THE EFFECTIVENESS OF POST-ABORTION BIBLE STUDIES

ON SELF-FORGIVENESS AND DEPRESSION

by

Karen Haaland Hubbard

Liberty University,

Lynchburg, VA

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

Liberty University

2023

EFFECTIVENESS OF POST-ABORTION BIBLE STUDIES

by Karen Haaland Hubbard

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

Liberty University, Lynchburg, VA

2023

APPROVED BY:

Pamela C. Moore, Ph.D, Committee Chair

Keena K. Cowsert, Ed.D, Committee Member

ABSTRACT

Pro-choice and pro-life perspectives differ regarding adverse emotional symptoms after abortion. Pro-choice researchers maintain that abortion presents no more risk of emotional distress than carrying an unplanned pregnancy to term. However, pro-life researchers discuss evidence that abortion does increase the risk of adverse emotional symptoms that persist long after the abortion. Since many women seek faith-based interventions, the purpose of the current study was to examine the effectiveness of the post-abortion Bible study, *Forgiven and Set Free* by Linda Cochrane, in decreasing depression and increasing self-forgiveness. The first research question was, “Does participation in a post-abortion Bible study increase post-abortive women’s self-forgiveness?” The second research question was, “Does participation in a post-abortion Bible study decrease post-abortive women’s depression?” Because of the small sample size of three, a post-hoc case study of the study methodology provided insights for researching the post-abortive vulnerable population and working with gatekeeping providers of post-abortion Bible study groups. The post-hoc case study highlighted the small sample size typical in this study on post-abortion Bibles to research studies of other vulnerable populations. In addition, the post-hoc case study explored the difficulties and benefits of collaborating with post-abortion Bible study facilitators functioning as gatekeepers when researching post-abortion healing and the importance of ongoing trust-building among Bible study facilitators to enhance access to the individuals taking post-abortion Bible studies.

Keywords: Post-abortion symptoms, post-abortion stress, post-abortion Bible study, moral injury, self-forgiveness, depression, spiritual interventions, complicated grief, perinatal loss,

Copyright 2023, Karen Haaland Hubbard ©

This document is copyrighted material. Under copyright law, no parts of this document may be reproduced without the expressed permission of the author.

Dedication

This dissertation is dedicated to my mother, Elizabeth Haaland, who completed a master's degree after my father died of Hodgkin's disease. Her example of lifelong learning and her encouragement have undergirded me in this doctoral. In addition, the support and delight that my uncle and aunt, Morris and Merle Stokka, gave me as a young girl strengthened me to complete this degree. Thank you, Mom, Uncle Morris, and Auntie Merle. Finally, to my husband, Harry Hubbard, your unwavering support throughout my master's and doctoral studies has made this degree possible. I love you wholeheartedly, and thank you for your love and commitment to my educational journey.

Acknowledgments

Thank you to Jesus Christ, who redeemed me and gave me the vision to become a counselor to "bind up the brokenhearted, to proclaim liberty to the captives, and the opening of the prison to them that are bound" (Isaiah 61:1b). It is because of His grace and mercy that I am completing this degree with the advanced training to help others find his healing and live more abundantly.

I also want to thank three professors who have contributed indelibly to my doctoral studies. First, thank you, Dr. Moore, for your encouragement and guidance throughout the dissertation. You have a gentle spirit that never failed to keep me motivated. I also want to thank Professor Carol Veil, who patiently helped me develop my writing skills from a mediocre undergraduate student to a strong graduate-level writer. Without your influence, I would have struggled to develop those skills. I am forever grateful for your investment in my academic career and continued friendship. In addition, I want to thank Dr. Irmeli Kuehnel, Lieutenant U. S. Navy Ret., for her friendship and encouragement in my studies. Irmeli, your life-long love of education has inspired me, and I will always cherish our many chats in historic Annapolis.

I also want to acknowledge several balcony people. Dr. Jerra Dooley, your friendship and support have helped me complete this dissertation. You have provided valuable insights that kept me motivated when discouraged, and I look forward to our continued collaboration. Shellie Wilson and Iva Grahek, your faithful prayers, guidance, and counsel buoyed me when I was down. To my brothers, David Haaland and Rod Haaland, you have prayed for and believed in me my entire life. It looks like your 'raising me' has paid off! Thank you very much; I am blessed to have you in my life.

Table of Contents

ABSTRACT 2

Copyright Page 3

Dedication 4

Acknowledgments 5

List of Figures 9

List of Abbreviations 10

Overview 11

Background 11

    Trauma Symptoms 12

    Abortion and Trauma Treatments 12

    Abortion, Diagnosis, and Treatment 13

    Trauma, Moral Injury, and Abortion 14

    Abortion Trauma and Treatment Options 15

Problem Statement 16

Purpose Statement 17

Significance of the Study 18

Research Questions 19

Definitions 19

Summary 20

CHAPTER TWO: LITERATURE REVIEW 21

Overview 21

Conceptual and Theoretical Framework....22

Conceptual Framework....22

Theoretical Models....23

Related Literature....25

Trauma Conceptualization....25

Nonelective Perinatal Loss Symptoms....35

Abortion and Trauma Symptoms....37

Post-Abortion Stress Symptom Controversy....42

Post-Abortion Healing....43

Post-Abortion Bible Study Research....54

Summary....55

CHAPTER THREE: METHODS....57

Overview....57

Design....57

Research Questions....58

Hypotheses....58

Participants and Setting....59

Instrumentation....60

Self-Forgiveness Dual-Process Scale....60

Moral Injury Exposure and Symptoms Scale-Civilian....61

Beck Depression Inventory-II....62

Procedures....63

Data Analysis....64

Summary..65
CHAPTER FOUR: FINDINGS..66
Overview..66
Descriptive Statistics..66
Results..66
Summary..67
CHAPTER FIVE: CONCLUSIONS..68
Overview..68
Discussion..68
Recruitment of Vulnerable Populations..68
Current Study Discussion..71
Implications..73
Gatekeepers..73
Trust-Building Between Researcher and Participants..74
Limitations..75
Recommendations for Future Research..76
Extended Data Collection..76
Including Multiple Bible Studies in the Research..77
Quantitative Versus Qualitative..77
Summary..78
REFERENCES..81
APPENDICES..101

List of Figures

Figure 1: *G*Power for Sample Size*

List of Abbreviations

ACA: American Counseling Association

APA: American Psychiatric Association

CPT: Cognitive Processing Therapy

DSM-5: *Diagnostic and Statistical Manual of Mental Health Disorders*

IRB: Institutional Review Board

MIG: Moral Injury Group

PAG: Post-Abortion Grief

PTSD: Posttraumatic Stress Disorder

REACH: Responsibility, Empathy, Altruism, Commit, Hold

SOCPT: Spiritually Oriented Cognitive Behavioral Therapy

WHO: World Health Organization

CHAPTER ONE: INTRODUCTION

Overview

Two contradictory perspectives address the topic of post-abortion stress. Pro-choice researchers maintain that women who terminate an unplanned pregnancy show no evidence of significantly higher levels of mental health stress than those who carry an unplanned pregnancy to term (Biggs et al., 2016; Horvath & Schreiber, 2017). However, pro-life researchers provide evidence for adverse mental health outcomes after abortion (Coleman, 2018; Layer et al., 2004; Rafferty & Longbons, 2020). The intrusive thoughts, avoidance, negative cognitions, and arousal after abortion are consistent with the *Diagnostic and Statistical Manual of Mental Health Disorders* (DSM-5) criteria for posttraumatic stress disorder (PTSD; American Psychiatric Association [APA], 2013; Rafferty & Longbons, 2020; Speckhard & Rue, 2012; Sullins, 2019). Post-abortive women need safe spaces to process their abortion, post-abortion symptoms, and grief (Bray, 2018; Curley & Johnston, 2014). Many women want to participate in post-abortion Bible studies to address moral injury's spiritual issues (Langberg, 2019). Post-abortion Bible studies have offered a spiritually based option for women who want a biblical perspective in their healing (Layer et al., 2004). However, additional research is needed to provide empirical evidence of Bible studies as healing interventions for Christian women.

Background

According to the World Health Organization (WHO, 2021), 73 million pregnancies are terminated each year; this statistic represents 61% of unintended pregnancies and 29% of all pregnancies. According to Kortsmit et al. (2021), 629,898 pregnancies were voluntarily terminated in the United States in 2019; that figure represents 11.4 abortions per 1000 women and 195 abortions per 1000 live births, or 19.5% of all pregnancies. Some women experience

symptoms after an abortion consistent with the PTSD symptoms many people experience after witnessing a traumatic event (Rafferty & Longbons, 2020; Speckhard & Rue, 2012; Sullins, 2019). Combat, natural disasters, sexual assault, or interpersonal violence are events that meet the diagnostic criteria for PTSD (American Psychiatric Association [APA], 2013).

Trauma Symptoms

A traumatic event can overwhelm one's inner and external ability to cope with the resulting stress (Levers, 2012; Sadock et al., 2015; Vandenbos, 2015). When one is overwhelmed, the body's fight, flight, or freeze response, initiated by the emotional brain, sends signals to the body to reduce cognitive reasoning and initiate the autonomic nervous system's response to the imminent danger (Uhernik, 2017; van der Kolk, 2014). The trauma response will differ from one person to another depending on individuals' coping resources, perceived strengths or helplessness, and the resulting stress symptoms after the event is over (Briere & Scott, 2015; Levers, 2012). Therefore, one person will have few residual stress symptoms after a traumatic experience, and another may have long-lasting difficulties with nightmares, intrusive thoughts, and reactivity to trauma reminders (APA, 2013). These symptoms can cause the person to avoid reminders and develop negative thoughts about themselves, others, and the world. The stress symptoms, avoidance, and negative thoughts can also cause relationship difficulties, depression, and anxiety (APA, 2013). Depending on their coping resources, women can develop some or all of these symptoms after an abortion (Campbell-Jackson & Horsch, 2014; Moafi et al., 2021).

Abortion and Trauma Treatments

Several researchers report that the trauma symptoms women can experience after elective abortion mirror those symptoms of PTSD, suggesting further study and consideration of criteria

for post-abortion stress (Speckhard & Rue, 2012; Whitney, 2017). For example, Whitney's (2017) research supports the impact of abortion stress and suggests that women can initially function well and experience abortion stress later. In contrast, Biggs et al. (2016) and Horvath and Schreiber (2017) report findings that women choosing abortion are at no greater risk of depression and other symptoms than those who carry an unintended pregnancy to term. In addition, Horvath and Schreiber (2017) conclude that abortion does not contribute to a decline in mental health. However, researchers identify depression, guilt, and grief women often have after a miscarriage (Slobodin, 2014; Sturrock & Louw, 2013) and minimize the association of these symptoms with abortion (Biggs et al., 2016; Horvath & Schreiber, 2017; Steinberg et al., 2012).

Abortion, Diagnosis, and Treatment

Unfortunately, these conflicting conclusions have kept the mental health community from adopting diagnostic criteria for post-abortion stress (Whitney, 2017) despite researchers' acknowledgment that some women experience trauma symptoms (Biggs et al., 2016; Whitney, 2017). The continued debate among researchers regarding the acknowledgment of adverse mental health outcomes after abortion reduces the exploration of treatment interventions for women's post-abortion symptoms that mirror those of PTSD (Reardon, 2018). Furthermore, women who experience traumatic stress after an abortion often need clinical help to process their emotions and symptoms (Bray, 2018; Curley & Johnston, 2014). Therefore, in the absence of diagnostic criteria specific to post-abortion stress, PTSD criteria and the unique concerns of women post-abortion can give insight into stress levels and treatment plans (Coleman, 2018; Katz, 2019).

Trauma, Moral Injury, and Abortion

Traumatic events can include moral injury or distress related to a betrayal at a high stake by an authority (Shay, 2014) or by oneself (Litz et al., 2009). Shay's (2014) work with veterans highlights moral injury's ability to cause sufficient distress in that the person has suicidal thoughts or behaviors and acts out violently. Shay's experience with veterans who have experienced a moral injury at the hands of an authority figure supports the physiological arousal related to violent behaviors. In addition, Litz et al. (2009) identify suicidal ideation and behaviors pertaining to self-inflicted moral injury when one violates personal values. The resulting shame and guilt surrounding moral injury can increase withdrawal and self-isolation (Bray, 2018; Griffin et al., 2019; Shay, 2014), which cuts off potential social support essential for healing from trauma symptoms (Antal & Winings, 2015; Dickie, 2019). Another crucial aspect of moral injury and treatment for many people is including a spiritual element (Smith-MacDonald et al., 2018). Much moral injury research is based on veterans; however, other populations, such as first responders and women considering abortions, also experience moral injury (Griffin et al., 2019).

The situation in which a woman considers abortion often presents multiple avenues for her to experience moral injury (Traina, 2018). For instance, a woman's decision for an abortion can be influenced by parents, friends, or the father of the baby, causing her to feel pressured in her choice, resulting in self-imposed and other-imposed moral injury. The complexities surrounding an abortion decision are increased by the shame surrounding abortion itself. In addition, women who have faith in God do not feel safe sharing their abortions with other church members (Sironi, 2015). Maguen and Burkman (2013) noted an association between combat veterans' feelings of being unforgivable and their difficulties in forgiving themselves. Based on

these findings, one may surmise that post-abortive women who feel they are unforgivable because of their abortion choice can also have difficulty with self-forgiveness. Individual or group interventions for increasing self-compassion can, in turn, increase one's self-forgiveness (Oral & Arslan, 2017). Based on the literature that highlights an increase in self-forgiveness when incorporating spiritual interventions (Antal & Winings, 2015; Dickie, 2019; Layer et al., 2004; Whitney, 2017), including a spiritual aspect to abortion healing offers God's grace, mercy, and forgiveness and helps women of faith forgive themselves.

Abortion Trauma and Treatment Options

Cognitive Processing Therapy (CPT) is a common manualized treatment of PTSD that can be implemented in groups or as individual therapy (Pearce et al., 2018; Resick et al., 2017). Early in therapy, clients write an impact statement that identifies their thoughts about why the event happened and how the experience impacted their beliefs about themselves, others, and their subsequent emotions. As therapists challenge stuck points and problematic thinking, clients learn to challenge their assumptions about intentions, responsibility, and problematic thinking related to the traumatic event (Resick et al., 2017). Research supports using CPT for trauma treatment to change maladaptive thinking to more adaptive thought processes, increasing clients' understanding of safety, trust, and esteem, reducing PTSD symptoms, and increasing positive emotions (Price et al., 2016). In addition, integrating spiritual themes helps clients address the psychological and spiritual symptoms of moral injury resulting from trauma (Pearce et al., 2018) and can benefit clients who struggle with forgiving themselves after an abortion.

Several options for faith-based post-abortion recovery integrate biblical principles into groups that offer supportive communities for post-abortive women. Essential spiritual elements of post-abortion healing include acknowledging influences, recognizing a balance in

responsibility, seeking and accepting God's mercy, focusing on his grace, sharing the abortion, and forgiving others and the self (Sironi, 2015). One faith-based healing option is Project Rachel, founded by Vicky Thorn; Project Rachel offers weekend retreats facilitated by a priest, a clinical therapist, and trained lay facilitators (O'Malley, 2015; Pastorius, 2013). In addition, many faith groups use post-abortion Bible study groups that include the essential elements of spiritual interventions (Cochrane, 2015; Covert et al., 2017; Giancola, 2018; Hrichi, 2018; Layton, 2020). Faith-based post-abortion Bible study groups incorporate scripture verses relating to post-abortion symptoms and encourage women to apply the principles to their abortion experiences and symptoms (Cochrane, 2015; Covert et al., 2017; Giancola, 2018; Hrichi, 2018; Layton, 2020). In addition, written homework facilitates clients' processing and emotional regulation, similar to written homework during CPT with written accounts (Glass et al., 2019; Harrington et al., 2018; Resick et al., 2017). Finally, integrating spiritual truths of God's love helps restore women's broken identities and answer questions about God's character (Langberg, 2019). Despite the number of faith-based post-abortion treatments available, Layer et al. (2004) have the only study published in a peer-reviewed journal to examine the effectiveness of Bible study groups in reducing post-abortion symptoms. Jaramillo (2017) recently replicated the Layer et al. study in her doctoral dissertation.

Problem Statement

Abortion statistics show that 73 million women worldwide (WHO, 2021) and 629,898 in the United States (Kortsmit et al., 2021) have abortions each year. Researchers report contradictory data on adverse mental health outcomes for women who choose abortion (Biggs et al., 2016; Speckhard & Rue, 2012; Steinberg et al., 2012; Sullins, 2019). However, the mental health impact of miscarriage and stillbirth (Campbell-Jackson & Horsch, 2014; Slobodin, 2014;

Sturrock & Louw, 2013) can inform clinicians that post-abortion women may experience similar mental health difficulties. The continued debate among researchers regarding the acknowledgment of adverse mental health outcomes after abortion reduces the exploration of treatment interventions for women's post-abortion symptoms that mirror those of PTSD (Reardon, 2018).

Some researchers have explored clinical interventions for post-abortion symptoms (Bray, 2018; Curley & Johnston, 2014). However, few studies have reviewed the efficacy of spiritual interventions for post-abortion symptoms (Layer et al., 2004). Clinicians can gain insight into treatments and spiritually informed treatments by employing evidence-based therapies for trauma (Pearce et al., 2018; Resick et al., 2017). These evidence-based treatments must also include treating moral injury and self-forgiveness with spiritual interventions since moral injuries involve psychological and spiritual wounds (Smith-MacDonald et al., 2018). The differing conclusions also have limited research into treatment options for post-abortive women (Reardon, 2018).

Purpose Statement

The purpose of this quantitative pretest-posttest study is to evaluate the effectiveness of a post-abortion Bible study in increasing a woman's self-forgiveness after an abortion. Research volunteers will be women who have had at least one abortion and wish to join a group Bible study to address their symptoms after the abortion. One's perception of their moral injury impacts their belief that they are unforgivable and reduces their ability to forgive themselves (Maguen & Burkman, 2013). Therefore, each research volunteer will complete the "Moral Injury Events Scale" to assess their perceived level of moral injury and the "Self-Forgiveness Dual-Process Scale" to assess their level of genuine self-forgiveness. The purpose of this study is to

evaluate the effectiveness of the Bible study, "*Forgiven and Set Free,*" in increasing post-abortive women's genuine self-forgiveness (Cochrane, 2015).

Significance of the Study

Prior research has highlighted the reduction of shame and avoidance of reminders of abortion when women participate in a post-abortion Bible study (Layer et al., 2004; see also Jaramillo, 2017). However, no study has examined the impact of post-abortion Bible studies on increasing women's self-forgiveness. The research study of veterans in a moral injury group (MIG) highlighted the significance of spiritual interventions in increasing their self-compassion (Cenkner et al., 2021). The current research will apply the understanding that trauma disrupts one's faith (Kopacz et al., 2016; Maguen & Burkman, 2013) and the intrinsic spiritual element of violating one's deeply held values (Koenig et al., 2017; Smith-MacDonald et al., 2018) to spiritual interventions for post-abortive women through a group Bible study. The study results will strengthen the assertions of post-abortion Bible studies regarding the necessity of including faith in women's post-abortion healing. In addition, this study will inform clinical counselors of the essential integration of faith-based interventions for Christian women who are processing their post-abortion symptoms and difficulties in forgiving themselves. Finally, post-abortive women learn to connect their decision to have an abortion to scripture that teaches God's forgiveness and his removal of condemnation through Jesus Christ. For instance, women will learn to embrace John 3:18, "He that believeth on him is not condemned" (*King James Bible*, 1769/1970). Romans 8:1a also speaks of the freedom of condemnation through Christ, "There is therefore now no condemnation to them which are in Christ Jesus" (*King James Bible*, 1769/1970).

