INFIDELITY, POST-INFIDELITY STRESS DISORDER, AND POST-INFIDELITY STRESS MARITAL OUTCOMES

by

Faith Christie Leigh Roby

Liberty University

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree

Doctor of Education School of Behavioral Sciences

2024

INFIDELITY, POST-INFIDELITY STRESS DISORDER, AND POST-INFIDELITY STRESS MARITAL OUTCOMES

Faith Christie Leigh Roby

Department of Community Care and Counseling: Traumatology, Liberty University

A Dissertation Proposal Presented in Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences
Liberty University

2024

Approved by:

Pamela Moore, Ph.D., Committee Chair

Wendy Robinson, Ph.D., Committee Member

Abstract

Marital infidelity discovery has been noted in the literature for traumatic emotional, behavioral, and psychological reactions in the injured spouse, but not extensively in terms of post-infidelity stress disorder. To that end, this cross-sectional quantitative anonymous online survey study explored marital infidelity, post-infidelity stress disorder and post-infidelity marital outcomes in 202 participants using certain frameworks, such as Glass's traumatic aftershock and Ortman's post-infidelity stress disorder. This researcher sought to investigate whether there is a relationship between post-infidelity stress disorder that is moderated by religious/core beliefs and marital repair efforts and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate; whether infidelity discovery, duration of marital infidelity, marital repair efforts, or lack of marital repair efforts predicted post-infidelity stress disorder level using multiple linear regression; and whether there were differences in healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire between participants with post-infidelity stress disorder and without post-infidelity stress disorder using multivariate analysis of variance: special interactions and effects. Findings showed that religious/core beliefs with marital repair efforts did not act as moderators but had other statistically significant main effects (e.g., marital repair efforts negatively predicted revenge), lack of marital repair efforts and discovery positively predicted post-infidelity stress disorder level, shorter duration negatively predicted post-infidelity stress disorder level, the post-infidelity stress disorder group had statistically significant higher levels of avoidance and revenge than the non-post-infidelity stress disorder group, and the non-postinfidelity stress disorder had higher levels of forgiveness and healing than the post-infidelity stress disorder group. Future research should examine if religious/core beliefs or marital repair

efforts act as mediators between post-infidelity stress disorder and post-infidelity marital outcomes.

Keywords: marital infidelity, post-infidelity stress disorder, trauma, traumatic aftershock, PISD, PTSD, marital repair, Christian, religious, transgression, adultery

Copyright Page

Dedication

To the Holy Trinity: Yahweh the Father, Yeshua the Son, and the Holy Spirit; I love you! I bless You! Lord, I thank You! I worship and honor You before Your throne. In You do I live, move, and have my being (Acts 17:28). As apostle Paul wrote in Philippians 3:12-14, though I have not attained and am not already perfected, I too press on that I may lay hold of what Yeshua Christ has laid hold for me. I have not apprehended; one thing that I do is forget what is behind me and reach forward to the things that are ahead. I press toward the mark of the prize of the high calling of God in Christ Yeshua. This is truly the heart of this dissertation, Yeshua, Your heart for us to be restored unto You. Marriage is Your institution, and I obediently submit to Your will and answer the call to allow Your redemptive work on the cross and resurrection work through me to show others Your restorative powers. This dissertation is unworthy if the true foundation is not rooted in you. When I was on my death bed in 2021, and the emergency room doctor declared he didn't know if I would live through the night, You restored me and gave me victory; this is for You! My investment in the restoration of marriage as a ministry is all because of You, heavenly Father.

To my beautiful daughters, Imani Roby and Maia Roby, I love you. To my father and mother, I honor and love you. I honor the memory of my late grandmothers and grandfathers. I honor the memory of the late Presiding Bishop G. E. Patterson, who believed in me as a child and counseled me through my darkest moments. I honor all the struggles and successes of life that led me to this moment and many moments to come. To every marital couple struggling with marital infidelity, trauma, ineffective communication, loss of love, no respect, unforgiveness, bitterness, finances, etc., this is for you! Be healed, be delivered, and be SET FREE!

Acknowledgments

I honor and acknowledge my dissertation chair, Dr. Pamela Moore, who has suffered long with me through this dual joyous and tumultuous journey! You have been pivotal in my journey and helped me develop academically and spiritually. You exemplify Christ inward, which means that you challenged me beyond the limits I had placed on myself. You made sure that I earned this accomplishment. You are truly a rarity. I honor my former dissertation chair, Dr. Tanisha Sapp. Though we were together for a short time, your input was also pivotal to me. I love your motto, "Get her done," regarding my dissertation.

I honor the entire Community Care and Counseling administration, especially Dr. Milacci, as you, too, were long-suffering and gracious toward me as well. Dr/Professor Clay Etha Peters, you have academically molded me from the first class and intensive I had with you when I successfully pursued my master's in marriage and family therapy ten years ago and once again when I initially started this traumatology doctoral journey in 2018. Your lectures and training were pivotal in developing me as a student and as a licensed marriage-family therapist. To my reader, Dr. Wendy Robinson, thank you for your thoroughness!

Table of Contents

bstractbstract	3
opyright Page	5
edication	6
cknowledgments	7
HAPTER ONE: INTRODUCTION	18
Overview	18
Background	18
Historical Context	21
Social Context	25
Marital and Individual Impact: The Clara Harris and David Harris Story	25
Family Impact	27
Post-Infidelity Reactions and Gender Differences	27
Conceptual Framework	28
The Definition of Trauma	28
Trauma and Neurobiology: The Limbic System Role in Fear-Based Responses	.29
Cognitive Schemas and Their Role in Trauma	29
Marital Trauma and PISD	30
Marital Repair	30
Religious/Core Beliefs Perspective: Infidelity as a Transgression and	
Transgression Repair	31
Problem Statement.	32
Purpose Statement	33

	Significance of the Study	34
	Research Questions	35
	Definitions	36
	Summary	39
СНАР	TER TWO: LITERATURE REVIEW	41
	Overview	41
	Conceptual/Theoretical Framework	41
	The Definition of Trauma	41
	Trauma and Neurobiology: The Limbic System Role in Fear-Based Responses	42
	The Limbic System	42
	Cognitive Schemas and Their Role in Trauma	45
	Marital Trauma and PISD	45
	Post-Infidelity Stress Disorder	48
	Marital Repair	50
	Religious/Core Beliefs Perspective: Infidelity as a Transgression and Transgression	
	Repair	51
	Infidelity as a Transgression	51
	Transgression Repair	52
	Overall Framework	53
	Related Literature	54
	Attitudes and Motivational Factors of Marital Infidelity	55
	Sensation-Seeking, Attachment Anxiety, and Infidelity Typologies	58
	Sensation-Seeking	58

Attachment Anxiety59
Infidelity Typologies59
Post-Infidelity Stress Disorder, Trauma, and Emotional/Psychological Symptoms62
Post-Infidelity Stress Disorder and Trauma
Emotional/Psychological Symptoms
Post-Infidelity-Related Stress on Marriage: Revenge and Repair69
Revenge69
Repair70
Religious/Core Beliefs: Infidelity, Transgressions, Repentance, and Forgiveness71
Infidelity as a Transgression71
Repentance71
Forgiveness72
Religiosity and Marital Outcomes
Treatment for Post-Infidelity Marital Trauma: TBCT and IBCT74
TBCT74
TBCT and IBCT75
Summary
CHAPTER THREE: METHODS
Overview78
Design
Research Questions
Hypotheses80
Participants and Setting82

Red	cruitment	84
Pre	escreening	85
Inst	trumentation	85
	The PCL-5	85
Hel	lp for Therapists and Their Clients in Dealing with Affairs	87
Tra	ansgression-Related Inventory (TRIM-18)	87
The	e Religious Commitment Inventory–10 (RCI-10)	88
Rel	lationship Repair Strategies Scale	89
We	eiss- Cerretto Marital Status Inventory (MSI)	90
Pro	ocedures	91
Dat	ta Analysis	92
	Data Screening	92
	Assumption Testing	93
Sur	mmary	93
CHAPTER	R FOUR: RESULTS	95
Ove	erview	95
Des	scriptive Statistics	95
Par	ticipant Demographics	96
	Sex and Age	96
	Religious Identification	96
	Marital and Parental Status	98
	Prior Diagnosis History	99
Inst	truments	101

PCL-5	
Help for Therapists (and Their C	lients) in Dealing with Affairs103
Transgression-Related Inventory	(TRIM-18)104
The Religious Commitment Inve	entory– 10 (RCI-10)104
Relationship Repair Strategies S	cale10:
Weiss - Cerretto Marital Status I	nventory (MSI)10:
Results	100
Data Screening	100
Assumption Testing Analysis	10°
Hypotheses Data Analysis: Hypothesis	One11:
Moderation Data Analysis	11:
Hypotheses Data Analysis: Hypothesis	Γwo12
Data Analysis	12
Hypotheses Data Analysis: Hypothesis	Γhree124
Data Analysis	124
Hypotheses Data Analysis: Hypothesis l	Four128
Data Analysis	128
Summary	132
CHAPTER FIVE: CONCLUSIONS	133
Overview	133
Discussion	133
Conceptual Framework Concurrence	133
Research Question One	136

Research Question Two	137
Research Question Three	139
Research Question Four	139
Implications	140
Limitations	142
Recommendations for Future Research	144
Summary	145
REFERENCES	148
APPENDIX A IRB Approval Letter	160
APPENDIX B Recruitment Flyer	161
APPENDIX C Consent Form	162
APPENDIX D PCL-5 Letter of Approval	165
APPENDIX E PCL-5 (With Modified Instructions)	166
APPENDIX F RCI-10 Approval Letter	168
APPENDIX G RCI-10	169
APPENDIX H TRIM-18 Approval Letter	170
APPENDIX I TRIM-18 (with Modified Instructions)	171
APPENDIX J RRSS Approval Letter	172
APPENDIX K Relational Repair Strategies Scale (RRSS)	174
APPENDIX I. Demographics	176

