profiles of men with SUDs (Ng et al., 2020). The severity of an individual's SUD-related problems associated with family dynamics, mental health, and interpersonal problems correlate with different trauma histories (Pawlowski et al., 2019). Findings show a reported distinction between alcohol-dependent men with histories of trauma exposure versus no trauma exposure, revealing distinctive and varying degrees of addiction-related problems (Theisen-Womersley, 2021).

Common Trauma Treatment Modalities

Various evidenced-based trauma therapies are available, and studies have proven them to be helpful in the reduction of PTSD and trauma symptoms. Some of these modalities include cognitive behavioral therapy (CBT), cognitive processing therapy (CPT), prolonged exposure therapy (PE), eye movement desensitization and reprocessing therapy (EMDR), psychoeducation, and relaxation and coping skills. Treatment should be client-centered and a modality the client feels comfortable with for a successful treatment outcome (Bernardy & Friedman, 2015).

Cognitive Behavioral Therapy (CBT)

The APA claims CBT is a successful, evidence-based trauma treatment method that focuses on the connections among feelings, behaviors, and thoughts (Watkins et al., 2018). In 1960, Aaron Beck identified cognition as a critical component in mental health issues. CBT focuses on the current symptoms and various problems related to trauma symptoms and notes how changes made to one domain, such as a person's beliefs, may impact how well the other domains, such as behaviors, perform (Watkins et al., 2018). For example, altering negative thought patterns might lead to more productive behaviors and improved emotional regulation (Phillips et al., 2017). Typically, a counselor will deliver CBT over 12–16 sessions individually or in groups. Several ideas explain the efficacy of CBT in the treatment of trauma. According to social cognitive theory (Smith et al., 2019; Watkins et al., 2018), people who try to fit their traumatic event into their preconceived concepts about themselves, other individuals, and their worldviews commonly develop unhealthy understandings of themselves and distortional core beliefs about their capacity to handle themselves or their surroundings; this is known as coping

self-efficacy (Smith et al., 2019). For instance, if a rape survivor believes only evil people experience horrible events, they may not understand being raped as being wrongly assaulted.

CBT therapists teach clients to evaluate their beliefs to detect potential harmful thought processes such as personalization, generalizing, or catastrophizing (Phillips et al. 2017; Watkins et al., 2018). Therapists help the individual in reexamining their perspective on traumatic experiences, self-observation, and coping abilities (Watkins et al., 2018). The trauma narrative, memories, and sensations connected to the experience the individual in session shares helps them process painful emotions and reduce avoidance (Watkins et al., 2018).

Cognitive Processing Therapy (CPT)

CPT is a manualized talk therapy utilized to reduce the symptoms accompanying PTSD and other related disorders, such as anxiety and depression. The purpose of CPT is to reduce the suffering connected to a person's memories about their trauma, as well as their associated feelings such as fear and shame (Meyer et al., 2019; Moring et al., 2020). CPT can be implemented as group or individual therapy. It is a framework that provides the individual with the ability to process the trauma they have experienced while evaluating feelings and thoughts associated with the experience. CPT helps identify trauma triggers that affect day-to-day functioning (Zabag et al., 2019). CPT also provides individuals with PTSD-specific tools to help them accurately identify destructive trauma-related beliefs so they can alter them and move toward improvement (Moring et al., 2020).

People commonly experience mental health reactions to trauma, and these reactions usually wane on their own over time. The CPT model states PTSD develops when anything interferes with the body's typical recovery after stress (Meyer et al., 2019; Robinson & Ickowicz, 2022). A person's presumptions regarding how and why the traumatic event occurred affects

PTSD development and course. Those who experience severe emotions related to their trauma memories can exhibit avoidance behaviors (Watkins et al., 2018; Zabag et al., 2019). It is challenging to think accurately about the trauma due to this avoidance behavior (Smith et al., 2019). CPT emphasizes how people perceive traumatic events and emotions that follow. Furthermore, CPT seeks to help individuals develop more constructive and logical perspectives about trauma, which results in symptom reduction (Watkins et al., 2018).

Prolonged Exposure Therapy (PE)

Prolonged exposure therapy (PE) is considered an evidence-based psychotherapy for PTSD. PE asserts an individual can deal with challenging memories in a supportive and secure environment (Back et al., 2022; Bourassa et al., 2020). Additionally, PE helps individuals to engage in activities they previously had avoided due to the trauma. Imaginal exposure is a form of exposure PE utilizes (Pawlowski et al., 2019). The client and therapist review the event and work together to change the client's thoughts and feelings about the occurrence. The therapist ensures therapeutic safety and security when the client is confronting fearful stimuli associated with the trauma (Watkins et al., 2018; Zabag et al., 2019). Additionally, the client and therapist identify areas of avoidance with the goal of imaginal exposure to help the former resume their previous hobbies (Watkins et al., 2018).

Eye Movement Desensitization and Reprocessing (EMDR)

Eye movement desensitization and reprocessing (EMDR) is a systematic trauma intervention in which the client concentrates on the traumatic event while receiving bilateral stimulation concurrently. Research shows EMDR decreases the intensity and emotions associated with traumatic memories (American Psychological Association, 2017; Landin-Romero et al., 2018). According to the adaptive information processing model, distressing

memories that are not processed result in ongoing suffering, mental health issues, and more severe PTSD. Researchers believe these unprocessed memories conserve the painful emotions, thoughts, and physical experiences of the traumatic event (Landin-Romero et al., 2018; Watkins et al., 2018). When trauma memories are triggered, a person will feel these previously stored distressing experiences.

In contrast to other therapies that directly alter feelings, ideas, and responses related to traumatic experiences, EMDR therapy aims to influence memory storage in the brain (Landin-Romero et al., 2018; Watkins et al., 2018). The negative symptoms should improve and eventually disappear as a result. Clinical evidence proposes standardized EMDR protocols, such as rhythmic left-right stimulation and eye movements, increase memory processing and consolidation (American Psychological Association, 2017). Individuals in therapy bring their attention to the traumatic experience and memories while receiving bilateral stimulation (BLS), which results in reduced intensity and vividness of emotions related to the trauma (American Psychological Association, 2017).

Psychoeducation

Psychoeducation is essential for trauma survivors because—without knowledge of the true causes of trauma reactions and symptoms such as sleep disorders, hypervigilance, hyperarousal, mood changes, intrusive thoughts, and avoidance (Whitworth, 2016)—people can draw incorrect conclusions about how trauma affects the brain and body. They frequently attribute these responses to themselves, medical conditions, similar settings or situations, unrelated individuals, and various other factors (McGee, 2020). Therapists can provide clients with the knowledge to manage their reactions, lessen blaming, and avoid perceived threats by

assisting them in understanding how their brains react to frightening situations (Whitworth, 2016).

Psychoeducation for trauma aims to increase awareness of the effects of these experiences on those who have been through them and to emphasize human resilience and recovery techniques (Whitworth, 2016). According to Whitworth (2016), psychoeducation entails elucidating trauma, its expected responses, symptoms of it, prevalent myths about trauma, its potential effects on body and brain function, and practical coping strategies.

Psychoeducation is essential for trauma treatment, but counselors cannot use it alone to alleviate PTSD symptoms. Group therapy is beneficial in this setting because it makes it possible to teach the material in a didactic manner. The group members receive additional support and a sense of hope from the group framework (D. J. Lee et al., 2016). Psychoeducation for trauma survivors, as I previously mentioned, is helpful but insufficient for reducing mental health symptoms in people with a long or complicated history of trauma and who may have PTSD or other trauma-related disorders (S. C. Lee & Rawlings, 2022).

Coping Skills and Relaxation Training

According to Scotland-Coogan and Davis (2016), practices such as deep breathing, yoga, mindfulness, and meditation can alleviate PTSD symptoms brought on by prolonged exposure to the stress response. Boden et al. (2014) conducted a longitudinal study on male PTSD veterans' coping strategies to assess their effectiveness. They assigned study participants randomly to one of two groups: substance use disorder (SUD), Seeking Safety (SS), or intensive treatment as usual (TAU) (Boden et al., 2014). Before and after treatment, they evaluated active, avoidant, emotional discharge, PTSD, SUD symptomatology, and 6- and 12-month follow-ups. The review

found avoidant and close-to-home release adapting, yet not dynamic adapting, were connected emphatically with PTSD and SUD (Boden et al., 2014).

Patients with co-occurring PTSD and SUD also must incorporate active coping strategies for unavoidable situations and avoid those that trigger PTSD symptoms (Sharkansky et al., 1999). Examples of active coping strategies include emotional regulation and distress skills, which assist with unpleasant emotions; interpersonal skill strengthening; relaxation techniques; and stress management, which assists with hyperarousal (Sharkansky et al., 1999).

Patients sometimes can use relaxation techniques in place of unsuccessful interventions for PTSD or in addition to traditional PTSD treatments. Relaxation therapies assist in reducing the physical manifestations of PTSD (Scotland-Coogan & Davis, 2016). The clinician can tailor the appropriate interventions to reduce the physiological symptomatology of PTSD symptoms by considering such symptoms to be a physical issue rather than a mental one (Scotland-Coogan & Davis, 2016). Relaxation techniques deconstruct the body's stress response by slowing breathing, lowering muscle tension, and lessening heart rate and blood pressure (Shah et al., 2014). According to Scotland-Coogan and Davis (2016), clients who struggled to manage their PTSD symptoms benefitted from learning helpful coping strategies through relaxation techniques.

Incorporating Faith in the Treatment of Trauma and Addiction

Churches are known to provide social and spiritual support in a community (Lovett & Weisz, 2021). Spirituality for many people, especially women, can lead to healthy relationships, emotional balance, and spiritual transformation. Oyewuwo (2020) described women's spirituality as a relational experience that involves assimilating and demonstrating key spiritual concepts, including understanding, acceptance, direction, centeredness, purpose, and coping with difficulties. Research has repeatedly proven spirituality can be essential for coping with physical

and psychological challenges, especially for women (Lovett & Weisz, 2021; Oyewuwo, 2020). Over the past 20 years, research repeatedly has indicated religious observance and church attendance are related to better physical, social, and mental health outcomes among African Americans (Oyewuwo, 2020).

Literature regarding physical health and mental health has affirmed spirituality as a preventive measure for various disorders. A sense of spirituality commonly refers to a subjective, individual belief drawing from perceptions, convictions, and emotions regarding a sacred or divine higher power, a global spirit, or an all-embracing purpose (Lovett & Weisz, 2021). Furthermore, spirituality is an awareness of one's meaning of life. For some, the commitment to practices such as attending religious services or being a part of a particular religious community typically characterizes a similar concept of religious well-being (Lovett & Weisz, 2021).

Although research has recognized spirituality and religious well-being as having significant and protective factors related to mental health, it also has found they are especially influential for African Americans (Oyewuwo, 2020; Villani et al., 2019). Numerous African Americans associate with a specific religious group, denomination, or church. Often offering good role models and a sense of community, the church can serve as the hub of the neighborhood (Oyewuwo, 2020). Given the importance of religion and spirituality to the community, it is not remarkable that studies reveal both serve as significant coping methods for mental health issues such as PTSD or depression.

Trauma has shown to have both positive as well as negative effects on people's spiritual beliefs and values. For example, loneliness and depression may accompany PTSD, resulting in reduced religious involvement (Lovett & Weisz, 2021). These trauma symptoms may evolve over time. Some people experience a reduction in spiritual or religious engagement, a loss of

faith, an alteration in their beliefs, a feeling of abandonment by God or being reproved by Him, and a lack of meaning and purpose in life (Lovett & Weisz, 2021). In contrast, others may experience a greater appreciation for life, a heightened sense of purpose, a feeling of being closer to God, and increased spiritual health after traumatic experiences (Lovett & Weisz, 2021).

Faith and spirituality are associated with beneficial outcomes, even when trauma survivors battle mental conditions such as PTSD or anxiety to start. Furthermore, studies among trauma populations show strong faith often connects to reduced symptoms and clinical issues (Lovett & Weisz, 2021). For example, after trauma, engaging in spiritual practices such as forgiveness and prayer may assist in controlling angry emotions or feelings of need for retribution. Various theories explain how spirituality assists in trauma recovery. Spirituality may improve post-trauma outcomes through religious practices such as social support through involvement in spiritual communities, avoiding alcohol and tobacco, improving coping skills, comprehending the trauma in a meaningful way, and physiological practices including prayer or meditation that activate a relaxed state (Lovett & Weisz, 2021).

A faith community's social support helps with trauma symptoms by decreasing the feelings of depression, loneliness, and isolation that come with traumatic loss. Faith also helps trauma survivors through the spiritual community by putting survivors in the company of caring people who might encourage them and offer emotional as well as practical support (Pearce et al., 2018). Furthermore, faith supports trauma survivors' capacity to interpret their trauma experience in meaningful ways. Spiritual beliefs and practices can challenge incorrect interpretations of trauma and maladaptive thinking patterns such as shame, guilt, rage, or demoralization that the person developed through the traumatic experience (Pearce et al., 2018). Spiritual practices and rituals such as forgiveness, spiritual visualization and meditation,

repentance, compassion, confession, grace, atonement, blessing, restitution, and making amends are the spiritual tools to help with reprocessing painful, traumatic thoughts and memories (Pearce et al., 2018).

Therefore, the perception can impact the survivor's symptoms and daily functioning significantly. According to several studies, holding unfavorable views or interpretations about God, such as believing He has abandoned the victim or is punishing them or feeling angry with God, are linked to several undesirable clinical outcomes (Lovett & Weisz, 2021). Studies show these viewpoints may be connected to physical and mental health problems as well as increased substance abuse. In one study of veterans receiving PTSD treatment, researchers discovered poor religious coping and resentment were linked both to worsening PTSD and to depressive symptoms (Lovett & Weisz, 2021). Faith-based substance use programs seek to correct these poor faith beliefs and experiences by reintroducing the individual to a loving and forgiving God.

War survivors may suffer from traumatic experiences that have happened to them or may suffer PTSD as a result from causing trauma for others. For example, soldiers may witness others being hurt in a war zone or may be the cause of hurt themselves (Lovett & Weisz, 2021). Two underlying mechanisms of a person's worldview, such as faith and patriotism, could be conflicting with each other, raising uncertainty regarding decisions they need to make (Lovett & Weisz, 2021). These experiences may at times result in enduring spiritual and moral dilemmas for veterans. Additionally, veterans may experience a loss of faith, increased shame and self-blame, and isolation from God. Individuals ultimately may feel separated from their ideals and expectations of military duty (Lovett & Weisz, 2021).

Since the beginning of Alcoholics Anonymous (AA), spirituality has been connected to recovery (Lovett & Weisz, 2021). Surrendering control to a higher power is a crucial component

of AA's 12-step program for recovery. Nevertheless, recovery practices have developed since the early 12-step programs and creation of AA. Spirituality is a more general term used to explain one's beliefs about their connection to the larger world. Some people ground their conceptions of spirituality in organized religion; others define it as connecting with nature (Lovett & Weisz, 2021). Spirituality is associated with humility because of the realization that something larger than ourselves exists. When faced with struggles and challenges, such as recovering from trauma and addiction, many individuals turn to spirituality.

Finding purpose in life can assist many people in their recovery. They can focus on their goals, and their lives begin to have meaning when they have a purpose (Villani et al., 2019). Spirituality aids a person in trauma and addiction recovery to find balance. Individuals understand there is something greater than themselves in the world when they are in connection with their spirituality (Lovett & Weisz, 2021). The realization of something more significant than oneself can help a person let go of their control over everything; this is vital for many people with addictions and past trauma who struggle with control and dependence on themselves. When individuals are able to relinquish control, they are able to be more present (Lovett & Weisz, 2021). Recovery begins when individuals can accept themselves for who they are and that their behaviors have consequences for themselves, other people, and society as a whole.

Faith-based initiatives are necessary in helping women recover from addiction and trauma (Lovett & Weisz, 2021). Whereas each faith-based program is different, they all have a component focused on spirituality. Faith-based substance use programs address an individual's spiritual needs by bridging a connection to a Christian God or other higher power (Blanco et al., 2020). They provide religious counseling, fellowship with other individuals, 12-step meetings,

and opportunities for the person to strengthen their relationship with God (Lovett & Weisz, 2021; Villani et al., 2019). Since 1992, SAMHSA actively has supported community-based and religious organizations that offer addiction and mental health treatment (Lovett & Weisz, 2021; Villani et al., 2019). For instance, multidenominational leaders in the faith community can gain from SAMHSA-sponsored training programs and curricula that promote integrated, sustainable collaborations at the local level across the nation while supporting addiction prevention, therapy, and psychoeducation (Lovett & Weisz, 2021).