Research Questions

While researchers have studied clinical treatments for post-abortion symptoms (Bray, 2018; Curley & Johnston, 2014), few have studied post-abortion Bible studies' effect on increasing self-forgiveness after an abortion (Layer et al., 2004). Therefore, the purpose of this study is to evaluate the effectiveness of a post-abortion Bible study in increasing a woman's self-forgiveness after an abortion.

RQ1: Does participation in a post-abortion Bible study increase post-abortive women's self-forgiveness?

RQ2: Does participation in a post-abortion Bible study decrease post-abortive women's depression?

Definitions

1. *Moral injury* – The witnessing or perpetrating an act that is against one's core beliefs, instigated by oneself (Litz et al., 2009) or a trusted leader (Shay, 2014) and can be exacerbated by the lack of trusted social support (Koenig et al., 2017).
2. *Post-abortion stress* – The symptoms of intrusive thoughts (Rafferty & Longbons, 2020), avoidance (Hutti et al., 2015), negative cognitions (Campbell-Jackson & Horsch, 2014), arousal and reactivity (Zulčić-Nakić et al., 2012), complicated grief (Speckhard & Rue, 2012), depression (Hang, 2018), suicidality (Rafferty & Longbons, 2020), and regret (Rafferty & Longbons, 2020) experienced by some women after an abortion.
3. *Posttraumatic stress disorder* – the emotional sequelae that can develop after experiencing or witnessing "actual or threatened death, serious injury, or sexual violence" and results in reexperiencing the event, avoiding reminders of the event, numbing negative thoughts and

moods, hyperarousal and hyperreactivity lasting more than 30 days after the event (American Psychiatric Association, 2013, p. 271).

4. *Self-compassion* – “involves being touched by and open to one’s suffering, not avoiding or disconnecting from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness” (Neff, 2003, p. 87).
5. *Self-forgiveness* – Addressing one’s offense, taking responsibility, acknowledging failures, repentance, and restoration (Woodyatt & Wenzel, 2013; Woodyatt et al., 2017)

Summary

The two conflicting perspectives regarding post-abortion stress have limited research-related discussions about post-abortion healing (Whitney, 2017). Some women experience no adverse effects while others do, consistent with findings that trauma generally affects people to differing degrees (Briere & Scott, 2015; Levers, 2012). A vital determination of a person’s developing trauma symptoms is whether the event overwhelms their internal and external resources to cope with the stress (Levers, 2012; Sadock et al., 2015; Vandenbos, 2015). In addition to the common psychological and biological trauma responses, many post-abortive women also experience shame, guilt, and difficulty forgiving themselves, common features of moral injury (Griffin et al., 2019; Shay, 2014). The symptoms experienced in conjunction with moral injury cut people off from social support (Antal & Winings, 2015). The intrinsic spiritual nature of moral injury supports including spiritual elements with clinical interventions (Antal & Winings, 2015; Dickie, 2019; Whitney, 2017). Research into the effectiveness of post-abortion Bible studies in increasing women’s ability to forgive themselves will add to an evidence-based understanding of post-abortion healing.

CHAPTER TWO: LITERATURE REVIEW

Overview

Perspectives regarding stress symptoms after abortion differ among researchers and clinicians. For example, some researchers report no more mental health difficulties for women after an abortion than those who have carried an unplanned pregnancy to term (Biggs et al., 2016; Steinberg et al., 2012). However, others report adverse mental health symptoms after an abortion similar to those experienced after nonelective perinatal loss (Campbell-Jackson & Horsch, 2014; Moafi et al., 2021; Rafferty & Longbons, 2020). Since some women experience stress symptoms after abortion, addressing these symptoms with evidence-based interventions is essential in post-abortion treatment. In addition, the evidence of research on moral injury, spiritual aspects of moral injury, and spiritually integrated therapy for military veterans informs clinicians of treatment adaptations for post-abortive women who have spiritual struggles surrounding their abortion decisions (Cenkner et al., 2021).

This chapter will present the theoretical framework of moral injury and the subsequent lack of self-forgiveness and depression and include spiritually oriented cognitive behavioral therapy (SOCPT) in treating moral injury. The literature review includes a conceptualization of trauma and a Christian worldview of trauma. The literature review also compares nonelective perinatal loss symptoms to post-abortion symptoms. The review also proposes using post-abortion Bible studies to address post-abortion symptoms, including self-forgiveness and depression. The lack of research regarding the effectiveness of post-abortion Bible studies supports the current study's purpose to evaluate the effectiveness of Bible studies in increasing post-abortive women's self-forgiveness and decreasing their depression.

Conceptual and Theoretical Framework

The impact of moral injury on self-forgiveness (Antal et al., 2019; Cenkner et al., 2021) and depression (Bryan et al., 2016) form the conceptual framework for considering post-Bible studies as spiritual interventions for increasing women's self-forgiveness and decreasing their depression after abortion. Two theoretical models provide the evidence-informed use of post-abortion Bible studies for women who wish their post-abortion treatment to include biblical integration. First, the association between moral injury and trauma involves the violation of deeply held moral values. The REACH Self-Forgiveness model helps people restore their values, accept their responsibility, and replace self-compassion with self-compassion (Griffin et al., 2018). In addition, the MIG model will extend previous research by applying the model to interventions to address moral injury-related depression in post-abortive women (Cenkner et al., 2021). These two models provide the framework for post-abortion Bible studies as treatment interventions for post-abortive women.

Conceptual Framework

Moral Injury, Self-Compassion, and Self-Forgiveness

As Litz et al. (2009) and Shay (2014) identified, a moral injury involves witnessing or perpetrating an act that is against one's core beliefs instigated by a trusted leader or oneself and can be exacerbated by the lack of trusted social support (Campbell et al., 2020; Koenig et al., 2017). The shame, guilt (Litz et al., 2009; Shay, 2014), and lack of social support (Koenig et al., 2017), combined with a person's belief that they are unforgivable and irredeemable (Maguen & Burkman, 2013), increase their difficulty in forgiving themselves. Because post-abortive women consider their decision to be a self-betrayal of their values (Traina, 2018), addressing moral

injury concepts in post-abortion healing is essential in addressing their lack of self-forgiveness (Whitney, 2017).

Moral Injury and Depression

Guilt and shame are associated with moral injury (Bryan et al., 2018; Hall et al., 2022; Levi-Belz et al., 2020), and those who have self-imposed moral injury have an increased risk of emotional numbing and an inability to express positive emotions (Bryan et al., 2018). Emotional numbing and the reduced expression of positive emotions are consistent with exhibiting more significant levels of depression and anger than those whose moral injuries were other-imposed (Hoffman et al., 2018; Levi-Belz et al., 2020). Because self-imposed moral injury increases clients' depression, clinicians must consider the potential of moral injury when conceptualizing clients' stories of traumatic experiences (Hall et al., 2022).

Theoretical Models

REACH Self-Forgiveness Model

Worthington (2013a) developed the dual-process model of self-forgiveness to add to Bandura's (1991) Social Cognitive Theory (Griffin et al., 2018). Bandura approached moral behavior from the concept of social learning as a continually adaptive process in which people consider both social and internal concepts of moral behavior. Those who have strongly internalized moral values differing from the social norm are less vulnerable to social conformity than those who do not. Bandura highlights that self-condemnation rises when one deviates from deeply held personal values but does not offer a theory for repairing these moral self-breeches.

Worthington's (2013a) REACH Forgiveness model uses the acronym REACH as the steps for forgiving others: **R**ecall the hurt, use **E**mpathy to replace negative emotions with positive ones, offer **A**ltruistic forgiveness, **C**ommit to forgive, and **H**old onto the forgiveness

(Ripley & Worthington, 2014; Worthington, 2013a). Since Worthington's REACH forgiveness effectively increases emotional forgiveness within multiple cultures in the United States (Lin et al., 2014), he adapted the model to treat people's self-condemnation after self-inflicted moral injury (Griffin et al., 2018). The REACH Self-Forgiveness model expands Bandura's theory of self-condemnation after violating one's deeply held values by offering a model of moral repair. The model includes accepting personal responsibility, re-establishing moral values, and offering self-compassion instead of condemnation (Griffin et al., 2018). The post-abortion Bible study, *Forgiven and Set Free*, incorporates elements of the REACH model to highlight the need for taking responsibility for one's decision to choose an abortion, setting aside self-condemnation, and reestablishing one's moral values based on the forgiveness God offers (Cochrane, 2015). Therefore, the current study will add to the understanding of how the REACH model can increase self-forgiveness for women who have lived with the moral injury of abortion many years earlier and could not forgive themselves.

Moral Injury Group Model and Depression Reduction

The MIG model provides psychological and spiritual interventions while increasing the essential element of social support for healing moral injury-related depression (Antal et al., 2019). In addition, Cenkner et al. (2021) reported that the MIG model facilitates a reduction in depression related to moral injury. These results are similar to those of other researchers using Prolonged Exposure and CPT to treat moral injury-related depression in veterans (Held et al., 2018; Paul et al., 2014). However, most of the moral injury research studied veterans, such as the research Resick et al. (2017) conducted with the MIG model incorporating spiritual interventions with written cognitive processing of traumatic experiences (Resick et al., 2017). The post-abortion Bible study, *Forgiven and Set Free,* also incorporates cognitive processing of women's

abortion experiences within the Bible study (Cochrane, 2015). Additional research on moral injury and the impact of MIGs on post-abortive women's depression will add additional understanding of the effectiveness of the MIG model as an intervention for moral injury-related depression.

Related Literature

Trauma Conceptualization

To understand trauma symptoms, one must understand how stress, crisis, and trauma relate to subsequent trauma responses. Stress is the physiological response to a perceived threat that alerts the sympathetic nervous system to prepare one to respond to the threat (Levers, 2012; Vandenbos, 2015). On the other hand, a crisis overwhelms one's internal and external coping resources and activates cognitive and emotional reactions to the stressors (Levers, 2012; Sadock et al., 2015; Vandenbos, 2015). Like a crisis, traumatic events overwhelm one's coping resources; however, traumatic events also elicit severe stress responses such as helplessness, intense fear, avoidance, and numbing (Levers, 2012; Sadock et al., 2015; Vandenbos, 2015). Thus, trauma differs from crises in the severity of the stress and the terror, helplessness, and long-term psychological symptoms after a traumatic event (Briere & Scott, 2015; Levers, 2012).

The brain has three distinct areas: the reptilian brain, containing the brain stem; the mammalian brain, containing the limbic system; and the neocortex, containing the frontal lobes (Sapolsky, 2004; Uhernik, 2017; van der Kolk, 2014). The three areas of the brain function from the bottom up, with the brain stem controlling autonomic functions that sustain life, such as breathing and heartbeat. The limbic system is responsible for instinctual behaviors and originating emotions. The neocortex is responsible for executive functioning, including working memory, behavioral adaptation, focus, and evaluating context clues (Sapolsky, 2004; Uhernik,

2017; van der Kolk, 2014). Understanding the neurological response during stress is essential to treating traumatic stress symptoms (Uhernik, 2017; van der Kolk, 2014).

Maintaining survival is the brain's primary function; the brain stem keeps the body's organs functioning independently from the limbic system and neocortex (van der Kolk, 2014). In addition to regulating essential body functions, the brain stem and the limbic system work together as the emotional brain to respond to internal needs of rest, food, and protection (Uhernik, 2017; van der Kolk, 2014). The emotional brain evaluates environmental cues and creates a map of the world regarding its ability to meet the person's needs (van der Kolk, 2014). The thalamus receives information, filters out irrelevant information, and relays pertinent information to the amygdala in the limbic system and the frontal lobes in the neocortex. While the frontal lobes evaluate the safety or danger of stimuli, it does so more slowly than the amygdala does. The amygdala uses prior experiences in its global risk assessment, which can result in responding to current stimuli similar to past experiences as a threat. Once the amygdala assesses stimuli as dangerous, it will warn the body of safety threats and prepare for an appropriate response, which inhibits the integration of the frontal lobe assessment (van der Kolk, 2014).

The frontal lobes of the neocortex integrate information and assign meaning (van der Kolk, 2014). This meaning-making facilitates empathy and mirror neurons to assess others' movements, emotions, and intentions. In addition to allowing one to respond positively to others' safe emotional cues, meaning-making helps them identify unsafe and harmful emotional signals and resist responding in kind. However, intense visceral sensory input decreases the ability to moderate one's mirroring response to negative emotions. The frontal lobes also regulate executive functioning, including focus, adaptive behavior, and emotional regulation. In addition,

executive functioning skills help restore pre-stress equilibrium as long as one is not too aroused. However, a breakdown of executive functioning can cause a conditioned trauma response to go from zero to fully activated in seconds because of the shift in the balance between the medial prefrontal cortex and the amygdala, causing the frontal lobes to shut down (van der Kolk, 2014).

Along with the bottom-up processing of incoming stimuli, the brain’s two hemispheres have different functions (Uhernik, 2017). While the left hemisphere controls logic, thinking, and language, the right hemisphere manages intuitive and emotional processing. For example, when thinking and emotional processing work together, the brain can evaluate the level of danger in each situation). Trauma disrupts this bilateral connection and processing, and if the brain cannot restore the connections, it cannot integrate the sensory memories with a logical evaluation of the episode. The result is higher reactivity to new cues like the initial traumatic situation (Uhernik, 2017).

Under normal circumstances, the Broca’s area, located in the left brain, functions as the speech area to integrate thoughts and feelings and to communicate experiences (van der Kolk, 2014), and the prefrontal cortex manages higher-level brain functioning, such as working memory, reasoning, focus, and assessment (Shrivastava et al., 2017; Uhernik, 2017). These left hemisphere areas help evaluate incoming information and communicate these evaluations verbally. In contrast to the logical left hemisphere, the right hemisphere interprets external cues intuitively and focuses on somatic senses (van der Kolk, 2014). The right brain recalls feelings and senses attached to memories of people and events, while the left brain recalls facts (van der Kolk, 2014). When the right and left hemispheres work together, one can balance the right brain's emotions and senses with the left brain's facts and reasoning (van der Kolk, 2014).

Trauma interrupts this connection between the two hemispheres by turning off the prefrontal cortex to prepare for survival (van der Kolk, 2014). With the left hemisphere deactivated, the influence of the emotions, sensations, and images that flood the brain increases, and the ability to evaluate and speak about incoming information decreases (Shrivastava et al., 2017; van der Kolk, 2014). The deactivation of the left hemisphere also reduces the ability to focus and inhibits the working memory, which may impact the immediate recall of the trauma (Shrivastava et al., 2017).

The connection between hemispheres resumes once the danger is over (Uhernik, 2017). However, in repeated trauma experiences, the ability to return to a normal state is often delayed because the high hormone levels released for protection take time to return to normal (van der Kolk, 2014). This delayed reduction of hormones increases the reactivity of the brain's trauma response. The longer the time needed to return to base hormonal levels, the greater the likelihood of a more rapid release of the hormones when someone again receives cues like the initial traumatic experience (van der Kolk, 2014). However, deep breathing and bodily movement can help release the extra energy left after the threat has subsided (Uhernik, 2017). The trauma reactions provide an understanding for developing trauma-informed therapies (Uhernik, 2017; van der Kolk, 2014).

The increased stress response to reminders of previous safety threats results in long-lasting cognitive, emotional, behavioral, and relational symptoms (Uhernik, 2017; van der Kolk, 2014). When people perceive they lack social support in stressful experiences, they experience more stress reactions and are vulnerable to relationship difficulties (Sapolsky, 2004; van der Kolk, 2014). One's response to stress depends on their perception of the threat and their ability to tolerate the stress; therefore, one person may experience trauma symptoms after a crisis, and

another experiencing the same event may have no symptoms or very few (Sapolsky, 2004; van der Kolk, 2014). Trauma symptoms can manifest in sleep disruption, eating disturbances, and risky or overcautious behaviors (van der Kolk, 2014). Safe relationships are essential for people to learn emotional regulation; the ability to identify safe or harmful relationships determines one's ability to learn to self-regulate by mirroring others (Porges, 2011). Because trauma disrupts one's perception of safety in relationships, one may withdraw from healthy relationships or form unhealthy attachments (Porges, 2011).

Christian Worldview of Trauma

Trauma survivors have often experienced attachment breaches both before their traumatic event, during, and after (Heller, 2019; Kosarkova et al., 2020; Zarzycka, 2019). Broken attachment relationships diminish their resilience against further trauma. These survivors need help to explore what safe relationships and attachments look and feel like (Heller, 2019; Kosarkova et al., 2020; Zarzycka, 2019). In addition to broken attachments with others, trauma survivors feel disconnected from God; their perceptions of God often mirror those who failed them in their greatest need (Kosarkova et al., 2020; Zarzycka, 2019). When survivors experience others ignoring or minimizing their experiences and the resulting trauma symptoms, they lose trust in others and God, resulting in their questioning their faith and God (Kosarkova et al., 2020; Worthington & Langberg, 2012; Zarzycka, 2019).

Many survivors hear Christians silence their faith questions by offering quick, simplistic answers rather than listening to them and grieving with them (Langberg, 2019). Answering questions only with cognitive responses instead of acknowledging the importance of emotional experiences invalidates the emotional reactions to traumatic experiences (Langberg, 2019). This invalidation increases the damage of trauma by further isolating survivors from empathetic

support and an understanding faith community (Langberg, 2019; Worthington & Langberg, 2012). By listening to survivors and allowing them to question their faith, God honors them and recognizes they have not lost faith but need to wrestle with their questions and the deep wounds they carry (Dickie, 2019; Langberg, 2019).

Trauma survivors often have suppressed emotions to manage their pain after trauma to protect them from further wounding (Uhernik, 2017). Unfortunately, within many churches, spiritual leaders emphasize cognitive beliefs over emotional experience (Pressley & Spinazzola, 2015). For Christian trauma survivors, the emphasis on minimizing experiencing their faith emotionally further entrenches their natural posttraumatic response to avoid feeling their emotions (Pressley & Spinazzola, 2015). However, when a supportive community recognizes that emotions and cognitive understanding work together, they will facilitate processing survivors' faith questions (Dickie, 2019; Langberg, 2019).

One aspect of resiliency is an emotionally healthy view of one's spirituality (Kisiel et al., 2017; Sinha & Rosenberg, 2013). In addition to assessing the domains of attachment, biology, affect regulation, dissociation, behavior control, cognition, and self-concept (Cook et al., 2005), clinicians must also include a spiritual assessment and consider integrating spirituality in therapy to enhance this avenue of resiliency (Pressley & Spinazzola, 2015; Sinha & Rosenberg, 2013). Like a genogram, the spiritual eco-map visually assesses how clients understand spirituality within the context of their trauma (Pearson, 2017). Assessing the appropriateness of spiritual integration within trauma counseling will provide a comprehensive treatment plan for addressing spiritual concerns and increasing resiliency for clients (Kisiel et al., 2017; Pearson, 2017).

Moral Injury

Moral injury can be defined as witnessing or perpetrating an act that is against one's core beliefs, instigated by oneself (Litz et al., 2009) or a trusted leader (Shay, 2014), and can be exacerbated by the lack of trusted social support (Koenig et al., 2017). In addition to the impact trauma has on one's sense of safety (Porges, 2011), trauma experiences can disrupt one's faith in God (Litz et al., 2009) and trust in others (Koenig et al., 2018). The intrinsic spiritual element of moral injury must be considered when planning interventions for clients.