List of Tables

Table 1 Power Analysis	83
Table 2 Age	96
Table 3 Sex	96
Table 4 Religious Identification	97
Table 5 Prior Diagnosis History	100
Table 6 PISD Variable Sum Score	101
Table 7 PISD Variable (Diagnosis)	102
Table 8 PCL-5 Descriptives	102
Table 9 Help for Therapists Variables	103
Table 10 TRIM-18 Variables	104
Table 11 Religious/Core Beliefs	104
Table 12 Marital Repair Efforts and Lack of Marital Repair Efforts	105
Table 13 Separation/Desire to Separate and Divorce/Desire to Divorce	106
Table 14 Test of Homogeneity of Regression Slopes	114
Table 15 Box's Test of Equality of Covariance Matrices	115
Table 16 Moderation Analysis – Revenge	118
Table 17 Moderation Analysis – Avoidance	118
Table 18 Moderation Analysis – Separate/Desire to Separate	119
Table 19 Moderation Analysis – Divorce/Desire to Divorce	119
Table 20 Moderation Analysis – Healing	120
Table 21 Moderation Analysis – Forgiveness	120
Table 22 Moderation Analysis – Benevolence	120

INFIDELITY, POST-INFIDELITY STRESS DISORDER & POST	15
Table 23 Multiple Regression Model Summary	123
Table 24 Duration Frequency	123
Table 25 Coefficients	123
Table 26 MANOVA – Multivariate Test RQ3	126
Table 27 Between Subjects Effects	127

List of Figures

Figure 1 The Limbic System44
Figure 2 Response to Trauma
Figure 3 Moderation
Figure 4 Multiple Linear Regression Predictors
Figure 5 G*Power Analysis Multiple Regression
Figure 6 G*Power MANOVA84
Figure 7 Religious Denominations
Figure 8 Marital and Parental Status99
Figure 9 Outlier
Figure 10 Tests of Normality, Homoscedasticity, and Linearity: Revenge
Figure 11 Tests of Normality, Homoscedasticity, and Linearity: Avoidance
Figure 12 Tests of Normality, Homoscedasticity, and Linearity: Desire to Separate
Figure 13 Tests of Normality, Homoscedasticity, and Linearity: Desire to Divorce
Figure 14 Tests of Normality, Homoscedasticity, and Linearity: Healing111
Figure 15 Tests of Normality, Homoscedasticity, and Linearity: Forgiveness111
Figure 16 Tests of Normality, Homoscedasticity, and Linearity: Benevolence
Figure 17 Tests of Normality, Homoscedasticity, and Linearity: PISD112
Figure 18 Tests of Normality, Homoscedasticity, and Linearity: Marital Repair113

List of Abbreviations

American Psychiatric Association (APA)

Generalized anxiety disorder (GAD)

Post-infidelity stress (PIS)

Post-infidelity stress disorder (PISD)

Posttraumatic stress disorder (PTSD)

Relationship Repair Strategies Scale (RRSS)

Transgression-Related Inventory (TRIM-18)

The Religious Commitment Inventory–10 (RCI-10)

CHAPTER ONE: INTRODUCTION

Overview

What constitutes infidelity, adultery, extramarital affairs, and extradyadic relations and their possible impact on marriage has been discussed in religion, research, the public space, pop fiction, movies, and books. Marriage had a consistent definition in the United States until 2015 when the U.S. Supreme Court expanded the original marriage¹ between one man and one woman to include same-sex unions legally. Infidelity and its psychological and emotional consequences are often traumatic and are a severe problem to treat in marital therapy. Many marriages suffer marital outcomes such as separation, low marital satisfaction, divorce, and PISD as a perceived infidelity-related betrayal. Chapter 1 provides a brief background regarding infidelity, posttraumatic reactions because of adultery, the identified problem in the literature, the purpose and significance of the study of PISD and other secondary reactions and outcomes because of infidelity, the research questions of this study, operational definitions pertaining to this study, and an overall summary of Chapter 1.

Background

"In sickness and in health, until death do us part" is a common wedding vow exchange. Marital infidelity can make a marriage sick and unhealthy, with infidelity as a predictor of future divorce (Glass, 2004, p. 4). Infidelity is the primary reason in one-third of divorce cases in the United States (Nowak et al., 2014). Infidelity also has a relationship with sexual and marital dissatisfaction (Nowak et al., 2014). Infidelity is one of the most difficult issues to treat in

¹ Historically, polygamy is almost as old as original marriage and was practiced as acceptable throughout many religions, cultures, and countries and is still practiced in certain countries, cultures, and religions today.

² Obergefell vs. Hodges 5-4 Supreme Court Opinion legalized same sex unions in the United States. Massachusetts as a state legalized same sex marriage via a court ruling in 2004 Goodridge vs. Department of Public Health.

marital therapy (Moller & Vossler, 2015). With the scarcity of infidelity-related marital therapy research, the studies have shown mixed outcomes, with some successes but mostly failures ending in lower marital satisfaction and divorce (Regas, 2019).

Research suggested that the seriousness of infidelity demands the evaluation of underlying factors that prompt mental health consequences and protective factors that can dampen its harmful impact (Shrout & Weigel, 2020). For example, Whisman (2016) identified gaps and problems in the research while evaluating major depressive episode(s) (MDE) after the discovery of an affair (marital infidelity). Clinicians often report difficulty in treating affairs in couples therapy, likely due to a greater possibility of depression after discovering an affair (Whisman, 2016). Whisman also suggested that infidelity discovery may have a relationship with other mental health outcomes (e.g., PTSD, generalized anxiety) and evaluating those possible correlations would be an important topic for future research. He further identified that future research is needed to assess the long-term outcome correlated with the discovery of infidelity, including couples before, during, and afterward in therapy (Whisman, 2016). Infidelity can sow seeds of distrust and destroy a marriage; it appears to be engaged in equally among men and women (Glass, 2004, p. 17). The consequences of infidelity can be psychologically, emotionally, and behaviorally traumatic for the betrayed spouse (Glass, 2004, pp. 88-90). To properly understand the psychological and traumatic nature of infidelity, the immediate context of what infidelity is must first be precisely defined in a conceptual context and discussed in a historical context. What makes infidelity difficult to treat clinically is also discussed in its historical context.

Since infidelity and post-infidelity reactions do not happen in isolation, marital therapists need help with treating infidelity. Dr. Peggy Vaughan (2010) conducted a survey regarding

extramarital affairs with a sample size of 1,083 participants, which consisted of 75% women and 25% men whose spouse or former spouse had an affair. Some of the participants' reactions once they discovered their spouse had an affair were the following: devastation, depression, worse than dying, hurtful, pain, grief, the most painful experience, suicidal, insecurity, violating, destructive, will not ever get over it, betrayal, anger, resentment, moody, trapped in my own feelings, guilt, sense of disillusionment, wanting to punish spouse, emotional wreck, hell, consumed by thoughts, agony, and PTSD (Vaughan, 2010). Furthermore, the literature suggests that only a small number of empirical investigations and empirical data related to the efficacy of infidelity-related couples therapy, specific infidelity-related treatment, can benefit couples post-affair such as the treatment model integrative behavioral couples therapy (Barraca & Polanski, 2021). The literature indicates that betrayal should be clinically researched using quantitative and qualitative measures because some post-infidelity betrayals are PTSD-like, and reactions can have catastrophic consequences (Rachman, 2010; Warach & Josephs, 2021).

Not only are therapists at a loss regarding post-infidelity treatment, but their clients in treatment are at a loss regarding effective infidelity treatment (Vaughan, 2010). The following is a statement from one of the participants (also a psychologist) from Vaughan's survey (2010) reflecting that sentiment:

Dealing with the affair of a spouse is a traumatic event, and clinically is very comparable to a posttraumatic stress disorder. Professional help would probably be much more effective if counselors would deal with the issue as a trauma and draw on the literature on the treatment of PTSD rather than to systematically regard affairs as signs of underlying relational problems.

Other sentiments from Vaughan's (2010) survey suggested that therapists should not treat the affair the same as other marital problems, deal directly with the affair, and not avoid the issues; there was more discussion on "family of origin" than the affair; need help dealing with the pain; personal damage; heal the pain, not the personal childhood; focus on the anger, less on the personal growth; affair accountability; and focus on the healing the guilt (Vaughan, 2010). Post-infidelity distress has been replicated and resulted in other mental-health-related outcomes in committed couples. Additionally, what makes infidelity difficult to treat clinically is discussed in its historical context.

Historical Context

A brief history of infidelity and post-infidelity reactions must be explored to provide more context on post-infidelity stress reactions. What exactly is infidelity, and what makes it difficult to treat historically? Defining infidelity is an interesting phenomenon within itself since it can be culturally determined. Defining infidelity can be complicated for clinicians and the public; the differentiations in defining infidelity have led to a discrepancy regarding infidelity prevalence in surveys and research (Moller & Vossler, 2015). What defines marriage is largely determined by religion and cultural values; the same is valid for infidelity. For thousands of years, across many cultures, marriage was an expectation between men and women. In modern times, exclusive dating, casual dating, one-night stands, and cohabitation have become common (Wentland & Reissing, 2014). Polyamory is starting to trend and can be defined as consensual non-monogamy (Brunning, 2018). What would be considered infidelity in the case of consensual non-monogamy? For example, within the Judeo-Christian context, the Bible mentions the word adultery in the *New King James Version* 40 times in 33 verses, and infidelity is mentioned one time in one verse (Strong, 2015). Adultery/infidelity in the Hebrew and Greek language is

defined as committing fornication, playing the harlot, committing idolatry, whoredom, cult prostitution, being unfaithful, unlawful intercourse with another's wife, and faithlessness toward God (Strong, 2015); this is characteristic of the Israelite's unfaithfulness to God. The Israelites worshipped other gods, which is considered biblical adultery, infidelity, and idolatry. The offense of adultery that Israel committed against God was so offensive that God said in Jeremiah 3 that Israel was faithless, a whore, and that treacherous Judah saw it (Israel's adultery) and engaged in whoredom likewise. Additionally, the biblical Tribe of Judah did not return to God fully repentant after committing infidelity but returned in pretense only. God divorced Israel then but still opened the door for Israel's repentance and mercy upon return.³ While understanding what infidelity is historically within the Judeo-Christian context, clinically, there has been a challenge.