Assimilating evidenced-based therapy approaches in faith-based substance use programs can help individuals reframe poor faith experiences and beliefs by challenging and restructuring distortions a person has developed about themself, the world, others, and God from their past trauma or experiences (Villani et al., 2019). Faith-based treatment programs also may provide group and individual counseling, psychoeducation about coping mechanisms, and cognitive behavioral therapy to help the person recover from addiction and substance abuse issues (Blanco et al., 2020). The resident can connect with spiritual counselors and attend religious services while in their treatment program (Lovett & Weisz, 2021; Villani et al., 2019). Numerous organizations also offer spiritually-focused activities such as Bible studies and 12-step meetings. When receiving residential care, some faith-based recovery facilities might offer a church or worship space or permit the individual to attend services there (Lovett & Weisz, 2021).

Walter Hoving Home and Faith-Based Recovery Programs

The Walter Hoving Home (WHH) was established in 1967 to assist women in New York City in overcoming drug addiction and escaping homelessness. Inspired by the Teen Challenge program, WHH is a faith-based, long-term initiative to provide individuals with the necessary

support and resources to achieve sobriety and reintegrate into society (Walter Hoving Home, 2022).

Reverend David Wilkerson established the faith-based program Teen Challenge as a solution to the issue of gang violence among young people in New York City (Wilkerson, 2008). His faith-based approach has been adopted since as a model for subsequent centers, which today accommodate people from many ethnicities, nationalities, and ages. Currently, Teen Challenge operates more than 200 residential facilities in the United States, while internationally, there are around 800 sites spanning over 80 different nations (Global Teen Challenge, n.d.; Teen Challenge, n.d.). Each center serves a specific demographic, such as men, women, adolescents, or adults. Both the Teen Challenge and Walter Hoving programs provide extended treatment duration, often 12 to 18 months, in a residential setting.

Faith-based initiatives have shown varying degrees of effectiveness. According to the first investigation Hess (1976) conducted, the program's alumni had a recovery success rate of 86%. Further research Thompson (1994) conducted in 1992 assessed the effectiveness of the Teen Challenge of Chattanooga over 15 years; this study's findings indicated a success rate of 67% among program graduates. According to previous studies, the success rate has ranged from as high as 92% to as low as 39% (Bicknese, 1999). Nonetheless, studies have shown Teen Challenge to be a faith-based alternative to the conventional methodology used in treating drug dependence.

One distinguishing characteristic of the Teen Challenge program is its perspective toward program participants. For instance, staff and leadership refer to those who enroll in the Teen Challenge program as "students" rather than as "patients" or "clients" (Kenny, 2003; Loconte, 2004). Teen Challenge diverges from the prevailing practices in the drug misuse domain due to

its distinct approach, which does not prioritize categorizing dysfunction or implementing deficit-based treatment strategies. In contrast, the disease model employs the vocabulary of "patients" and perceives those struggling with addiction or alcoholism as individuals experiencing a sickness or disease (Thombs, 1999). This language perpetuates the notion that people have a passive role in the context of addiction and drug abuse. According to Loconte (2004), Teen Challenge sees people as capable of making choices for which they have ultimate responsibility to God.

The WHH, the program study site, offers a wide range of spiritually-based activities such as prayer, worship, Bible study, spiritual mentoring, pastoral counseling, and Bible classes to assist in the resident's recovery (Lear, 2013). Programs like WHH and Teen Challenge assert a relationship with God is essential in recovery from drug and alcohol disorders. Likewise, one might consider this faith-based dynamic to be important in trauma recovery.

Post-Traumatic Growth

Post-traumatic growth is vital in treating women in faith-based recovery programs and is an end goal when treating trauma symptoms. Trauma survivors often make judgments about their symptoms and the traumatic event(s) that prompted them without understanding the exact cause of their emotions and behaviors (Whitworth, 2016). According to Joe et al.'s (1997) research, clients in addiction tended to evaluate their own psychological and social strengths and weaknesses in a more critical and possibly more natural light than standard clients; knowing this, it is essential to incorporate strength-based concepts into the trauma and addiction therapy sessions.

Trauma survivors' beliefs about themselves and their traumatic experiences may be intuitively correct. However, they frequently are distorted, such as when a traumatized individual

believes they are flawed due to their actions or blames unrelated people or places for the traumatic experiences (Whitworth, 2016). According to Morrill et al. (2008), positive psychosocial resources such as social support or the perception of psychological resilience following a stressful life event help foster post-traumatic growth. Conversely, Tedeschi and Calhoun (2004) found psychological distress was associated with lower levels of reported post-traumatic growth.

A person's mental health can benefit from making positive and meaningful interpretations of a distressing and traumatic experience, and this also may aid in addiction treatment. According to Tedeschi and Calhoun (2004), a person can increase post-traumatic growth by sharing their thoughts and showing empathy for those who are going through a trauma. Similarly, mental flexibility and positive relationships support post-traumatic growth (Morrill et al., 2008). According to Morrill et al. (2008), post-traumatic growth is a positive psychosocial resource comparable to social support or the perception of psychological mastery following a stressful life event. Morrill et al. (2008) also found a positive correlation between post-traumatic growth and post-traumatic stress disorder. This can make sense as survivors might encounter post-traumatic pressure and develop post-traumatic growth (Morrill et al., 2008). The goal of trauma therapy among women in faith-based recovery is to instill and foster post-traumatic growth to aid in the healing process and reduce relapse.

Summary

In conclusion, research has shown a connection between past traumatic experiences and addiction disorders (Basedow et al., 2020). Additionally, faith can be a positive cornerstone in treating addiction and trauma (Lovett & Weisz, 2021). The relationships among these three variables has yet to be examined among women in recovery residing at the WHH. To date, there

has not been any investigation of the connections among trauma, faith, and addiction for women in this faith-based program. Understanding the connections among these three variables can assist women seeking treatment for their addiction problems in faith-based settings determine how much trauma concerns also need to be addressed. Faith-based substance use programs can utilize a variety of evidence-based therapies for trauma. These approaches include CBT, CPT, EMDR, PE, relaxation training, and psychoeducation. The study's conclusions will clarify the importance of trauma-informed training for program staff members and the demand for qualified religious therapy to address SUD and trauma-related disorders with evidenced-based practices that align with the client's faith and spirituality.

Chapter Three: Methods

This quantitative study investigated if addiction severity risk, adverse childhood experiences (ACEs), length of time in a faith-based drug and alcohol program, and faith scores are significant predictors of current trauma symptoms among women in recovery. Furthermore, this study offers insight into the need for trauma-informed care for women in faith-based drug and alcohol programs by analyzing how these variables co-exist and influence one another. In this chapter, I define the methodology used to examine trauma, addiction, and faith among the women in the Walter Hoving Home (WHH). This chapter also indicates the guiding principles for the selected research design, questions, hypotheses, participants, instrumentation, procedures, data analysis, and validity concerns.

Design

This study used a nonexperimental quantitative survey research design to research the impact that addiction severity risk, ACEs, time in the program, and faith had on trauma symptoms among women in recovery at the WHH. I adopted a nonexperimental design because I did not randomly assign the participants, and I did not manipulate the independent variables. Instead, I assessed variables at a specific time for each participant (Heppner et al., 2016).

The independent predictor variables in this study were addiction severity risk, ACEs, length of time in program, and faith, while the dependent variable was trauma symptoms. Quantitative research depends upon numerical statistical analysis and data (Daniel, 2016). Researchers select this design when the purpose of the study is to explore a phenomenon using systematic investigation to gain a deeper knowledge of a population (Heppner et al., 2016). Consequently, this study aimed to acquire and analyze data objectively using a regression analysis.

Survey studies are one of the earliest and most widely utilized research designs in the social sciences (Heppner et al., 2016). Researchers use them when their objective is to study a particular population's experiences (Heppner et al., 2016). Typically, surveys obtain information through phone and in-person interviews, mail, and the Web (Ornstein, 2013; Ponto, 2015). Internet surveys, which this study used, are a beneficial way of collecting data due to the simplicity of administration, the decreased time in receiving data, and the accessibility of representative samples over a greater region (Heppner et al., 2016; Ponto, 2015).

The study provided a flexible strategy for expanding the current but limited research on the impact of addiction severity risk, ACEs, faith, and time in the program on trauma symptoms. The online survey utilized assessment instruments such as the Tobacco, Alcohol, Prescription medication, and Other Substances (TAPS Tools) assessment, Adverse Childhood Experiences Questionnaire (ACE), Time in Program Evaluation, Trauma Symptom Checklist (PCL-5), and a Spiritual Interest and Beliefs Scale (SIBS) scale. The chosen research design was appropriate and effective for this study because it enabled me to conduct the research to test the hypothesis that a significant relationship exists among addiction, trauma history, faith, and current traumatic symptoms. I analyzed the collected data using descriptive statistics, tables, graphs, and inferential statistics.

Research Questions

This study aimed to investigate if a significant relationship exists between addiction severity risk, ACEs, length of time in the WHH program, and faith scores on levels of current trauma symptoms for women in recovery. The relationship between ACEs and trauma symptoms has been confirmed in research (Kalmakis et al., 2020) as well as that between substance use disorder and PTSD (Lotzin e al., 2019). Examining relationships existing between length of time

in faith-based drug and alcohol programs, like the WHH, and levels of faith in relation to trauma symptoms have yet to be examined quantitatively among women in recovery. Specifically, this study sought to answer the following research questions:

RQ1: Is addiction severity risk a significant predictor of current trauma symptoms among women in recovery?

RQ2: Are adverse childhood experiences a significant predictor of current trauma symptoms among women in recovery?

RQ3: Is faith a significant predictor of current trauma symptoms among women in recovery?

RQ4: Is length of time in the WHH a significant predictor of current trauma symptoms among women in recovery?

Hypotheses

The alternate hypotheses for this study are:

H1: Higher addiction severity scores will be a significant predictor of higher trauma symptom scores.

H2: Higher ACE scores will be a significant predictor of higher trauma symptom scores.

H3: Higher faith scores will be a significant predictor of lower trauma symptom scores.

H4: Longer time in the program will be a significant predictor of lower trauma symptom scores.

Participants and Setting

The first stage in participant selection is distinguishing the target population. Heppner et al. (2016) explains the more heterogeneous the sample is, the more generalizable it is. Thus, I selected the participants in this research using a method of purposive sampling. According to

Ornstein (2013), when probability sampling is unavailable, researchers should utilize purposive sampling. This type of sampling is prevalent in the social sciences; researchers employ it when the study's objective is to generalize certain characteristics of a group of people to the population of interest (Heppner et al., 2016).

This study could not realistically or practically collect data from all women in recovery in America. Consequently, a sample of the target population was used to analyze the collected data. When using a subset of the population, the sample should be descriptive of the total population (Ponto, 2015). The sample consisted of 84 female WHH residents and staff from the New York, Massachusetts, Las Vegas, California, New Jersey, and North Carolina sites, which was 74% of total potential participants across program sites. Because inclusion criteria marks a difficult-to-reach population, purposeful sampling was appropriate for this study. The inclusion criteria for the study was that participants must (a) be at least 18 years old; (b) currently be enrolled at WHH Program as a student or staff for a previous self-reported addiction problem; (c) be willing to take part in the study and competent to give informed consent; (d) have answered "Yes" to entering the program due to an alcohol or drug problem that was affecting their life in a negative way; and (e) be female. The regression analysis only included participants 2–12 or more months in the WHH. Participation was voluntary, and participants were not compensated.

To attain statistical significance, it was necessary to establish the number of participants, the effect size, the alpha level, and the statistical power of the population of interest. A G Power analysis revealed that the minimal sample size (n=85) was required for multiple regression with four predictors and standard parameters for similar studies (effect size of 0.15, alpha of 0.05, and power of 0.80). Effect size, which also can compute statistical power and resolve the minimum sample size for an effect, provides the researcher with information regarding the strength of the

association between two variables or the extent of the effect within groups (Warner, 2013). Selecting the most suitable effect size determined both statistical significance and practical significance (Kirk, 1996; Warner, 2013).

Instrumentation

Adverse Childhood Experiences (ACEs) Questionnaire

The survey began with a brief demographic questionnaire with six items identifying information such as age, drug of choice, length of time in the program, and self-identified religion. The participant then started the randomized assessments to minimize order effect bias. The Adverse Childhood Experiences (ACEs) questionnaire evaluates ten different types of childhood trauma studied in the ACE study (Zarse et al., 2019). The first five include physical, verbal, sexual, and emotional abuse, as well as physical neglect. The remaining five are related to family problems, such as the consequences of parental intoxication, the parent being a victim of domestic abuse, a family member being imprisoned, parents disappearing due to divorce, death, or abandonment, or relatives being diagnosed with mental illness (Zarse et al., 2019). An example of an item on the ACEs is, “While you were growing up, how often did a parent, stepparent, or another adult living in your home swear at you, insult you, or put you down?” with a response score of “0” or “1.” ACE scores total can range from 0–10, with 10 being indicative of the highest score for adverse childhood experiences. Dube et al. (2014) found the reports of adverse childhood experiences (ACEs) during maturity have good to outstanding reliability. The test–retest reliability of responses to queries about adverse childhood experiences (ACEs) and the resulting ACE score was found to be acceptable to substantial (Dube et al., 2004). These results indicate retrospective responses to childhood maltreatment and family dysfunction are generally stable over time. Wingenfeld and his colleagues researched the psychometric

properties of the ACE Score and found it is a reliable and valid too for screening ACEs" (2010). The ACE assessment has suitable reliability and validity, with a test–retest reliability (kappa coefficient = 0.61-0.80) and construct validity (Dube, 2004).

Tobacco, Alcohol, Prescription Medication, and Other Substances (TAPS Tool)

The development of the TAPS Tool was motivated by the necessity for a concise screening instrument that encompasses a range of frequently used substances, while also being compatible with clinical procedures (U.S. Dept. of Health and Education, n.d.). The TAPS instrument is a brief assessment with two components that evaluate the patterns and consequences of substance use. TAPS-1 consists of four items that assess the frequency of tobacco use, alcohol consumption, use of prescription medication, and the consumption of illicit substances such as marijuana, cocaine, methamphetamine, and hallucinogens. If the response to the TAPS-1 questionnaire is anything other than "never," it is considered a positive screen, which then prompts the administration of the TAPS-2. The TAPS-2 is a concise evaluation derived from the Alcohol, Smoking, and Substance Involvement Screening Tool (ASSIST)-Lite. It consists of a series of 3–4 binary inquiries for each category of substances, aiming to gauge the extent of consumption and dependency. The determination of thresholds for problematic substance use disorder is predicated upon the evaluation of scores obtained from the administration of the TAPS-2 assessment tool. The TAPS tool has the capability to be administered either by a clinician interviewer or by patients themselves using a computer or tablet. The scores from TAPS 2 can be 0 = No Use in Past 3 Months, 1 = Problem Use, 2+ = Higher Risk (U.S. Dept. of Health and Education, n.d.).

McNeely et al. (2016) evaluated the validity of the TAPS tool by utilizing the Areas Under the Curve (AUC) of Receiver Operating Characteristics Curves (ROC). The TAPS tool

demonstrated satisfactory or superior discriminatory ability in distinguishing between moderate and high-risk usage of alcohol, prescription opiates, and tobacco (with area under the curves ranging from 0.75 to 0.97). Additionally, the tool exhibited satisfactory or superior discriminatory ability in distinguishing between low and moderate-risk usage in 5 out of 8 subscales, namely alcohol, marijuana, tobacco, heroin, and stimulants (with area under the curves ranging from 0.70 to 0.92). The TAPS instrument has demonstrated its ability to identify problem substance use in many drug categories, making it a viable assessment tool for screening individuals' drug and alcohol consumption (McNeely et al., 2016).