Faith and Social Support Disruption. Not only does trauma undermine one's faith, but it also disrupts one's attachment to God (Langberg, 2019). Often, the reduction in faith and attachment to God is rooted in behavior against a person's core values (Litz et al., 2009) or a betrayal by a trusted person (Shay, 2014), also termed moral injury. Guilt and shame result from moral injury, and a person is vulnerable to suicidal ideation and violence (Shay, 2014). When a person experiences moral injury after violating their own values, they often feel guilt and shame that causes them to believe they are unworthy of forgiveness and deserve punishment (Kopacz et al., 2016; Maguen & Burkman, 2013; Shay, 2014).

Another aspect of moral injury is the disruption of social support, which is often disrupted by trauma (Koenig et al., 2018; Shay, 2014). While trauma and moral injury disrupt social connections, social support is essential for healing (Langberg, 2019). However, because trauma compromises one's ability to identify safe relationships, many people do not trust others (Porges, 2011). This safety assessment is visceral and rooted in the limbic system's stored memories. Therefore, trauma and its disruption of one's social connections can cause a person to build unhealthy relationships (Porges, 2011; van der Kolk, 2014). Social support requires reciprocity in which one experiences that another person hears and cares about them (van der Kolk, 2014). The experience of someone responding to their call and helping them (van der

Kolk, 2014) triggers neural connections that calm stress responses and promote healing (Porges, 1022). Therefore, social connection and support are essential in healing from trauma and moral injury (Antal et al., 2019; Langberg, 2019).

Moral injury is an intrinsically spiritual wound that requires spiritual integration to provide a holistic approach (Antal & Winings, 2015; Koenig et al., 2017; Smith-MacDonald et al., 2018). The guilt, shame, lack of self-forgiveness (Kopacz et al., 2016; Maguen & Burkman, 2013; Shay, 2014), depression (Levi-Belz et al., 2020), and the disruption of one's faith in God (Langberg, 2019) all contribute to the need to address moral injury with a biopsychosocial-spiritual approach (Brémault-Phillips et al., 2019). The conflict moral injury brings regarding self-forgiveness also needs exploration regarding spiritual aspects of forgiveness (Kopacz et al., 2016; Mushonga et al., 2021; Smith-MacDonald et al., 2018).

Spiritually Integrated Interventions. Much of the moral injury research investigates military-related moral injury (Cenkner et al., 2021; Kopacz et al., 2016; Maguen & Burkman, 2013; Shay, 2014). Therefore, a study evaluating the effectiveness of a MIG for veterans facilitated by a chaplain and a psychologist provides rich insight into the use of spiritual interventions for moral injuries and the shame, guilt, and lack of self-forgiveness (Antal et al., 2019; Cenkner et al., 2021). The MIG for veterans employed several assumptions as foundational to the moral injury intervention (Antal et al., 2019). First, combat moral distress is normal and stems from a moral framework, and veterans who have religious faith gain additional healing through spiritual integration. When chaplains help facilitate the MIG, veterans benefit from a strengths-based conceptualization that highlights their sensitivity to a moral framework instead of thinking about their injury as a weakness. The MIG also reconnects the veterans to

society to restore the essential social framework for healing moral injury and reduce the shame common to the concept of moral injury (Antal et al., 2019).

The MIG used a psychologist and a chaplain to address moral injury with clinical and spiritual insights (Antal et al., 2019). The group aided in healing relationships and facilitated safety and mourning in 12 90-minute sessions. When needed, the facilitators offered individual sessions to strengthen safety and concepts. The diversity of religious beliefs was honored within the group. Throughout the sessions, veterans learned definitions of moral injury and gained insight into dilemmas stemming from moral values and the accompanying emotions of guilt, shame, and resentment. Understanding the difference between guilt and shame was essential for veterans addressing social isolation. Also, learning how to reengage with moral values helped them identify the harmful consequences of their negative coping strategies. Chaplains introduced spiritual disciplines to encourage lament and reconciliation in a social context where non-veteran community members understand society's role in sending military personnel to combat, thus bearing some responsibility for the veterans' moral injuries. The social context is essential to reducing shame and fostering veterans' increase in self-compassion (Antal et al., 2019). Veterans who have participated in the MIG have reported a restoration of faith, an ability to accept guilt, increased self-compassion, and restoration of social relationships (Antal et al., 2019; Cenkner et al., 2021).

The MIG was designed for religious and cultural diversity to meet spiritual needs within the context of moral injury symptoms (Antal et al., 2019). The group's foundational assumptions of the need for community within the healing of moral injury incorporated non-veteran community support that enabled the community to understand better the needs of veterans and the veterans to experience restored social support that enables increased self-compassion (Antal

et al., 2019; Cenkner et al., 2021). Self-compassion “involves being touched by and open to one’s own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness” (Neff, 2003, p. 87). The MIG study provides a foundation for examining how participation in a post-abortion Bible study can increase a woman’s self-forgiveness because of God’s forgiveness. While Antal et al. (2019) and Cenkner et al. (2021) focused on self-compassion in their studies of the MIG, the positive relationship between self-compassion and self-forgiveness in Oral and Arslan’s (2017) research supports investigating the effectiveness of post-abortion Bible studies in increasing a woman’s self-forgiveness after an abortion.

Understanding that moral injury is related to a betrayal of one’s moral values perpetrated by either a trusted authority (Shay, 2014) or oneself (Litz et al., 2009) is foundational to recognizing the impact that abortion has on many women, especially for those of faith (Traina, 2018). Moral injury has distinct differences from PTSD and elicits inner spiritual struggles, resulting in a loss of faith (Atuel et al., 2020). The spiritual elements associated with moral injury necessitate spiritual elements integrated with trauma treatment (Koenig et al., 2017; Pearce et al., 2018). Having an abortion can result in moral injury because of a woman’s personal decision and the influence of others who may have pressured her to make that decision (Traina, 2018). The resulting unworthiness many women feel adds to their difficulty in forgiving themselves and points to the essential spiritual element in their post-abortion treatment (Antal & Winings, 2015; Cenkner et al., 2021; Dickie, 2019).

The self-forgiveness difficulty veterans experience (Finlay, 2015; Whitney, 2017) is what post-abortive women also have, which is common among those who have experienced moral injury (Antal & Winings, 2015). The distinction between pseudo-self-forgiveness and genuine

self-forgiveness must be identified before addressing self-forgiveness within the context of abortion. Claiming self-forgiveness while blaming another and denying personal responsibility constitutes pseudo-self-forgiveness (McConnell, 2015; Woodyatt & Wenzel, 2013). Pseudo-self-forgiveness also involves avoiding the emotions surrounding guilt or shame regarding the moral injury (Woodyatt & Wenzel, 2013; Woodyatt et al., 2017). In contrast, genuine self-forgiveness involves accepting responsibility, expressing remorse, and making amends (Woodyatt & Wenzel, 2013; Woodyatt et al., 2017). The elements of responsibility, remorse, and making amends allow the person to acknowledge that they have done wrong and change future behaviors, a crucial element of restoration (McConnell, 2015). When people engage in genuine self-forgiveness, they can experience restoration with God, supporting their subsequent self-forgiveness (Worthington & Langberg, 2012). These elements are included in post-abortion Bible studies to present biblical principles of God's forgiveness based on Christ's death on the cross, burial, and resurrection that paid the price for sin (Cochrane, 2015).

Nonelective Perinatal Loss Symptoms

Two opposing views highlight the controversy surrounding abortion and adverse mental health symptoms. First, recent U.S. and global abortion statistics give perspective on the number of women impacted. In 2019, 195 pregnancies for every 1000 live births ended in elective abortion in the United States (Kortsmit et al., 2021), and globally, 73 million, or 29%, of all pregnancies were reported as elective abortions in the same year (WHO, 2021). When reviewing abortion statistics, one also must acknowledge the underreporting bias of abortion statistics (Sullins, 2019). For instance, in the United States, California and Maryland are not legally required to report abortion data as of February 1, 2023 (Guttmacher Institute, 2023), highlighting one avenue of underreporting bias. In addition, compared with women who have miscarriages,

post-abortive women feel more guilt and shame and tell fewer people, an average of 1.24 people, of their abortions, compared with women telling an average of 2.63 people about their miscarriages (Cowan, 2014).

Mental Health Stress Related to Nonelective Perinatal Loss.

The stress symptoms that many women experience after the perinatal losses of miscarriage and stillbirth can inform researchers of the potential for experiencing these same symptoms when recognizing abortion as a perinatal loss. Up to 54% of women who have a spontaneous abortion develop depression within a week after the pregnancy loss (Moafi et al., 2021). In addition, women who have a stillbirth have an increased risk of anxiety, depression, and substance use (Campbell-Jackson & Horsch, 2014). Another aspect of pregnancy loss identified by the research is the disruption abortion has on women's maternal development (Slobodin, 2014). This disrupted development impacts a woman's identity since she cannot mother the lost child and feels uncertain of her role and purpose (Sturrock & Louw, 2013). This perinatal loss causes difficulties in the mother's ability to make sense of the loss and her lost mother status, causing potential long-term psychological difficulties (Slobodin, 2014).

The evidence regarding stress symptoms after nonelective perinatal loss establishes the disruption of women's maternal development and attachment to their unborn child (Slobodin, 2014; Sturrock & Louw, 2013). Furthermore, just as women with perinatal loss acknowledge this as the loss of a child, many women acknowledge the abortion loss as a loss of their child (Hang, 2018; Layer et al., 2004). Thus, the similarities between perinatal loss and abortion stress support acknowledging abortion loss as a reproductive loss.

Abortion and Trauma Symptoms

Kortsmit et al. (2021) reported 195 abortions per 1000 live births in the United States, and WHO (2021) reported 73 million abortions (29% of all pregnancies) worldwide in 2019. While some researchers minimize the adverse psychological impact of abortion (Biggs et al., 2016; Whitney, 2017), some women experience psychological symptoms similar to PTSD. Comparing the symptoms these women report with the DSM-5 diagnostic criteria will inform clinicians of possible treatments for these women (Bray, 2018; Curley & Johnston, 2014).

Event

The DSM-5 presents a comprehensive list of criteria for a PTSD diagnosis (APA, 2013). Many stress symptoms women experience after an abortion are also stress symptoms itemized in the DSM-5. The first criterion for PTSD is directly experiencing a “threat of death, serious injury, or sexual violence” (APA, 2013, p. 271). In abortion stress symptoms, a woman directly experiences the event, with many women identifying it as traumatic (Rafferty & Longbons, 2020). Women can differ in their assessment of the traumatic nature of abortion, but some report their experience as traumatic (Speckhard & Rue, 2012). For example, while abortion procedures may not cause life-threatening complications, women refer to their abortion as traumatic when the procedure is especially painful or life-threatening. In addition, experiencing coercion, abusive relationships, and unsupportive family members can increase the traumatic experience of abortion (Speckhard & Rue, 2012). These reported experiences meet criterion A for a PTSD diagnosis (APA, 2013).

Intrusive Thoughts

Women can experience intrusive thoughts about their abortion (Giancola, 2018; Rafferty & Longbons, 2020), consistent with criteria B symptoms for PTSD (APA, 2013). Intrusive

thoughts can present randomly, seemingly without reason, be persistent preoccupations (Briere & Scott, 2015), or prompt aggressiveness (Frueh et al., 2012). Women can also display irritability after an abortion as a sign of stress (Abi-Hashem, 2017). In addition, adolescents have significantly intense dreams after abortion, another aspect of posttraumatic intrusion (Zulčić-Nakić et al., 2012). Asking women questions such as “How often do you think about your abortion?” or “Do you find it difficult to get the thought out of your mind?” can help assess for intrusive thoughts (Briere & Scott, 2015). Just as intrusion plays a role in PTSD, women can experience intrusive symptoms after abortion (Giancola, 2018; Layton, 2020; Rafferty & Longbons, 2020).

Avoiding Reminders

Criteria C of PTSD diagnosis is avoiding reminders of the traumatic event (APA, 2013). While grief is a normal response to pregnancy loss (Sironi, 2015), the lack of mourning after perinatal loss is not only a symptom of avoidance but also increases intrusion symptoms, such as dreams and intense emotions (Hutti et al., 2015). Many women bury their grief for years after the abortion, often remaining unprocessed for decades (Layer et al., 2004). This avoidance of grief is a common dissociative symptom after trauma (Finlay, 2015) and can exhibit as emotional numbing (Abi-Hashem, 2017). In addition, the secrecy surrounding abortion increases women’s silence about their abortion, increasing their belief that abortion is a sin like no other (Sironi, 2015). Avoiding people is another common symptom for post-abortive women; Rafferty and Longbons (2020) reported that 60% of the participating women reported isolation and feelings of alienation because of the silence surrounding their abortion.

Negative Cognitions

Trauma symptoms also include negative cognitions and moods that begin or worsen after the traumatic event (APA, 2013). After a stillbirth, women often experience guilt and shame (Campbell-Jackson & Horsch, 2014; Hang, 2018); women can also experience guilt and shame after an abortion (Finlay, 2015; Hang, 2018; Rafferty & Longbons, 2020). For some women, the guilt and shame around abortion reflect moral injury. Litz et al. (2009) define moral injury as "an act of transgression that severely and abruptly contradicts an individual's personal or shared expectation about the rules or the code of conduct either during the event or at some point afterwards" (p. 700). Moral injury results in internal distress, guilt, shame, and the expectation of judgment and rejection increases the belief that the person cannot be forgiven (Litz et al., 2009), increasing self-condemnation (Worthington & Langberg, 2012). The decision to cause the death of one's baby by abortion can explain psychological stress (Zulčić-Nakić et al., 2012). Many women experience this guilt for years, causing the past to remain in their lives years later (Erickson, 2016).

Arousal

Arousal and reactivity related to traumatic events comprise criterion E for PTSD diagnosis (APA, 2013). After an abortion, increased risky behavior can present as increased sexual activity (Zulčić-Nakić et al., 2012); however, some women avoid it (Hang, 2018). Academic performance also suffers among post-abortive adolescents (Zulčić-Nakić et al., 2012), potentially related to concentration problems related to traumatic symptoms (APA, 2013). Sleep disturbances, including nightmares, also increase for many women after an abortion (Hang, 2018). In addition to the arousal and reactivity already stated, Erickson (2016) reported that substance abuse is a common theme for Rachel's Vineyard retreat participants, who often do not understand its connection with their abortion. The common substance abuse among retreat

participants reflects Sullins' (2019) finding that women who abort an unwanted pregnancy present with substance abuse twice as often as women who carry their unwanted pregnancies to term. Rafferty and Longbons (2020) said that 38% of their study participants reported substance abuse after their abortions. The reported symptoms from researchers suggest a similarity between posttraumatic stress and post-abortion stress symptoms.

Complicated Grief

Worden (2018) describes complicated grief as chronic, delayed, or exaggerated. A form of complicated grief is disenfranchised grief: the grief of a loss that is not acknowledged, such as perinatal loss or abortion (Worden, 2018). Several aspects of abortion loss can lead to complicated grief. First, many women believe that because they chose to have an abortion, they have no right to mourn the loss of their child (O'Malley, 2015). This guilt can disrupt the normal grieving process and result in complicated grief (Speckhard & Rue, 2012). Second, dissociative symptoms of post-abortion stress also prevent women from thinking about the loss needed for healthy grieving (Speckhard & Rue, 2012). In addition, silence from others increases shame and avoidance of the topic (Whitney, 2017). Third, many women experience extended grief after perinatal loss, consistent with complicated grief (Erickson, 2016; Grauerholz et al., 2021). Finally, recurrent negative thoughts about abortion are linked to complicated grief and inhibit posttraumatic growth; in contrast, deliberately thinking about and reframing those negative thoughts encourage growth (Lafarge et al., 2019), thus facilitating mourning of the loss. The proposed criteria for complicated and traumatic grief would add to therapeutic care but have not been accepted in the DSM (Thevathasan, 2003; Worden, 2018).

Relationship Distress

Several considerations impact the health of women's relationships following abortion. The silencing of family members and the baby's father negated the preferences of 50% of the women in one study (Rafferty & Longbons, 2020). In addition, secrecy and isolation increase the risk of poorer coping (Rafferty & Longbons, 2020). The emotional numbing often experienced in perinatal grief, combined with avoidance and isolation, can negatively impact relationships after perinatal losses, including abortion loss (Abi-Hashem, 2017; Speckhard & Rue, 2012). The relational disruption experienced after abortion is consistent with the detachment and estrangement included in the DSM-5 criteria for PTSD (APA, 2013). However, the *Diagnostic and Statistical Manual of Mental Disorders: Fifth Edition Text Revision* included criteria for Prolonged Grief Disorder within the Trauma and Stressor Related Disorders section, adding to the clinical understanding of grief and traumatic loss (APA, 2022).

***Depression*, Suicidal Ideation, and Anxiety**

Depression, suicidal ideation, and anxiety are common among post-abortive women (Hang, 2018). Among anonymous post-abortion bloggers, 38% reported feeling depressed and anxious and experiencing suicidal ideation (Rafferty & Longbons, 2020). For adolescents, abortion can predict depression, which has a sense of loss, and post-abortive adolescents have significantly more anxiety and depression than adolescents who have not had an abortion (Zulčić-Nakić et al., 2012). A longitudinal study of adolescents found that participants who aborted a wanted pregnancy showed substantial levels of depression and suicidal ideation (Sullins, 2019).

Abortion Regret

Abortion regret is often a long-term adverse effect of abortion, impacting women for years (Erickson, 2016). Researchers have questioned the experience of regret and propose that

women feel relief after an abortion rather than regret it (Rocca et al., 2013). For instance, studies of women's emotions one week after an abortion show that most women experience relief after an abortion rather than regret (Rocca et al., 2013). In contrast, Rafferty and Longbons' (2020) study indicates that 77% of the participants felt relief initially, which later turned to regret. One woman's regret had the perspective of looking back at the abortion from the year before. These women's regrets included remorse, emotional pain, and guilt. The complexity of many women's emotions consists of both initial relief and longer-lasting regret, which must be heard and understood by both pro-choice and pro-life proponents (Rafferty & Longbons, 2020).

Post-Abortion Stress Symptom Controversy

The pro-choice and pro-life advocates differ in their view of the short and long-term impact abortion has on a woman. Biggs et al. (2016) reported that their study showed no significant difference in negative mental health concerns between women who aborted an unplanned pregnancy and those who were denied a late-term abortion of an unplanned pregnancy. Steinberg et al. (2012) and Biggs et al. lean toward concluding that the stress of circumstances surrounding an unplanned pregnancy rather than the abortion procedure is the source of negative mental health concerns. In addition to citing circumstances as the source of mental health concerns, Steinberg et al. also highlight flawed studies reporting an association with post-abortion stress as problematic in establishing scientific evidence for an association between abortion and mental health symptoms. When comparing women's mental health statuses between women who have had abortions and those who carried an unplanned pregnancy to term, Horvath and Schreiber (2017) found no significant differences in mental health outcomes.

The pro-choice approach maintains that multiple variables impact adverse mental health outcomes (Biggs et al., 2016; Steinberg et al., 2012). In contrast, pro-life researchers identify the

abortion experience as the correlated event contributing to adverse mental health outcomes after an abortion (Coleman, 2018; Layer et al., 2004; Rafferty & Longbons, 2020). In addition, the adverse mental health symptoms often experienced by women with perinatal loss can show similarities with those symptoms that women experience who identify their voluntary abortion as a perinatal loss (Campbell-Jackson & Horsch, 2014; Layer et al., 2004; Moafi et al., 2021; Rafferty & Longbons, 2020).