The historical conceptualization of what constitutes infidelity from a clinical perspective has also encountered some difficulty because of the differing definitions provided in the literature. Part of the problem in treating infidelity is defining infidelity in clinical research. Many clinical research articles concerning infidelity admit the lack of clinical consensus on a definition. For example, Glass (2004) suggested that infidelity can take place even if there is no sex (emotional affair), and extramarital infidelity involves the heart, mind, and body, which also includes internet-only behavior. Pittman and Wagers (2005) suggested that infidelity's main feature is not sex but secrecy and a betrayal of the agreement between the couple regarding sexual involvement and romance outside the marriage. Similar to Glass (2004), Gottman and Gottman (2017) suggested that an affair (infidelity) is "clandestine in both a sexual and

³ In the book of scripture in Jeremiah 3 God spoke to the prophet Jeremiah about Israel's adultery, exile, and reconciliation. Israel as a nation and God's people would frequently worship other gods and engage in those idolatrous practices. Some of the gods that Israel frequently committed adultery with was Molech-the fire god, Ashtoreth- god of fertility, and Baal.

emotional liaison context other than the spouse that violates traditional wedding vows of exclusivity" (i.e., exclusive commitment). The overall theme for the many conceptualizations of infidelity (which this research used) is that infidelity violates expectant (sexual) fidelity in marriage by engaging in sexual behavior outside the marriage that is designed to be exclusive to marriage.

Clinical research, both old and new, has suggested that treating infidelity is one of the most challenging tasks in marital therapy (Gordon et al., 2005; Moller & Vossler, 2015; Snyder et al., 2008; Whisman et al., 1997), likely because of its traumatic components (Gordon et al., 2005). The difficulty in treating infidelity is exemplified in therapist survey research from 1992-2001 (Glass, 2004, p. 5) and survey research from Dr. Peggy Vaughan (2010). The literature suggests clinicians have no consensus about why infidelity occurs and what constitutes an effective post-infidelity treatment; research is limited (Glass, 2004, p. 5; Marín et al., 2014; Moller & Vossler, 2015; Regas, 2019). Adultery can be difficult to treat in marital therapy, most likely because of its traumatic nature (Gordon et al., 2005). How can infidelity be effectively treated when research regarding the infidelity-related emotional, psychological, behavioral, and physical repercussions is limited for effective treatment? This presents a problem in martial/couples therapy research in older and more recent studies. For example, practitioners that use cognitive-behavioral couples therapy (CBCT) had significant gaps in dealing with couples that experienced infidelity; many couples reported that they could not move ahead because they needed an effective way to process the trauma of the affair and a way to contextualize the past (Gordon et al., 2008). CBCT was purported to be efficacious in treating individuals with PTSD and enhancing relationship satisfaction in couples therapy in a small, randomized control trial (n = 40 couples) vs. the couples in a wait-listed condition (Monson et al., 2012). The study was not

focused on infidelity or infidelity-related trauma as the cause of PTSD (Monson et al., 2012). In other infidelity-related research, traditional couples behavioral therapy (TCBT) was evaluated in a small, randomized controlled trial of 89 married couples with infidelity that ended six months before the study (Kröger et al., 2012). TCBT purported to help some marriages decrease PTSD hyperarousal and intrusion symptoms with no relief in PTSD depressive symptoms in the betrayed spouse (Kröger et al., 2012).

Additionally, the Kröger et al. (2012) study could not determine if PTSD-like symptoms were already declining before the study, which underscores the difficulty in infidelity-related treatments. In more recent research (Marín et al., 2014), investigators conducted a five-year follow-up post-infidelity study of relationship outcomes of integrative behavioral couple therapy (IBCT) and traditional behavioral couple therapy (TBCT). Some six-month follow-up studies showed decreased anxiety and depression and increased couples' satisfaction and forgiveness (Marín et al., 2014). Other five-year follow-up post-therapy studies show complete infidelity recovery and relationship approval, while others show continued marriage with lower marital satisfaction (Marín et al., 2014). Most post-therapy five-year marital therapy follow-up studies post-infidelity had more than two times the divorce rate than marriages with no infidelity (Marín et al., 2014). The difficulty in treating marital infidelity has motivated John and Julie Gottman (2017) to create a trauma and infidelity-specific treatment called "treating affairs and trauma," currently in its testing phase in partnership with Dr. Paul Peluso. This study adds to the historical context by evaluating marital outcomes for participants who have experienced being betrayed by an affair, measuring PISD symptomology, moderators between the two, and other factors associated with the PISD level in participants post-infidelity.

Social Context

Marital and Individual Impact: The Clara Harris and David Harris Story

Not only is infidelity prevalent in both sexes in original traditional marriage but so are intense reactions from the exposure of an affair from the betrayed spouse. Infidelity and post-infidelity impact marriages, individuals, families, and society. Overall, sexual infidelity is damaging to relationships, and despite the damage sexual infidelity causes, it continues to permeate; adultery is often met with social disapproval (Glass, 2004, p. 92; Warach et al., 2018). When infidelity happens in a marriage, the couple's environment makes it difficult for the two to feel safe enough to communicate, which can cause issues in marital resolution (Hertlein et al., 2011). Strong emotional responses of the spouse betrayed by infidelity are common and usually followed by spousal low self-esteem, anxiety, and depression (Weiser et al., 2014). A well-documented case within the individual and marital context regarding extreme traumatic post-infidelity reactions to infidelity happened in 2002. The betrayed spouse was Clara Harris. The victims of Clara's traumatic reactions were her deceased husband, David Harris, and his then-teenage daughter, who witnessed his death (Houston Chronicle, 2002).

Strong suspicions of infidelity correlate with high suspicion-based distress, which also impacts involvement in risky health behaviors (Weigel & Shrout, 2021). The impact on those who suspected infidelity from their partner was greater when holding fidelity in high regard, the relationship has a prior history of infidelity, and high marital satisfaction (Weigel & Shrout, 2021). Risky health behaviors include drug use, alcohol use, risky sexual behavior, over/undereating, and intense exercise (Weigel & Shrout, 2021). For example, Clara and her husband, Dennis, owned several orthodontics clinics in Texas when David met his affair partner, Gail. Gail was hired at David's primary clinic in mid-year 2001 (Turner, 2003). In 2002, dentist Clara

Harris suspected her husband was having an affair, so she hired a private investigator to confirm or deny her suspicions. Clara's suspicions were confirmed, so she confronted her husband; David confessed he had an ongoing affair. According to Clara's testimony at her trial, when her husband confessed his affair and stated he would end it (Easton, 2003a), Clara asked for feedback from her husband regarding his motivations for the affair (Easton, 2003a). The next day, David gave Clara a list of pros and cons that compared Clara to his affair partner, Gail (Easton, 2003a). The feedback led Clara to quit the dental practice. She had been giving David sex three times per night, preparing her husband's favorite meals daily, styling her hair, and getting tanned at a salon (Easton, 2003a). Clara also scheduled liposuction because David told Clara she was overweight (Easton, 2003a). Clara planned a breast augmentation because David was fascinated with his affair partner's breast size (Easton, 2003a). Clara underwent breast augmentation to save her marriage and claimed their marriage was healing (Easton, 2003a). Clara engaged in very risky behaviors due to suspected, and then confirmed, infidelity.

After engaging in risky behaviors that Clara thought would save her marriage, she started to suspect her husband of continuing the affair with Gail. Ultimately, the affair between David and Gail did not end. Clara's husband continued the affair with Gail in the same hotel where Clara and David married (Easton, 2003a). While in a hyperarousal state, physical pain overcame Clara when she saw David and Gail in the hotel lobby (Easton, 2003b). With her stepdaughter in tow, Clara violently attacked Gail; Clara eventually managed to run her husband over twice in the parking lot after the lobby altercation. Clara contended that she was aiming for Gail's SUV (Easton, 2003b). Clara's behavior in response to her husband's ongoing affair was an extreme example of the traumatic reactions regarding infidelity, but in no way are traumatic reactions as a response to infidelity happening in isolation. Clara's husband's infidelity and her subsequent

traumatic post-infidelity stress reactions are just one example of the many personal and social ramifications of infidelity, post-infidelity stress, and post-infidelity stress reactions. Infidelity and Clara's post-infidelity stress reactions destroyed her, her husband, and her family, but her story is not the only one.

Family Impact

Marital stability is crucial for marriages with children because affairs often have deceptions (e.g., secrecy, lies) that can create distance between the family (Sori, 2007, p. 248). Discovering parental marital infidelity in children may be accidental (Sori, 2007, p. 249). In contrast, other discovery methods involve a confession to the child or teen, which can cause the most harm, especially when the child or teen is expected to keep the infidelity a secret. Sometimes, the unfaithful spouse actively involves their children in the affair. Children of parental infidelity may be triangulated by one or both parents due to infidelity with the parent, which can lead to stunted emotional growth due to the parental burden. Children react in different ways upon discovering their parent's affair, including silence, parental alliance, depression, perfectionism, and home escapism (Negash & Morgan, 2016; Sori, 2007, pp. 249-250; Weiser et al., 2017). Adult children discovering their parent's infidelity may cut ties with the adulterous parent (Sori, 2007, p. 255). At the same time, the betrayed spouse, consumed with bitterness post-infidelity, may demand an alliance with the children. Children of parental infidelity are likelier to commit adultery (Negash & Morgan, 2016; Sori, 2007, p. 255).