PTSD Checklist for DSM-5 (PCL-5)

The PCL-5 is a 20-item self-report tool utilizing a Likert's scale to assess the 20 DSM-5 PTSD symptoms. In the current study, a PCL-5 assessment is used to screen for trauma symptomatology. An example question on the PCL-5 is, "In the past month, have you experienced repeated, disturbing, and unwanted memories of stressful experiences?" The response format includes answering "Not at All – 0, A Little Bit – 1, Moderately – 2, Quite a Bit – 3, and Extremely – 4," and scores are tallied at the end. In 2021, Roberts and a team of researchers found that the PCL-5 exhibited excellent internal consistency, convergent and divergent validity, acceptable stability, and diagnostic utility in research. Nevertheless, operating characteristics were distinct from those of other samples. Scores between 43 and 44 were optimal for diagnosing PTSD. Depression explained more variance in the PCL-5 total score than the CAPS-5, as determined by a post hoc regression analysis (Roberts et al., 2021). Blevins et al. (2015) reports the PCL-5 internal consistency as high (alpha = .94) and an adequate convergent validity (Ibrahim et al., 2018); Utilizing the cut off score of 23, the PCL-5 attained the most

satisfactory balance of sensitivity and specificity (area under the curve = .82, $p < .001$; sensitivity = .82, specificity = .70; Ibrahim et al., 2018).

Spiritual Interest and Beliefs Scale (SIBS)

The Spiritual Involvement and Beliefs Scale (SIBS) was created to be relevant across various religions, to evaluate behaviors in addition to beliefs, to assess pertinent characteristics not examined by other available assessments, and to be administered and scored straightforwardly. The assessment is a survey with 26 Likert-type items in an adjusted format. The SIBS was given to 50 patients and 33 educators in family practice after extensive pre-testing. An example question on the SIBS scale is "Some experiences can be understood only through one's spiritual beliefs," to which the participant will answer Strong Agree, Agree, Neutral, Disagree, or Strong Disagree. Multiple measures indicate the reliability and validity of the instrument are excellent, including "high internal consistency (Cronbach's alpha =.92), test-retest solid reliability (r =.92), a clear four-factor structure, and a high correlation (r =.80) with another established measure of spirituality, the Spiritual Well-Being Scale" (Hatch et al., 1998).

Procedures

Approval from the IRB was obtained before recruiting participants. Upon IRB approval, I informed each approved Walter Hoving Home program site of the nature and purpose of the study via Zoom. I informed and apprised participants of the study's purpose via Zoom prior to participation. The residents interested in participating in the research then notified their site program manager, who provided them a confidential space to access the Qualtrics survey. The survey took each participant fewer than 15 minutes to complete.

Once participants met inclusion criteria, they accessed the Qualtrics survey link online through the program site's computer in a confidential office space. Participants were not

compensated for this study. When participants clicked on the secure survey link, the survey guided them to the informed consent (see Appendix A) and gave them more information on the objective of the study via the verbal recruitment request (see Appendix B). Next, survey instructions directed participants to complete the self-report questions and assessments. Participants first completed questions about their age, religion, and length of time in the program (see Appendix C). Assessments in the survey included the PCL-5 (See Appendix D), TAPS tool (see Appendix E), ACEs (see Appendix F), and SIBS (see Appendix G). As an anonymous survey, no identifying information was collected, and outcomes from each assessment were scored as informed by each of their manuals. The information collected was transferred into SPSS, and the Qualtrics link was disabled. I assessed all data to detect variations and oversights. I initially endeavored to correct any detected inconsistencies or errors. I compiled and analyzed all descriptive and summary statistics for the multiple regression analysis.

Data Analysis

After I collected and reviewed the data in SPSS, a multiple linear regression analysis, I conducted multiple *t*-tests to answer the research questions. The first research question sought to determine if addiction severity (TAPS Tools 1 & 2) scores would be a significant predictor of current trauma symptoms as measured by the PCL-5. I hypothesized higher TAPS Tools 1 & 2 scores would be a significant predictor of higher levels of trauma symptoms among women in recovery. The second research question sought to determine if ACE scores would be a significant predictor of current trauma symptoms as the PCL-5 measured them. I hypothesized higher ACE scores would be a significant predictor of higher levels of trauma symptoms among women in recovery. The third research question sought to determine if SIBS scores would be a significant predictor of current trauma symptoms as the PCL-5 measured. I hypothesized higher SIBS scores

would be a significant predictor of lower trauma symptoms among women in recovery residing at the WHH. The fourth research question sought to determine if length of time in the WHH program would be a significant predictor of current trauma symptoms as the PCL-5 measured. I hypothesized more extended time in the program would be a significant predictor to lower trauma symptoms.

I utilized a multiple linear regression analysis, which was appropriate for this study because we analyzed the strength of the relationship between more than one independent for a single dependent variable (Myers & Myers, 1990). Multiple *t*-tests were also utilized and appropriate, comparing the difference of means of the dependent variable for each of the predictor variables. Predictor variables included addiction severity as TAPS Tools 1 & 2 measured, the length of time in the program (1–12+ months), faith as the SIBS scale measures it, and history of trauma as the ACEs measured it. The dependent variable was trauma symptoms as the PCL-5 measured.

Summary

The purpose of this quantitative study was to examine if addiction severity, ACEs, faith, and length of time in the WHH program are significant predictors of current trauma symptoms for women in recovery residing at the WHH. Chapter Three presents a detailed overview of the research design and methods employed in this study. Liberty University's IRB granted permission to conduct the study. Additionally, the President and National Director of the WHH programs granted permission to conduct the research with residents of Walter Hoving Home program. Participation was voluntary and an anonymous Qualtrics survey link was provided to WHH residents interested in participating. I collected data from the survey through a self-report questionnaire, addiction severity scale (TAPS tools), adverse childhood experiences (ACEs

questionnaire), faith (SIBS scale), and trauma symptoms (PCL-5). I analyzed data through a multiple regression analysis and a secondary independent sample *t*-test analysis to confirm regression results.

Chapter Four: Findings

This chapter reviews the data analysis for the proposed research study beginning with descriptive statistics, followed by the multiple linear regression and *t*-test outcomes that answer the proposed research questions. This study examined the predictive relationship of addiction severity, faith, adverse childhood experiences, and length of time in the WHH program with current trauma symptoms among women in recovery.

The research questions for this study were:

RQ1: Is addiction severity a significant predictor of current trauma symptoms among women in recovery?

RQ2: Are adverse childhood experiences a significant predictor of current trauma symptoms among women in recovery?

RQ3: Is faith a significant predictor of current trauma symptoms among women in recovery?

RQ4: Is the length of time in the WHH a significant predictor of current trauma symptoms among women in recovery?

Descriptive Statistics

Table 1 exhibits the overall descriptive statistics for the dependent and predictor variables, including means for each predictor variable, as well as the dependent variable. Minimum and maximum scores are illustrated in the table for each of the variables along with the total sample size. Figures 1–4 exhibit bar graphs with means and standard deviation error bars of the sample data for each predictor variable and dependent variable.

Table 1

Descriptive Statistics for Predictive and Dependent Variables (N = 84)

Variable	M	SD	Min	Max
Time (number of months)	8.00	3.87	2	12
Addiction	9.32	5.78	0	26
ACE score	4.75	2.63	0	10
Faith score	111.43	9.88	82	125
Trauma score	20.10	16.36	0	66

Figure 1

Bar Graph of ACEs and Trauma Symptom Scores

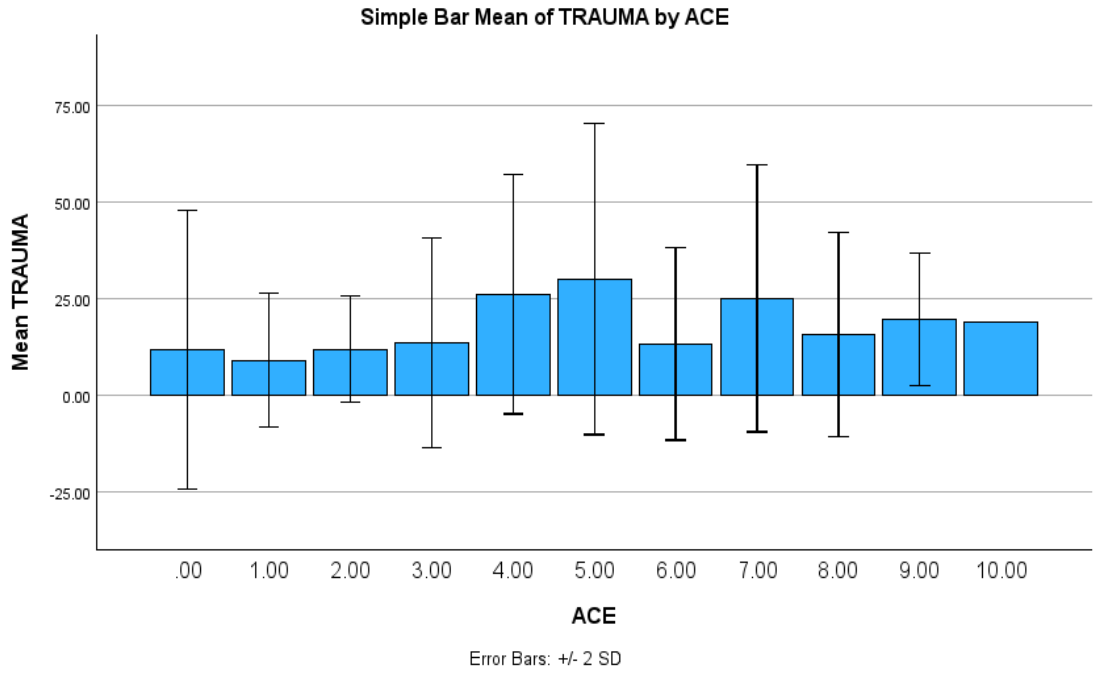


Figure 2

Bar Graph of Addiction and Trauma Symptom Scores

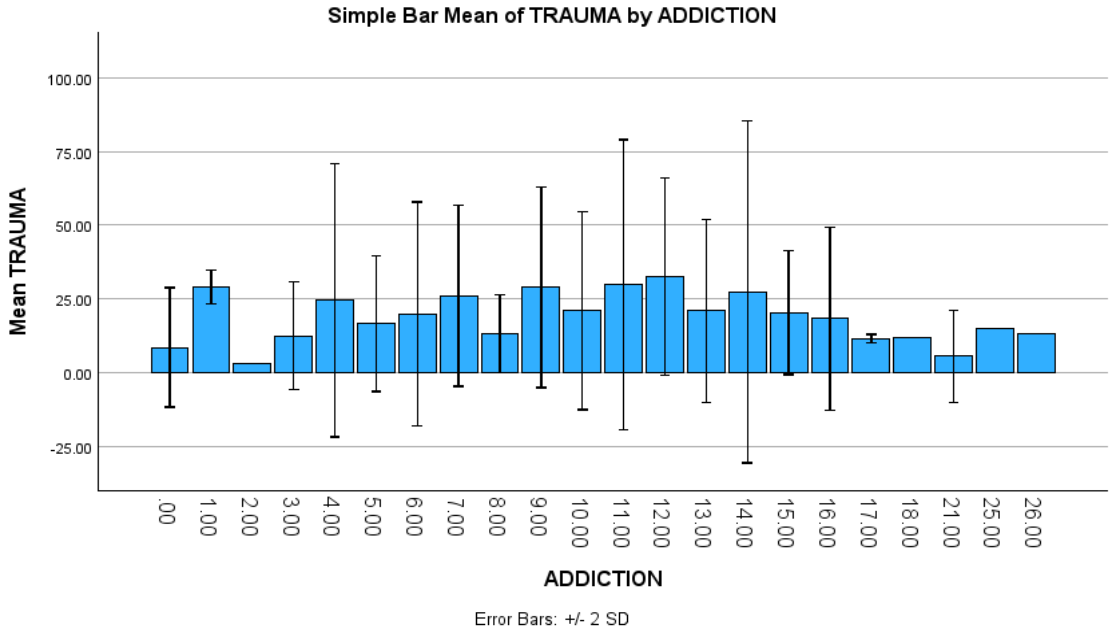


Figure 3

Bar Graph of Time and Trauma Symptom Scores

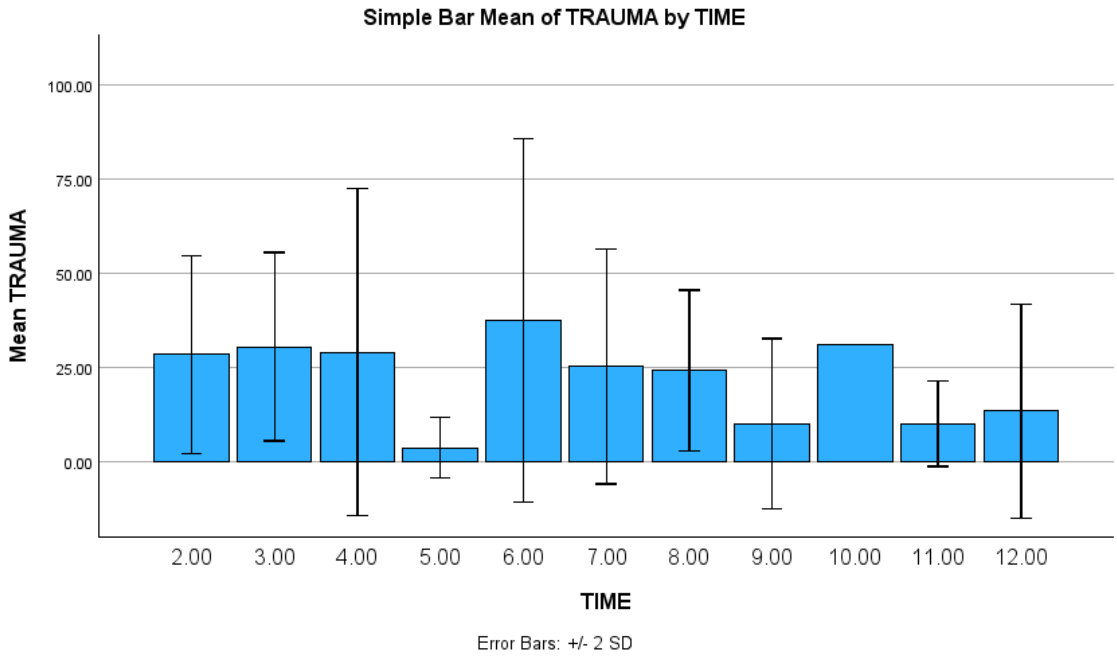
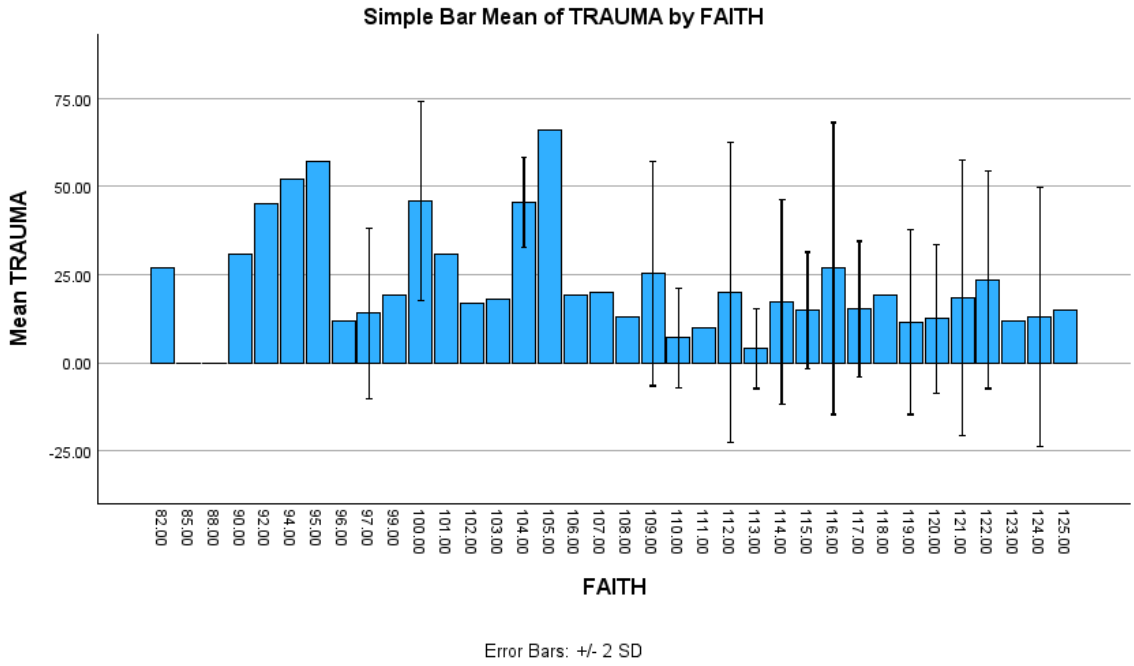


Figure 4

Bar Graph Faith and Trauma Symptom Scores



Results

I conducted a multiple regression and several independent sample *t*-tests to examine the associations among trauma symptoms among women in recovery residing at the WHH and adverse childhood experiences, length of time in the program, addiction severity, and faith. The overall regression was significant: $F(4,79)=7.04$, $p<.001$, $R2=.263$. These results indicated the combination of ACEs, time in the program, addiction severity, and faith significantly predicted trauma symptoms for women in recovery at the WHH (see Table 2). The overall multiple regression scatterplot shows a moderate and positive linear association. The acceptable R2 value of .263 reveals 26% of the variance in trauma symptoms was explained by a combination of predictor variables within this sample (see Figure 5).