Post-Abortion Healing

Many women use abortion to cope with the stress of unwanted or complicated pregnancies, only to experience unexpected grief and stress symptoms later (Rafferty & Longbons, 2020; Speckhard & Rue, 2012). Although the pro-choice position minimizes the mental health effects of abortion, an estimated 20% of women experience negative mental health symptoms (Speckhard & Rue, 2012). In addition, women with preexisting trauma and previous abortion histories are at an increased risk of mental health disorders after abortion (Horvath & Schreiber, 2017). Researchers contend that evidence does not support the assessment that abortion causes mental health problems (Horvath & Schreiber, 2017). However, the wording in the DSM considers a recent traumatic event to be the precipitating factor for a potential PTSD diagnosis if negative cognitions begin or worsen after the most recent event (APA, 2013). These considerations lay the foundation for making post-abortion healing available to post-abortive women.

Clinical Interventions

Women can experience shame from family members because of an abortion decision and carry that shame for years (Bray, 2018). Clients may disclose previously hidden abortions in counseling sessions, requiring counselors to bracket their values to work with clients with

different values (American Counseling Association [ACA], 2014, A.4.b.; Bray, 2018). Women can present with unexpected feelings of guilt and desire support to process the guilt (Curley & Johnston, 2014). These feelings of guilt can be rooted in violating intrinsic values consistent with Litz et al.'s (2009) definition of moral injury. In the clinical setting, counselors should include pregnancy history on an intake form and explore pregnancy losses with a client (Bray, 2018). Counselors must navigate this conversation carefully to avoid potential traumatization by using traumatizing terms such as abortion. The goal is to develop a safe space for clients to talk about something they may not have spoken about since their abortion procedure (Bray, 2018).

Once clients identify their distress after their abortion, counselors may choose to use the Post Abortion Intervention Questionnaire to clarify what areas of care the client would like included in their counseling (Curley, 2010). This questionnaire consists of the following options: grief and loss, coping skills, guilt, spiritual issues, pregnancy prevention, psychoeducation for post-abortion distress, and sharing with others. Curley's (2010) questionnaire provides a template for collaboratively developing an individual treatment plan. Once the client and counselor have determined the needs to address in treatment, cognitive behavioral therapy can help the client evaluate and reframe intrusive thoughts about each aspect the client wishes to discuss in treatment (Katz, 2019). Cognitive-behavioral therapy allows counselors to facilitate healing and recovery while providing non-judgmental support. As counselors facilitate healing from abortion, they also must speak about the client's distressing symptoms using politically neutral language to reduce potentially imposing personal values on the client (ACA, 2014; Katz, 2019). Including pregnancy loss in a counseling intake and exploring clients' wishes to process their psychological symptoms related to pregnancy loss in counseling enhances the holistic approach to client care (Curley, 2010; Katz, 2019).

Approaching post-abortion mental health treatment from the perspective of moral injury is an essential understanding for treatment interventions post-abortive women often experience moral distress (Traina, 2018). In the absence of specific evidence-based clinical interventions for treating post-abortion symptoms, clinical interventions developed from research with combat veterans (Litz et al., 2009) may also benefit post-abortive women. Litz et al. (2009) proposed a clinical model for moral injury that assumes that transgressions have caused conflict within a moral belief system. Psychological and emotional processing and corrective experiences help to repair moral injury. People who experience moral injury also believe they are unforgivable, and time is needed to process the events contributing to the moral injury (Maguen & Burkman, 2013). According to Litz et al. (2009), effective treatment with modified Cognitive Behavioral Therapy must have a supportive therapeutic relationship, and clients need psychoeducation to prepare them for processing painful memories. With the therapist's help, clients will participate in exposure processing, examining, and reclaiming their self-worth and moral core. The treatment also uses empty chair dialogue to help clients talk about their experiences to a benevolent authority. Clients also engage in repair and forgiveness; the goal is not to fix the past but to make changes for the future (Litz et al., 2009). This model of reflection and changing approaches to life benefits post-abortive women as they change aspects of their lives that contributed to their decision to have an abortion.

Spiritual Intervention

Trauma impacts one's spiritual attachment to God, causing clients to question his love for them (Langberg, 2019). In addition, the spiritual impact can include the moral injury often felt by women who have had an abortion (Zulčić-Nakić et al., 2012). Therefore, counselors who include spiritual assessments add to the holistic conceptualization of post-abortion stress symptoms when

assessing a client's post-abortion symptoms (Curley, 2010; Katz, 2019). Spiritual interventions that allow clients to express their lament will aid their refocus on God (Dickie, 2019; Whitney, 2017). These spiritual interventions provide evidence-informed care to post-abortion healing. Therefore, counselors will include spiritual interventions for clients who ask to explore their faith; this care adds to the collaborative treatment approach (ACA, 2014, A.1.c.).

Spiritually Oriented Cognitive Processing Therapy. CPT combines cognitive therapy with trauma processing, sometimes with written accounts of the trauma experience (Resick et al., 2017). The cognitive approach helps clients process stuck points in their thoughts and beliefs because of their traumatic experiences (Resick et al., 2017). In addition, the written accounts promote emotional regulation (Glass et al., 2019; Harrington et al., 2018; Resick et al., 2017). CPT is an evidence-based trauma treatment (Price et al., 2016). Spiritually oriented CPT (SOCPT) addresses the spiritual needs of guilt and self-forgiveness associated with moral injury (Pearce et al., 2018), and incorporating spiritual principles of God's love and forgiveness restores women's broken identities (Langberg, 2019).

SOCPT integrates CPT with spiritual elements to address the client's stuck points and engage in gradual exposure (Koenig et al., 2017). SOCPT integrates the client's faith to address guilt and shame with the need for confession, restoration, and forgiveness (Koenig et al., 2017; Pearce et al., 2018). The spiritual element of SPCPT can also incorporate the definition of self-forgiveness as two-fold: decisional and emotional self-forgiveness (Worthington & Langberg, 2012). Self-forgiveness does not involve ignoring personal responsibility or blaming another for personal responsibility. Instead, it is a decision to refrain from self-condemnation and be self-empathetic while accepting personal responsibility, making amends, and accepting God's forgiveness (Worthington & Langberg, 2012). Like CPT, SOCPT has clients write their

experience early in treatment as an exposure intervention (Koenig et al., 2017; Resick et al., 2017). Writing one's experience increases the depth of the exposure and reduces anxiety (Glass et al., 2019; Harrington et al., 2018). SOCPT also challenges maladaptive beliefs within the framework of the core principles of the client's faith (Koenig et al., 2017). Studies show faster recovery from PTSD with moral injury when integrated with the spiritual aspect. While SOCPT was developed and evaluated with military veterans (Koenig et al., 2017), post-abortive women could also benefit from this spiritually integrated therapy.

Post-Abortion Bible Studies. Many pro-life authors have written post-abortion Bible studies that apply biblical principles to post-abortion symptoms and healing. Based on the evidence that safe social support is essential to trauma (Porges, 2011; van der Kolk, 2014) and moral injury healing (Antal & Winings, 2015; Dickie, 2019), the social element of Bible study groups also provides an essential healing element for post-abortive women. These Bible studies use various formats, including a case study format that uses stories from multiple women who have begun their healing journey, a case study that uses the author's story, and exploring Bible passages that speak about common post-abortion symptoms. The studies incorporate the elements of Worthington's (2013a) REACH model of self-forgiveness, including accepting responsibility, empathically embracing positive emotions, offering altruistic forgiveness, and holding onto that forgiveness (Ripley & Worthington, 2014). The studies also use a group model in which the participants share their abortion stories and apply spiritual principles in the healing process (Antal et al., 2019; Cenkner et al., 2021). In addition to the REACH and group models, the writing elements shared among the Bible studies include written processing of the abortion memory, an essential element of SOCPT that provides gradual exposure and processing (Koenig et al., 2017; Pearce et al., 2018).

Surrendering the Secret uses the author's abortion story as the case study (Layton, 2020). At the beginning of the group, the participants take assessments; throughout the Bible study, participants share their stories and explore biblical principles of anger, forgiveness, grief, and peace. Each chapter includes a portion of the author's story, reflective prompts, and scripture and concludes with freedom action steps (Layton, 2020). In *Transforming Your Story,* Giancola (2018) uses multiple scripture passages that apply to various aspects of the abortion experience and case studies to illustrate a woman's experience with the post-abortion symptom discussed in the chapter. Giancola also addresses sharing one's story, anger, shame, God's grace, forgiveness, grieving, and hope. Layton (2020) and Giancola each incorporate a time for mourning in their group curriculum. Like Layton, Hrichi (2018) also weaves her abortion story throughout the Bible study. Hrichi examines common lies associated with abortion against scriptural principles and God's character. She also addresses avoidance using the metaphor of wearing masks. Covert et al. (2017) use a devotional approach with several devotional readings accompanying each workbook chapter. In addition, the authors use the metaphor of bricks for taking down the wall of protection that inhibits healing and replacing it with biblical principles as bricks for God's fortress of security, which allows one to walk in God's forgiveness and healing (Covert et al., 2017). Each Bible study incorporates biblical principles applied to participants' abortion experiences and establishes the foundation of God's forgiveness and healing (Covert et al., 2017; Giancola, 2018; Hrichi, 2018; Layton, 2020).

Cochrane (2015) published the first edition of her *Forgiven and Set Free* post-abortion Bible study in 1986 to bring the healing she experienced in her post-abortion healing to other women. The current edition is the fourth revision of the study. Cochrane begins the study by answering, "How do I know where I need healing" (p. 15)? The second chapter is a study of the

character of God to establish that he sees us, is with us, provides forgiveness and righteousness, and gives us his love.

Cochrane (2015) titled the first chapter of the Bible study “How Do I Know Where I Need Healing?” This chapter discusses natural grief and its stages after the death of a loved one. The stages of grief include denial, anger, depression, and acceptance. Cochrane compares the stages of grief after a miscarriage with those after an abortion. Exploring post-abortion grief and the questions at the end of the chapter can help women identify the areas in which they need healing. The group session following chapter one allows each participant to share their abortion story and how it changed them (Cochrane, 2015).

Chapter two concentrates on the names and the character of God. With each scripture passage, participants answer questions to help them reflect on the meaning of God’s character. For instance, the participants read Isaiah 61:1-3, illustrating God’s provision consistent with his name: *Yahweh Jireh*. Cochrane (2015) asks, “In what ways have you seen God provide for you? Are there any areas in your abortion experiences where you would like to see God provide what he promised in Isaiah 61:3” (p. 26)? When discussing the meaning of *Yahweh Rapha*, the Healer, Cochrane has participants read Psalm 107:19-20, James 5:13-16, and Isaiah 53:4-5 and list steps to apply the verses to their healing. Cochrane concludes the discussion of God’s character by exploring God’s desired father relationship with all people God says are his children. “But as many as received him, to them gave he power to become the sons of God, even to them that believe on his name” (*King James Bible*, 1769/1970, John 1:12). After completing chapter two as homework, the participants will meet in a group session to discuss the character of God and the truths each participant gleaned from their study (Cochrane, 2015).

Chapter three explores participants' experiences with feeling relief and denial after their abortions (Cochrane, 2015). In addition to understanding the grief stages of relief and denial, participants read Bible passages highlighting the relief and denial that biblical characters experienced. Cochrane (2015) also has participants explore ways they have denied the impact of their abortions on their lives. In addition, Cochrane uses guided questions with Scripture passages for participants to explore the concepts of the beginning of life, women's nurturing instinct, and the facts about abortion and the loss of life. The following group session allows participants to discuss personal insights they gained (Cochrane, 2015).

The chapter about anger discusses the destructive nature of anger without self-control and the bitterness that can arise (Cochrane, 2015). The Bible talks about God's anger because of his righteous character (Psalm 33:5), his grace and mercy that slows his anger (Exodus 34:6-7), and his forgiveness of sin (Psalm 78:38). The Bible study participants explore the contrast of personal anger often expressed with God's righteousness, mercy, and forgiveness. This chapter on anger helps participants assess any anger they still carry toward others who played a role in the abortion decision-making. This assessment allows the participants to explore their need to receive God's forgiveness in chapter five, which allows them to forgive other people related to their abortion experience (Cochrane, 2015).

Chapter six discusses the depression that arises from someone's anger with themselves for their abortion choice and the resulting self-condemnation (Cochrane, 2015). As Cochrane (2015) leads women through the study of grief and biblical examples of grief, the women encounter a biblical understanding of guilt, remorse, and shame. Cochrane also has women read Psalm 32:5-7 and answer, "How does David find relief from his guilt" (p. 87)? Discussing guilt, shame, self-condemnation, and biblical relief from these emotions provides a segue to chapter

seven, “Forgiven and Set Free.” This chapter presents the problem of sin, God’s redemption in Christ’s death on the cross, and Christ’s resurrection as the source of freedom from the guilt of sin (Cochrane, 2015). John 8:36, one of the verses studied, gives the premise for self-forgiveness. “If the Son therefore shall make you free, ye shall be free indeed” (*King James Bible*, 1769/1970). Once women believe God has forgiven them and understand that they are secure in God’s forgiveness, they can begin to forgive themselves and move to the acceptance stage of grief discussed in chapter eight (Cochrane, 2015).

Barriers to Post-Abortion Healing Options

Several barriers inhibit women from seeking and finding options for healing from their abortion grief and distress. First, political narratives state that adverse mental health outcomes are rooted in the stigma surrounding abortion rather than the abortion experience itself (Steinberg et al., 2016) and that carrying an unintended pregnancy, not an abortion, increases depression (Steinberg & Rubin, 2014). This narrative can inform women who experience difficulties that their feelings are abnormal or cause them to discount the abortion as influencing their stress symptoms (Bray, 2018). In addition, the silencing and suppressing of memories inhibit healing (Nouwen, 1977). Many Christian women experience little compassion from churches that speak about the moral aspects of abortion, causing them to interpret the church as an unsafe place for help with their spiritual and emotional symptoms following their abortion (Sironi, 2015). When women experience moral injury, they may have trouble accepting God’s forgiveness and sharing their stories with other Christians, inhibiting their self-forgiveness. However, shining the truth and light of the Gospel onto one’s abortion within the Christian community offers the grace of God (Bonhoeffer, 1954). Unshared grief becomes oppressive and isolating; however, a safe community promotes talking about their experience (Langberg, 2019; Nouwen, 1977; Sironi,

2015). Counselors who listen for clues of abortion history can develop a safe environment for women to share their stories and provide clinical and spiritual interventions; they may also encourage a faith-based group for post-abortion healing (Bray, 2018; Curley & Johnston, 2014).

Opposition to Faith-Based Post-Abortion Healing

While little secular research addresses women's need for post-abortion healing, one author compares post-abortion grief counseling to reparative therapy designed to work with clients to change their sexual orientation (Panozzo, 2016). The comparison highlights the harm to clients who have had counseling with reparative therapy and the setbacks they have experienced. Panozzo (2016) uses Layer et al.'s (2004) study of spiritually based post-abortion grief groups to apply researchers' evidence from reparative therapy treatment to post-abortion groups.

One of Panozzo's (2016) main points of contention is the assumption that reparative therapy and post-abortion Bible study proponents have of a Supreme Being. As Panozzo maintains that this fact is unvalidated and unvalidatable through research, he also writes from the assumption that there is no Supreme Being without providing evidence for his position. In addition, Panozzo cites the National Association of Social Workers (2008) *Code of Ethics* regarding the use of evidence-based therapies. "Social workers should base practice on recognized knowledge, including empirically based knowledge, relevant to social work and social work ethics" (sect. 4.01.c). Panozzo does not acknowledge that an understanding of a Supreme Being can fall under the category of recognized knowledge, as the Bible is the accepted manual for guiding Christians. The wording of the social workers' *Code of Ethics* includes empirically based knowledge within the larger category of recognized knowledge (National Association of Social Workers, 2008). Philosophers, such as Immanuel Kant (2016), have

proposed that acknowledging the existence of a Supreme Being is reasonable to assume. Also, while many people do not believe the Bible, generations have accepted the Bible as the religious reference for the Christian faith (Catholic Evidence Guild, 1921; Evangelical Lutheran Church in America, 2021). Philosophers and writers have historically recognized the assumption of a Supreme Being and the Bible as the reference for the Christian faith.

Panozzo (2016) also highlights his concern about facilitators of post-abortion Bible studies imposing their values on others regarding the sin of abortion. Panozzo contends that sin is a human concept to control others without giving evidence for his acceptance that this idea is a fact, something that he calls the facilitators of post-abortion Bible studies to do. Panozzo presents his concern from the assumption that the participants do not have a choice in their attendance. This concern about imposing the biblical principles of sin onto participants of post-abortion Bible studies fails to recognize that 86% of the women who attended the studies in Layer et al.'s (2004) study emphasized the essential role of the post-abortion Bible studies in processing their post-abortion grief. The high percentage of women who said the inclusion of the faith was essential supports the assumption that they voluntarily chose to be in the Bible studies. In addition, less than 5% of the participants received their referral to the group outside the area's religious community, underscoring their acceptance of the core beliefs of the organizations offering post-abortion Bible studies (Layer et al., 2004). In addition, rather than imposing their values, these facilitators honored the participants' self-determination and autonomy to stop attending the Bible studies (ACA, 2014, A.1.c., A.2.a.; National Association of Social Workers, 2008). Offering the post-abortion Bible studies aligned with ethical codes and honored the participants' wishes for biblical principles included in their post-abortion healing (Layer et al., 2004).

Post-Abortion Bible Study Research

Layer et al. (2004) developed a research study of faith-based post-abortion grief (PAG) groups to evaluate the impact PAG groups have on reducing shame and other post-abortion symptoms related to PTSD. The study also identified specific interventions that helped women in processing their grief. Over ten months in 2000, 35 women with PAG completed the Impact of Event Scale-Revised (IES-R; Weiss, 2004) and the Internalized Shame Scale (ISS; del Rosario & White, 2006) before participating in a PAG group through one of three faith-based nonprofit agencies. Upon completing the group intervention, the women completed the two assessments as posttests and participated in an individual interview to answer questions regarding what experiences were helpful in the PAG group (Layer et al., 2004).

All participants received informed-consent information regarding the nature of the group and their right to choose to discontinue the intervention (Layer et al., 2004). In addition, any potential participant who had an abortion within the previous year was referred for individual counseling to reduce her potential to minimize her PAG symptoms in light of hearing more severe symptoms from other participants. The PAG groups were either eight-week groups or two-day weekend intensive groups. Both intervention groups addressed grief and grief stages, included scripture about anger, guilt, and God's forgiveness, and offered mourning rituals (Layer et al., 2004). A Catholic agency facilitated the weekend intensive group, and the eight-week PAG group used the Bible study *A Season to Heal: Help and Hope for Those Working Through Post-Abortion Stress* (Freed & Salazar, 1993; Layer et al., 2004).

Upon completing the PAG groups, 86% of the participants identified faith integration as a significant part of their healing (Layer et al., 2004). While many women accepted God's forgiveness, self-forgiveness remained difficult for them. The pretest-posttest results revealed a

significant reduction in shame and avoidance after participation in a PAG group. This study reported positive outcomes and suggested additional research utilizing a two-group model with a comparative secular PAG group (Layer et al., 2004). Jaramillo (2017) also found statistically significant reductions in avoidance and hyperarousal in her replication study as Layer et al. However, while Layer et al. noted that their participants still struggled with forgiving themselves, Jaramillo noted that most of her participants reported that they could forgive themselves after their Bible study group.

Summary

Trauma causes neurological responses that initiate the fight, flight, or freeze response to protect one from a real or perceived threat to one's safety (Uhernik, 2017; van der Kolk, 2014). While this response is protective during the threat, the person can experience long-lasting cognitive, emotional, behavioral, and relational symptoms (Uhernik, 2017; van der Kolk, 2014). In addition, the person can disrupt interpersonal relationships, causing them to feel unsafe and unable to evaluate healthy and unhealthy relationships (Porges, 2011). In addition, when the traumatic event causes a violation of the person's sincerely held moral values, they experience a moral injury (Litz et al., 2009; Shay, 2014). If the moral injury is self-imposed, the person feels guilt, shame, and unworthiness, preventing them from forgiving themselves (Kopacz et al., 2016; Maguen & Burkman, 2013; Shay, 2014).