Post-Infidelity Reactions and Gender Differences

Women are more vulnerable to traumatization post-infidelity because they generally give more in marriage (Ortman, 2009, p. 31). Women are purportedly more likely to experience family environmental sexual and physical abuse. In contrast, men are more likely to experience

combat trauma, physical violence, and severe accidents that increase the likelihood of posttraumatic stress. In terms of reactions to the discovery of infidelity, women are more likely to be tearful and depressed in comparison to men, who are more likely to isolate and be angry (Ortman, 2009, pp. 33-34). Men who discover that their wives have committed adultery are more likely to divorce, and women who discover their husband's unfaithfulness are more likely to attempt to repair it (Ortman, 2009, p. 35). This study adds to the social context by evaluating marital outcomes for participants who have experienced being betrayed by an affair, measuring PISD symptomology, moderators between the two, and other factors associated with the PISD level in participants post-infidelity.

Conceptual Framework

The Definition of Trauma

The conceptual framework for this study comprehensively combines trauma concepts from neurobiology, cognitive-based schemas, marital infidelity, and Judeo-Christianity. Trauma is "any disturbing experience that results in significant fear, helplessness, dissociation, confusion, or other disruptive feelings intense enough to have a long-lasting negative impact on a person's attitudes, behavior, and other aspects of functioning" (VandenBos & American Psychological Association, 2013, p. 597). According to VandenBos and the American Psychological Association (2013), "Traumatic events include those caused by human behavior (e.g., rape, toxic accidents) as well as by nature (e.g., earthquakes) and often challenge an individual's view of the world as a just, safe, and predictable place" (p. 597). Trauma can transition to a traumatic disorder, which is "any disorder that results from physical or psychological harm" (VandenBos & American Psychological Association, 2013, p. 598).

Trauma and Neurobiology: The Limbic System Role in Fear-Based Responses

From a neurological-biological conceptual framework, trauma is exhausting. It puts the sympathetic nervous system into overdrive, which causes even the slightest sense of threat to trigger the traumatized individual into fight, flight, or freeze mode (Schupp, 2015, p. 20). The amygdala and hippocampus are in the limbic system and work together to regulate fear and subsequent reactions (Schupp, 2015, p. 18). The amygdala regulates short-term perceptions of threats, whereas the hippocampus deeply assesses threats (Schupp, 2015, p. 18). Over-exposure to traumatic material is what Dr. Daniel Goleman suggests leads to emotional hijacking (Schwartz, 2016, p. 108), which takes place in the amygdala and is why the amygdala is the primary mediator of PTSD symptomology (Schupp, 2015, p. 18). In addition to emotional hijacking, the dose-response (exposure time) is regarded as being precisely predictive of the development of some forms of traumatic stress (Schupp, 2015, p. 12).

Cognitive Schemas and Their Role in Trauma

From a cognitive-based framework, Janoff-Bulman (1989) postulated that "schemas serve as preexisting theories that provide a basis for anticipating the future and guide what we notice and remember, as well as how we interpret new information." Schemas store firmly held expectations and work to filter data based on an individual's schema (Janoff-Bulman, 1989; Resick et al., 2017, p. 50). Furthermore, from a cognitive-based framework, although adverse events are most certainly not always experienced as something tragic, it is suggested that there is a predisposition to emotional traumatization when a situation or event contravenes that person's basic worldview (Gordon et al., 2005; Janoff-Bulman, 1989; McCann et al., 1988).

Marital Trauma and PISD

Infidelity can be traumatic, so it is important to understand the conceptual framework that best explains post-infidelity stress disorder as a specific type of PTSD, which is PISD. Infidelity /adultery/an affair is an act of violation of expectant fidelity in marriage by one or both spouses who engage in a sexual relationship outside the marriage that is supposed to be exclusive to marriage (Gottman & Gottman, 2017). From a marital infidelity-discovery as a trauma framework, Shirley Glass posited that when a spouse discovers or reveals that their spouse has committed adultery, the betrayed spouse is traumatized. The degree to which the betrayed spouse is traumatized post-infidelity is based on how the infidelity was discovered, the nature of the betrayal (e.g., duration and extent of the marital infidelity), the extent of shattered assumptions held by the betrayed spouse, situational and individual vulnerabilities, and if the threat of infidelity continues (Glass, 2004, pp. 94-104).

PISD

Dennis Ortman (2005) coined PISD as specific infidelity-related PTSD based on his 28 years of counseling experience as a priest, psychologist, and clinician. Ortman (2005) suggested that many spouses betrayed by the discovery of infidelity experience it as a life-threatening event that often develops into infidelity-related PTSD.

Marital Repair

Glass (2004) postulated that to repair the damage of the marriage post-infidelity, both spouses must work together for recovery (pp. 320-338). Certain marital repairs can happen instantly, but other marital repairs can happen over time. Glass postulated that recovering refers to when the marriage is back in balance, and infidelity is not an everyday focus. Marital repair diminishes the traumatic wounds that infidelity causes. The adulterous spouse must convert from

being the hurter of the injured spouse to being the soother toward the injured spouse with increased patience and care at a level that was never previously shown.

Religious/Core Beliefs Perspective: Infidelity as a Transgression and Transgression Repair

From a religious perspective based on a transgression-based framework, marital infidelity is a transgression. Worthington (2006) posited that a transgression causes the individual to view the transgression as a stressor that challenges that individual to adjust (Worthington, 2006). When it comes to repairing post-transgression, if an individual considers the transgression something they can cope with, the transgression is considered a challenge (Worthington, 2006). If the individual believes they cannot cope with the transgression, then the transgression is viewed as a threat (Worthington, 2006). Because of a transgression, an overstressed individual evaluates every offense as a threat, thus reducing the capacity to forgive the transgressor (Worthington, 2006). In all three Abrahamic faiths (i.e., Christianity, Judaism, and Islam), repentance, forgiveness, restitution, and reconciliation are part of the core tenets (Worthington, 2006). Highly religiously committed individuals will likely rely on their religious beliefs and values across situations longer than those with a moderate religious commitment (Worthington, 2006). Religious struggle frequently occurs when the injustice gap is highly personal (Worthington, 2006). Irrespective of an individual's faith, if an individual ruminates posttransgression, they are highly unlikely to forgive the transgression (Worthington, 2006). When the overall frameworks are synthesized in totality, marital infidelity exposure is a marital trauma that can develop into infidelity-related PTSD, which is called PISD for the betrayed spouse. The extent of the traumatization is based on the betrayed spouse's schema, the affair discovery method, the degree of a betrayed spouse's shattered assumptions, individual/situation vulnerabilities, if the threat continues, and other issues. PISD can stress the individual

neurological system, placing the betrayed spouse in a perpetual state of defense. A betrayed spouse consistently on edge will evaluate a transgression (e.g., infidelity) as a threat that makes it difficult to engage in marital repair (e.g., forgiveness). A betrayed spouse who is highly religious will likely hold to their faith regarding infidelity vs. betrayed spouses who are moderately religious. Rumination can make it difficult for the betrayed spouse to engage in forgiveness post-infidelity. This investigation adds to the conceptual framework by measuring PISD and evaluating marital outcomes that are associated with it.

Problem Statement

According to the research literature, infidelity is prevalent, but research regarding effective treatments for marital infidelity and the emotional, psychological, and behavioral costs is limited; there is no clinical or scientific consensus. This research is of interest because understanding the emotional, psychological, behavioral, and physical impacts of infidelity helps inform treatment and capture, conceptualize, and explain how the lack of emphasis on infidelity and its consequences can and often does have clinical implications in marital/couples therapy.

One of those clinical implications is minimal research regarding what can be conceptualized as PISD, which has recognition in the literature (Ortman, 2005) as being parallel to PTSD and its possible impact on marital therapy and marital outcomes; Shrout and Weigel (2020, 2018) conducted research and replicated mental health symptoms (e.g., depression, anxiety, distress) post-infidelity, but the sample was not exclusive to marriage and did not assess PTSD. The timeframe was three months from the incident (Shrout & Weigel, 2020). By understanding and conceptualizing PISD and other infidelity-related trauma symptoms, treating infidelity and its consequences shifts from a cultural phenomenon to a clinical problem.

Marital infidelity and its emotional, psychological, physical, and behavioral impacts must be conceptualized, realized as marital trauma, and treated clinically. The problem yet to be addressed is the impact of PISD or post-infidelity stress symptoms on marital outcomes. Survey research conducted by the late Peggy Vaughan (2010) indicated that most marital therapy's frustration and dissatisfaction occur when infidelity and its consequences are treated as a symptom of a problematic marriage instead of a problem within itself first. An example of that very issue is summarized by the following statement from a respondent to Vaughan's survey (2010):

Our counselor focused on other events and "losses" in my life rather than helping to deal with the affair and my reaction to it in particular. I entered a depression, and the counselor was no help in dealing with this at all. Perhaps I was overly optimistic about what a counselor could do.

That respondent's statement is the ultimate summation of this study's "statement of the problem."

Purpose Statement

The purpose of this descriptive, quantitative, and correlational study is to help close the gap in the literature by focusing on PISD in marriages and post-infidelity marital outcomes in contrast with marriages without PISD using online surveys and measures by evaluating if there are relationships between PISD with specific positive and negative marital outcomes (e.g., divorce, revenge, forgiveness, reconciliation). This study also examines whether core/religious beliefs and infidelity repair attempts (from the spouse who committed infidelity) are moderators related to specific marital outcomes. This study also investigates if the following are predictors of PISD levels in the injured spouse: marital infidelity discovery method, religious/core beliefs,

duration of the marital infidelity, and marital repair efforts. This study informs clinical treatment in marital therapy and infidelity recovery. The population of interest consisted of participants who were traditionally married and experienced infidelity (spouse committed adultery) within the last 30 days to 1.5 years.