Table 2

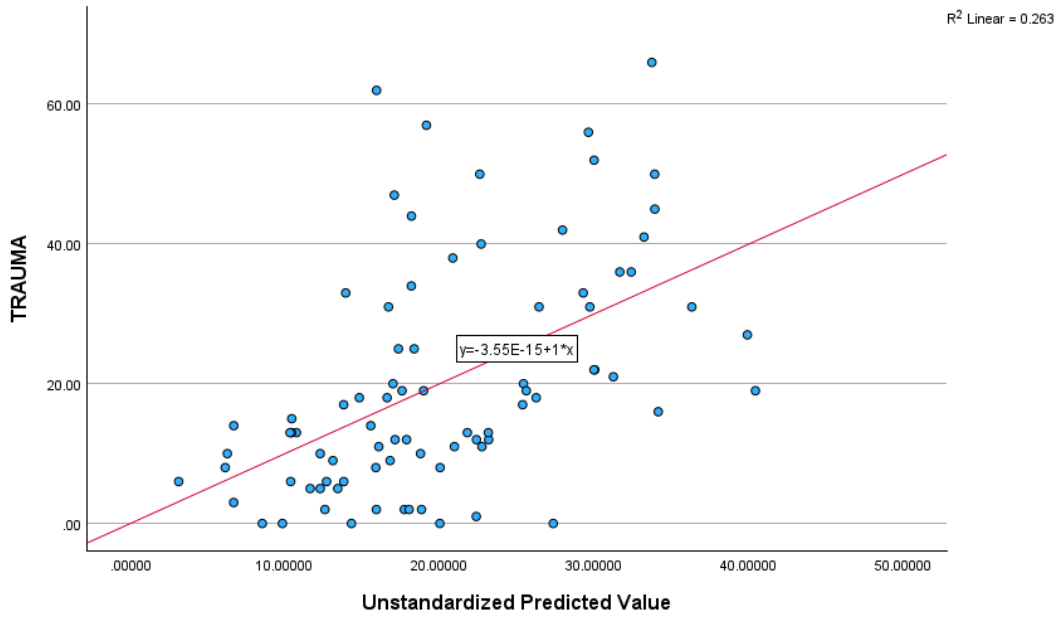
Multiple Regression Analysis Predicting Trauma Score

Variable	*β*	*SE*	*t*
Intercept	72.90	17.99	
Time	-1.61	0.42***	-3.85
Addiction	0.46	0.28	1.63
ACE Score	1.52	0.62*	2.47
Faith Score	-0.46	0.17**	-2.75
$F(4,79) = 7.01$, $p < .001$, $R^2 = .263$, Adj. $R^2 = .225$			

Note. $*p < .05$, $**p < .01$, $***p < .001$.

Figure 5

Multiple Regression Model Scatterplot



Note. (a) Predictors: (Constant), Faith, Time, Ace, Addiction; (b) Dependent Variable: Trauma

H1: Higher addiction severity scores will be a significant predictor of higher trauma symptom scores.

Results revealed addiction severity was not a significant predictor in trauma symptoms (β = .46, $t(79) = 1.63$, $p > .05$). The scatterplot for addiction severity and trauma scores shows a weak and slightly positive linear association. The R^2 value of .002 reveals that 0.2 % of the variance in trauma symptoms was explained by addiction severity in this sample (see Figure 6). To examine whether a significant difference existed between individuals with high and low addiction scores using trauma scores as the dependent variable, an independent-samples *t*-test was utilized. Addiction scores were dichotomized using a median split (*Mdn* = 9). Results revealed no statistically significant difference in trauma scores between low addiction individuals (*M* = 18.62, *SD* = 15.09) and high-addiction individuals (*M* = 22.08, *SD* = 17.91), $t(81) = 0.96$, $p = .175$, $d = .210$ (see Table 3).

Figure 6

Scatterplot Addiction and Trauma

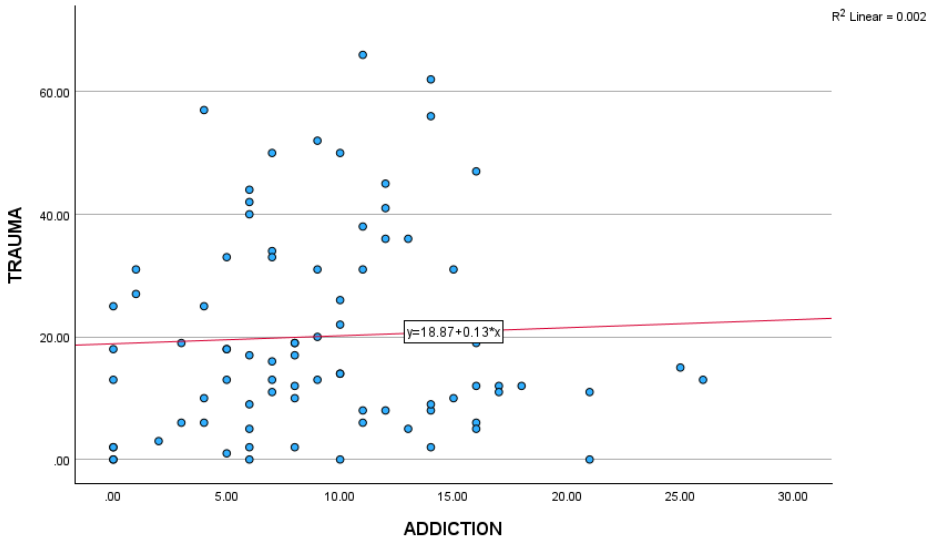


Table 3

Differences Between Individuals With Low Addiction and Individuals With High Addiction on Trauma Score

	Low		High					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	Cohen's *d*
Trauma Score	18.62	15.09	22.08	17.91	81	0.96	.175	.210

H2: Higher ACE scores will be a significant predictor of higher trauma symptom scores.

Results revealed ACE scores were a significant predictor of trauma scores (β = 1.52, $t(79) = 2.47$, $p <. 05$). The scatterplot of ACE and trauma scores shows a weak and positive linear association. The R^2 value of .032 reveals that a change in ACE scores explained 3.2% of the variance in trauma scores (see Figure 7). I also utilized an independent-samples *t*-test to determine if there were differences in trauma scores between individuals with low ACE scores and individuals with high ACE scores. ACE scores were dichotomized using a median split (*Mdn* = 5). Levine's equality of variances was violated in this analysis. Results revealed a statistically significant difference in trauma scores between low ACE individuals (M = 16.19, SD = 14.52) and high ACE individuals (M = 23.02, SD = 17.18), $t(80.76) = 1.97$, p = .026, d = .424 (see Table 4).

Figure 7

Scatterplot Aces and Trauma

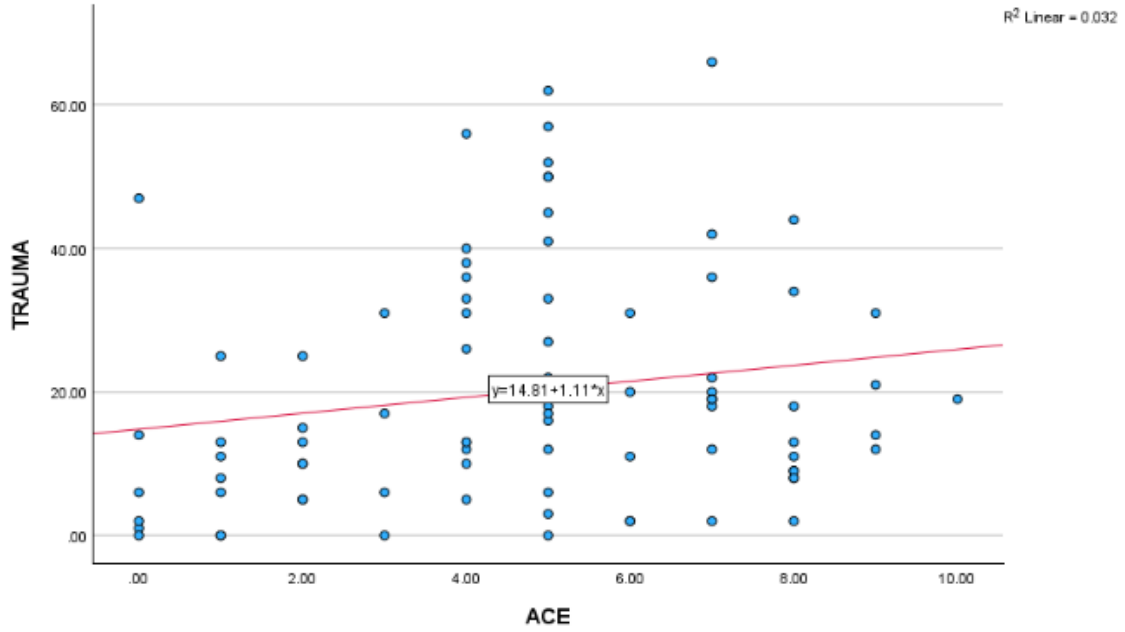


Table 4

Differences Between Individuals With Low ACEs and Individuals With High ACEs on Trauma Scores

	Low		High					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	Cohen's *d*
Trauma Score	16.19	14.52	23.02	17.18	80.76	1.97	.026	.424

H3: Higher faith scores will be a significant predictor of lower trauma symptom scores.

Results revealed faith was a significant predictor of trauma scores (β = -.46, $t(79)$ = -2.75, $p < .05$). The scatterplot for faith and trauma scores shows a weak and negative linear association. The R^2 value of .059 reveals 5.9% of the variance in trauma symptoms was explained faith scores (see Figure 8). I also utilized an independent-samples *t*-test to determine if

there were differences in trauma scores between individuals with low faith scores and individuals with high faith scores. I dichotomized faith scores using a median split (*Mdn* = 114). Results revealed a statistically significant difference in trauma scores between low faith individuals (*M* = 23.90, *SD* = 18.80) and high faith individuals (*M* = 16.63, *SD* = 13.04), *t*(82) = -2.07, *p* = .021, *d* = .453 (see Table 5).

Figure 8

Scatterplot Faith and Trauma

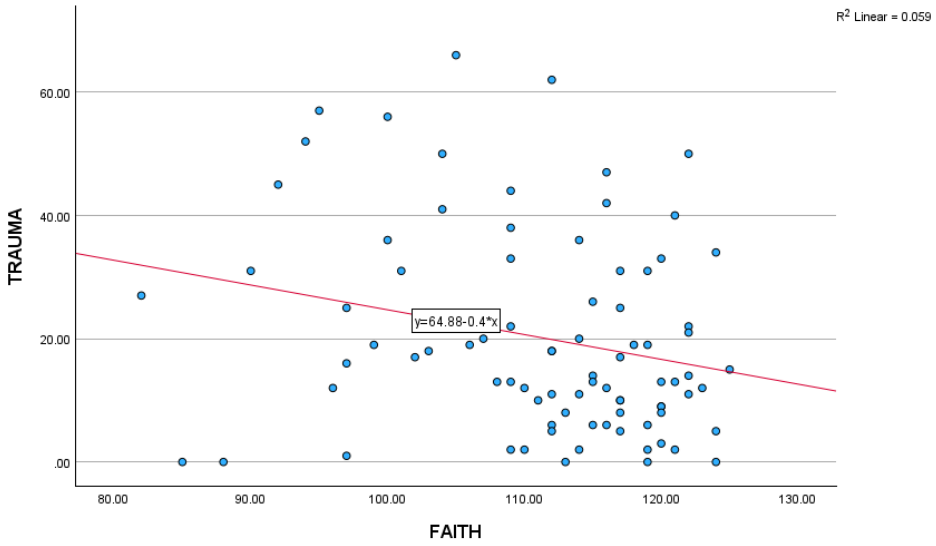


Table 5

Differences Between Individuals With Low Faith and Individuals With High Faith on Trauma Scores

	Low		High					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	Cohen's *d*
Trauma Score	23.90	18.80	16.63	13.04	82	-2.07	.021	.453

H4: Longer time in the program will be a significant predictor of lower trauma symptom scores.

Results reveal length of time in the program was a significant predictor of trauma scores (β = -1.61, $t(79)$= -3.85, $p < .001$). The scatterplot for length of time in the program and trauma scores shows a moderate and negative linear association. The acceptable R^2 value of .14 reveals the length of time in the program explained 14% of the variance in trauma symptoms (see Figure 9). An independent-samples *t*-test also was run to determine if there were differences in trauma scores between individuals who had spent less time in the program and individuals who had spent longer time in the program. Time in program was dichotomized using a median split (*Mdn* = 8). Results revealed a statistically significant difference in trauma scores between individuals who have spent less time in the program (M = 23.90, SD = 17.36) and individuals who have spent a longer time in the program (M = 15.08, SD = 13.75), $t(82) = -3.26$, $p < .001$, $d = .715$ (see Table 6).

Figure 9

Scatterplot of Time and Trauma Scores

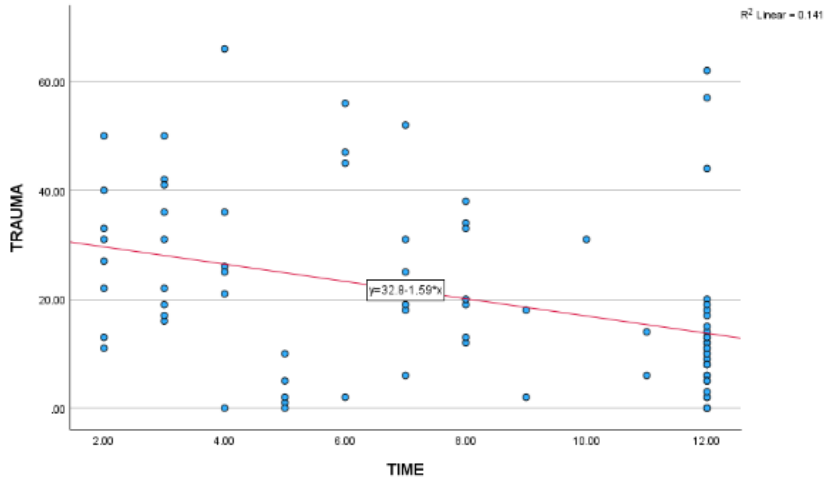


Table 6

Differences Between Individuals With Less Time in Program and Individuals With Longer Time in Program on Trauma Scores

	Low		High					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	Cohen's *d*
Trauma Score	26.15	17.36	15.08	13.75	82	-3.26	<.001	.715

Summary

Chapter Four highlighted a synopsis of the research results, including descriptive statistics, primary and secondary statistical analyses on the data collected, and overall conclusions of the research findings. In this study, addiction severity, ACEs, faith, and length of time in the WHH program were the predictor variables measured, while current level of trauma symptoms was the dependent variable measured. I utilized a multiple regression analysis to identify the strength of the association of the predictor variables on the dependent variable. Due to one analysis result appearing inconsistent with my first hypothesis, I employed a secondary analysis to further evaluate regression findings. I then ran an independent sample *t*-test for each predictor variable and dependent variable. The multiple regression analysis revealed a significant predictive relationship among the independent variables ACEs, faith, and length of time in the WHH program and the dependent variable trauma symptoms. Inconsistent with my hypothesis, the predictor variable addiction severity was not found to have a significant predictive relationship with trauma symptoms. The independent sample *t*-tests supported the regression results where there was no significant difference in mean scores of trauma symptoms between the low and high addiction severity groups. Also supporting the regression results, results revealed a significant difference in mean trauma scores among the low and high ACEs, faith, and length of time in the WHH groups. The study found length of time in the program to be the

strongest predictor for lower trauma symptoms among all the predictor variables (β = -1.61, $t(79) = -2.75$, $p < .001$), and it also had the largest effect size in the independent sample *t*-test between individuals who have spent less time in the program ($M = 23.90$, $SD = 17.36$) and individuals who have spent longer time in the program ($M = 15.08$, $SD = 13.75$), $t(82) = -3.26$, $p < .001$, $d = .715$.