Women who have an abortion can experience common trauma and moral injury symptoms (Speckhard & Rue, 2012; Traina, 2018; Zulčić-Nakić et al., 2012). Since moral injury is an intrinsically spiritual wound (Antal & Winings, 2015; Koenig et al., 2017; Smith-MacDonald et al., 2018), trauma treatment must include evidence-based spiritual integration (Antal et al., 2019; Cenkner et al., 2021; Zulčić-Nakić et al., 2012). Post-abortion Bible studies

integrate research-based written accounts with spiritual principles for addressing guilt, shame, and difficulty with self-forgiveness (Koenig et al., 2017) to address women's abortion experiences (Cochrane, 2015). However, the lack of research into the effectiveness of the *Forgiven and Set Free* Bible study in increasing women's self-forgiveness highlights a gap in research about faith-based abortion healing groups.

CHAPTER THREE: METHODS

Overview

The reviewed literature supports conceptualizing post-abortive women's lack of self-forgiveness and depression as symptoms of moral injuries resulting from their abortion (Griffin et al., 2019; Traina, 2018). In addition, research studies on veterans have identified the intrinsically spiritual element of moral injury and the need to include spiritual elements in treatment for moral injury-related self-forgiveness and depression (Antal et al., 2019; Cenkner et al., 2021). Therefore, the study will explore post-abortion Bible studies' effectiveness in increasing women's self-forgiveness and reducing depression. Chapter two describes the study's research design and presents the research questions and hypotheses rationale. In addition, this chapter will describe the research setting, participants, and instrumentation. Finally, the chapter will finish with a detailed description of the study procedures and data analysis.

Design

The current study used a pretest-posttest within-subjects design to evaluate the changes observed following the Bible study intervention (Heppner et al., 2016). In addition, this study used a convenience sample of women who self-selected to participate in a group using the post-abortion Bible study *Forgiven and Set Free* by Linda Cochrane (2015). The group design sought to expand the findings on integrating spiritual elements into groups to treat moral injury-related depression and self-forgiveness concerns within veteran populations (Cenkner et al., 2021). Convenience sampling allowed women to independently decide to seek treatment, ensuring their readiness to address their negative symptoms after an abortion. Self-selecting treatment is essential since many women feel shame and do not disclose the abortion for years (Bray, 2018; Traina, 2018).

Because many women experience regret and stress symptoms after their abortions (Rafferty & Longbons, 2020; Speckhard & Rue, 2012), many Christian pro-life advocates have developed Bible studies that address these symptoms from a biblical perspective (Cochrane, 2015; Giancola, 2018; Layton, 2020). Also, several researchers have researched and identified the psychological and relational impacts abortion has on women (Coleman, 2018; Rafferty & Longbons, 2020). However, to date, only one published research study evaluates the effectiveness of post-abortion Bible studies in reducing stress symptoms after abortion (Layer et al., 2004), and one doctoral thesis replicated the Layer et al. (2004) study (Jaramillo, 2017). While research has evaluated the effectiveness of moral injury groups with spiritual interventions on veterans' self-compassion levels (Cenkner et al. (2021), no research study has evaluated the effectiveness of post-abortion Bible studies on post-abortive women's self-forgiveness. This research study will assess the increase in women's self-forgiveness after participating in the post-abortion Bible study *Forgiven and Set Free*.

Research Questions

RQ_1: Does participation in a post-abortion Bible study increase post-abortive women's self-forgiveness?

RQ_2: Does participation in a post-abortion Bible study decrease post-abortive women's depression?

Hypotheses

Ha_1: There will be a statistically significant increase in a woman's post-abortion self-forgiveness after participating in the Bible study *Forgiven and Set Free.*

Ha_0: There will not be a statistically significant increase in a woman's post-abortion self-forgiveness after participating in the Bible study *Forgiven and Set Free*

Ha_2: There will be a statistically significant decrease in a woman's depression after participating in the Bible study *Forgiven and Set Free.*

Ha_0: There will not be a statistically significant decrease in a woman's depression after participating in the Bible study *Forgiven and Set Free.*

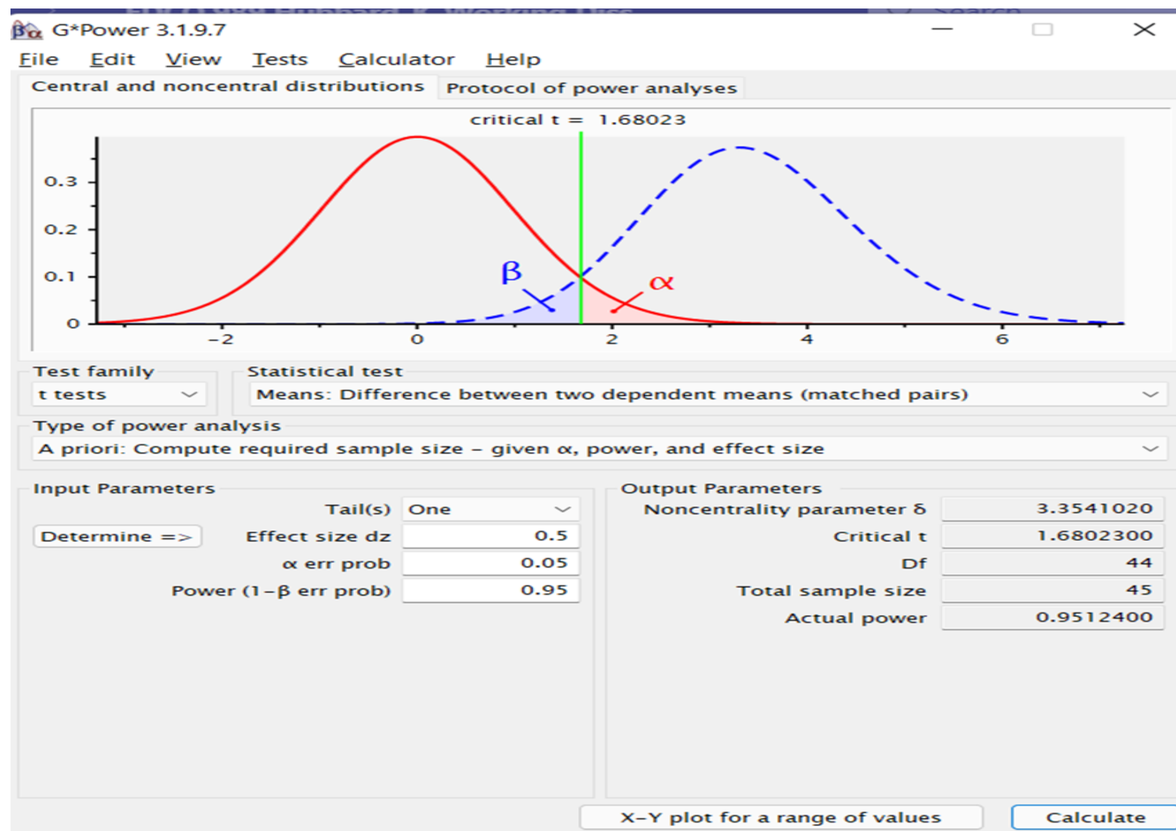
Participants and Setting

Research volunteers for this study were drawn from a population of post-abortive women using convenience sampling. These women were at least 18 years old and 12 months post-abortion. Potential members who are processing an acute crisis are better served in an individual setting rather than in a group setting (Corey, 2016). The study sample attempted to have a diverse demographic representation as the research volunteers were recruited nationwide, with representatives from the following regions: New England, Mid-Atlantic, and Southwest. Each research volunteer provided the following demographical information: current age, marital status, race or ethnicity, age at the time of abortion, and marital status at the time of the abortion. The setting for the research included four faith-based pregnancy clinics that offer women help in deciding about an unplanned pregnancy and the Bible study, *Forgiven and Set Free,* for women who request post-abortion healing.

The sample size of three participants was smaller than the sample size of 45 needed, with alpha set at .05 for a medium effect size and a .95 statistical power; see Figure 1 (Faul et al., 2007). The 00 participants ranged in age from 24-58. The length of time from their abortions ranged from six to forty years.

Figure 1

*G*Power for Sample Size*



Instrumentation

Self-Forgiveness Dual-Process Scale

Worthington (2013b) has conducted extensive research on forgiveness that also explored how to help people forgive themselves (Berry et al., 2005; Lin et al., 2014; Ripley et al., 2009; Sutton et al., 2014; Woodyatt et al., 2017; Worthington, 2013a; Worthington & Langberg, 2012). As a result of his self-forgiveness research, Worthington (2013b) collaborated with fellow researchers to develop the Self-Forgiveness Dual-Process Scale for assessing self-forgiveness (Griffin et al., 2018). One essential element of the scale is its assessment of personal esteem as an essential element of self-forgiveness. Therefore, the 10-item Self-Forgiveness Dual-Process Scale is an appropriate scale to measure participants' level of self-forgiveness (Griffin et al.,

2018). Examples of assessment questions are "Since Committing the offense I have tried to change" and "I deserve to suffer for what I've done" (Griffin et al., 2018, p. 719). This assessment scale has good internal consistency across three variables (range α = .80 - .91), indicating that the scale associates value reorientation with genuine self-forgiveness (Griffin et al., 2018). The reorientation of values, accepting responsibility, and seeking restitution are consistent with restoring original values, essential elements of self-forgiveness (Woodyatt & Wenzel, 2013).

Moral Injury Exposure and Symptom Scale-Civilian

Since the construct of moral injury was developed within the military population, moral injury assessments were also developed for the military and veteran populations. Nash et al. (2013) developed and evaluated the nine-item Moral Injury Event Scale (MIES), which evaluates six statements regarding perceived transgressions and three statements regarding perceived betrayals. The MIES shows excellent internal consistency with a Cronbach's alpha of 0.90 (Nash et al., 2013). Because of the strong psychometric evaluation of the MIES, Fani et al. (2021) adapted the MIES for measuring moral injury in civilian populations, resulting in the Moral Injury Exposure and Symptom Scale-Civilian (MIESS-C). The original first six MIES items related to perceived transgressions and did not specifically relate to military experience. Therefore, Fani et al. did not change these items for the MIESS-C. However, MIES items seven through nine directly related to military experiences, Fani et al. changed the items to relate to civilian experiences.

The MIESS-C uses a 6-point Likert scale ranging from strongly agree to strongly disagree (Fani et al., 2021). Items addressing perceived transgression include distress surrounding both committed and omitted acts of transgression. An example of an adapted item

relating to betrayal is "I feel betrayed by people I once trusted" (Fani et al., 2021, p. 5). The initial testing of the MIESS-C indicates a relationship between PTSD and depressive symptomatology. These results support using MIESS-C to evaluate the level of civilians' moral injury distress. Additional testing of the scale will provide insight into its validity over a broader population (Fani et al., 2021).

Beck Depression Inventory-II

Beck developed the first version of the Beck Depression Inventory in 1962, with the most current revision completed in 1996 (Eser & Aksu, 2021). The Beck Depression Inventory-II (BDI-II) is widely used in research studies to assess depression (Nezu et al., 2002), and several abortion research studies use BDII-II to assess for depression (Bahat et al., 2022; Curley, 2010; Memon et al., 2020; Zulčić-Nakić et al., 2012). (BDI-II) includes items that assess irritability, sleep disturbances, concentration, and suicidal ideation (Eser & Aksu, 2021). The inventory comprises 21 items related to depressive symptoms (Beck et al., 1996). One example is "Sadness. 0 I do not feel sad. 1 I feel sad much of the time. 2 I am sad all of the time. 3 I am so sad or unhappy" (Beck et al., 1996, p. 1). The BDI-II has a maximum score of 63, and a score of 20 indicates depression in a non-clinical population (Jackson-Koku, 2016; Nezu et al., 2002). Score interpretation indicates depression severity with 0-13, minimal; 14-19, mild; 20-28, moderate; and 29-63, severe (Jackson-Koku, 2016; Nezu et al., 2002). The BDI-II has an average reliability of 0.896 to 0.900 with a confidence interval of 95%. The BDI-II also has a Cronbach alpha coefficient of $\alpha = .92$ with a test-retest reliability of $r = .93$, indicating that the BDI-II is a reliable screening instrument for depression (Eser & Aksu, 2021).

Procedures

The researcher requested permission from assessment developers to use all proposed assessment scales: Self-Forgiveness Dual-Process Scale, MIESS-C, and BDI-II (Appendix A). The researcher sent a Site Permission Request letter (Appendix B), including the research start and end dates, to pregnancy clinics that use the Bible study for their post-abortion recovery ministry. In addition, the researcher will hire a web designer to develop a website, *Effectiveness of Forgiven and Set Free to Reduce Depression and Increase Self-Forgiveness,* for research volunteers to review the research study's purpose. This research study was conducted with the approval of the Liberty University Institutional Review Board (IRB) to maintain ethical research standards throughout the study.

After pregnancy clinics provided permission to conduct research with their clients, the researcher sent the site facilitators instructions (Appendix C) with the start and end dates for the research study. The researcher also included the Participant Recruitment Letter (Appendix D) for the facilitators to give to each Bible study member with the reminder that research participation is voluntary and anonymous. Thus, the clinic staff and the Bible study facilitators did not know which members agreed to join the research study. In addition, this anonymity reduces the potential for expectation bias among the Bible study members (Heppner et al., 2016). The facilitator's instructions also included a copy of the informed consent (Appendix E).

A research website was developed to introduce the research study, and research volunteers completed the demographic questionnaire, which asked for current age, marital status, race or ethnicity, age at the time of abortion, and marital status at the time of the abortion. The demographic questionnaire also screened (Appendix F) research volunteers for inclusion, at least 18 years old, and exclusion criteria, 12 months post-abortion. If research volunteers had

questions, the website directed them to the link to anonymously ask questions about the study. Informed consent was provided with the statement, “By checking this box, you agree that you have read and agreed to the statements in the consent,” to maintain anonymity. The website directed participants to choose an alias to link their informed consent affirmation, pretest, and posttest. The researcher received confirmation that each research participant had agreed to the informed consent (Appendix E). The website then directed research participants to the pretest assessment page, and Bible study facilitators reminded all Bible study members to return to the research website for the posttest assessments. The researcher received the pretest and posttest data in an Excel spreadsheet.

Data Analysis

This study includes two hypotheses. Ha1 states that there will be a statistically significant increase in a woman’s post-abortion self-forgiveness after participating in the Bible study *Forgiven and Set Free.* Ha2 states that there will be a statistically significant decrease in a woman’s depression after participating in the Bible study *Forgiven and Set Free*. The paired-samples *t* test is used to evaluate the change between the pretest and posttest when using the within-sample design (Warner, 2013). Therefore, the paired-samples *t* test is appropriate to test each null hypothesis to evaluate if there is a change in self-forgiveness and depression scores from the Bible study intervention. For these statistical tests to be valid, three assumptions must be confirmed. First, each observation is independent of the others; the data falls under a normal distribution, and there are no extreme outliers (Warner, 2013).

The researcher planned to use paired samples *t*-tests to assess the pretest and posttest data outcomes related to the participants’ self-forgiveness and depression scores following the Bible study. Applying $\alpha = 0.05$ to determine sample size decreases the likelihood of a Type II error

without increasing the risk of a Type I error (Warner, 2013). In addition, Figure 1 illustrates that a sample size of 45 with a .95 statistical power and alpha set at .05 will provide a medium effect size (Faul et al., 2007).

Summary

Because many women experience post-abortion stress symptoms similar to posttraumatic stress symptoms, psychological interventions can help women reduce their stress symptoms. For women who want a faith-based approach to their healing, post-abortion Bible studies apply biblical principles to each symptom. Little research has studied the effectiveness of Bible studies; this study will strengthen the understanding gained in the study conducted by Layer et al. (2004). Quantitative data can inform researchers of the relationship between post-abortion Bible studies, the reduction of post-abortion symptoms, and the increase in self-forgiveness.

CHAPTER FOUR: FINDINGS

Overview

Because a pretest-posttest within-subjects design evaluates the changes observed following a participant's participation in an intervention (Heppner et al., 2016), the current study used this design for the post-abortion Bible study intervention. The convenience sample included three women who participated in a group using the *Forgiven and Set Free* study by Linda Cochrane (2015). The research study was offered to a total of 21 participants in six Bible studies. Three research participants completed the Self-Forgiveness Dual-Process Scale (Griffin et al., 2018), the MIES assessing moral injury (Nash et al., 2013), and the BDI-II measuring depression (Beck et al., 1996).

Descriptive Statistics

The current research study was offered to participants of six Bible study groups in three U.S. regions: New England, Mid-Atlantic, and Southwest. Among the six groups, 21 Bible study members were invited to participate in the research study. Three women identified that they were over 18 years old and had their abortion at least one year ago. Each participant was single at the time of their abortion and at the time of the Bible study. Two participants were 18 years old at the time of their abortion, and one was 23. The participants' current ages ranged from 24 to 58 years old, and the time elapsed between the abortion and Bible study ranged from six to forty years.

Results

The hypotheses stated that after participating in a post-abortion Bible study, women would experience an increase in their self-forgiveness and a decrease in their depression. While the study planned to use paired samples *t* tests to assess the data outcomes for self-forgiveness

and depression, the sample size of three women was too small for meaningful data analyses. Therefore, a post-hoc case study of this research design's methodology will enhance the development of research studies regarding the effectiveness of post-abortion Bible studies in women's healing after an abortion.

Summary

The pretest-posttest within-subjects research design evaluates the changes in targeted variables after participating in an identified intervention (Heppner et al., 2016). The current research study used the pretest-posttest design to evaluate the effectiveness of the *Forgiven and Set Free* post-abortion Bible study to increase women's self-forgiveness and decrease their depression. However, a sample size of three participants did not provide enough data to complete meaningful statistical analyses for a quantitative study. Therefore, a post-hoc case study of the research methodology provides valuable lessons learned for researching post-abortion Bible studies and post-abortion healing.

CHAPTER FIVE: CONCLUSIONS

Overview

The current study used a quantitative research design in the attempt to evaluate the effectiveness of the post-abortion Bible study, *Forgiven and Set Free*, to increase women's self-forgiveness and to decrease their depression. Since only three participants completed the pretest and posttest assessments, providing too little data for finding statistical significance, a post-hoc case study of the research methodology provides insight into researching post-abortive women's healing. As researchers view the population of post-abortive women as vulnerable, existing literature on other vulnerable populations suggests working with gatekeeping caregivers to develop a research methodology that will enhance the understanding of biblically integrated post-abortion healing.

Discussion

Recruitment of a Vulnerable Population

Definition of Vulnerable Populations

This study focused on the vulnerable population of post-abortion women and the effectiveness of a Bible study intervention in addressing self-forgiveness and depression. Researchers consider participants vulnerable who have a reduced ability to protect their interests because of health or mental health status that impinges on their ability to make an informed decision to consent to participate in research (Bracken-Roche et al., 2016; Bracken-Roche et al., 2017). However, Ellard-Gray et al. (2015) also say that abused women are vulnerable because "they are disenfranchised and potentially at risk for greater harm if they identify their experiences" (p. 1). For instance, van Wijk (2014) identified participants in her longitudinal study because, as the male partners of females who had been raped, they were secondary trauma

victims, which caused increased stress in their partner relationships. Carleton and Snodgrass (2023) describe women's grief after abortion as disenfranchised since women feel they cannot speak of their grief, feel unworthy to grieve, and do not trust other's responses because of the public stigma surrounding abortion. This understanding of disenfranchised grief supports considering the population of post-abortive women as vulnerable (Carleton & Snodgrass, 2023). Research studies focusing on vulnerable populations' unique concerns and needs are essential to developing interventions that best meet their needs (O'Brien et al., 2022) and to help participants experience an increase in mood, as Biddle et al. (2013) found that some of their participants who had experienced suicidal ideation and self-harm.