Significance of the Study

Whether it is called infidelity, adultery, extramarital affair, cheating, unfaithfulness, or some other term, marital infidelity is not a unique phenomenon; however, the impact of infidelity as a betrayal has a profound effect on marriages. While there are some limited studies on marital infidelity and treatment outcomes, there is a recurring theme of how difficult it is to treat infidelity clinically (Gordon et al., 2005). Researchers have suggested focusing on possible post-infidelity mediators that likely impact marital outcomes (e.g., divorce, separation, revenge, healing) (Whisman, 2016). Infidelity can cause severe emotional reactions, with certain spouses being more traumatized than others, leading to infidelity-related PTSD (Glass, 2004, pp. 94-104). Shrout and Weigel (2020) researched a population of those coping with infidelity and the mental health consequences of infidelity. They examined self-esteem as a moderator and suggested that future research should use longitudinal studies to capture reactions to infidelity more in real-time since their study is from zero to three months. Most research on infidelity tends to be absent from a conceptual framework (Shrout & Weigel, 2018).

The significance of this study is that it builds upon concepts related to infidelity, individual worldview(s), and infidelity as trauma to create a comprehensive framework regarding post-infidelity emotional, mental, and behavioral reactions as a trauma (PISD). This study's significance is primarily that it explicitly measures emotional, mental, and behavioral responses resulting from infidelity and explores the moderators and predictors of and relationships to

specific marital outcomes and PISD levels. This study found participants traumatized from the perceived betrayal of adultery and participants who experienced infidelity that may not have trauma symptomology for robust comparative marital outcomes, moderators, and predictors (e.g., repair attempts, PISD). This study is significant because it explores religious/core beliefs and repair efforts as possible moderators for marital outcomes post-infidelity. It adds to the existing body of literature regarding infidelity and PISD. Finally, the significance of this study is that the timeframe post-infidelity is more expansive because it surveys responses specifically from 1 month to 1.5 years post-infidelity discovery, which addresses that specific recommendation for future research.

Research Questions

RQ1: Do religious/core beliefs and marital repair efforts moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate?

RQ2: Do any of the following factors have a relationship with the level of PISD in the injured spouse: How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts?

RQ3: Is there a statistically significant difference in the positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD?

RQ4: Is there a statistically significant difference in the negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separate/desire to separate between participants with PISD and participants who do not have PISD?

Definitions

The following are academic definitions of terms used throughout this dissertation:

- 1. Acute stress disorder (ASD) The growth of at least 9 characteristic symptoms due to exposure to an event(s) that can be very stressful and traumatic that occurred in 5 to 30 days with at least 9 characteristics falling within the 5 following categories: intrusion, negative mood, avoidance, arousal, and dissociation (American Psychiatric Association, 2013, pp. 280-286).
- 2. *Adultery* Consensual engagement in acts of sexual intercourse between a married man or woman with someone to whom the individual is not married (Lawson, 1988).
- 3. *Anxiety* "The apprehensive anticipation of future danger or misfortune accompanied by a feeling of worry, distress, and/or somatic symptoms of tension" (American Psychiatric Association, 2013, p. 818).
- 4. *Avoidance* "The practice or an instance of keeping away from particular situations, environments, individuals, or things because of either (a) the anticipated negative consequences of such an encounter or (b) anxious or painful feelings associated with those things or events" (VandenBos & American Psychological Association, 2013, p. 58).
- 5. *Core belief(s)* deeply-rooted, long-lasting, and extensively applied assumptions that an individual accepts fundamentally as truths (Resick et al., 2017, p. 50).
- 6. *Emotional affair/infidelity* Secret emotionally intimate relationship mixed with sexual chemistry (not acted on) with an individual who is married to someone to whom the individual is not married (Glass, 2004, p. 31).

 Distress – According to VandenBos and the American Psychological Association (2013), distress is:

The negative stress response, involving excessive levels of stimulation: a type of stress that results from being overwhelmed by demands, losses, or perceived threats. It has a detrimental effect by generating physical and psychological maladaptation and posing serious health risks for individuals. A negative emotional state in which the specific quality of the emotion is unspecified or unidentifiable. (p. 180)

- 8. *Divorce* Legal dissolution of marriage.
- 9. *Fear* "An emotional reaction to an apparent imminent threat, whether real or perceived" (American Psychiatric Association, 2013, p. 821).
- 10. *Infidelity* A violation of expectant fidelity in marriage by one or both spouses who engage in a sexual relationship outside the marriage that is supposed to be exclusive to marriage (Gottman & Gottman, 2017).
- 11. *Forgiveness* The process of lowering an individual's negative motivations and restoring positive motivations concerning the transgressor (McCullough et al., 2006).
- 12. *Post-infidelity stress (PIS)* Stress resulting from the discovery/exposure of infidelity that has some or all the characteristics of irritability, aggression, numbing, obsessing, interrogating, and shifting emotions (Glass, 2004, pp. 88-90).
- 13. Post-infidelity stress disorder (PISD) Full-blown PTSD with the triggering/exposure event/injury (Criterion A) being the discovery of or exposure to the betrayal of infidelity/adultery from the individual's spouse (Ortman, 2005).

- 14. *Posttraumatic stress disorder (PTSD)* The growth of characteristic symptoms due to exposure to one or more events of threatened or actual death, serious injury (does not explicitly or implicitly state injury must be physical), or sexual violence with at least one intrusion symptom and one avoidance symptom, two or more symptoms regarding in noticeable change in mood and cognitive state, two or noticeable changes in arousal and reactivity that worsen correlated to said traumatic event(s); symptoms persist more than one month and causes clinically significant distress in chief areas of functioning; distress is not due to substances (American Psychiatric Association, 2013, pp. 271-280).
- 15. Repentance "a complex of intentions and actions involving (a) intellectual regret, (b) regret over the moral and interpersonal consequences of an action, and (c) the resolve not to repeat the actions in the future" (McCullough & Worthington, 1999, p. 1144).
- 16. *Revenge* "The infliction of harm in return for perceived wrong" (Stuckless & Goranson, 1992, as cited in Bradfield & Aquino, 1999) and a "unique form of negative reciprocity characterized by an intense personal action that seeks to restore the rank of the victim, while demeaning the offender in the process" (p. 608).
- 17. *Religious beliefs* "Adherence to a belief system and practices associated with a tradition in which there is agreement about what is believed and practiced" (Worthington et al., 2011, p. 205).
- 18. *Rumination* "Obsessional thinking involving excessive, repetitive thoughts or themes that interfere with other forms of mental activity" (VandenBos & American Psychological Association, 2013, p. 505).
- Trauma (psychological) According to VandenBos and the American Psychological Association (2013):

Any disturbing experience that results in significant fear, helplessness, dissociation, confusion, or other disruptive feelings intense enough to have a long-lasting negative impact on a person's attitudes, behavior, and other aspects of functioning. Traumatic events include those caused by human behavior (e.g., rape, toxic accidents) as well as by nature (e.g., earthquakes) and often challenge an individual's view of the world as a just, safe, and predictable place. (p. 597)

- 20. Traumatic disorder "Any disorder that results from physical or psychological trauma" (VandenBos & American Psychological Association, 2013, p. 597).
- 21. *Transgressions (interpersonal)* Interpersonal stressors within an individual who has the perception that another individual(s) has committed harm against them in a manner that is both morally wrong and painful (McCullough et al., 2006).

Summary

Infidelity has plagued marriages for centuries, historically, socially, and religiously. From a Christian biblical standpoint, infidelity/adultery was so extreme and hurtful that God even divorced Israel as the unfaithful wife; that is how serious adultery violation and its consequences are. Given the prevalence of infidelity among different cultures globally, the literature continues to grapple with the emotional, mental, and behavioral implications that infidelity causes in marriages in the form of post-infidelity stress; this presents a problem because of the traumatic nature of infidelity it is difficult to treat in marital therapy (Gordon et al., 2005). This quantitative correlational study helps close the gap in the literature by focusing on the nature of infidelity, PISD in marriages, and specific post-infidelity marital outcomes in participants with and without PISD to inform clinical treatment. This study is an intricate piece of closing the

puzzling gap to instill faith and hope of effective treatment from the clinical field to the consumer.

CHAPTER TWO: LITERATURE REVIEW

Overview

Post-infidelity stress is indeed a severe response to infidelity, and the trauma of infidelity makes it difficult to treat as it relates to marital therapy (Gordon et al., 2005). Before an attempt to close the wide gap concerning infidelity, post-infidelity stress, and marital outcomes as the research problem, the literature concerning the topic must be assessed and synthesized to explore and understand what the literature says or does not say concerning the suggested research gap and problem. To that end, Chapter Two comprises the conceptual framework for the study, which conceptualizes the nature of trauma, including assumptions and worldviews, post-infidelity stress, what makes specific individuals more traumatized than others, and PISD. Chapter Two is a compilation of the related literature that evaluates infidelity's prevalence, motivations, types of infidelity, PISD as a trauma, and other post-infidelity stress psychological reactions. It reviews the literature regarding infidelity's marital consequences, religious beliefs and transgressions, forgiveness, infidelity-related recovery, and post-infidelity treatment for trauma. Finally, Chapter Two ends with a summary.

Conceptual/Theoretical Framework

The Definition of Trauma

The conceptual framework for this study is a neurological, biological, cognitive-schema-based, psychological-emotional, trauma, marital trauma, infidelity-related, and transgressional-repair-based perspective. The conceptual framework for this study comprehensively combines trauma concepts from neurobiology, cognitive-based schemas, marital infidelity, and Judeo-Christianity. The concept and consequences of infidelity as a marital trauma must be explained to provide an understanding of the trauma narrative of marital infidelity. Trauma is "any

disturbing experience that results in significant fear, helplessness, dissociation, confusion, or other disruptive feelings intense enough to have a long-lasting negative impact on a person's attitudes, behavior, and other aspects of functioning" (VandenBos & American Psychological Association, 2013, p. 597). According to VandenBos and the American Psychological Association (2013), "Traumatic events include those caused by human behavior (e.g., rape, toxic accidents) as well as by nature (e.g., earthquakes) and often challenge an individual's view of the world as a just, safe, and predictable place" (p. 597). Trauma can also develop into a disorder defined as "any disorder that results from physical or psychological trauma" (VandenBos & American Psychological Association, 2013, p. 598).