Chapter Five: Conclusions

This chapter discusses the study conducted while considering previous research on the relationships among trauma, faith, and addiction. This chapter also indicates how this research can benefit the Christian counseling field as it relates to addiction issues and trauma concerns. Within this context are the results of the investigation of the predictive relationships among addiction severity, adverse childhood experiences, faith, and trauma symptoms among women in recovery residing at a faith-based substance use program. I discuss here the answers to the proposed research questions on the predictive relationships among faith, trauma, and addiction. Furthermore, an overview of the study's limitations and recommendations for future research concludes this chapter.

Discussion

The purpose of this research study was to examine the predictive ability of specific variables on current trauma symptoms for women in recovery residing at the WHH. I conducted a multiple regression analysis and several independent sample *t*-tests to examine the association and differences among trauma symptoms among women in recovery residing at the WHH with adverse childhood experiences, length of time in the program, addiction severity, and faith.

RQ1: Is addiction severity a significant predictor of current trauma symptoms among women in recovery?

Inconsistent with my hypothesis, addiction severity was not a significant predictor of trauma symptoms for women in recovery at the WHH. The independent sample *t*-test also revealed no significant difference in mean scores of trauma symptoms between individuals with low addiction and high addiction scores. One of the earliest studies on SUD and PTSD found four out of five women seeking help for their addiction problems had a reported history of sexual

assault, physical assault, or both (Covington & Kohen, 1984). Additionally, nine out of ten women with SUD and PTSD report a history of childhood abuse (Lotzin et al., 2019). The mean addiction severity score for the women upon entering the program was over nine, which is very high and signifies a severe SUD risk. And yet, however high the score, there still was no significant association between this score and higher trauma symptom scores. Potential explanations for this could be the small sample size or the scale the study utilized. Past research linking addiction and trauma utilized the Addiction Severity Index as opposed to the TAPS tools that this study used (Kuksis et al., 2017).

RQ2: Are adverse childhood experiences a significant predictor of current trauma symptoms among women in recovery?

Consistent with the hypotheses, adverse childhood experiences were important factors in predicting higher trauma symptoms. ACE scores exhibited a weak but significant positive association with trauma symptoms scores for women in recovery at the WHH. The independent sample *t*-test also revealed a significant difference in mean trauma symptom scores between individuals with low ACE scores and high ACE scores. This reveals ACEs do have a role in influencing trauma symptom levels for women in recovery; however, other determining factors influence trauma symptom scores as well. In support of my research outcome, past studies reveal childhood trauma is prevalent among individuals with a SUD. Statistics report that 22%–74% of individuals with a SUD disclose at least one form of child maltreatment or neglect (Liu et al., 2021), whereas women are more likely than men to report severe childhood trauma, including sexual abuse (Blanco et al., 2020; Liu et al., 2021). Lui et al. (2021) also found PTSD correlates strongly to childhood trauma. An explanation of the weak correlation could be due to a small sample size or the buffering effects of the faith-based model on trauma symptoms.

RQ3: Is faith a significant predictor of current trauma symptoms among women in recovery?

Faith was found to be a significant predictor for lower trauma symptoms for women in recovery at the WHH. Faith exhibited a weak to moderate, but still significant, negative association with trauma symptoms. The independent sample *t*-test also revealed a significant difference in mean trauma symptom scores between individuals with low faith scores and faith ACE scores. This outcome is consistent with my hypothesis and consistent with the robust literature that informs faith as a resilience factor in trauma treatment. Faith has been linked to beneficial outcomes as it relates to mental health by its ability to be a protective factor in PTSD and reducing trauma symptoms (Lovett & Weisz, 2021). Faith may enhance post-trauma outcomes through better and healthier religious practices, and this study confirms these assertions (Lovett & Weisz, 2021).

RQ4: Is the length of time in the WHH a significant predictor of current trauma symptoms among women in recovery?

Length of time in the WHH program was the strongest predictor in the study for lower trauma symptoms. Length of time had a moderate significant negative association with trauma symptoms for women in recovery at the WHH. The independent sample *t*-test also revealed a significant difference in mean trauma symptom scores between individuals with longer time in the WHH program and individuals with less time in the WHH program. Graduating from the similar faith-based program, Adult and Teen Challenge, had a significant effect on abstinence rates; however, this was the first study to examine the effect length of time in the program had on trauma symptoms (Bicknese, 1999; Hess, 1976; May, 2019). Since trauma symptoms could leave women with addiction history vulnerable to triggers and potential relapse, gaining understanding

into how and to what extent the program already helps trauma symptoms is critical in addressing the unique treatment needs of women in recovery with trauma issues. Some studies reveal time away from a traumatic experience does not affect trauma symptoms for individuals diagnosed with PTSD. For Syrian refugees, research showed there was no significant change in the mean scores of PTSD and depression symptoms between the first and second evaluations, which were conducted over the course of 18 months. Additionally, for more than three-quarters of the research participants, the study found no reliable change for depression or PTSD on the individual level (Mahmood et al., 2022). Nobels et al. (2022) also asserted time does not heal all wounds and found a connection between sexual victimization and mental health and PTSD issues later in life. Considering this past research, my study confirming that length of time in the WHH program has a significant predictive relationship with lower trauma symptoms is of utmost value to women in recovery with trauma issues.

This research study supports the theoretical frameworks I chose for the study: the theory of religious coping as well as the biopsychosocial theory of addiction. This study adds to the existing literature on faith as a resilience factor for trauma recovery and confirms Pargament's theory of religious coping. The WHH program model, assists not only in addiction recovery but also in reducing trauma symptoms by actively engaging in many functions Pargament's theory of religious coping outlined.

According to Kenneth Pargament, a prominent scholar in the field of religious coping, religion plays a fundamental role that is primarily spiritual in nature. Pargament emphasizes spirituality is an indispensable component of human existence, and it should not be dismissed or rationalized (Pargament, 2007, p. 31). Furthermore, Pargament (1997) provided an explanation of coping as the active endeavor to seek and construct meaning in the face of challenging

circumstances (p. 90). According to Pargament and Raiya (2007), religious coping strategies refer to approaches utilized to comprehend and manage adverse life occurrences that are connected to the sacred (p. 23). Additionally, Pargament (1997, 2007, & 2011) asserted religion plays a significant role in addressing matters of faith, hence enhancing coping mechanisms. According to Pargament et al. (2000), religious coping encompasses five primary roles. These functions include seeking solace by establishing a connection with a higher power, fostering closeness and intimacy with others, deriving meaning from challenging circumstances, facilitating personal transformation, and cultivating self-regulation. In times of adversity, several individuals turn to their religious beliefs as a means of finding comfort, support, and a sense of direction and control (Pargament & Ano, 2006). According to Pargament et al. (2005) and Tatsumura et al. (2003), a number of studies consistently have shown individuals frequently employ prayer, engage in worship, and seek support from their religious community as a means of coping with suffering. Individuals often derive a sense of purpose and agency from their religious beliefs (Pargament & Ano, 2006).

This research also supports Engel's biopsychosocial model of addiction. Engel (1977) hypothesizes many components—namely biological, psychological, and social ones—significantly contribute to the overall functioning of individuals concerning disease or their perception of it. Engel presented it as a comprehensive model, an alternative to the prevailing biomedical paradigm within the field at that period. Engel's contribution redirected focus from the disease itself to the individual who is impacted. In 1980, Engel put forth the proposition that the primary aim of the model is to facilitate therapeutic interventions that align with the biopsychosocial framework. The biological aspect comprises the genetic and physiological elements that exert an influence on individuals' addiction disorders (Masaik, 2013). The

approach integrates issues of psychology and mental health (Masaik, 2013). The final aspect of the theory involves the social component, which includes the theoretical framework of family systems, matters pertaining to diversity and multiculturalism, and obstacles faced in achieving social justice (Masaik, 2013). The existing body of research pertaining to trauma, faith, and addiction among women in recovery substantiates the underlying assumptions the biopsychosocial model of addiction posits.

Implications

The present study has implications for the field of community care and counseling. First, it furthers the clinical understanding and influence that the faith-based substance use program, the WHH, has on trauma symptoms for women in recovery. The faith-based model has previously shown positive results with addiction recovery and abstinence; however, this is the first study conducted evaluating faith and length of time in this type of substance use residential setting on trauma symptoms as well. Among participants in this research, 50% of the sample exhibited none-to-low trauma symptoms scores, 20% moderate, and 30% high. The regression model concluded faith and length of time in the program were both significant predictors of lower trauma symptom scores with time in the program superseding faith scores.

This study recognizes the development and persistence of substance use disorders and trauma symptoms in women are influenced by biological, psychological, and social factors. This study exhibited a significant predictive relationship between the social component of adverse childhood events and the psychological component of trauma symptoms in women with addiction problems. Additionally, this research revealed the predictive nature of the relationship between the psychosocial component of faith and trauma symptoms, while also evaluating the magnitude of the association between these two variables. This study demonstrated the presence

of multimodal elements might have an influence on addictive behaviors and traumatic experiences. Consequently, it is plausible multimodal factors also can be utilized to address these concerns.

Assimilating Christ-centered evidenced-based trauma therapy in faith-based substance use programs can help individuals reframe poor faith experiences and beliefs by challenging and restructuring distortions developed about oneself, the world, others, and God from their past trauma or experiences (Villani et al., 2019). The person suffering can connect with spiritual counselors and attend religious services through faith-based initiatives (Lovett & Weisz, 2021; Villani et al., 2019). Faith-based initiatives for addiction recovery, such as the WHH, have shown varying degrees of effectiveness ranging from 76%–86% recovery rate upon completion (Bicknese, 1999: Hess, 1976; May, 2019). Because of this research, one might consider the faith-based model to treating addiction also is helping in trauma recovery. Understanding the predictors of trauma symptoms, such as ACE scores, can help clinicians be prepared and provide appropriate treatment needs as women seek out help for SUD treatment in faith-based settings.

Individuals who have undergone traumatic experiences often engage in self-medicating involving the use of drugs and alcohol as a means to alleviate emotional distress, to cope with feelings of guilt associated with surviving a trauma, or to suppress memories of the event (Theisen-Womersley, 2021). This process may lead to the development of a severe addiction, as individuals who have experienced trauma progressively require larger quantities of a substance to achieve comparable effects. The potential for enhanced success in substance use disorder (SUD) treatment among women may arise from the combination of trauma resolution and the integration of spiritual beliefs into their healing process. This research provides valuable insight

to Christian mental health clinicians as it validates the benefits of the faith-based model in trauma recovery alongside addiction treatment.

By integrating faith, clinical professionals can achieve a reduction in trauma symptoms so women are less vulnerable to relapse. According to Oyewuwo (2020), women's spirituality can be characterized as a relational phenomenon including the assimilation and manifestation of certain fundamental values and beliefs. These faith concepts encompass understanding, acceptance, direction, centeredness, purpose, and coping with difficulties. The significance of spirituality, particularly among African American women, has been well documented in studies, highlighting its role in facilitating resilience and adaptation to various physical and psychological adversities (Lovett & Weisz, 2021; Oyewuwo, 2020). Numerous studies conducted over the course of the last two decades consistently have demonstrated a positive correlation between religious observance and church attendance and improved physical and mental health outcomes specifically within the African American population (Oyewuwo, 2020).

Furthermore, existing empirical research suggests, in populations impacted by trauma, the presence of a strong religious belief system is often linked to a reduction in symptoms and clinical difficulties (Lovett & Weisz, 2021). For instance, subsequent to a distressing encounter, individuals could discover fostering forgiveness, upholding strong spiritual convictions, or engaging in diverse spiritual practices might assist in effectively managing emotions characterized by heightened anger, wrath, and a desire for retribution. A multitude of views have been proposed on the potential influence of spirituality on the healing process among individuals who have undergone traumatic experiences. The potential advantages of spirituality in the context of post-trauma outcomes can be ascribed to the implementation of enhanced religious practices, including refraining from alcohol and tobacco, actively participating in spiritual

communities to augment social support, cultivating effective coping mechanisms, and employing diverse strategies to gain a deeper understanding of the traumatic experience, ultimately resulting in a heightened sense of meaning. Furthermore, studies have suggested engaging in physiological activities such as prayer or meditation, which can generate a state of relaxation, could have a role in facilitating these favorable results (Lovett & Weisz, 2021).

Women residing in the WHH program actively are seeking a personal relationship with Jesus. They typically gain comfort through this closeness to God as well as developing nearness and intimacy with other women in the program going through similar issues. Beyond this, they have women they are able to look up to that have remained in the program and decided to stay on for an internship or as staff. This is a source of hope for some that recovery is possible, not only for their addiction problems, but for their trauma as well. The program itself fosters life transformation through practicing Christian principles like prayer, worship, and reading God's Word daily. The WHH teaches that self-control is possible through a relationship with God. This self-control may extend beyond substance use to even include self-control with difficult emotions that may relate to traumatic memories.

The present study is of value to faith-based substance use programs by providing valuable information on the links among trauma, faith, and addiction. Due to the strong link between trauma and addiction, staff and ministers in the faith-based setting find they are not only addressing SUD concerns, but many times trauma as well, especially among women. Although most of the sample exhibited low to moderate trauma symptoms, the women in the program still would benefit greatly from trauma-informed Christian counseling targeting these symptoms. As treatment needs are met and uniquely tailored to address trauma issues, I believe we will see an even stronger relationship develop between the length of time in the WHH program and reduced

trauma symptoms in the future. Trauma-informed training for staff among faith-based SUD programs as well as Christian counseling targeting trauma would continue to benefit the program as a whole.

Limitations

Findings should be interpreted considering design limitations. First, the study's non-experimental purposive sampling limits conclusions about causality. It is probable that the connection between addiction issues and trauma is bidirectional (Simmons & Suarez, 2016), and the etiology of trauma and addiction should be examined in future research. Secondly, although addiction severity was not shown to be a significant predictor of trauma symptoms for women in the WHH program, this does not mean a relationship between the two does not exist. Past research suggests there is a direct relationship between addiction severity and PTSD symptoms (Kuksis, 2017). A potential explanation for this discrepancy could be the scale utilized. Past research has used the Addiction Severity Index, while this study employed the TAPS tools assessment to assess addiction severity (Kuksis et al., 2017). Another potential rationalization is that over 47% of the sample included women who have been in the WHH program for more than nine months, and over 90% of the sample exhibited high addiction severity risk. Because the length of time in the WHH program is revealed as a significant predictor of lower trauma symptoms, the large number of women over nine months in the study sample may be influencing the lack of relationship between addiction severity and trauma symptoms. Third, we were unable to identify total participation amounts at each specific location due to the nature of the study remaining anonymous. This limits us in valuable cultural information on SUD and trauma characteristics as it relates to each specific geographic location. Fourth, we did not measure other potentially relevant factors, such as previous counseling addressing trauma issues or types of

trauma exposure endured over time. Both are factors that may have significant explanations for levels of trauma symptoms for women in recovery. Lastly, the current study only measured variables among women; therefore, results cannot be generalized to a male population.

Recommendations for Future Research

This research provided valuable insight into the relationships among faith, trauma, and addiction for women in recovery. However, there is a need to continue further research to add to the existing literature on these three variables. Recommendations for future research include the following:

1. A larger sample size would permit a more effective interpretation of both significant and nonsignificant effects.
2. Researching WHH alumni would provide valuable insight into the lasting effects of the faith-based model in helping addiction as well as trauma symptoms.
3. Replicating the study by including men in the research would provide better generalizability of the findings.
4. Differentiating participants who have had previous evidenced-based trauma therapy to better interpret relationships between the variables.
5. Collecting data as it relates to types of trauma exposure, as well as the duration of trauma and how that relates to current trauma symptoms.
6. Examining addiction severity with the Addiction Severity Index Scale as well as the TAPS tools, and among women a faith-based residential setting ranging from only 3–6 months stay.
7. Replicate as a qualitative or mixed methods study to provide richer insight into the participants' experiences and variables being studied.

Summary

Chapter Five provided a general overview of the answers to this study's research questions and discussed the study's findings as they relate to previous research and literature. The chapter provided an overall synopsis of the results of the multiple regression analysis and independent sample *t*-test as well. This research furthers the clinical understanding and influence the faith-based model in treating addiction, as found in the WHH, has on lowering trauma symptoms for women in recovery. While faith and length of time in the WHH program are found to be significant predictors of lower trauma symptoms, there is room for improving the strength of association between these variables through targeted Christ-centered trauma interventions. This chapter concluded with implications of this research study as it relates to the community care and counseling field, limitations of this present study, and recommendations for future research.