Including vulnerable populations in research remains challenging since they are stigmatized, hiding them from researchers as they are difficult to reach (Busch-Armendariz et al., 2016). The hidden nature of many vulnerable populations results in research studies with limited sample sizes and requires more time for data collection, increasing the costs involved in the research (O'Brien et al., (2022). In addition, O'Brien et al. (2022) encountered difficulty engaging survivors of domestic minor sex trafficking, potentially due to the stigma surrounding their experiences. For instance, many women experiencing domestic violence choose not to identify when screened at a health service appointment, expressing their embarrassment and shame as one of the reasons for not reporting it (Spangaro et al., 2010). In addition, many women do not speak of their abortions and subsequent grief due to the stigma surrounding abortion (Carleton & Snodgrass, 2023), hiding them from those who could support them.

Gatekeeping

In addition to the hidden nature of many vulnerable populations, those providing care may engage in gatekeeping to protect their clients from real or perceived harm involved in

research studies (Levine et al., 2004; Sutton et al., 2003). Gatekeeping occurs when providers limit participation for vulnerable populations, preventing individuals from being able to participate and make informed choices for themselves (Levine et al., 2004). Finally, due to the nature of vulnerable populations, researchers can rely on healthcare providers to recruit study participants (Ellard-Gray et al., 2015); thus, gatekeepers can help maintain participants' anonymity. Traianou (2014) emphasized the importance of anonymity in research to guard the confidentiality of participants, which is highlighted in the Declaration of Helsinki as an ethically essential element in research (World Medical Association, 2022).

During the current study, few women participated in the studies; among the six Bible study groups included in the research study, a total of 21 women were members of a Bible study group. Of the 21 Bible study facilitators I spoke with, about 75% shared that few women wish to participate at any given time. These facilitators also said they limited the number of participants in each group because they found that smaller groups enhance group dynamics and engagement better than a large Bible study group. In addition, approximately 75% of the facilitators I spoke with said that they do not have large numbers of groups each year. The relatively small number of post-abortion Bible studies each year dramatically limits the potential sample size and increases the data collection time. Without research studies discussing post-abortion Bible studies and participants, readers cannot generalize these percentages reflecting my personal experience to the experiences of the broader population of post-abortion Bible study facilitators. However, the limited number of women who seek post-abortion Bible studies at any given facility offering the intervention is similar to the findings of O'Brien et al. (2022) in their research on survivors of domestic minor sex trafficking.

O’Brien et al. (2022) indicated that trauma impacts research responses because trauma reminders elicit unexpected reactions to research questions and unpleasant memories. No research, to date, has explored the barriers to women’s participation in research on post-abortion Bible studies. However, three or four experienced Bible study facilitators thought that Bible study members might be concerned about added emotional stress by participating in the study in addition to the Bible study. The *Forgiven and Set Free* Bible study requires participants to reflect on how each biblical concept studied applies to their abortion experience (Cochrane, 2015). Facilitators wondered if the additional steps in assessing their symptoms before and after the study might be too daunting for participants to complete the assessments for the research study. These observations of Bible study facilitators also reflect the findings of O’Brien et al. (2022) regarding the increased stress reactions to research questions that can limit participants’ desire or ability to participate in their research study. O’Brien et al. indicated that their participants experienced difficulty in recalling the order of events and evoked memories elicited trauma symptoms such as anger and crying.

Current Study Discussion

Gatekeeping

I contacted 36 faith-based pregnancy centers in 17 states and spoke with 13 Bible study facilitators to discuss my research study and to request permission to offer my research opportunity to their Bible study participants. Since I did not know any of the facilitators, they may have hesitated to introduce this research opportunity to their Bible study participants. Others indicated that their organizations routinely did not open research opportunities to their clients to protect their clients. However, four facilitators recognized the importance of research studies to

learn how to aid women's healing after abortion and worked with me to offer their Bible study members the research opportunity.

Trust-Building Between Researcher and Participants

Another challenge to the current study was that the anonymous study design prevented trust-building between the researcher and potential research participants, mirroring the limited ability to build trust that O'Brien et al. (2022) highlighted when researchers distanced themselves to maintain anonymity. Building trust is essential for researchers to gain helpful information regarding the research questions. Researchers gain trust by sharing the reasons to research the topic with those who provide services to the population (Hilton et al., 2020). Through continued collaboration, the trust that researchers build with facilitators could provide opportunities for researchers to personally present research opportunities to Bible study participants and offer them opportunities to ask researchers questions about the research. Dichter et al. (2019) experienced enhanced direct interactions with potential participants after gaining the trust of Veterans Health Administration providers.

While many researchers can gain access to potential participants within facilities providing ongoing treatment, many post-abortive women have not been in ongoing treatment before they decide to attend a post-abortion Bible study. Both Layer et al. (2004) and Jaramillo (2017) relied on faith-based organizations offering Bible study groups for post-abortion healing; however, they did not describe their experience recruiting participants from those groups. Similarly, I worked with faith-based organizations and facilitators who routinely offer post-abortion Bible studies. During the current study, facilitators expected the participant's anonymity to be protected throughout the study, eliminating an opportunity for the researcher to present the research opportunity to the Bible study members. After deciding to extend the data collection

period in the current study, I spoke with facilitators about personally introducing the research opportunity to Bible study members via video conferencing. However, while one facilitator favored having me introduce the research to the Bible study in the first session, time constraints prevented this.

Implications

Gatekeepers

Providers working with vulnerable populations often serve as gatekeepers for clients' access to research participation (Levine et al., 2004). While gatekeeping can add barriers to research participation, Roger and Penner (2010) reported that the insight gatekeepers provided regarding participant reluctance enabled the researchers to enhance their research design and decrease reluctance to participate. For instance, Walker and Read (2011) worked with hospice to conduct research regarding hospice patients' preferred place of death. In addition, the collaboration Sutton et al. (2003) experienced with healthcare providers of vulnerable HIV and AIDS populations enhanced trust-building and increased participant trust. While the collaboration with gatekeepers takes time (Sutton et al., 2003), the time is well spent as it increases the positive outcomes by evaluating and fine-tuning the study design and increasing participants' safety (Walker & Read, 2011). In the current research, Bible study facilitators provided invaluable insight into wording the introduction of each assessment. The initial order of the assessments was the MIES, Self-Forgiveness Dual Process Scale, and the BDI-II. One Bible study facilitator was concerned that women could be distressed by taking the MIES assessment first. We discussed editing the introduction to the assessment to clarify the rationale for assessing moral injury in the post-abortion research study. In addition, we agreed to reorder the assessments to begin with the BDI-II, followed by the MIES and Self-Forgiveness Dual Process

Scale. This collaboration exemplifies how the Bible study facilitators' insight helped fine-tune the current research study.

Another concern gatekeepers raised was the need to clarify the research's purpose and reduce the invitation letter's blunt wording (Walker & Read, 2011). Regarding the current study, one counselor recommended developing a flyer to introduce the researcher, the research study's purpose, and the anonymous design for collecting data. The flyer, she said, differs from the research letter as it presents the research in a more personable tone, whereas the research letter presents research details in clinical terms. Each serves an essential purpose: the flyer to spark the interest of potential participants and the invitation letter to review all essential information for informed consent.

Trust-Building Between Researcher and Participants

Because of the lack of direct contact between the researcher and post-abortion Bible study members, the trust built between the researcher and facilitators is essential in recruiting Bible study members to a research study. Soliciting the help of national pro-life organizations such as Care Net could increase the researcher's access to Bible study facilitators and develop professional relationships, thereby building trusting relationships between researchers and facilitators. Following Jaramillo's (2017) example of soliciting the support of the Bible study author could also enhance facilitators' willingness to offer research opportunities to their Bible study members. The author and president of *SaveOne* provided Jaramillo with an introduction letter to 100 facilitators of the *SaveOne* post-abortion healing ministry, increasing Jaramillo's access to facilitators and potential participants. The access that Jaramillo gained through the author and president of *SaveOne* is an example of Lata's (2021) assertion that gatekeepers among vulnerable populations can increase a researcher's access to participants. Trusting

relationships between researchers and gatekeepers can enhance gatekeepers' promotion of research to their clients and facilitate trust-building between the researchers and potential research participants when direct researcher-client interaction is limited.

Limitations

This study's limited number of participants prevented meaningful data analyses of the study's hypotheses. While I contacted 36 faith-based pregnancy centers across 17 states, I could only discuss the research study with 13 facilitators. One reason for the lack of response may have been that I am not known in the national abortion recovery community, limiting the providers' trust in me as a researcher of this population. As a result of the direct conversations with facilitators, four facilitators agreed to present the research opportunity to their Bible study members. Among the six Bible studies that offered the research study, 17 women received the invitation letter to participate; of those 17 women, three completed the informed consent and the three assessments. Each facilitator introduced the research following a conversation with me regarding the importance of research about post-abortion Bible studies. While the facilitator of the final two Bible studies planned to have me present the research opportunity either virtually or via prerecorded video, time constraints to accomplish this did not allow for me to present the research to the Bible study members.

One common theme from the facilitators was the lack of regularly offered Bible studies. Most facilities offer post-abortion Bible studies based on the demand for them rather than active recruiting to ensure a set number of Bible studies each year. In addition to the limited number of Bible studies offered each year, another common characteristic is limiting the size of each group; many limit the study members to five per group. These limitations also played a role in the current research. Because of these common limitations, I extended my data collection by four

months, with one Bible study member participating in the research during the data collection extension. While I began my research understanding the potential of these limitations impacting my research, I attempted to mitigate their impact by contacting faith-based pregnancy clinics that use the *Forgiven and Set Free* Bible study for their post-abortion recovery groups.

Recommendations for Future Research

The case study of the current study's methodology highlighted several recommendations for future research based on the limitations intrinsic to researching hidden vulnerable populations, such as post-abortive women. Because of the stigma surrounding abortion and post-abortive women in the church (Sironi, 2015), many women do not seek biblically integrated healing for years after their abortion (Layer et al., 2004). The discomfort many Christian women have in talking about their abortions with other church members helps to keep them part of a hidden population, as O'Brien et al. (2022) identified vulnerable populations. Therefore, considering recommendations for future research in this population will enhance the biblical integration of women's post-abortion healing.

Extended Data Collection

The limitations of only a few Bible study groups conducted during the year of data collection and the small number of women joining the Bible study groups contributed to the small number of research participants in the current research study. Planning for a more extended data collection period would allow a researcher to develop relationships with more Bible study facilitators and increase the number of studies to offer the research study to the Bible study members. In addition to increasing the number of facilitators collaborating with the researcher, each facilitator could also offer the research to multiple Bible study groups they facilitate, thus increasing the number of research participants.

Including Multiple Bible Studies in the Research

To increase the number of potential research participants, future research that examines multiple post-abortion Bible studies would increase the number of Bible study groups available during the targeted data collection period. Layer et al. (2004) included a Catholic-based post-abortion intervention and two nondenominational interventions in their study conducted over 10 months. The study included 35 women who participated in one of the groups in those 10 months. In addition, Jaramillo (2017) replicated the Layer et al. study using the SaveOne study and Rachel's Vineyard, with 46 participants completing the research study. The current study's design of evaluating the *Forgiven and Set Free* Bible study (Cochrane, 2015) limited recruitment to those organizations that used the study. By including multiple Bible studies, researchers would expand the number of organizations with a post-abortion Bible study group during the planned research collection data period.

Quantitative Versus Qualitative

O'Brien et al. (2022) also discussed the benefits of using qualitative research methods with vulnerable populations to extend the person-centered care of treatment interventions into research, allowing participants to use their own words to describe their experiences surrounding the research topic. O'Brien et al. highlighted the benefit of designing qualitative studies for research with vulnerable populations despite the added IRB oversight needed for a qualitative study. Therefore, qualitative study designs could enhance research participation and outcomes when studying the effectiveness of post-abortion Bible studies. Roger and Penner (2010) also noted that participants reported that the interview format increased their sense of well-being, and they felt valuable because of the insights the research would provide for others. Based on these

research findings, using a qualitative or mixed methods design for studying post-abortion healing can increase research recruitment and positive outcomes for future studies.

Designing a qualitative study of biblical integrated post-abortion healing groups could increase the trust between researchers and participants since Heppner et al. (2016) indicate that personal interactions can increase rapport and trust, and researchers' increased empathy increases their understanding of the participants. Despite the elimination of anonymity in a quantitative study, O'Brien et al. (2022) advocate qualitative studies with vulnerable populations to address the unique collective and individual needs of the studied population. They believe that these advantages outweigh the challenges of a quantitative study by allowing participants to express their feelings and experiences personally. Researchers conducting qualitative research with vulnerable populations, such as post-abortive women, must attend to unanticipated emotional reactions during interview questions. Proactively designing general questions that allow the participants to expand their responses as they feel comfortable is one way to attend to potential unexpected reactions (O'Brien et al., 2022). In addition to a qualitative study, a mixed methods study would allow the pretest and posttest assessments of the current study and combine quantitative data with qualitative study (Heppner et al., 2016) while also increasing the trust-building between researchers and participants (O'Brien et al., 2022). Mixed methods data also enhances the explanation of data through a broader exploration of the subject under study (Heppner et al., 2016).

Summary

The current research study of the effectiveness of the post-abortion Bible study, *Forgiven and Set Free*, used a pretest-posttest within-subjects design to evaluate the changes in women's self-forgiveness after participating in a Bible study group. However, with only three research

participants, a post-hoc case study of the methodology provides valuable insight for future research into biblically integrated post-abortion healing. Researchers of the population of post-abortive women must understand the vulnerabilities of this population as they design research, work with Bible study facilitators, and recruit research participants. One common definition of vulnerable populations includes the reduced ability to protect one's interests due to mental health conditions, which impinge on informed consent decisions (Bracke-Roche et al.; Bracke-Roche et al., 2016, 2017). Furthermore, vulnerable populations are often hidden because of disenfranchisement, placing them at greater risk of harm should they disclose their experiences (Ellard-Gray et al., 2015). The population of post-abortive women experience disenfranchisement because of the stigma of abortion within the Christian community; women often do not know who they can trust to listen to them talk about their abortion (Carleton & Snodgrass, 2023). This disenfranchisement contributes to the hidden population of post-abortion women.

In their efforts to understand the vulnerabilities of post-abortive women, researchers of vulnerable populations often work with gatekeeping providers to access the clients they wish to join their research studies. Providers of vulnerable populations often protect their clients from real or perceived harm involved in research studies (O'Brien et al., 2022; see also Levine et al., 2004; Sutton et al., 2003). While gatekeepers can limit researchers' access to vulnerable populations, they can also enhance research studies when researchers work with gatekeepers to reduce the risk of harm to the research participants. Trust-building is essential between researchers and potential participants, and building trust with gatekeepers can increase researchers' direct access to many vulnerable populations (O'Brien et al., 2022). However, post-abortive women are not often in ongoing treatment, inhibiting researchers' direct access to

recruiting. Therefore, trust-building with post-abortion Bible study facilitators, functioning as gatekeepers, is essential for researchers in this field.

The current study encountered and navigated gatekeeping. Some facilities offering Bible study groups did not choose to present the research opportunity to their clients, and others suggested changes to the research methods that would help participants better understand the rationale behind the assessment choices. The limitations presented in this research study are inherent within the biblically integrated post-abortion healing field, as there are limited numbers of groups at any given time. Therefore, the findings of this case study of the current methodology support extending the time for data collection and including more than one post-abortion Bible study in the research to increase the number of participants. In addition, developing a mixed methods study would combine quantitative data from assessments and quantitative insight from each participant's experience during the post-abortion Bible study group.

REFERENCES

Abi-Hashem, N. (2017). Grief, bereavement, and traumatic stress as natural results of reproductive losses. *Issues in Law & Medicine*, *32*(4), 245–254.

American Counseling Association. (2014). *ACA code of ethics*. https://www.counseling.org/knowledge-center/ethics/code-of-ethics-resources

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/https://doi.org/10.1176/appi.books.9780890425596

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders: Fifth edition text revision*. https://www.appi.org/dsm-5-tr

Antal, C. J., & Winings, K. (2015). Moral injury, soul repair, and creating a place for grace. *Religious Education*, *110*(4), 382–394. https://doi.org/10.1080/00344087.2015.1063962

Antal, C. J., Yeomans, P. D., East, R., Hickey, D. W., Kalkstein, S., Brown, K. M., & Kaminstein, D. S. (2019). Transforming veteran identity through community engagement: A chaplain–psychologist collaboration to address moral injury. *Journal of Humanistic Psychology*, 1–26. https://doi.org/10.1177/0022167819844071

Atuel, H. R., Chesnut, R., Richardson, C., Perkins, D. F., & Castro, C. A. (2020). Exploring moral injury: Theory, measurement, and applications. *Military Behavioral Health*, *8*(3), 248–255. https://doi.org/10.1080/21635781.2020.1753604

Bahat, P. Y., Turan, G., Fitnat, N., Çakmak, K., & Kaya, C. (2022). Comparison of depression and anxiety scores in multi/nulli-parous women who have undergone dilatation and curettage. *Acta Biomed*, *93*(4). https://doi.org/10.23750/abm.v93i2.11089

Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (pp. 45–103). Lawrence Erlbaum Associates, Publishers.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck depression inventory-II*. Pearson. https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Personality-%26-Biopsychosocial/Beck-Depression-Inventory-II/p/100000159.html?tab=product-details

Berry, J. W., Worthington, E. L., O'Connor, L. E., Parrott, L., & Wade, N. G. (2005). Forgivingness, vengeful rumination, and affective traits. *Journal of Personality*, *73*(1), 183–226. https://doi.org/10.1111/j.1467-6494.2004.00308.x

Biddle, L., Cooper, J., Owen-Smith, A., Klineberg, E., Bennewith, O., Hawton, K., Kapur, N., Donovan, J., & Gunnell, D. (2013). Qualitative interviewing with vulnerable populations: Individuals' experiences of participating in suicide and self-harm based research. *Journal of Affective Disorders*, *145*(3), 356–362. https://doi.org/10.1016/j.jad.2012.08.024

Biggs, M. A., Rowland, B., McCulloch, C. E., & Foster, D. G. (2016). Does abortion increase women's risk for posttraumatic stress? Findings from a prospective longitudinal cohort study. *BMJ Open*, *6*(2), 1–13. https://doi.org/10.1136/bmjopen-2015-009698

Bonhoeffer, D. (1954). *Life together* (J. W. Dobe). SCM Press. (Original work published 1949, 5th ed.).

Bracken-Roche, D., Bell, E., & Racine, E. (2016). The "vulnerability" of psychiatric research participants: Why this research ethics concept needs to be revisited. In *Canadian Journal of Psychiatry 61*(6), 335–339. https://doi.org/10.1177/0706743716633422

Bracken-Roche, D., Bell, E., Macdonald, M. E., & Racine, E. (2017). The concept of "vulnerability" in research ethics: An in-depth analysis of policies and guidelines. *Health Research Policy and Systems*, *15*(1), 1-18. https://doi.org/10.1186/s12961-016-0164-6

Bray, B. (2018). When post-abortion emotions need unpacking. *Counseling Today*, *April*, 20–35.