Trauma and Neurobiology: The Limbic System Role in Fear-Based Responses The Limbic System

Regarding trauma from a neurological and biological perspective, Linda Schupp (2015, Introduction, para. 3) postulated that trauma triggers exhaustion, and its survivors are spiritually, emotionally, physiologically, and cognitively spent. The sympathetic nervous system is on edge, scanning for safety threats so much that any slightly perceived threat will induce the provocation to fight, flight, or freeze (Schupp, 2015, p. 10). Julie Uhernik (2017) posited that the brain's limbic system is based more on instinct and is the origin of emotional function, responsible for anger, basic survival, and sexual desire (p. 32). The limbic system has a variety of parts and processes, such as the hypothalamus, which is the direct connection between the endocrine system (primarily the pituitary gland) and the nervous system; the survival instinct of fight, flight, or freeze is regulated mainly by the hypothalamus (Uhernik, 2017, p. 32). The amygdala is located in the limbic system (Schupp, 2015, p. 17). The amygdala is the shape of an almond that maintains emotional memory and plays a crucial part in emotional behavior (specifically the

regulation of aggression). The amygdala has a critical role in fear responses (among other emotional reactions) and has a role in memory, including motivation; think of it as an alarm system (Schupp, 2015, p. 17). Prolonged traumatic exposure to what the amygdala perceives as a threat, the amygdala triggers a startle response and hyperarousal response in other events that are non-threatening (Schupp, 2015, p. 18). That is why the amygdala earns the reputation of being the primary mediator of PTSD symptomology (Schupp, 2015, p. 18). The amygdala learns the importance of external events and assists in processing memories such as horror and terror, along with trauma-related flashbacks and nightmares (Schupp, 2015, p. 18). Dr. Daniel Goleman calls what the amygdala primarily takes over when an individual is overexposed to a traumatic event "emotional hijacking" (Schwartz, 2016, p. 108). When the amygdala has hijacked an individual, the amygdala acts as a malfunctioning alarm system that triggers false alarms (such as a trauma trigger) to an individual even when they are not in danger (Schupp, 2015, p. 18).

The hippocampus is located in the limbic system (Schupp, 2015, p. 18). The hippocampus plays a crucial role in declarative memory, which means it is responsible for storing or removing long-term memories; the hippocampus is the glue of the trauma puzzle because it receives input from every region of the sensory association cortex (Schupp, 2015, p. 18). The amygdala and hippocampus are teammates that work together; the amygdala assesses short-term threats and sends signals to the hippocampus so the hippocampus can take a more extended look for danger. If there is or is not any danger, the hippocampus coordinates its response by sending signals back to the amygdala (Schupp, 2015, p. 18). The overall picture dictates that if there is danger, the prefrontal cortex malfunctions, leaving the individual in a hypervigilant state (Schupp, 2015, p. 19). When the brain agrees that fear is warranted, the

excess cortisol is released, it inhibits the hippocampus from developing new memories (Schupp, 2015, p. 19). Other areas of the limbic system that play a role in executive functioning as it relates to trauma and malfunctions during prolonged exposure to traumatic events due to emotional hijacking are the following: The cingulate gyrus, which Dr. Daniel Amen (1998, as cited in Schupp, 2015) posited is responsible for cognitive flexibility, the thalamus which acts like a filter of information to other sensory organs and helps prepare limbic areas to prepare the person for an attack, and the hypothalamus after triggering fight, flight, or freeze creates a domino effect of accelerated heartbeat, accelerated breathing, pupil dilation, increased production of blood flow throughout the muscles, and triggers the release of epinephrine and norepinephrine (pp. 19-20). Please see Figures 1-2 from Schupp (2015, pp. 17, 21).

Figure 1

The Limbic System "Emotional Brain"

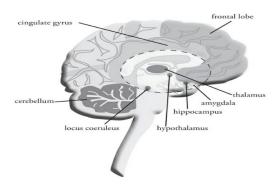
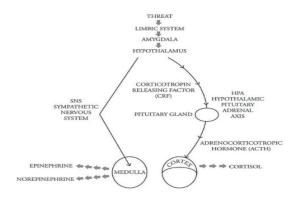


Figure 2

Response to Trauma



Cognitive Schemas and Their Role in Trauma

From a cognitive-based perspective, Ronnie Janoff-Bulman (1989) theorized that a cognitive schema "is an abstracted knowledge structure, stored in memory, which involves a rich network of information about a given stimulus domain" (Janoff-Bulman, 1989, p. 115). Janoff-Bulman (1989) posited "schemas serve as preexisting theories that provide a basis for anticipating the future and guide what we notice and remember, as well as how we interpret new information" (p. 115). Schemas store firmly held expectations and work to filter data based on an individual's schema (Janoff-Bulman, 1989). Furthermore, from a cognitive-based framework, although adverse events are most certainly not always experienced as something as tragic, it is suggested that there is a predisposition to emotional traumatization when a situation or event contravenes that person's basic worldview (Gordon et al., 2005; Janoff-Bulman, 1989; McCann et al., 1988).

Marital Trauma and PISD

Infidelity must be defined within this conceptual framework to flesh out the marital trauma narrative. Infidelity/adultery/an affair is an act of violation of expectant fidelity in marriage by one or both spouses who engage in a sexual relationship outside the marriage that is

supposed to be exclusive to marriage (Gottman & Gottman, 2017). Within the context of infidelity and infidelity as a trauma, the late psychologist and clinical researcher, Dr. Shirley Glass (2004), theorized that discovering or disclosing an affair (infidelity) leaves the betrayed spouse traumatized. The degree of traumatization is based on the nature of the infidelity and the method of discovery (Glass, 2004, p. 94).

The discovery of an affair by the betrayed spouse can leave a traumatic aftershock (Glass, 2004, pp. 94-105). Glass postulated that traumatic reaction severity is determined by the following: (a) how the discovery was made, (b) extent of shattered assumptions, (c) individual and situational vulnerabilities, (d) the nature of the betrayal, and (e) whether the threat of betrayal continues. Regarding how the discovery was made, disclosure shock is a universal reaction to the discovery of infidelity and is experienced as a mortal injury. The disclosure of infidelity to the injured spouse may invoke stronger traumatic reactions. The disclosure-shock symptoms from the injured spouse are exhibited through numbness, irritability, aggression, obsessing, interrogating, and shifting emotions. The term shattered assumptions refers to an individual's basic assumptions being infringed upon, leaving the individual in a state of disorientation. Within the marital context, shattered assumptions tear down the fundamental beliefs about that marriage. Glass postulated that the discrepancy between the injured spouse regarding beliefs about marital fidelity and the actual actions of the unfaithful spouse determine the degree of traumatization. Not only expectations about marital fidelity are shattered, but the assumptions about the character of the cheating spouse to the injured spouse increase the traumatization. An example of shattered assumptions of the spouse's character is: "I thought you were trustworthy. I thought you would always be honest with me. I thought you would always do the right thing." When a spouse is confident of their spouse's character, their spouse's behavior

contradicts that confidence; the betrayed spouse's distress is not only about the infidelity; the distress now includes the altered perceptions of the spouse who has committed infidelity. The effect is like an idealization of devaluation post-affair from the injured spouse. In contrast, if assumptions about fidelity were not firm at the start of the relationship, a greater sense of shock and disillusionment would likely not be present during an affair's disclosure.

A betrayed spouse's individual and situational vulnerabilities can make traumatization more severe in personal vulnerabilities such as self-esteem, fractured trust, and parental infidelity. As it relates to self-esteem, betrayed spouses with low self-esteem mentally filter their spouse's infidelity as evidence of their own defects, which would have more significant difficulties in recovery. Betrayed spouses concerned about their sexual competence or attractiveness are particularly vulnerable to great feelings of incompetence and self-doubt when their spouse has committed infidelity. Regarding fractured trust, Glass posited that persons who did not form basic trust during early childhood are more susceptible to deception by someone they love. Infidelity against the betrayed spouse that has fractured trust reinforces childhood scars of when their parents broke promises; those who were sexually, physically, and emotionally abused are at risk of being retraumatized when the person they depended on breaks trust and dependency. Spouses betrayed by infidelity are more predisposed to being traumatized by an affair if they witnessed a parent's infidelity. Preexisting life events such as the betrayed wife being pregnant during the exposure of an affair and family illness(es) can make the discovery of infidelity more traumatic.

Glass theorized that the betrayal's nature correlates with the intensity of the trauma reaction. Part of the nature of betrayal involves the extent of extramarital involvement, which includes the following: the depth of the affair's emotional bond, the type of sexual closeness

between the cheating spouse and affair partner, the length of the infidelity, double betrayals such as the identity of the affair partner (e.g., babysitter, friend, relative), and stolen treasures such as desires and needs that the betrayed spouse wanted and did not receive but the affair partner getting them instead. It also includes flagrant indiscretions (e.g., how apparent the cheating was and what lengths the cheating spouse went to in covering it up) and the gulf between perception and reality, such as the cheating spouse being intensely affectionate or attentive to their spouse while participating in infidelity. If the threat of infidelity continuing is present, then, there are circumstances where the cheating spouse and the affair partner share the same place of employment. Suppose the injured spouse discovers the continued contact between the two. In that case, the cheating spouse shows more sympathy for their affair partner than their spouse, threatening marital safety and leading to further injured spouse marital traumatization.