References

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787

American Psychological Association. (2017). *Eye movement desensitization and reprocessing (EMDR) therapy.* American Psychological Association. https://www.apa.org/ptsd-guideline/treatments/eye-movement-reprocessing

Arnaudo, C. L., Andraka-Christou, B., & Allgood, K. (2017). Psychiatric co-morbidities in pregnant women with opioid use disorders: Prevalence, impact, and implications for treatment. *Current Addiction Reports*, *4*(1), 1–13. https://doi.org/10.1007/s40429-017-0132-4

Azadfard, M., Huecker, M. R., & Leaming, J. M. (2022). Opioid addiction. In *StatPearls [Internet]*. StatPearls Publishing.

Back, S. E., Acierno, R., Saraiya, T. C., Harley, B., Wangelin, B., Jarnecke, A. M., McTeague, L. M., Brown, D. G., Ana, E. S., Rothbaum, A. O., & Adams, R. J. (2022). Enhancing prolonged exposure therapy for PTSD using physiological biomarker-driven technology. *Contemporary Clinical Trials Communications*, *28,* Article 100940. https://doi.org/10.1016/j.conctc.2022.100940

Barry, K. L. (1999). *Brief interventions and brief therapies for substance abuse* (vol. 99, no. 3353). US Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.

Basedow, L. A., Kuitunen-Paul, S., Roessner, V., & Golub, Y. (2020). Traumatic events and substance use disorders in adolescents. *Frontiers in Psychiatry*, *11*(559).

Beck, J. S. (2020). *Cognitive behavior therapy: Basics and beyond*. Guilford Publications.

Becoña, E. (2016). Addiction is not a brain disease. *Papeles del Psicólogo*, *37*(2). https://www2.papelesdelpsicologo.es/English/2696.pdf

Becoña, E. (2002). Scientific bases of drug consumption prevention. Madrid: Delegación del Gobierno para el Plan Nacional sobre Drogas. https://pnsd.sanidad.gob.es/profesionales/publicaciones/catalogo/catalogoPNSD/publicaciones/pdf/Bases_cientificas.pdf

Berg, I. K. (1995). Solution-focused brief therapy with substance abusers. In *Psychotherapy and substance abuse: A practitioner's handbook* (pp. 223–242). Guillford Press.

Berg, I. K., & Miller, S. D. (1992). *Working with the problem drinker: A solution-focused approach*. W.W. Norton & Company.

Bernardy, N.C, & Friedman, M. J. (2015). *A practical guide to PTSD treatment: Pharmacological and psychotherapeutic approaches* (1st ed.). American Psychological Association.

Bicknese, A. T. (1999). *The Teen Challenge drug treatment program in comparative perspective*. Northwestern University.

Blanco, L., Sió, A., Hogg, B., Esteve, R., Radua, J., Solanes, A., Gardoki-Souto, I., Sauras, R., Farré, A., Castillo, C., Valiente-Gómez, A., Pérez, V., Torrens, M., Amann, B. L., & Moreno-Alcázar, A. (2020). Traumatic events in dual disorders: Prevalence and clinical characteristics. *Journal of Clinical Medicine, 9*(8), Article 2553. https://doi.org/10.3390/jcm9082553

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial

psychometric evaluation. *Journal of Traumatic Stress*, *28*(6), 489–498. https://doi.org/10.1002/jts.22059

Boden, M. T., Kimerling, R., Kulkarni, M., Bonn-Miller, M. O., Weaver, C., & Trafton, J. (2014). Coping among military veterans with PTSD in substance use disorder treatment. *Journal of Substance Abuse Treatment*, *47*(2), 160–167. https://doi.org/10.1016/j.jsat.2014.03.006

Bourassa, K. J., Smolenski, D. J., Edwards Stewart, A., Campbell, S. B., Reger, G. M., & Norr, A. M. (2020). The impact of prolonged exposure therapy on social support and PTSD symptoms. *Journal of Affective Disorders*, *260*, 410–417. https://doi.org/10.1016/j.jad.2019.09.036

Bryant-Davis, T., Ellis, M. U., Burke-Maynard, E., Moon, N., Counts, P. A., & Anderson, G. (2012). Religiosity, spirituality, and trauma recovery in the lives of children and adolescents. *Professional Psychology: Research and Practice*, *43*(4), 306–314. https://psycnet.apa.org/doi/10.1037/a0029282

Carmassi, C., Bertelloni, C. A., Cordone, A., Cappelli, A., Massimetti, E., Dell'Oste, V., & Dell'Osso, L. (2020). Exploring mood symptoms overlap in PTSD diagnosis: ICD-11 and DSM-5 criteria compared in a sample of subjects with bipolar disorder. *Journal of Affective Disorders*, *276*(1), 205–211. https://doi.org/10.1016/j.jad.2020.06.056

Center for Substance Abuse Treatment. (2013). *Addressing the specific behavioral health needs of men.* https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4736.pdfL here

Centers for Disease Control and Prevention. (2019). *About the CDC-Kaiser ACE study error processing SSI file*. https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/about.html

Chand, S. P., Kuckel, D. P., Huecker, M. R. (2023). Cognitive behavior therapy. In *StatPearls* (n.p.). StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK470241/

Charcot, J. M. (1877). *Lessons on diseases of the nervous system: Made at the Salpêtrière. Volume 1*. Paris: Delahaye et Cie.

Child welfare information gateway. (n.d.). *Screening and assessment of child trauma—Child welfare information gateway*. https://www.childwelfare.gov/topics/systemwide/assessment/family-assess/childneeds/trauma/

Christie, C., Cooper, R., Kennedy, P., Madras, B., P., Baker, C. & Bondi, P. (2017). *The president's commission on combating drug addiction and the opioid crisis: Roster of commissioners*. https://trumpwhitehouse.archives.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-15-2017.pdf

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kagan, R., Liautaud, J., Mallah, K., Olafson, E., & van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, *35*(5), 390–398. https://doi.org/10.3928/00485713-20050501-05

Covington, S. S. (2008). Women and addiction: A trauma-informed approach. *Journal of Psychoactive Drugs*, *40*(5), 377–385. https://doi.org/10.1080/02791072.2008.10400665

Covington, S. S., & Kohen, J. (1984).Women, alcohol, and sexuality. *Advances in Alcohol & Substance Abuse*, *4*(1), 41–56. https://doi.org/10.1300/J251v04n01_0

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE.

Crocq, L., & Verbizier, J. D. (1988). Psychological trauma in the work of Pierre Janet. *Psychology Bulletin*, *41*(385), 483-485. https://www.persee.fr/doc/bupsy_0007-4403_1988_num_41_385_12895

Daniel, E. (2016). The usefulness of qualitative and quantitative approaches and methods in researching problem-solving ability in science education curriculum. *Journal of Education and Practice*, *7*(15), 91–100. http://iiste.org/Journals/index.php/JEP

De Jongh, A. D., Resick, P. A., Zoellner, L. A., Van Minnen, A., Lee, C. W., Monson, C. M., ... & Bicanic, I. A. (2016). Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depression and Anxiety*, *33*(5), 359–369. https:// doi: 10.1002/da.22469

De Shazer, S. (1988). *Clues: Investigating solutions in brief therapy*. W.W. Norton & Co.

DeCarlo, M., Cummings, C., & Agnelli, K. (2021). Theory and paradigm. *Graduate research methods in social work*. Openoregon.pressbooks.pub. https://openoregon.pressbooks.pub/graduateresearchmethodsinsocialwork/chapter/7-theory-and-paradigm/

Dube, S. R., Williamson, D. F.. Thompson, T., Felitti, V. J., & Anda, R. F. (2004). Assessing the reliability of retrospective reports of adverse childhood experiences among adult HMO members attending a primary care clinic. *Child Abuse and Neglect*, *28*(7), 729–737. https://psycnet.apa.org/doi/10.1016/j.chiabu.2003.08.009

Egan, R., Gross, J., Cameron, C., Hobbs, L., & Patterson, T. (2022). Spirituality: A key component of the Salvation Army's bridge programme model of treatment in Aotearoa

New Zealand. *Journal of Religion and Health, 62,* 2563–2584. https://doi.org/10.1007/s10943-022-01674-7

Engel, G. (1980). The clinical application of the biopsychosocial model. *American Journal of Psychiatry*, *137*(5), 535–544. https://doi.org/10.1176/ajp.137.5.535

Engel, G. (1977*).* The need for a new medical model: A challenge for biomedicine. *Science, 196*(4286), 129–136. https://doi.org/10.1126/science.847460

Etheridge, R. M., Hubbard, R. L., Anderson, J., Craddock, S. G., & Flynn, P. M. (1997). Treatment structure and program services in the Drug Abuse Treatment Outcome Study (DATOS). *Psychology of Addictive Behavior*, *11*(4), 244–260. https://psycnet.apa.org/doi/10.1037/0893-164X.11.4.244

Faherty, L. J., Stein, B. D., & Terplan, M. (2020). Consensus guidelines and state policies: The gap between principle and practice at the intersection of substance use and pregnancy. *American Journal of Obstetrics & Gynecology MFM, 2*(3), Article 100137. https://doi.org/10.1016/j.ajogmf.2020.100137

Fonseca, F., Robles-Martínez, M., Tirado-Muñoz, J., Alías-Ferri, M., Mestre-Pintó, J.-I., Coratu, A. M., & Torrens, M. (2021). A gender perspective of addictive disorders. *Current Addiction Reports, 8*(1) 88-99. https://doi.org/10.1007/s40429-021-00357-9

Fowler, J. W. (1981). *Stages of faith: The psychology of human development and the quest for meaning.* Harper & Row.

Franklin, C., & Hai, A. H. (2021). Solution-focused brief therapy for substance use: A review of the literature. *Health & Social Work, 46*(2), 103–114. https://doi.org/10.1093/hsw/hlab002

Gall, T. L., & Cornblat, M. W. (2002). Breast cancer survivors give voice: A qualitative analysis of spiritual factors in long-term adjustment. *Psycho-Oncology*, *11*(6), 524–535. https://doi.org/10.1002/pon.613.

Ghafoori, B., Fisher, D., Korosteleva, O., & Hong, M. (2016). A randomized, controlled, pilot study of a single session psychoeducation treatment for urban, culturally diverse, trauma-exposed adults. *The Journal of Nervous and Mental Disease*, *204*(6), 421. https://doi.org/10.1002/pon.613

Global Teen Challenge. (n.d.). *About us*. Retrieved July 27, 2023 from http://www.globaltc.org/html/about_us.html

Goldstein, R. Z., & Volkow, N. D. (2011). Dysfunction of the prefrontal cortex in addiction: neuroimaging findings and clinical implications. *Nature reviews neuroscience*, *12*(11), 652-669.

Grant, C., & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative issues journal*, *4*(2), 4. https://dc.swosu.edu/aij/vol4/iss2/4

Hardeman, R., Gerrard, M. D., & Owe, G. (2011). Minnesota Teen Challenge follow-up study. *Wilder Research*. https://www.iteenchallenge.org/wp-content/uploads/2015/06/MN_TeenChallengeFollow-up_-2010-Sum1-pg_1-11--2-.pdf

Hatch, R. L., Burg, M. A., Naberhaus, D. S., & Hellmich, L. K. (1998). *Spiritual involvement and beliefs scale* [Database record]. APA PsycTests. https://doi.org/10.1037/t06493-000

Heppner, P. P., Wampold, B. E., Owen, J., Thompson, M. N., & Wang, K. T. (2016). *Research design in counseling* (4th ed.). Cengage.

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, *5*(3), 377–391. https://doi.org/10.1002/jts.2490050305

Hess, C. B., & Reynolds, D. E. (1976). An evaluation of the Teen Challenge treatment program. *National Institute on Drug Abuse. Washington, DC*.

Hofmann, S. G., & Asmundson, G. J. (Eds.). (2017). *The science of cognitive behavioral therapy.* Academic Press.

Jain, R., & Chetty, P. (2019). *How to interpret the results of the linear regression test in SPSS? Knowledge Tank.* https://www.projectguru.in/interpret-results-linear- regression-test-spss/

Janet, P. (1889). *Psychological automatism: An essay in experimental psychology on the lower forms of human activity.* Felix Alcan.

Janet, P. M. F. (1925). *Psychological healing* (2 vols., E. Paul & C. Paul, Trans.). Macmillan.

Joe, G. W., Dansereau, D. F., Pitre, U., & Simpson, D. D. (1997). Effectiveness of node-link mapping enhanced counseling for opiate addicts: A 12-month posttreatment follow-up. *The Journal of Nervous and Mental Disease*, *185*(5), 306–313. https://journals.lww.com/jonmd/toc/1997/05000

Juillion, P. (2023). What is multiple R? https://studybuff.com/what-is-multiple-r/#:~:text=What%20is%20a%20good%20multiple%20R%3F%204%20to.6,more%20good%20and%20even%20the%20best%20value%20till.9

Kalmakis, K. A., Chiodo, L. M., Kent, N., & Meyer, J. S. (2020). Adverse childhood experiences, post-traumatic stress disorder symptoms, and self-reported stress among

traditional and nontraditional college students. *Journal of American College Health*, *68*(4), 411–418. https://doi.org/10.1080/07448481.2019.1577860

Kenny, A. (2003). *Teen challenge's proven answer to the drug problem*. Unpublished manuscript. Vanguard University.

Kirk, R. E. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement*, *56*(5), 746–759. https://doi.org/10.1177/0013164496056005002

Krause, N. (1998). Neighborhood deterioration, religious coping, and changes in health during late life. *Gerontologist*, *38*(6), 653–664. https://doi.org/10.1093/geront/38.6.653

Kuksis, M., Di Prospero, C., Hawken, E. R., & Finch, S. (2017). The correlation between trauma, PTSD, and substance abuse in a community sample seeking outpatient treatment for addiction. *Canadian Journal of Addiction*, *8*(1), 18-24.

Landin-Romero, R., Moreno-Alcazar, A., Pagani, M., & Amann, B. L. (2018). How does eye movement desensitization and reprocessing therapy work? A systematic review on suggested mechanisms of action. *Frontiers in Psychology*, *9*,1395. https://doi.org/10.3389/fpsyg.2018.01395

Lear, H. (2013). *Teen Challenge: A program evaluation of a faith-based drug and alcohol rehabilitation program*. Southern Connecticut State University.

Lee, D. J., Schnitzlein, C. W., Wolf, J. P., Vythilingam, M., Rasmusson, A. M., & Hoge, C. W. (2016). Psychotherapy versus pharmacotherapy for posttraumatic stress disorder: Systemic review and meta-analyses to determine first-line treatments. *Depression and Anxiety*, *33*(9), 792–806. https://doi.org/10.1002/da.22511

Lee, S. C., & Rawlings, M. A. (2022). Healing from trauma through psychoeducation: Understanding young adult client group experiences. *Social Work With Groups*, *46*(1), 5–20. https://doi.org/10.1080/01609513.2021.2024109

Levinstein, E. (1878). *Morbid Craving for Morphia:(Die Morphiumsucht.) A Monograph Founded on Personal Observations*. Smith, Elder, & Company.

Lewis, T. F., & Osborn, C. J. (2004). Solution-focused counseling and motivational interviewing: A consideration of confluence. *Journal of Counseling & Development*, *82*(1), 38–48.

Leza, L., Siria, S., López-Goñi, J. J., & Fernandez-Montalvo, J. (2021). Adverse childhood experiences (ACEs) and substance use disorder (SUD): A scoping review. *Drug and Alcohol Dependence*, *221*, 108563 https://doi.org/10.1016/j.drugalcdep.2021.108563

Liu, J., Lin, X., Shen, Y., Zhou, Y., He, Y., Meng, T., Cui, X., Xiao, B., Lu, J., Zhang, X., & Luo, X. (2021). Epidemiology of childhood trauma and analysis of influencing factors in psychiatric disorders Among Chinese adolescents: A cross-sectional study. *Journal of Interpersonal Violence*, *37*(19–20), NP17960–NP17978. https://doi.org/10.1177/08862605211039244

Loconte, J. (2004). Faith healing. *Public Interest*, *89*(155), 89–104.