Brémault-Phillips, S., Pike, A., Scarcella, F., & Cherwick, T. (2019). Spirituality and moral injury among military personnel: A mini-review. *Frontiers in Psychiatry*, *10*(APR), 1–9. https://doi.org/10.3389/fpsyt.2019.00276

Briere, J. N., & Scott, C. (2015). *Principles of trauma therapy: A guide to symptoms, evaluation, and treatment* (2nd ed.). Sage.

Bryan, C. J., Bryan, A. B. O., Anestis, M. D., Anestis, J. C., Green, B. A., Etienne, N., Morrow, C. E., & Ray-Sannerud, B. (2016). Measuring moral injury: Psychometric properties of the moral injury events scale in two military samples. *Assessment*, *23*(5), 557–570. https://doi.org/10.1177/1073191115590855

Bryan, C. J., Bryan, A. B. O., Roberge, E., Leifker, F. R., & Rozek, D. C. (2018). Moral injury, posttraumatic stress disorder, and suicidal behavior among national guard personnel. *Psychological Trauma: Theory, Research, Practice, and Policy*, *10*(1), 36–45. https://doi.org/10.1037/tra0000290

Busch-Armendariz, N., Nale, N. L., Kammer-Kerwick, M., Kellison, B., Torres, M. I. M., Heffron, L. C., & Nehme, J. (2016). *Human trafficking by the numbers: The initial benchmark of prevalence and economic impact for Texas*. https://repositories.lib.utexas.edu/bitstream/handle/2152/77456/Human-Trafficking-by-the-Numbers-2016.pdf?sequence=2&isAllowed=y

Campbell, S. B., Erbes, C., Grubbs, K., & Fortney, J. (2020). Social support moderates the association between posttraumatic stress disorder treatment duration and treatment outcomes in telemedicine-based treatment among rural veterans. *Journal of Traumatic Stress*, *33*(4), 391–400. https://doi.org/10.1002/jts.22542

Campbell-Jackson, L., & Horsch, A. (2014). The psychological impact of stillbirth on women: A systematic review. *Illness Crisis and Loss*, *22*(3), 237–256. https://doi.org/10.2190/IL.22.3.d

Carleton, T. C., & Snodgrass, J. L. (2023). *Moral injury after abortion: Exploring the psychospiritual impact on Catholic women*. Routledge. https://doi.org/10.4324/9781003008613

Catholic Evidence Guild. (1921). *Catholics and the Bible*. Catholic Education Resource Center. https://www.catholiceducation.org/en/culture/catholic-contributions/catholics-and-the-bible.html

Cenkner, D. P., Yeomans, P. D., Antal, C. J., & Scott, J. C. (2021). A pilot study of a moral injury group intervention co-facilitated by a chaplain and psychologist. *Journal of Traumatic Stress*, *34*(2), 367–374. https://doi.org/10.1002/jts.22642

Cochrane, L. (2015). *Forgiven and set free: A post-abortion Bible study for women*. Baker Books.

Coleman, P. K. (2018). Negative abortion experiences: Predictors and development of the post-abortion psychological and relational adjustment scale. *Issues in Law & Medicine*, *33*(2), 133–162.

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kagan, R., Liautaud, J., Mallah, K., & Olafson, E. (2005). Complex trauma in

children and adolescents. *Psychiatric Annals*, *35*(5), 390–398. https://doi.org/10.3928/00485713-20050501-05

Corey, G. (2016). *Theory and practice of group counseling* (9th. ed.). Cengage.

Covert, K. C., Franck, Y., Newton, B., Perez, J., & Wong, A. (2017). *Brick by brick: A journey for healing the heart from abortion one brick at a time*. Westbow Press.

Cowan, S. K. (2014). Secrets and misperceptions: The creation of self-fulfilling illusions. *Sociological Science*, *1*(November), 466–492. https://doi.org/10.15195/v1.a26

Curley, M. (2010). Psychological distress after abortion among university students: Developing an intervention. McGill University. ProQuest Dissertations & Theses Global.

Curley, M., & Johnston, C. (2014). Exploring treatment preferences for psychological services after abortion among college students. *Journal of Reproductive and Infant Psychology*, *32*(3), 304–320. https://doi.org/10.1080/02646838.2013.879566

del Rosario, P. M., & White, R. M. (2006). The internalized shame scale: Temporal stability, internal consistency, and principal components analysis. *Personality and Individual Differences*, *41*(1), 95–103. https://doi.org/10.1016/j.paid.2005.10.026

Dichter, M. E., Sorrentino, A. E., Haywood, T. N., Tuepker, A., Newell, S., Cusack, M., & True, G. (2019). Women's participation in research on intimate partner violence: Findings on recruitment, retention, and participants' experiences. *Women's Health Issues*, *29*(5), 440–446. https://doi.org/10.1016/j.whi.2019.03.007

Dickie, J. F. (2019). Lament as a contributor to the healing of trauma: An application of poetry in the form of biblical lament. *Pastoral Psychology*, *68*(2), 145–156. https://doi.org/10.1007/s11089-018-0851-z

Ellard-Gray, A., Jeffrey, N. K., Choubak, M., & Crann, S. E. (2015). Finding the hidden participant: Solutions for recruiting hidden, hard-to-reach, and vulnerable populations. *International Journal of Qualitative Methods*, *14*(5). https://doi.org/10.1177/1609406915621420

Erickson, M. (2016). Post-abortion ministry helps couple heal: Rosemary and Joey Medeiros shared their decades-long secret at a retreat run by Rachel's Vineyard. *National Catholic Reporter*, *53*(6).

Eser, M. T., & Aksu, G. (2021). Beck Depression Inventory-II: A study for meta analytical reliability generalization. *Pegem Journal of Education and Instruction*, *11*(3), 88–101. https://doi.org/10.14527/pegegog.2021.00

Evangelical Lutheran Church in America. (2021). *Scriptures, creeds, confessions*. https://elca.org/Faith/ELCA-Teaching/Scripture-Creeds-Confessions

Fani, N., Currier, J. M., Turner, M. D., Guelfo, A., Kloess, M., Jain, J., Mekawi, Y., Kuzyk, E., Hinrichs, R., Bradley, B., Powers, A., Stevens, J. S., Michopoulos, V., & Turner, J. A. (2021). Moral injury in civilians: Associations with trauma exposure, PTSD, and suicide behavior. *European Journal of Psychotraumatology*, *12*(1). https://doi.org/10.1080/20008198.2021.1965464

Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/bf03193146

Finlay, L. (2015). The experience of 'entrapped grief' following traumatic abortion. *International Journal of Integrative Psychotherapy*, *6*(0), 26–53.

Freed, L., & Salazar, P. Y. (1993). *A season to heal: Help and hope for those working through post-abortion stress*. Cumberland House Publishing.

Frueh, B. C., Grubaugh, A. L., Elhai, J. D., & Ford, J. D. (2012). *Assessment and treatment planning for PTSD*. Wiley.

Giancola, W. (2018). *Transforming your story: A path to healing after abortion*. Capitol Hill Pregnancy Center.

Glass, O., Dreusicke, M., Evans, J., Bechard, E., & Wolever, R. Q. (2019). Expressive writing to improve resilience to trauma: A clinical feasibility trial. *Complementary Therapies in Clinical Practice*, *34*, 240–246. https://doi.org/10.1016/j.ctcp.2018.12.005

Grauerholz, K. R., Berry, S. N., Capuano, R. M., & Early, J. M. (2021). Uncovering prolonged grief reactions subsequent to a reproductive loss: Implications for the primary care provider. *Frontiers in Psychology*, *12*(May), 1–14. https://doi.org/10.3389/fpsyg.2021.673050

Griffin, B. J. (2016). *Development of a two-factor self-forgiveness scale development of a two-factor self-forgiveness scale.* Virginia Commonwealth University. VCU Scholars Compass. https://scholarscompass.vcu.edu/etd/4670

Griffin, B. J., Purcell, N., Burkman, K., Litz, B. T., Bryan, C. J., Schmitz, M., Villierme, C., Walsh, J., & Maguen, S. (2019). Moral injury: An integrative review. *Journal of Traumatic Stress*, *32*(June), 350–362. https://doi.org/10.1002/jts.22362

Griffin, B. J., Worthington, E. L., Davis, D. E., Hook, J. N., & Maguen, S. (2018). Development of the Self-Forgiveness Dual-Process Scale. *Journal of Counseling Psychology*, *65*(6), 715–726.

Guttmacher Institute. (2023). *Abortion reporting requirements*. https://www.guttmacher.org/state-policy/explore/abortion-reporting-requirements

Hall, N. A., Everson, A. T., Billingsley, M. R., & Miller, M. B. (2022). Moral injury, mental health and behavioural health outcomes: A systematic review of the literature. *Clinical Psychology and Psychotherapy*, *29*(1), 92–110. https://doi.org/10.1002/cpp.2607

Hang, T. M. (2018). After the abortion: Suffering, silence and spiritual relief. In *Global debates, local dilemmas: Sex-selective abortion in contemporary Viet Nam* (pp. 125–156). ANU Press.

Harrington, S. J., Morrison, O. P., & Pascual-Leone, A. (2018). Emotional processing in an expressive writing task on trauma. *Complementary Therapies in Clinical Practice*, *32*(November 2017), 116–122. https://doi.org/10.1016/j.ctcp.2018.06.001

Held, P., Klassen, B. J., Brennan, M. B., & Zalta, A. K. (2018). Using prolonged exposure and cognitive processing therapy to treat veterans with moral injury-based PTSD: Two case examples. *Cognitive and Behavioral Practice*, *25*(3), 377–390. https://doi.org/10.1016/j.cbpra.2017.09.003

Heller, D. P. (2019). *The power of attachment: How to create deep and lasting intimate relationships*. Sounds True.

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

Hilton, T. P., Fawson, P. R., Sullivan, T. J., & Dejong, C. R. (2020). *Applied social research: A tool for the human services.* Springer Publishing. https://doi.org/10.1891/9780826172846

Hoffman, J., Liddell, B., Bryant, R. A., & Nickerson, A. (2018). The relationship between moral injury appraisals, trauma exposure, and mental health in refugees. *Depression and Anxiety*, *35*(11), 1030–1039. https://doi.org/10.1002/da.22787

Horvath, S., & Schreiber, C. A. (2017). Unintended pregnancy, induced abortion, and mental health. *Current Psychiatry Reports*, *19*(77), 1–6. https://doi.org/10.1007/s11920-017-0832-4

Hrichi, S. (2018). *Worthy of love: A journey of hope and healing after abortion*. Beautiful Voice Ministries.

Hutti, M. H., Armstrong, D. S., Myers, J. A., & Hall, L. A. (2015). Grief intensity, psychological well-being, and the intimate partner relationship in the subsequent pregnancy after a perinatal loss. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *44*(1), 42–50. https://doi.org/10.1111/1552-6909.12539

Jackson-Koku, G. (2016). Beck Depression Inventory. *Occupational Medicine*, *63*, 174–175. https://doi.org/10.1093/occmed/kqv087

Jaramillo, S. (2017). *Mending broken lives: Post-abortion healing*. Regent University. ProQuest Dissertations and Theses Global.

Kant, I. (2016). *The collected works of Immanuel Kant* (I. Johnston, Trans.). Delphi Classics (Original publication 1755).

Katz, J. (2019). Supporting women coping with emotional distress after abortion. *The Professional Counselor*, *9*(2), 100–108. https://doi.org/10.15241/jk.9.2.100

King James Bible. (1970). Thomas Nelson Inc. (Original work published 1769).

Kisiel, C., Summersett-Ringgold, F., Weil, L. E. G., & McClelland, G. (2017). Understanding strengths in relation to complex trauma and mental health symptoms within child welfare.

Journal of Child and Family Studies, *26*(2), 437–451. https://doi.org/10.1007/s10826-016-0569-4

Koenig, H. G., Ames, D., Youssef, N. A., Oliver, J. P., Volk, F., Teng, E. J., Haynes, K., Erickson, Z. D., Arnold, I., O'Garo, K., & Pearce, M. (2018). The moral injury symptom scale: Military version. *Journal of Religion and Health*, *57*(1), 249–265. https://doi.org/10.1007/s10943-017-0531-9

Koenig, H. G., Boucher, N. A., Oliver, J. P., Youssef, N., Mooney, S. R., Currier, J. M., & Pearce, M. (2017). Rationale for spiritually oriented cognitive processing therapy for moral injury in active duty military and veterans with posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, *205*(2), 147–153. https://doi.org/10.1097/NMD.0000000000000554

Kopacz, M. S., Connery, A. L., Bishop, T. M., Bryan, C. J., Drescher, K. D., Currier, J. M., & Pigeon, W. R. (2016). Moral injury: A new challenge for complementary and alternative medicine. *Complementary Therapies in Medicine*, *24*, 29–33. https://doi.org/10.1016/j.ctim.2015.11.003

Kortsmit, K., Mandel, M. G., Reeves, J. A., Clark, E., Pagano, H. P., Nguyen, A., Petersen, E. E., & Whiteman, M. K. (2021). Abortion surveillance: United States. *MMWR Surveillance Summaries*, *70*(9), 1–29. https://doi.org/10.15585/mmwr.ss7009a1

Kosarkova, A., Malinakova, K., van Dijk, J. P., & Tavel, P. (2020). Childhood trauma and experience in close relationships are associated with the God image: Does religiosity make a difference? *International Journal of Environmental Research and Public Health*, *17*(23), 1–13. https://doi.org/10.3390/ijerph17238841

Lafarge, C., Usher, L., Mitchell, K., & Fox, P. (2019). The role of rumination in adjusting to termination of pregnancy for fetal abnormality: Rumination as a predictor and mediator of posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(1), 101–109. https://doi.org/10.1037/tra0000440

Langberg, D. (2019). Healing the wounds of trauma and abuse. *Unio Cum Christo*, *5*(2), 51–56. https://doi.org/10.35285/ucc5.2.2019.art3

Lata, L. N. (2021). Negotiating gatekeepers and positionality in building trust for accessing the urban poor in the Global South. *Qualitative Research Journal*, *21*(1), 76–86. https://doi.org/10.1108/QRJ-03-2020-0017

Layer, S. D., Roberts, C., Wild, K., & Walters, J. (2004). Postabortion grief: Evaluating the possible efficacy of a spiritual group intervention. *Research on Social Work Practice*, *14*(5), 344–350. https://doi.org/10.1177/1049731504265829

Layton, P. (2020). *Surrendering the Secret*. LifeWay.

Levers, L. L. (2012). An introduction to counseling survivors of trauma: Beginning to understand the context of trauma. In L. L. Levers (Ed.), *Trauma counseling: Theories and interventions* (pp. 1–22). Springer Publishing Co.

Levi-Belz, Y., Greene, T., & Zerach, G. (2020). Associations between moral injury, PTSD clusters, and depression among Israeli veterans: A network approach. *European Journal of Psychotraumatology*, *11*(1). https://doi.org/10.1080/20008198.2020.1736411

Levine, C., Faden, R., Grady, C., Hammerschmidt, D., Eckenwiler, L., & Sugarman, J. (2004). The limitations of "vulnerability" as a protection for human research participants. In *American Journal of Bioethics* 4(4), 44–49. https://doi.org/10.1080/15265160490497083

Lin, Y., Jr, E. L. W., Griffin, B. J., Greer, C. L., Opare-henaku, A., Lavelock, C. R., Hook, J. N., Ho, M. Y., & Muller, H. (2014). Efficacy of REACH forgiveness across cultures. *Journal of Clinical Psychology*, *70*(9), 781–793. https://doi.org/10.1002/jclp.22073

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, *29*(8), 695–706. https://doi.org/10.1016/j.cpr.2009.07.003

Maguen, S., & Burkman, K. (2013). Combat-related killing: Expanding evidence-based treatments for PTSD. *Cognitive and Behavioral Practice*, *20*(4), 476–479. https://doi.org/10.1016/j.cbpra.2013.05.003

McConnell, J. M. (2015). A conceptual-theoretical-empirical framework for self-forgiveness: Implications for research and practice. *Basic and Applied Social Psychology*, *37*(3), 143–164. https://doi.org/10.1080/01973533.2015.1016160

Memon, P., Soomro, L. A., Malik, M., & Almas, S. (2020). Miscarriages and its relationship with depression & quality of life: A comparative study. *Journal of University Medical & Dental College*, *11*(4), 47–54. https://doi.org/10.37723/jumdc.v11i4.439

Moafi, F., Momeni, M., Tayeba, M., Rahimi, S., & Hajnasiri, H. (2021). Spiritual intelligence and post-abortion depression: A coping strategy. *Journal of Religion and Health*, *60*(1), 326–334. https://doi.org/10.1007/s10943-018-0705-0

Mushonga, D. R., Rasheem, S., & Anderson, D. (2021). And still I rise: Resilience factors contributing to posttraumatic growth in African American women. *Journal of Black Psychology*, *47*(2–3), 151–176. https://doi.org/10.1177/0095798420979805

Nash, W. P., Carper, T. L. M., Mills, M. A., Au, T., Goldsmith, A., & Litz, B. T. (2013). Psychometric evaluation of the moral injury events scale. *Military Medicine*, *178*(6), 646–652. https://doi.org/10.7205/MILMED-D-13-00017

National Association of Social Workers. (2008). *Code of ethics*. https://www.socialworkers.org/

Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85–101. https://doi.org/10.1080/15298860309032

Nezu, A. M., Ronan, G. F., Meadows, E. A., & McClure, K. S. (Eds.). (2002). *Practitioner's guide to empirically based measures of depression*. Kluwer Academic Publishers.

Nouwen, H. (1977). *The living reminder: Service and prayer in memory of Jesus Christ*. Harper Collins.

O'Brien, J. E., Brewer, K. B., Jones, L. M., Corkhum, J., & Rizo, C. F. (2022). Rigor and respect: Recruitment strategies for engaging vulnerable populations in research. *Journal of Interpersonal Violence*, *37*(17–18), NP17052–NP17072. https://doi.org/10.1177/08862605211023497

O'Malley, V. (2015). Healing after abortion: Priest-to-priest advice for pastoral care. *Priest*, *January*, 34–37.

Oral, T., & Arslan, C. (2017). The investigation of university students' forgiveness levels in terms of self-compassion, rumination and personality traits. *Universal Journal of Educational Research*, *5*(9), 1447–1456. https://doi.org/10.13189/ujer.2017.050902

Panozzo, D. (2016). Lessons from reparative therapy applied to post-abortion grief counseling. *Journal of Homosexuality*, *63*(6), 764–782. https://doi.org/10.1080/00918369.2015.1112194

Pastorius, T. M. (2013). Post-abortion healing: Four insights from this important ministry. *The Priest*, *June*, 42–45.

Paul, L. A., Ph, D., Gros, D. F., Ph, D., Strachan, M., Ph, D., Worsham, G., Foa, E. B., & Ph, D. (2014). *Prolonged exposure for guilt and shame in a veteran of Operation Iraqi Freedom*. *68*(3), 277–287.

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*. https://doi.org/10.1177/2164956118759939

Pearson, A. (2017). Working with religious and spiritual experience in family therapy: Manna for the journey. *Australian and New Zealand Journal of Family Therapy*, *38*(1), 43–60. https://doi.org/10.1002/anzf.1202

Porges, S. W. (2011). *The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, and self-regulation*. W. W. Norton & Company.