Post-Infidelity Stress Disorder

Clinical psychologist and priest Dr. Dennis C. Ortman (2005) coined the term for infidelity-related PTSD as PISD. PISD was initially based on DSM-IV criteria (also matches DSM-5 criteria) and posited that many spouses who discovered their spouse's affair experience the same symptoms of PTSD. Ortman (2005) postulated that the discovery of infidelity is traumatic because it is a betrayal of trust, and those traumatized become "fixated on the horror they experienced." Those with PISD also engage in avoidance behaviors, emotional numbing, irritability, rage, heightened anxiety, and reexperiencing; those being more vulnerable to PISD include dependent personalities, sexual/and or physical abuse as a child, and long patterns of abusive relationships (Ortman, 2005). Recovery from infidelity-related trauma includes establishing safety, understanding the unfaithful spouse, understanding oneself, making a decision about the relationship, and healing through forgiveness (Ortman, 2005, 2013). Using

PTSD criteria, PISD is infidelity-related PTSD, with the first 30 days of post-infidelity stress symptoms conceptualized as infidelity-related ASD. The criteria of ASD that must be present from at least three days up to a month (American Psychiatric Association, 2013) are as follows:

At least one or more of the following for Criteria A (Exposure to actual or threatened death, serious injury or sexual violation: (a) directly experiencing the traumatic event(s), (b) witnessing, in person, the event(s) as it occurred to others, (c) learning that the event(s) occurred to a close family member or close friend, (d) experiencing repeated or extreme exposure to aversive details of the traumatic event(s). Criteria B: presence of nine (or more) of the following symptoms from any of the five categories of intrusion, negative mood, dissociation, avoidance, and arousal, beginning or worsening after the traumatic event(s) occurred: intrusion symptoms-(a) recurrent, involuntary, and intrusive distressing memories of the traumatic event(s), (b) recurrent distressing dreams in which the content and/or affect of the dream are related to the event(s), (c) dissociative reactions in which the individual feels or acts as if the traumatic event(s) were recurring, (d) intense or prolonged psychological distress or marked physiological reactions in response to internal or external cues that symbolize or resemble an aspect of the traumatic event(s), (e) negative mood- persistent inability to experience positive emotions, (f) dissociative symptoms- an altered sense of the reality of one's surroundings or oneself (g) inability to remember an important aspect of the traumatic event(s), (h) avoidance symptoms- efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s), (i) efforts to avoid external reminders that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s), (j) arousal symptoms- sleep disturbance, (k) irritable behavior and angry outbursts (with

little or no provocation), typically expressed as verbal or physical aggression toward people or objects, (I) hypervigilance, (m) problems with concentration, (n) exaggerated startle response. Criterion C: Duration of the disturbance (symptoms in Criterion B) is three days to one month after trauma exposure. Criterion D: The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. Criterion E: The disturbance is not attributable to the physiological effects of a substance or another medical condition and is not better explained by brief psychotic disorder. A PTSD diagnosis has almost all the required diagnostic features of ASD with the following exceptions: Criteria B, C, D, and E duration is more than a month; includes a dissociative subtype, symptoms that are not based on fear (e.g., negative beliefs about self or of the world); and dissociation as a subtype. (American Psychiatric Association, 2013, pp. 280-281)

Marital Repair

Glass (2004) postulated that to repair the damage of the marriage post-infidelity, both spouses must work together for recovery (pp. 320-338). Certain marital repairs can happen instantly, but other marital repairs happen over time. Glass postulated that recovering is when the marriage is back in balance, and infidelity is not an everyday focus. Marital repair diminishes the traumatic wounds that infidelity causes. The adulterous spouse must convert from being the hurter to being the soother toward the injured spouse with increased patience and care at a level that was never previously shown. Repair efforts from the betraying spouse toward the betrayed spouse need to include giving the betrayed spouse inside information regarding interactions (putting the betrayed partner on the inside), hardline distancing from their affair partner (cementing the wall with the affair partner), being open and transparent (letting each other in),

restoration of broken trust, being accountable, respecting boundaries with more restrictive boundaries relating to behavior that led to the vulnerability of infidelity, and cleaning up the fallout that the unfaithful spouse caused.

Religious/Core Beliefs Perspective: Infidelity as a Transgression and Transgression Repair Infidelity as a Transgression

Infidelity is also a religious transgression in the marriage from the spouse who has committed adultery. Regarding transgression-related repair, Dr. Everett Worthington (2006) posited that individuals assess the transgression as a stressor, making demands on those individuals to adjust. Those individuals who found themselves in the position of being transgressed asked the following two questions: "Might this harm me?" and "Can I cope?" (Worthington, 2006). If the individual assesses that they can cope with the transgression, the stressor is evaluated as a challenge; if not, the stressor is considered a threat (Worthington, 2006). Worthington (2006) further postulated that stressors could threaten or challenge different targets in the following three ways: (a) a person's confidence and competence, (b) attachment bonds, and (c) autonomy and self-determination. Infidelity can threaten and challenge the romantic relationship and the betrayed spouse's competence and confidence (Worthington, 2006). As it relates to relationship repair post-transgression, an overstressed victim of transgression(s)/betrayal(s) assesses nearly every offense as a threat; therefore, stress reduction makes forgiveness a more significant possibility (Worthington, 2006). If the transgressor displays no sensitivity toward the person they transgressed, the perceived lack of caring presents a threat to the betrayed person's competence, relatedness, self-determination, or autonomy; in such a case, forgiveness from the betrayed toward the transgressor is less likely (Worthington, 2006). Worthington (2006) conceptualized that unforgiveness "is a stress reaction in response to

an appraisal of threat, or sometimes challenge, which is brought by transgression" (p. 49). Furthermore, "emotional unforgiveness" is defined as "a complex of emotions experienced at some later time than a transgression" with emotions that include "resentment, bitterness, hostility, anger, and fear." They arise from someone perceiving that one has experienced a transgression (Worthington, 2006). Transgressions alone do not usually lend to unforgiveness by the transgressed, as it usually develops only with people who ruminate with intense anger (Worthington, 2006).

Transgression Repair

From a religious perspective, when the hallowed (e.g., God) is situated beside the transgression, the threat level increases specifically if the betrayed believes that there is now a separation from God nonetheless (Worthington, 2006). Abrahamic faith traditions such as Christianity, Judaism, and Islam have somewhat different views of justice and mercy (Worthington, 2006). Forgiveness in Christianity is often seen as a core tenant of the faith scripturally, with receiving forgiveness from God conditioned on forgiveness of others who have transgressed; for Christians who hold to the biblical concept of forgiveness as a core belief, the decision to forgive is highly predictive (Worthington, 2006). Judaism views forgiveness as a core social process that requires the transgressor to repent with evidence of repentance; without evidence of repentance, unwillingness to forgive is strongly predictive for Jews (Worthington, 2006). Muslims value forgiveness, which is integrated with submission to God (Worthington, 2006). If the transgressor is not properly submissive to God, there is less obligation to forgive

⁴ Matthew 18: 21-35 Jesus explicitly talks about forgiveness and uses the parable of the unmerciful servant. Matthew 6:7-15 transgressions are not forgiven by God unless people forgive others of their transgressions, Luke 6:37-38, etc.

The process of atonement in the Torah (Leviticus) is very specific, requiring a Levitical priest and depending on the transgression, the sacrifice may require an animal for sin (lamb and bull), trespass offering, peace offering, etc.

(Worthington, 2006). Highly religiously committed individuals will likely rely on their religious beliefs and values across situations longer than those with a moderate religious commitment (Worthington, 2006). Religious struggle frequently occurs when the injustice gap is highly personal. After a faith-based person has been transgressed, God may expect to intervene and issue justice against a transgressor (Worthington, 2006). Last but not least, Worthington (2006) postulated that people who ruminate depressively, angrily, and anxiously are predominantly at risk of being unforgiving after a transgression.

Overall Framework

Overall, the conceptual framework for this study comprehensively combines trauma concepts from neurobiology, cognitive-based schemas, marital infidelity, and Judeo-Christianity. The neuro-biological perspective of trauma presented by Uhernik (2017) and Schupp (2015), the cognitive-based view from Janoff-Bulman (1989), the infidelity-related trauma-based perspective presented by Glass (2004) and Ortman (2005), and the transgression-repair conceptual framework from Dr. Everett Worthington (2006) provide an overall thorough framework in understanding infidelity-based marital trauma, and its underpinnings. Infidelity does not happen in a vacuum; neither does the trauma it triggers in spouses betrayed by infidelity. The limited literature available has provided a small but broad map of what is still needed to close the gap regarding treating marital infidelity recovery. This framework does this by defining infidelity as a marital-based trauma, explaining the role that the limbic system (e.g., amygdala, hippocampus) plays in judgments, threat assessments, and the development of trauma leading to PTSD/PISD. This conceptual framework explains how cognitive schemas work as a filtering tool that houses an individual's basic assumptions about the world. This framework defines infidelity, what makes infidelity so traumatic, what makes some more traumatized than

others, and conceptualizes infidelity-related PTSD as PISD. The conceptual framework includes a religious/spiritual worldview related to transgressions, how forgiveness serves as repair, how unforgiveness is a stressor because of a threat or a challenge from a transgression, and how stressors threaten the transgressed competence, autonomy, and attachment bonds. The framework guides the study's research questions, hypotheses, and instruments so that the complexity of traumatic infidelity exposure/discovery and PISD can be explored along with the specific marital outcomes after infidelity to expand the literature and inform effective treatment.

Related Literature

Although the literature is minimal regarding infidelity with PISD, discussing the past and current literature behind attitudes and motivational factors regarding infidelity is essential to the research problem because it can also provide valuable information regarding the reactions of the betrayed spouse once infidelity is discovered. The infidelity-related "traumatic aftershock" is an emotional rollercoaster (Glass, 2004, pp. 88-116). Traumatic aftershock is a set of post-infidelity reactions that explains why some people are more traumatized than others (Glass, 2004, p. 88-116). It highlights the concepts of shattered assumptions and the nature of betrayal (Glass, 2004, pp. 94-104), which ties into the motivations for infidelity, which likely plays a prominent role in marital distress reactions, particularly for the spouse betrayed by an affair/infidelity. Clinical practice research (Snyder et al., 2008) indicates that when an affair has been discovered in marriage, one of the main questions asked in therapy or the marital home between husband and wife is conceptualized by the following question: Why did you do it? Since infidelity appears to be prevalent and does not happen in a vacuum, the reason(s) why men and women engage in infidelity may upset or confirm preconceived notions. Behind every act of infidelity is a

motivation. Understanding the reasons behind affairs to treat infidelity and PISD is crucial to comprehending infidelity-related stress reactions.