Lotzin, A., Grundmann, J., Hiller, P., Pawils, S., & Schäfer, I. (2019). Profiles of childhood trauma in women with substance use disorders and comorbid posttraumatic stress disorders. *Frontiers in Psychiatry*, *10*, 674. https://doi.org/10.3389/fpsyt.2019.00674

Lovett, K. L., & Weisz, C. (2021). Religion and recovery among individuals experiencing homelessness. *Journal of Religion and Health*, *60*, 3949-3966. https://doi.org/10.1007/s10943-020-01060-1

Mahmood, H. N., Ibrahim, H., Ismail, A. A., & Neuner, F. (2022). Does Time Heal Trauma? 18 Month Follow-Up Study of Syrian Refugees' Mental Health in Iraq's Kurdistan Region. *International journal of environmental research and public health*, *19*(22), 14910.

Machisa, M. T., Christofides, N., & Jewkes, R. (2017). Mental ill health in structural pathways to women's experiences of intimate partner violence. *PLOS ONE*, *12*(4), Article e0175240. https://doi.org/10.1371/journal.pone.0175240

Marx, B. P., Lee, D. J., Norman, S. B., Bovin, M. J., Sloan, D. M., Weathers, F. W., Keane, T. M., & Schnurr, P. P. (2021). A reliable and clinically significant change in the clinician-administered PTSD Scale for DSM-5 and PTSD checklist for DSM-5 among male veterans. *Psychological Assessment*, *34*(2),197. https://doi.org/10.1037/pas0001098

Masiak, J. (2013). Biopsychosocial model of addictions and other approaches. *Zdrowie Publiczne /*, *123*(4), 321–324. https://doi.org/10.12923/j.0044-2011/123-4/a.12

McCraw, B. W. (2015). Faith and trust. *International Journal for Philosophy of Religion*, *77*(2), 141–158.

McGee, M. D. (2020). Awakening and recovery. *Alcoholism Treatment Quarterly*, *38*(2), 266–285. https://doi.org/10.1080/07347324.2019.1632766

McNeely, J., Wu, L. T., Subramaniam, G., Sharma, G., Cathers, L. A., Svikis, D., Sleiter, L., Russell, L., Nordeck, C., Sharma, A., O'Grady, K. E., Bouk, L. B., Cushing, C., King, J., Wahle, A., & Schwartz, R. P. (2016). Performance of the Tobacco, Alcohol, Prescription Medication, and Other Substance Use (TAPS) Tool for Substance Use Screening in Primary Care Patients. Annals of internal medicine, 165(10), 690–699. https://doi.org/10.7326/M16-0317

Melchert, T. P. (2015). *Biopsychosocial practice: A science-based framework for behavioral health care*. American Psychological Association.

Meyer, J. P., Isaacs, K., El-Shahawy, O., Burlew, A. K., & Wechsberg, W. (2019). Research on women with substance use disorders: Reviewing progress and developing a research and implementation roadmap. *Drug and Alcohol Dependence, 197,* 158–163. https://doi.org/10.1016/j.drugalcdep.2019.01.017

Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change*. Guilford Press.

Moring, J. C., Dondanville, K. A., Fina, B. A., Hassija, C., Chard, K., Monson, C., LoSavio, S. T., Wells, S. Y., Morland, L. A., Kaysen, D., Galovski, T. E., & Resick, P. A. (2020). Cognitive processing therapy for posttraumatic stress disorder via telehealth: Practical considerations during the COVID-19 pandemic. *Journal of Traumatic Stress, 33*(4), 371-379. https://doi.org/10.1002/jts.22544

Morrill, E. F., Brewer, N. T., O'Neill, S. C., Lillie, S. E., Dees, E. C., Carey, L. A., & Rimer, B. K. (2008). The interaction of post-traumatic growth and post-traumatic stress symptoms in predicting depressive symptoms and quality of life. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer, 17*(9), 948–953. https://doi.org/10.1002/pon.1313

Musto, D. F. (1996). Drug abuse research in historical perspective. In Committee on Opportunities in Drug Abuse Research (Ed.), *Pathways of addiction: Opportunities in drug abuse research* (pp. 284–294). Publisher.

Myers, R. H (1990). *Classical and modern regression with applications* (Vol. 2, p. 488). Duxbury Press.

National Center for PTSD. (n.d.). *Traumatic stress and substance abuse problems*. Substance Abuse and Mental Health Services Administration. Retrieved June 1, 2023, from https://www.samhsa.gov/resource-search/dbhis?keys=traumatic%20stress%20and%20substance%20use&rc%5B0%5D=issues_conditions_disorders%3A20322&rc%5B1%5D=resource_type%3A20358&sort_bef_combine=sticky_DESC&items_per_page=25

National Institute on Drug Abuse. (2003). *Group therapy research*.

Ndungu, J., Ramsoomar, L., Willan, S., Washington, L., Ngcobo-Sithole, M., & Gibbs, A. (2020). Depression, posttraumatic stress disorder (PTSD) and their comorbidity: Implications of adversity amongst young women living in informal settlements in Durban, South Africa. *Journal of Affective Disorders Reports*, *1*, 00022. https://doi.org/10.1016/j.jadr.2020.100022

Neupane, S. P., Bramness, J. G., & Lien, L. (2017). Comorbid post-traumatic stress disorder in alcohol use disorder: Relationships to demography, drinking, and neuroimmune profile. *BMC Psychiatry*, *17*(1), 1-10. https://doi.org/10.1186/s12888-017-1479-8

Ng, L. C., Stevenson, A., Kalapurakkel, S. S., Hanlon, C., Seedat, S., Harerimana, B., Chiliza, B., & Koenen, K. C. (2020). National and regional prevalence of posttraumatic stress disorder in sub-Saharan Africa: A systematic review and meta-analysis. *PLOS Medicine*, *17*(5), Article e1003090. https://doi.org/10.1371/journal.pmed.1003090

Nobels, A., Lemmens, G., Thibau, L., Beaulieu, M., Vandeviver, C., & Keygnaert, I. (2022). "Time Does Not Heal All Wounds": Sexual Victimisation Is Associated with Depression, Anxiety, and PTSD in Old Age. *International journal of environmental research and public health*, *19*(5), 2803.

Ornstein, M. (2013). *A companion to survey research*. Sage.

Oyewuwo, O. B. (2020). Black Muslim women's use of spirituality and religion as domestic violence coping strategies. *Journal of Muslim Mental Health, 29(7), 856-875.*https://doi.org/10.3998/jmmh.10381607.0014.101

Pargament K. I., Ano G. G., Wachholtz A. B. (2005) 'The religious dimension of coping: Advances in theory, research, and practice', in Paloutzian R. F., Park C. L. (eds), *Handbook of the Psychology of Religion and Spirituality*, New York, Guilford. Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry*, *13*(3), 168–181. https://doi.org/10.1207/S15327965PLI1303_02

Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice,* Guilford.

Pargament, K. I. (2011). Religion and coping: The current state of knowledge. In S. Folkman (Ed.), *Oxford Handbook of Stress, Health, and Coping* Oxford University Press.

Pargament, K. I. (2007). *Spiritually integrated psychotherapy: Understanding and addressing the sacred*. Guilford.

Pargament, K. I., & Ano, G. G. (2006). Spiritual resources and struggles in coping with medical illness. *Southern Medical Journal, 99*(10), 1161-1163.

Pargament, K. I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving process: Three style of coping. *Journal for the Scientific Study of Religion, 27*(1), 90–104.

Pargament K. I., & Raiya, H. A. (2007). A decade of research on the psychology of religion and coping: Things we assumed and lessons we learned. *Psyche and Logos*, *28*(2), 25. https://doi.org/10.7146/pl.v28i2.8398

Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of clinical psychology, 56*(4), 519-543.

Pargament K. I., Tarakeshwar N., Ellison C. G., Wulff K. M. (2001) 'Religious coping among the religious: The relationship between religious coping and well-being in a national sample of Presbyterian clergy, elders, and members', *Journal for the Scientific Study of Religion*, 403, pp. 497–513.

Pawlowski, T., Daroszewski, J., Czerwinska, A., & Rymaszewska, J. (2019). Reduction of posttraumatic stress disorder (PTSD) symptoms in PTSD and major depressive disorder comorbidity after acute hypoglycemia—A case report. *Frontiers in Psychiatry, 10*, 530. https://doi.org/10.3389/fpsyt.2019.00530

Pearce, M., Haynes, K., Rivera, N. R., & Koenig, H. G. (2018). Spiritually integrated cognitive processing therapy: A new treatment for post-traumatic stress disorder that targets moral injury. *Global Advances in Health and Medicine*, *7*, 2164956118759939. https://doi.org/10.1177/2164956118759939

Phillips, J. K., Ford, M. A., & Bonnie, R. J. (2017). *Evidence on strategies for addressing the opioid epidemic*. National Institute of Health, National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK458653/

Pinedo, M., Zemore, S., Beltrán-Girón, J., Gilbert, P., & Castro, Y. (2019). Women's barriers to specialty substance abuse treatment: A qualitative exploration of racial/ethnic differences. *Journal of Immigrant and Minority Health, 22*, 653-660. https://doi.org/10.1007/s10903-019-00933-2

Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the Advanced Practitioner in Oncology*, *6*(2), 168–171. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601897/

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research, and Practice*, *19*(3), 276–288. https://psycnet.apa.org/doi/10.1037/h0088437

Radell, M. L., Beck, K. D., Gilbertson, M. W., & Myers, C. E. (2017). Post-traumatic stress disorder symptom burden and gender each affect generalization in a reward- and punishment-learning task. *PLOS ONE*, *12*(2), Article e0172144. https://doi.org/10.1371/journal.pone.0172144

Ringel, S., & Brandell, J. R. (Eds.). (2011). *Trauma: Contemporary directions in theory, practice, and research*. Sage.

Roberts, N. P., Kitchiner, N. J., Lewis, C. E., Downes, A. J., & Bisson, J. I. (2021). Psychometric properties of the PTSD checklist for DSM-5 in a sample of trauma exposed mental health service users. *European Journal of Psychotraumatology*, *12*(1), Article 1863578. https://doi.org/10.1080/20008198.2020.1863578

Robinson, K., & Ickowicz, S. (2022). Research with women who use drugs: Applying a trauma-informed framework. *Journal of Addiction Medicine*, *16*(6), 627. https://doi.org/10.1097/adm.0000000000000998

Runcan, R., & Lupșa, R. (2020). Analysis of the effectiveness of the Teen Challenge programme after 13 years of social work in recovering Romanian addicts. *Social Work Review/Revista de Asistenta Sociala*, *19*(1), 4-19.

Scotland-Coogan, D., & Davis, E. (2016). Relaxation techniques for trauma. *Journal of Evidence-Informed Social Work, 13*(5), 434–441. https://doi.org/10.1080/23761407.2016.1166845

Sekoni, O., Mall, S., & Christofides, N. (2021). Prevalence and factors associated with PTSD among female urban slum dwellers in Ibadan, Nigeria: A cross-sectional study. *BMC Public Health, 21*(1), 1-13. https://doi.org/10.1186/s12889-021-11508-y

Shah, L. B. I., Klainin-Yobas, P., Torres, S., & Kannusamy, P. (2014). Efficacy of psychoeducation and relaxation interventions on stress-related variables in people with mental disorders: A literature review. *Archives of Psychiatric Nursing*, *28*(2), 94–101. https://doi.org/10.1016/j.apnu.2013.11.004

Sharkansky, E. J., Brief, D. J., Peirce, J. M., Meehan, J. C., & Mannix, L. M. (1999). Substance abuse patients with posttraumatic stress disorder (PTSD): Identifying specific triggers of substance use and their associations with PTSD symptoms. *Psychology of Addictive Behaviors*, *13*(2), 89. https://psycnet.apa.org/doi/10.1037/0893-164X.13.2.89

Shazer, S. (1990). Brief therapy. In J. K. Zeig & W. M. Munion (Eds.),*What is psychotherapy? Contemporary perspectives* (pp. 278–282). Jossey-Bass.

Skewes, M. C., & González, V. M. (2013). The biopsychosocial model of addiction. *Principles of addiction. Comprehensive addictive behaviors and disorders* (Vol. 1, pp. 61–70). Academic Press.

Smedslund, G., Berg, R. C., Hammerstrøm, K. T., Steiro, A., Leiknes, K. A., Dahl, H. M., & Karlsen, K. (2011). Motivational interviewing for substance abuse. *The Cochrane Database of Systematic Reviews*, *2011*(5), Article CD008063. https://doi.org/10.1002/14651858.CD008063.pub2

Smith, Y., Garcia-Torres, R., Coughlin, S., Ling, J., Marin, T., Su, S., & Young, L. (2019). The effectiveness of social cognitive theory-based interventions on glycemic control in adults with type 2 diabetes mellitus: A systematic review and meta-analysis protocol (preprint). *JMIR Research Protocols*, *9*(9), e17148. https://doi.org/10.2196/17148

Simmons, S., & Suárez, L. (2016). *Substance Abuse and Trauma. Child and adolescent psychiatric clinics of North America*, *25*(4), 723–734. https://doi.org/10.1016/j.chc.2016.05.006

Substance Abuse and Mental Health Services Administration (SAMHSA). (2017). *Results from the 2017 national survey on drug use and health: Detailed tables*. https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHDetailedTabs2017/NSDUHDetailedTabs2017.pdf

Substance Abuse and Mental Health Services Administration ([SAMHSA] 2023). *SAMHSA announces National Survey on Drug Use and Health (NSDUH) results detailing mental illness and substance use levels in 2021*. HHS.gov. https://www.hhs.gov/about/news/2023/01/04/samhsa-announces-national-survey-drug-use-health-results-detailing-mental-illness-substance-use-levels-2021.html

Tarakeshwar, N., Vanderwerker, L. C., Paulk, E., Pearce, M. J., Kasl, S. V., & Prigerson, H. G. (2006). Religious coping is associated with the quality of life of patients with advanced cancer. *Journal of Palliative Medicine*, *9*(3), 646–657. https://doi.org/10.1089/jpm.2006.9.646

Tatsumura, Y., Maskarinec, G., Shumay, D. M., & Kakai, H. (2003). Religious and spiritual resources, CAM, and conventional treatment in the lives of cancer patients. *Alternative Therapies in Health & Medicine*, *9*(3).

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and the evaluation of drug abuse counseling sessions. *Psychology of Addictive Behaviors*, *9*(3), 195. https://doi.org/10.1207/s15327965pli1501_01

Teen Challenge. (n.d.). *The program*. Retrieved July 27, 2023, from http://teenchallengeusa.com/program/

Theisen-Womersley, G. (2021). Trauma and migration. *Trauma and Resilience Among Displaced Populations*, 29–65. https://doi.org/10.1007/978-3-030-67712-1_2

Thombs, D. L. (1999). *Introduction to addictive behaviors* (2nd ed.). The Guilford Press.

Thompson, R. D. (1994). Teen challenge of Chattanooga, Tennessee: Survey of alumni. *Teen Challenge National: Springfield, Missouri*.

Tix, A. P., & Frazier, P. A. (1998). The use of religious coping during stressful life events: Main effects, moderation, and mediation. *Journal of Consulting and Clinical Psychology*, *66*(iss#), 411–422. https://psycnet.apa.org/doi/10.1037/0022-006X.66.2.411

U.S. Department of Health and Human Services. (n.d.). *Tobacco, alcohol, prescription medication, and other substance use (TAPS) tool.* National Institutes of Health. https://nida.nih.gov/taps2/

Van der Kolk, B. (2000). Posttraumatic stress disorder and the nature of trauma. *Dialogues in Clinical Neuroscience*, *2*(1), 7–22. https://doi.org/10.31887/DCNS.2000.2.1/bvdkolk

Van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies*, *18*(5), 389-399. https://doi.org/10.1002/jts.20047

Van Wormer, K., & Davis, D. R. (2016). *Addiction treatment*. Cengage Learning.

Visser, C. F. (2013). The origin of the solution-focused approach. *International Journal of Solution-Focused Practices, 1*(1), 10-17.

Villani, D., Sorgente, A., Iannello, P., & Antonietti, A. (2019). The role of spirituality and religiosity in subjective well-being of individuals with different religious status. *Frontiers in Psychology, 10*(1525). https://doi.org/10.3389/fpsyg.2019.01525

Wahab, S. (2005). Motivational interviewing and social work practice. *Journal of Social Work, 5*(1), 45–60. https://doi.org/10.1177/1468017305051365

Walter Hoving Home. (2022, February 11). *Who we are: Hoving home*. https://hovinghome.org/who-we-are/

Walter, J. L., & Peller, J. E. (2000). *Recreating brief therapy: Preferences and possibilities*. W.W. Norton & Co.

Waltz, M., Fisher, J. A., Lyerly, A. D., & Walker, R. L. (2021). Evaluating the National Institutes of Health's sex as a biological variable policy: Conflicting accounts from the front lines of animal research. *Journal of Women's Health*, *30*(3), 348–354. https://doi.org/10.1089/jwh.2020.8674

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Sage.