Pressley, J., & Spinazzola, J. (2015). Beyond survival: Application of a complex trauma treatment model in the Christian context. *Journal of Psychology and Theology*, *43*(1), 8–22. https://doi.org/10.1177/009164711504300102

Price, J. L., Macdonald, H. Z., Adair, K. C., Koerner, N., & Monson, C. M. (2016). Changing beliefs about trauma: A qualitative study of cognitive processing therapy. *Behavioural and Cognitive Psychotherapy*, *44*(2), 156–167. https://doi.org/10.1017/S1352465814000526

Rafferty, K. A., & Longbons, T. (2020). #Abortionchangesyou: A case study to understand the communicative tensions in women's medication abortion narratives. *Health Communication*, *June*, 1–10. https://doi.org/10.1080/10410236.2020.1770507

Reardon, D. C. (2018). The abortion and mental health controversy: A comprehensive literature review of common ground agreements, disagreements, actionable recommendations, and research opportunities. *SAGE Open Medicine*, *6*, 1–38. https://doi.org/10.1177/2050312118807624

Resick, P. A., Monson, C. M., & Chard, K. M. (2017). *Cognitive processing therapy for PTSD: A comprehensive manual*. The Guilford Press.

Ripley, J. S., & Worthington, E. L. (2014). *Couple therapy: A new hope-focused approach*. IVP Academic.

Ripley, J. S., Davis, E. B., Quigley, C., & Worthington, E. (2009). *Hope focused treatment manual*. http://hopecouples.com/resources/HFCA Manual 8.5.pdf

Rocca, C. H., Kimport, K., Gould, H., & Foster, D. G. (2013). Women's emotions one week after receiving or being denied an abortion in the United States. *Perspectives on Sexual and Reproductive Health*, *45*(3), 122–131. https://doi.org/10.1363/4512213

Roger, K., & Penner, L. (2010). Divining for water: Considerations for methodology. *International Journal of Qualitative Methods*, *10*(1), 10–13. https://doi.org/10.1177/160940691101000101

Sadock, B. J., Sadock, V. A., & Ruiz, P. (2015). *Kaplan & Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry* (C. S. Pataki & N. Sussman (Eds.); 11th ed.). Wolters Kluwer.

Sapolsky, R. M. (2004). *Why don't zebras get ulcers: The acclaimed guide to stress, stress-related diseases, and coping* (3rd ed.). St. Martin's Griffin.

Shay, J. (2014). Moral injury. *Psychoanalytic Psychology*, *31*(2), 182–191. https://doi.org/10.1037/a0036090

Shrivastava, A. K., Kariea, S. B., Sonavane, S. S., & De Sousa, A. A. (2017). Child sexual abuse and the development of psychiatric disorders: A neurobiological trajectory of pathogenesis. *Industrial Psychiatry Journal*, *26*(1), 4–12. https://doi.org/10.4103/ipj.ipj_38_15

Sinha, J. W., & Rosenberg, L. B. (2013). A critical review of trauma interventions and religion among youth exposed to community violence. *Journal of Social Service Research*, *39*(4), 436–454. https://doi.org/10.1080/01488376.2012.730907

Sironi, A. (2015). Healing from post-abortion grief. *Journal of Biblical Counseling*, *29*(2), 10–35.

Slobodin, O. (2014). The aborted time: A temporal view on the trauma of pregnancy loss. *Journal of Depression and Anxiety*, *03*(04), 1–7. https://doi.org/10.4172/2167-1044.1000163

Smith-MacDonald, L. A., Morin, J. S., & Brémault-Phillips, S. (2018). Spiritual dimensions of moral injury: Contributions of mental health chaplains in the Canadian Armed Forces. *Frontiers in Psychiatry*, *9*(November), 1–7. https://doi.org/10.3389/fpsyt.2018.00592

Spangaro, J. M., Zwi, A. B., Poulos, R. G., & Man, W. Y. N. (2010). Who tells and what happens: Disclosure and health service responses to screening for intimate partner violence. *Health and Social Care in the Community*, *18*(6), 671–680. https://doi.org/10.1111/j.1365-2524.2010.00943.x

Speckhard, A., & Rue, V. (2012). Abortion trauma. In C. R. Figley & K. R. Figley (Eds.), *Encyclopedia of trauma: An interdisciplinary guide* (pp. 3–7). SAGE.

Steinberg, J. R., & Rubin, L. R. (2014). Psychological aspects of contraception, unintended pregnancy, and abortion. *Policy Insights from the Behavioral and Brain Sciences*, *1*(1), 239–247. https://doi.org/10.1177/2372732214549328

Steinberg, J. R., Trussell, J., Hall, K. S., & Guthrie, K. (2012). Fatal flaws in a recent meta-analysis on abortion and mental health. *Contraception*, *86*(5), 430–437. https://doi.org/10.1016/j.contraception.2012.03.012

Steinberg, J. R., Tschann, J. M., Furgerson, D., & Harper, C. C. (2016). Psychosocial factors and pre-abortion psychological health: The significance of stigma. *Social Science and Medicine*, *150*, 67–75. https://doi.org/10.1016/j.socscimed.2015.12.007

Sturrock, C., & Louw, J. (2013). Meaning-making after neonatal death: Narratives of Xhosa-speaking women in South Africa. *Death Studies*, *37*(6), 569–588. https://doi.org/10.1080/07481187.2012.673534

Sullins, D. P. (2019). Affective and substance abuse disorders following abortion by pregnancy intention in the United States: A longitudinal cohort study. *Medicina (Lithuania)*, *55*(11), 1–22. https://doi.org/10.3390/medicina55110741

Sutton, G., Jordan, K., & Worthington, E. (2014). Spirituality, hope, compassion, and forgiveness: Contributions of Pentecostal spirituality to godly love. *Journal of Psychology and Christianity*, *33*(3), 212.

Sutton, L. B., Erlen, J. A., Glad, J. M., & Siminoff, L. A. (2003). Recruiting vulnerable populations for research: Revisiting the ethical issues. *Journal of Professional Nursing*, *19*(2), 106–112.

Thevathasan, P. (2003). Traumatic grief and post-abortion trauma. *The Post-Abortion Review*, *11*(1), 1–2.

Traianou, A. (2014). The centrality of ethics in qualitative research. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 62–77). Oxford University Press.

Traina, C. L. H. (2018). Between a rock and a hard place: Unwanted pregnancy, mercy, and solidarity. *Journal of Religious Ethics*, *46*(4), 658–681. https://doi.org/10.1111/jore.12240

Uhernik, J. (2017). *Using neuroscience in trauma therapy: Creative and compassionate counseling*. Routledge. https://doi.org/10.4324/9781315709710

van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin Books.

van Wijk, E. (2014). Recruitment and retention of vulnerable populations: Lessons learned from a longitudinal qualitative study. *The Qualitative Report*, *19*(56), 1–21.

Vandenbos, G. R. (Ed.). (2015). *APA dictionary of psychology* (2nd ed.). American Psychological Association. https://doi.org/http://dx.doi.org/10.1037/14646-000

Walker, S., & Read, S. (2011). Accessing vulnerable research populations: An experience with gatekeepers of ethical approval. *International Journal of Palliative Nursing*, *17*(1), 1418. https://doi.org/10.12968/ijpn.2011.17.1.14

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques*. SAGE.

Weiss, D. S. (2004). The impact of event scale: Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (2nd., pp. 168–189). The Guilford Press.

Whitney, D. K. (2017). Emotional sequelae of elective abortion: The role of guilt and shame. *The Journal of Pastoral Care & Counseling*, *71*(2), 98–105. https://doi.org/10.1177/1542305017708159

Woodyatt, L., & Wenzel, M. (2013). Self-forgiveness and restoration of an offender following an interpersonal transgression. *Journal of Social and Clinical Psychology*, *32*(2), 225–259. https://doi.org/10.1521/jscp.2013.32.2.225

Woodyatt, L., Wenzel, M., & Ferber, M. (2017). Two pathways to self-forgiveness: A hedonic path via self-compassion and a eudaimonic path via the reaffirmation of violated values. *British Journal of Social Psychology*, *56*(3), 515–536. https://doi.org/10.1111/bjso.12194

Worden, J. W. (2018). *Grief counseling and grief therapy: A handbook for the mental health practitioner*. Springer Publishing Co.

World Health Organization. (2021). *Abortion*. https://www.who.int/news-room/fact-sheets/detail/abortion

World Medical Association. (2022). *WMA declaration of Helsinki-ethical principles for medical research involving human subjects*. https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/#

Worthington, E. L. (2013a). Helping people REACH forgiveness of others. *Bibliotheca Sacra 170*(September), 273–286. https://doi.org/10.1002/jclp.22073

Worthington, E. L. (2013b). *Moving forward: Six steps to forgiving yourself and breaking free from the past*. WaterBrook.

Worthington, E. L., & Langberg, D. (2012). Religious considerations and self-forgiveness in treating complex trauma and moral injury in present and former soldiers. *Journal of Psychology and Theology*, *40*(4), 274–288. https://doi.org/10.1177/009164711204000403

Zarzycka, B. (2019). Parental attachment styles and religious and spiritual struggle: A mediating effect of God image. *Journal of Family Issues*, *40*(5), 575–593. https://doi.org/10.1177/0192513X18813186

Zulčić-Nakić, V., Pajević, I., Hasanović, M., Pavlović, S., & Ljuca, D. (2012). Psychological problems sequalae in adolescents after artificial abortion. *Journal of Pediatric and Adolescent Gynecology*, *25*(4), 241–247. https://doi.org/10.1016/j.jpag.2011.12.072

APPENDIX A: Assessments

Self-Forgiveness Dual-Process Scale

(Griffith, 2016; Griffith et al., 2018)

1. I will try not to repeat my offense in the future.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

2. I acknowledge that I am to blame for my actions.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

3. I would take back what I've done if I could.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

4. I regret that my past actions violated my values.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

5. My actions violated something that is important to me.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

6. Even though I did something wrong, I feel a sense of self-acceptance.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

7. I feel like a valuable person despite my wrongdoing.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

8. I still love myself even though I did wrong.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

9. I respect myself even though I did wrong.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

10. I feel compassion toward myself.

1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

Score _________

Higher scores indicate greater acceptance of responsibility, move toward repair, resolve to change behavior, and greater self-forgiveness (Griffin, 2016).

Moral Injury Experiences Symptom Scale-Civilian

1. I saw things that were morally wrong

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

2. I acted in ways that violated my own moral code or values

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

3. I violated my own morals by failing to do something that I felt I should have done

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

4. I feel betrayed by specific people who I once trusted

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

5. I feel betrayed by the institutions that I am supposed to trust (for example, police, church, schools, governmental workers)

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

6. I am troubled by having witnessed others' immoral acts

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

7. I am troubled by having acted in ways that violated my own morals or values

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

8. I am troubled because I violated my morals by failing to do something that I felt I should have done

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

9. I am troubled by this betrayal by specific people

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

10. I am troubled by this betrayal by the institutions that I am supposed to trust

1 Strongly Disagree	2	3	4 1	5	67 Strongly Agree

Score _________

"Higher scores suggest higher exposure and/or distress" (Fani et al., 2021, p. 5).

Beck Depression Inventory-II

1. **Sadness**
   0 I do not feel sad.
   1 I feel sad much of the time. 2 I am sad all the time.
   3 I am so sad or unhappy.

2. **Pessimism**
   0 I am not discouraged about my future.
   1 I feel more discouraged about my future than I used to be.
   2 I do not expect things to work out for me.
   3 I feel my future is hopeless and will only get worse.

3. **Past Failure**
   0 I do not feel like a failure.
   1 I have failed more than I should have.
   2 As I look back, I see a lot of failures.
   3 I feel I am a total failure as a person.

4. **Loss of Pleasure**
   0 I get as much pleasure as I ever did from the things I enjoy.
   1 I don't enjoy things as much as I used to.
   2 I get very little pleasure from the things I used to enjoy.
   3 I can't get any pleasure from the things I used to enjoy.

5. **Guilty Feelings**
   0 I don't feel particularly guilty.
   1 I feel guilty over many things I have done or should have done.
   2 I feel quite guilty most of the time.
   3 I feel guilty all of the time.

6. **Punishment Feelings**
   0 I don't feel I am being punished.
   1 I feel I may be punished.
   2 I expect to be punished.
   3 I feel I am being punished.

7. **Self-Dislike**
   0 I feel the same about myself as ever.
   1 I have lost confidence in myself.
   2 I am disappointed in myself.
   3 I dislike myself.

8. **Self-Criticalness**
   0 I don't criticize or blame myself more than usual.
   1 I am more critical of myself than I used to be.
   2 I criticize myself for all of my faults.
   3 I blame myself for everything bad that happens.

9. **Suicidal Thoughts or Wishes**

0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. Crying

0 I don't cry anymore than I used to.
1 I cry more than I used to.
2 I cry over every little thing.
3 I feel like crying, but I can't.

11. Agitation

0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated, it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to others.
3 I feel utterly worthless.

15. Loss of Energy

0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0 I have not experienced any change in my sleeping.
1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.
2a I sleep a lot more than usual.
2b I sleep a lot less than usual. 3a I sleep most of the day.

3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability

0 I am not more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite

0 I have not experienced any change in my Appetite.
. 1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.
2a My appetite is much less than before.
2b My appetite is much greater than usual.
3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty

0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely

APPENDIX B: Site Permissions

July,2022

Name
Director
Company Name
Address 1
Address 2

Dear Director,

As a graduate student in the Community Care and Counseling department at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is *Effectiveness of Post-Abortion Bible Studies*. The purpose of my research is to study the effectiveness of the Bible study *Forgiven and Set Free* to decrease women's depression and increase their self-forgiveness after an abortion.

I am writing to request your permission to conduct my research in your pregnancy clinic's post-abortion *Forgiven and Set Free* Bible study groups. The tentative beginning date of the study is as early as August 22, 2022, or as late as September 1, 2022. The tentative ending date is October 31, 2022. I will provide a Participant Recruitment Letter for your organization to give your clients. This letter will link your clients to a secure website to sign up for the research study anonymously. They can anonymously ask me any questions they have on the website. All of your clients who participate in the research study will complete three online assessments regarding self-forgiveness, moral injury, and depression. Participants will take each assessment before they begin the Bible study group and when they complete the Bible study. In addition, participants will be presented with informed consent information. Participation in this anonymous research study is voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, respond by email to [redacted]. A permission letter document is attached for your convenience. I trust that the results of this research will increase the effectiveness of faith-based pregnancy clinics in helping women heal after abortion.
Sincerely,

Karen H. Hubbard, MA, LCPC
Liberty University Doctoral Candidate
[redacted]

[Please provide this document on official letterhead or copy and paste into an email.

[Date]

Karen H. Hubbard
Liberty Doctoral Candidate
Liberty University

Dear Karen H. Hubbard,

After carefully reviewing your research proposal entitled *Effectiveness of Post-Abortion Bible Studies*, [I/we] have decided to grant you permission to invite our post-abortion Bible study clients to participate in your research study.

Check the following boxes, as applicable:

☐ [I/We] will not provide potential participant information to Karen H. Hubbard. However, we agree to [send/provide] her study information to our post-abortion Bible study clients on her behalf.]

[Retain the below option if desired.]

☐ [[I/We] are requesting a copy of the results upon study completion and/or publication.]

Sincerely,

[Official's Name]
[Official's Title]
[Official's Company/Organization]

APPENDIX C: Site Facilitator Instructions

Facilitator Instructions for Post-Abortion Bible Study Research

Dear Facilitators,

I appreciate your help with my research study on the effectiveness of the post-abortion Bible study, *Forgiven and Set Free*, in increasing post-abortive women's self-forgiveness and decreasing their depression. In addition, your help in providing invitations to your post-abortion Bible study participants will allow them to participate in my research study anonymously, thus protecting their privacy. Please emphasize to your participants that the anonymity of the research study extends to you; you will not know who has signed up for the research study.

Please provide the attached Participant Recruitment Letter to your Bible study participants by either emailing or handing it to them before your Bible study begins. My research tentative start date is August 22/2022, and the completion date is October 31. This recruitment letter includes a QR code and a hyperlink to my research website. They will be introduced to the study and can join the study through the website after reading and agreeing to the provided informed consent.

Once participants sign up for the research study, they will take three pretest assessments before your Bible study begins. The website will send them an email reminding them to take the posttest after week 8 of the Bible study, which covers chapter 8, "Acceptance." In addition, I would like you to remind the Bible study group to return to the website to complete the posttest assessments.

If you have any questions for me, you can reach me at [redacted] Thank you for your assistance with my research study. I trust that the results of this research will increase the effectiveness of faith-based pregnancy clinics in helping women heal after abortion.

Sincerely,

Karen H. Hubbard, MA, LCPC
[redacted]

Appendix D: Participant Recruitment Letter

August 15, 2022

Forgiven and Set Free Bible Study Participant

Dear Bible Study Participant:

As a graduate student in the School of Behavioral Studies at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to evaluate the effectiveness of the post-abortion Bible study *Forgiven and Set Free* in reducing women's depression and increasing their self-forgiveness. Therefore, I am writing to invite eligible participants to join my study.

Participants must be 18 years of age or older and have had an abortion at least one year ago. Participants, if willing, will be asked to take three assessments to determine their levels of self-forgiveness, moral injury, and depression. Participants will complete the pretest assessments before they begin the Bible study and after completing the Bible study. The pretest and posttest assessments will each take about 15 minutes total to complete. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please [click here (include hyperlink to online survey) or use the QR code at the bottom of this letter. You will be directed to a secure website to register as a participant and consent to participate in the research study. The website will then direct you to each assessment. The website will also generate a reminder email to complete the assessments after completing the Bible study. Finally, use the link on the website to anonymously ask any questions regarding the study.

Thank you for reviewing my invitation to participate in this research study. I trust that the results of this research will increase the effectiveness of faith-based pregnancy clinics in helping women heal after abortion
Sincerely,

Karen H. Hubbard, MA, LCPC
Liberty University Doctoral Candidate

APPENDIX E: Informed Consent

Consent

Title of the Project: Effectiveness of Post-Abortion Bible Studies

Principal Investigator: Karen H. Hubbard, MA, LCPC, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 years old, and have had an abortion at least one year ago. 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 study the effectiveness of post-abortion Bible studies in increasing post-abortive women's self-forgiveness and decreasing their depression. In addition, this study will inform clinical counselors of the essential integration of faith-based interventions for Christian women who are processing their post-abortion symptoms and difficulties in forgiving themselves.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to complete the following two tasks.

1. Take a pretest that includes the Self-Forgiveness Dual Process Scale, the Moral Injury Experiences Symptoms Scale-Civilian, and the Beck Depression Inventory. The pretest will take you about 15 minutes.
2. Return to this website to take the posttest that includes the same three pretest assessments. The posttest will take you about 15 minutes.

How could you or others benefit from this study?

The direct benefit participants should expect to receive from taking part in this study is possible evidence of the change in self-forgiveness and depression they have experienced after participating the *Forgiven and Set Free* Bible study.

Benefits to society include an increased understanding of the effectiveness of post-abortion Bible studies in increasing self-forgiveness and decreasing depression. In addition, this understanding will provide evidence of the importance of including spiritual elements in abortion recovery interventions.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

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
- Participant responses will be anonymous.
- Data will be stored on a password-locked computer and will not be used in future presentations. After three years, all electronic records will be deleted.

Does the researcher have any conflicts of interest?

The researcher serves as an intake coordinator for post-abortion Bible studies and a faith-based pregnancy clinic. To limit potential or perceived conflicts, the research study will not include participants from the researcher's pregnancy clinic. This disclosure is made so that you can decide if this relationship will affect your willingness to participate in this study. No action will be taken against an individual based on her decision to participate or not participate in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision on whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the assessments 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 Karen H. Hubbard. If you have questions, **you are encouraged** to contact her via the Researcher Questions link on this website; this link allows you to ask the researcher questions anonymously. You may also contact the researcher's faculty sponsor, Dr. Pamela Moore, at

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

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

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

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

APPENDIX F: Screening Questions

Are you 18 years of age or older?

Has it been at least 1 year since your abortion?