Watkins, L. E., Sprang, K. R., & Rothbaum, B. O. (2018). Treating PTSD: A review of evidence-based psychotherapy interventions. *Frontiers in Behavioral Neuroscience, 12*(258), 1–9. https://doi.org/10.3389/fnbeh.2018.00258

Washburn, D., Kelly, H., Arnzen, C., Hale, E. (2019). Adult and Teen Challenge Outcome Study Report. *Evangel University's Behavioral and Social Science Department.* https://teenchallengeusa.org/studies/

Weiss, R. D., Jaffee, W. B., Menil de, V. P., & Cogley, C. B. (2004). Group therapy for substance use disorders: What do we know? *Harvard Review of Psychiatry*, *12*(6), 339–350. https://doi.org/10.1080/10673220490905723

West, R., & Brown, J. (2013). *Theory of addiction* (2nd ed.). Wiley-Blackwell.

Whitworth, J. D. (2016). The role of psychoeducation in trauma recovery: Recommendations for content and delivery. *Journal of Evidence-Informed Social Work*, *13*(5), 442–451. https://doi.org/10.1080/23761407.2016.1166852

Wilkerson, D. (2008). *The cross and switchblade* (2nd ed.). The Berkley.

Wingenfeld, K., Schäfer, I., Terfehr, K., Grabski, H., Driessen, M., Grabe, H., Spitzer, C. (2010). The reliable, valid and economic assessment of early traumatization: First psychometric characteristics of the German version of the Adverse Childhood Experiences Questionnaire (ACE). *Psychotherapie, Psychosomatik, Medizinische Psychologie*, *61*(1), Article e10-4. https://doi.org/10.1055/s-0030-1263161

Zabag, R., Deri, O., Gilboa-Schechtman, E., Richter-Levin, G., & Levy-Gigi, E. (2020). Cognitive flexibility in PTSD individuals following nature adventure intervention: Is it that good? *Stress*, *23*(1), 97-104. https://doi.org/10.1080/10253890.2019.1645113

Zarse, E. M., Neff, M. R., Yoder, R., Hulvershorn, L., Chambers, J. E., & Chambers, R. A. (2019). The adverse childhood experiences questionnaire: Two decades of research on childhood trauma as a primary cause of adult mental illness, addiction, and medical diseases. *Cogent Medicine*, *6*(1), 1-24. https://doi.org/10.1080/2331205x.2019.1581447

Appendix A

Consent Form

Title of the Project: The Intersection of Trauma, Faith, and Addiction among Women in Recovery at the Walter Hoving Home
Principal Investigator: Jessica West, Doctoral Candidate, Department of Community Care and Counseling Traumatology, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be female, 18 years or older and are residents of Walter Hoving Home Program. 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 investigate the strength of the relationship between trauma, faith, and addiction among women in recovery residing in the Walter Hoving Home (WHH) program. Specifically, this study is investigating the relationship between addiction severity risk and trauma symptoms for women in the faith-based substance use program (WHH), as well as the relationship that faith and the length of time in the faith-based substance use program (WHH) has with trauma symptoms.

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. Answer an online survey questionnaire that would take approximately 15 minutes or less to complete.

How could you or others benefit from this study?

Participants will be provided with the score totals at the end of the survey and will gain insight on their levels of personal ACEs, personal faith, trauma symptom scores, and previous addiction severity risks.

Benefits to society include a better understanding of how substance use disorders, faith and faith-based substance use programs can impact trauma symptoms for women in recovery. This research will add to the existing literature on substance use and trauma symptoms, as well as faith as a resilience factor for trauma symptoms in women.

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 every day. The risk involved in the study includes the possibility of psychological stress from being asked to answer questions related to trauma. To reduce risk the program staff will monitor participants, discontinue the survey if needed, and the researcher will provide referral counseling services for the participant day of if requested by the participant.

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. Data will be stored on a password-locked computer/in a locked drawer and the data file will be password protected and encrypted. After three years, all electronic records will be deleted.

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

Participants will not be compensated for participating in this study.

What are the costs to you to be part of the study?

There are no costs to participate in the study.

Is the researcher in a position of authority over participants, or does the researcher have a financial conflict of interest to your study.

The researcher does not work for the Walter Hoving Home or have a position of authority. Data collection will remain anonymous, so the researcher will not know who participated. No action will be taken against an individual based on his or her decision to participate or not participate in this study.

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 or Walter Hoving Home. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

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

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

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

The researcher conducting this study is Jessica West. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted]. You may also contact the researcher's faculty sponsor, Professor Sullins, at [redacted].

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

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

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

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. If you have any questions about the study later, you can contact the Jessica West using the information provided above.

Appendix B

Verbal Recruitment

Hello,

As a graduate student in the Department of Community Care and Counseling Traumatology at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to study the impact that faith-based drug and alcohol programs have on trauma symptoms for women in recovery, and if you meet my participant criteria and are interested, I would like to invite you to join my study.

Participants must be 18 years of age or older and be a resident at the Walter Hoving Home. Participants, if willing, will be asked to complete an online survey, which should take approximately 15 minutes to complete. Participation will be completely anonymous, and no personal, identifying information will be collected.

Would you like to participate? [Yes] Great, I will be providing the onsite program manager the survey link and she will assist you in taking the survey [No] I understand. Thank you for your time. [Conclude the conversation.]

Thank you for your time. Do you have any questions?

Appendix C

Introduction Self-Report and Demographic Questions

1. How many months have you resided in the WHH program?
    a) 1-2 months
    b) 2-3 months
    c) 3-4 months
    d) 4-5 months
    e) 5-6 months
    f) 6-7 months
    g) 7-8 months
    h) 8-9 months
    i) 9-10 months
    j) 10-11 months
    k) 11-12 months
    l) 12 + months
2. What is your Drug of Choice?
    a) Alcohol
    b) Marijuana
    c) Cocaine
    d) Other Stimulant
    e) Heroin
    f) Prescription Pills
    g) Other
3. Do you identify as a:
    a) Christian,
    b) Other religion
    c) No religion
4. What is your age?
    a) 18-24
    b) 25-34
    c) 35-44
    d) 45-54
    e) 55-64
    f) 65 and older

Appendix D

Trauma Symptom Checklist

PCL-5

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Appendix E

NIDA Clinical Trials Network
The Tobacco, Alcohol, Prescription medications, and other Substance (TAPS) Tool

TAPS Tool Part 1

Web Version: 2.0; 4.00; 09-19-17

General Instructions:
The TAPS Tool Part 1 is a 4-item screening for tobacco use, alcohol use, prescription medication misuse, and illicit substance use in the past year. Question 2 should be answered only by males and Question 3 only be females. Each of the four multiple-choice items has five possible responses to choose from. Check the box to select your answer.

Segment:
Visit number:

1. In the PAST 12 MONTHS, how often have you used any tobacco product (for example, cigarettes, e-cigarettes, cigars, pipes, or smokeless tobacco)?

☐ Daily or Almost Daily ☐ Weekly ☐ Monthly
☐ Less Than Monthly ☐ Never

2. In the PAST 12 MONTHS, how often have you had 5 or more drinks containing alcohol in one day? One standard drink is about 1 small glass of wine (5 oz), 1 beer (12 oz), or 1 single shot of liquor. (Note: This question should only be answered by males).

☐ Daily or Almost Daily ☐ Weekly ☐ Monthly
☐ Less Than Monthly ☐ Never

3. In the PAST 12 MONTHS, how often have you had 4 or more drinks containing alcohol in one day? One standard drink is about 1 small glass of wine (5 oz), 1 beer (12 oz), or 1 single shot of liquor. (Note: This question should only be answered by females).

☐ Daily or Almost Daily ☐ Weekly ☐ Monthly
☐ Less Than Monthly ☐ Never

4. In the PAST 12 MONTHS, how often have you used any drugs including marijuana, cocaine or crack, heroin, methamphetamine (crystal meth), hallucinogens, ecstasy/MDMA?

☐ Daily or Almost Daily ☐ Weekly ☐ Monthly
☐ Less Than Monthly ☐ Never

5. In the PAST 12 MONTHS, how often have you used any prescription medications just for the feeling, more than prescribed or that were not prescribed for you? Prescription medications that may be used this way include: Opiate pain relievers (for example, OxyContin, Vicodin, Percocet, Methadone) Medications for anxiety or sleeping (for example, Xanax, Ativan, Klonopin) Medications for ADHD (for example, Adderall or Ritalin)

☐ Daily or Almost Daily ☐ Weekly ☐ Monthly
☐ Less Than Monthly ☐ Never

NIDA Clinical Trials Network
The Tobacco, Alcohol, Prescription medications, and other Substance (TAPS) Tool

TAPS Tool Part 2

Web Version: 2.0; 4.00; 09-19-17

General Instructions:
The TAPS Tool Part 2 is a brief assessment for tobacco, alcohol, and illicit substance use and prescription medication misuse in the PAST 3 MONTHS ONLY. Each of the following questions and subquestions has two possible answer choices- either yes or no. Check the box to select your answer.

1. In the PAST 3 MONTHS, did you smoke a cigarette containing tobacco? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, did you usually smoke more than 10 cigarettes each day? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, did you usually smoke within 30 minutes after waking? ☐ Yes ☐ No

2. In the PAST 3 MONTHS, did you have a drink containing alcohol? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, did you have 4 or more drinks containing alcohol in a day?* (Note: This question should only be answered by females). ☐ Yes ☐ No

b. In the PAST 3 MONTHS, did you have 5 or more drinks containing alcohol in a day?* (Note: This question should only be answered by males). ☐ Yes ☐ No

*One standard drink is about 1 small glass of wine (5 oz), 1 beer (12 oz), or 1 single shot of liquor.

c. In the PAST 3 MONTHS, have you tried and failed to control, cut down or stop drinking? ☐ Yes ☐ No

d. In the PAST 3 MONTHS, has anyone expressed concern about your drinking? ☐ Yes ☐ No

3. In the PAST 3 MONTHS, did you use marijuana (hash, weed)? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, have you had a strong desire or urge to use marijuana at least once a week or more often? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, has anyone expressed concern about your use of marijuana? ☐ Yes ☐ No

4. In the PAST 3 MONTHS, did you use cocaine, crack, or methamphetamine (crystal meth)? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, did you use cocaine, crack, or methamphetamine (crystal meth) at least once a week or more often? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, has anyone expressed concern about your use of cocaine, crack, or methamphetamine (crystal meth)? ☐ Yes ☐ No

5. In the PAST 3 MONTHS, did you use heroin? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, have you tried and failed to control, cut down or stop using heroin? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, has anyone expressed concern about your use of heroin? ☐ Yes ☐ No

6. In the PAST 3 MONTHS, did you use a prescription opiate pain reliever (for example, Percocet, Vicodin) not as prescribed or that was not prescribed for you? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, have you tried and failed to control, cut down or stop using an opiate pain reliever? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, has anyone expressed concern about your use of an opiate pain reliever? ☐ Yes ☐ No

7. In the PAST 3 MONTHS, did you use a medication for anxiety or sleep (for example, Xanax, Ativan, or Klonopin) not as prescribed or that was not prescribed for you? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, have you had a strong desire or urge to use medications for anxiety or sleep at least once a week or more often? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, has anyone expressed concern about your use of medication for anxiety or sleep? ☐ Yes ☐ No

8. In the PAST 3 MONTHS, did you use a medication for ADHD (for example, Adderall, Ritalin) not as prescribed or that was not prescribed for you? ☐ Yes ☐ No

If "Yes", answer the following questions:

a. In the PAST 3 MONTHS, did you use a medication for ADHD (for example, Adderall, Ritalin) at least once a week or more often? ☐ Yes ☐ No

b. In the PAST 3 MONTHS, has anyone expressed concern about your use of a medication for ADHD (for example, Adderall or Ritalin)? ☐ Yes ☐ No

9. In the PAST 3 MONTHS, did you use any other illegal or recreational drug (for example, ecstasy/molly, GHB, poppers, LSD, mushrooms, special K, bath salts, synthetic marijuana ('spice'), whip-its, etc.)? ☐ Yes ☐ No

If "Yes", answer the following questions:

In the PAST 3 MONTHS, what were the other drug(s) you used?

Comments:

Appendix F

Adverse Childhood Experience (ACE) Questionnaire

Finding your ACE Score ra hbr 10 24 06

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

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

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

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

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

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

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

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

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

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

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

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

Appendix G

Appendix
The Spiritual Involvement and Beliefs Scale

Please answer the following questions by checking your response.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. In the future, science will be able to explain everything.	___	___	___	___	___
2. I can find meaning in times of hardship.	___	___	___	___	___
3. A person can be fulfilled without pursuing an active spiritual life.	___	___	___	___	___
4. I am thankful for all that has happened to me.	___	___	___	___	___
5. Spiritual activities have not helped me become closer to other people.	___	___	___	___	___
6. Some experiences can be understood only through one's spiritual beliefs.	___	___	___	___	___
7. A spiritual force influences the events in my life.	___	___	___	___	___
8. My life has a purpose.	___	___	___	___	___
9. Prayers do not really change what happens.	___	___	___	___	___
10. Participating in spiritual activities helps me forgive other people.	___	___	___	___	___
11. My spiritual beliefs continue to evolve.	___	___	___	___	___
12. I believe there is a power greater than myself.	___	___	___	___	___
13. I probably will not reexamine my spiritual beliefs.	___	___	___	___	___
14. My spiritual life fulfills me in ways that material possessions do not.	___	___	___	___	___
15. Spiritual activities have not helped me develop my identity.	___	___	___	___	___
16. Meditation does not help me feel more in touch with my inner spirit.	___	___	___	___	___
17. I have a personal relationship with a power greater than myself.	___	___	___	___	___
18. I have felt pressured to accept spiritual beliefs that I do not agree with.	___	___	___	___	___
19. Spiritual activities help me draw closer to a power greater than myself.	___	___	___	___	___

Please indicate how often you do the following:

	Always	Usually	Sometimes	Rarely	Never
20. When I wrong someone, I make an effort to apologize.	____	____	____	____	____
21. When I am ashamed of something I have done, I tell someone about it.	____	____	____	____	____
22. I solve my problems without using spiritual resources.	____	____	____	____	____
23. I examine my actions to see if they reflect my values.	____	____	____	____	____

24. During the last WEEK, I prayed. . . (check one)
- ____ 10 or more times.
- ____ 7-9 times.
- ____ 1-3 times.
- ____ 4-6 times.
- ____ 0 times.

25. During the last WEEK, I meditated. . . (check one)
- ____ 10 or more times.
- ____ 7-9 times.
- ____ 4-6 times
- ____ 1-3 times.
- ____ 0 times.

26. Last MONTH, I participated in spiritual activities with at least one other person. . . (check one)
- ____ more than 15 times.
- ____ 11-15 times.
- ____ 6-10 times.
- ____ 1-5 times.
- ____ 0 times.

SCORING INSTRUCTIONS

For positively worded items, ie, items where answers indicating agreement seem more spiritual (item numbers 2, 4, 6, 7, 8, 10, 11, 12, 14, 17, 19, 20, 21, 23): Strongly agree = 5; Agree = 4; Neutral = 3; Disagree = 2; Strongly disagree = 1.

For negatively worded items, where agreement would seem less spiritual (item numbers 1, 3, 5 , 9, 13, 15, 16, 18, 22): Strongly agree = 1; Agree = 2; Neutral = 3; Disagree = 4; Strongly disagree = 5.

For items 24 - 26: Highest frequency category = 5; Next highest category = 4; Middle frequency = 3; Next to lowest frequency = 2; Lowest frequency = 1.

Note that this version of the scale was used only in this preliminary study. Those planning to use the scale for clinical or research purposes are encouraged to contact Dr Hatch to obtain an updated version and pertinent reliability and validity data.

Appendix H

IRB Permission Request

[Insert Date]

[Recipient]
[Title]
[Company]
[Address 1]
[Address 2]
[Address 3]

Dear [Recipient],

As a graduate student in the Department of Community Care and Counseling Traumatology at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is The Intersection of Trauma, Addiction, and Faith among Women in Recovery at the Walter Hoving Home and the purpose of my research is to study the impact that faith has on substance and alcohol abuse treatment outcomes.

I am writing to request your permission to conduct my research at Walter Hoving Home. Participants will be asked to complete the attached survey. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, respond by email to jimott@liberty.edu.

Sincerely,

Jessica West