Attitudes and Motivational Factors of Marital Infidelity

A *Psychology Today* analysis conducted by Glass and Wright (1977) with a sample size of 20,000 married participants found that in long-term traditional (heterosexual) marriages, faithful and unfaithful married men had equal satisfaction in their marriages. Married women who engaged in infidelity were the most distressed group within that sample (Glass & Wright, 1977). That airport study seemingly contradicts Western culture's common advice given to newlywed women, which suggests men in "happy and fulfilling marriages" do not commit adultery; that adds clinical perspective to infidelity considering that specific study. Emotional affairs pose another threat in an airport sample survey that suggested infidelity committed by women was about marital dissatisfaction and falling in love with someone else. In contrast, adultery committed by men was more about sexual excitement than an unsatisfactory marriage (Glass, 1981).

Additionally, a surprisingly new outcome found that deep emotional bonds, along with sexual intercourse, are the most threatening form of infidelity within marriages (Glass, 1981). According to survey research conducted by Glass and Wright (1992), women are more likely to justify an affair for "love" with further reasoning that love and sex are combined but are less likely to justify infidelity, that is, "sex: for the sake of sex." Men, in comparison, were more able to separate sex and love (Glass & Wright, 1992). Still, interestingly, 43% of men involved in infidelity approved of "falling in love" as a reason for having an affair (Glass & Wright, 1992). Additionally, there was virtually no difference between men and women using emotional closeness as a rationalization for infidelity. Although men are more likely to engage in infidelity

with little to no emotional involvement (Glass & Wright, 1992), clinical practice research found that men who commit infidelity by creating an emotional bond with their affair partners has increased (Glass, 2004, pp. 45-57).

In 1994, a national survey on extramarital affairs (Wiederman, 1997) in the United States found that women were less likely to report infidelity than men. There are no gender differences in affairs for those under age 40, but overall, men committed adultery at a higher rate than women. In more recent literature, longitudinal survey data from 2000-2016 (Labrecque & Whisman, 2017), using a sample size of 13,030 American married participants, evaluated attitudes toward infidelity, gender differences in attitudes toward adultery, the lifetime prevalence of infidelity, the annual prevalence of infidelity, and others. The survey suggested that attitudes toward believing infidelity is "always wrong" have declined, and those who believe infidelity is "only wrong sometimes" have increased (Labrecque & Whisman, 2017). Lifetime prevalence of infidelity declined with no significant change in annual prevalence; lifetime prevalence for men increased slightly more than for women (Labrecque & Whisman, 2017). As it relates to what type of affair partner married individuals seek, it is suggested that affairs happen in close proximity, such as an affair with a close friend by 53.5% (women 56.9% and men 51.3%), which is consistent with Glass's (2004) research. Long-term acquaintances, coworkers, or neighbors accounted for 29.4% of affairs (women 29.9% and men 29.2%), casual dates or hook-ups were 21% (men 24.3% and women 15%), and purchased sex was 7.9% (women 1.3% and men 12%) (Labrecque & Whisman, 2017). Glass's (2004) data between 1982 and 1990 found that, based on her clinical practice, women engaged in workplace affairs by 38%; from 1991 to 2000, women's workplace infidelity increased to 50%, and 62% of men engaged in infidelity from someone at the workplace. Another survey targeted infidelity in 4,884

American women (Whisman & Snyder, 2007) and evaluated infidelity's prevalence, infidelity predictors, and whether prevalence and predictors of infidelity differentiated between computer-assisted self-interview or face-to-face interviews. The research showed that childhood sexual abuse predicted the greatest probability of infidelity and that face-to-face interviews reported less infidelity prevalence vs. computer-assisted self-interviews (Whisman & Snyder, 2007). The findings of that survey shed some light on predictors that may be missed when researching infidelity, especially childhood sexual abuse, and the disparity between face-to-face interviews vs. self-administered ones. It seems that attitudes, beliefs, close proximity, and emotional attachment likely have a role in marital infidelity motivations and outcomes when an affair occurs.

Longitudinal research literature shows that lower premarital satisfaction, lower sexual satisfaction, lower positive communication, and higher negative communication were predictive of infidelity in married men (Allen et al., 2008). Higher premarital sexual satisfaction, lower positive communication, and higher negative communication predicted infidelity in married women (Allen et al., 2008). Based on Allen et al.'s (2008) research, for women, although premarital sexual satisfaction can be high, if there is a decrease in positive communication and an increase in negative communication, then the ground for infidelity is more fertile. In contrast, men who have lower premarital sex satisfaction, with everything else being lower, are more likely to have affairs. The literature provides some explanation but does not present a definitive pretext for infidelity's motivational factors. It does not address post-infidelity psychological symptoms; however, other research attempts to fill the gaps.

Selterman et al. (2019) researched more distinct motivations behind infidelity with 495 participants in the latest research data regarding infidelity's motivational facts. Selterman et al.

(2019) conducted a 77-item questionnaire to capture a more extensive range of potential motivations for infidelity. Examples of those items are: "Acceptable: I witnessed others around me (e.g., friends) having affairs, and that seemed to make it more acceptable in my mind." "Person: I am the kind of person who cheats; it is part of my personality." "Grow-Up: Growing up, I saw older people (e.g., parents, relatives) having affairs, and that seemed to make it more acceptable in my mind." The research showed a correlation between personality and infidelity motivation and a correlation between attachment insecurity with motivations of neglect, low commitment, low self-esteem, anger, and a lack of love (Selterman et al., 2019). The research also purported that men were more likely motivated to commit infidelity based on sexual desire, situational issues, and sexual variety vs. women who were motivated by neglect (Selterman et al., 2019). This is consistent with the overall literature of women being more motivated emotionally and men by sexual desire and opportunity (Glass & Wright, 1992). Selterman et al. (2019) suggested that their data for implicit beliefs imply that an individual's mindset regarding relationships is predictive of their motivation(s) to commit infidelity. Individuals with "high growth beliefs" believe quality relationships take time (Selterman et al., 2019). Because of those beliefs, those who hold them are less likely to commit infidelity because of relationship dysfunction (Selterman et al., 2019).

Sensation-Seeking, Attachment Anxiety, and Infidelity Typologies Sensation-Seeking

Sensation-seeking appears to be a motivational factor for infidelity for both sexes based on hypothetical research scenarios, but at an increased rate with males vs. females (Lalasz & Weigel, 2011). Individuals who scored high on the Brief Sensation-Seeking Scale (BSSS-4) for general sensation-seeking were predictive of engaging in hypothetical sexual infidelity (Lalasz &

Weigel, 2011). Motivation for infidelity has grown in social media, with lower marital satisfaction and higher engagement in social media affairs in a small portion of marriage and cohabitating couples (McDaniel et al., 2017).

Attachment Anxiety

Attachment theorists purport that high attachment anxiety from either spouse is predictive of infidelity in a small number of marriages, and there were no discrepancies between both sexes; attachment avoidance negatively correlates with infidelity (Russell et al., 2013). That negative correlation is interesting because attachment anxiety and infidelity increasingly show a positive correlation with infidelity. Another aspect of attachment anxiety and infidelity is the mediation of "fearing being single" across ages, sex, and length of relationship with infidelity (Sakman et al., 2021). That suggests that the higher the attachment anxiety based on the fear of being single, the higher the probability that infidelity will occur (Sakman et al., 2021). The implication for that specific study focuses on preventing infidelity by exploring attachment anxiety to develop a secure attachment before infidelity (Sakman et al., 2021). Still, that literature does not explore other psychological symptoms after infidelity for either partner. Prevention is one avenue, but post-infidelity treatment was not addressed, even considering attachment anxiety.

Infidelity Typologies

Girard et al. (2020) proposed seven infidelity typologies rooted in emotion-focused therapy in a study concerning infidelity typology. Those typologies are the protest affair, the come and get me affair [sic], the romantic fantasy affair, the burned-out affair, the hedge fund affair, the power player affair, and the compulsive affair. This study's typology showed that individuals with higher attachment anxiety condoned multiple affairs, in contrast to

those with lower attachment anxiety (Girard et al., 2020). More specifically, among the typologies, the come and get me affair, hedge fund affair, and protest affair had higher attachment anxiety vs. the compulsive affair, burned-out affair, and power player affair (Girard et al., 2020).

Additionally, individuals with romantic affair typologies had higher attachment anxiety than the power-player affair individuals (Girard et al., 2020). The literature is mixed because people engage in infidelity for different reasons with no one-size-fits-all motivation from a social-behavioral science perspective generalizable to heterosexual marriages. However, exploring the correlating factors may inform therapy treatment for marital infidelity. Girard et al. (2020) addressed attachment anxiety and other psych symptoms for the motivations of affairs and recommended attachment-based interventions by conceptualizing the affair as an attachment-based issue. Girard et al. (2020) are missing a key and perplexing point that they made in this study, represented in the following statement:

If a couple presented to therapy after an affair, the therapist might be able to assess for the function of the affair (closeness vs. distance), which would guide treatment and frame the affair in a way that externalized it as a relational issue rather than a personal attack.

(p. 132)

That statement is perplexing because it is not specific concerning who would likely see the treatment of an affair as a personal attack. Are Girard et al. (2020) referring to the spouse who committed infidelity or the spouse betrayed by infidelity? Girard et al. (2020) research findings conflict with other replicated research literature that suggests infidelity is difficult to treat according to marital therapists (Gordon et al., 2005; Snyder et al., 2008; Whisman et al., 1997). Girard et al. (2020) assumptions contradicted previous survey research, such as Vaughan's

(2010) study of 1,083 spouses who were betrayed by an affair. That survey reported that 57% of spouses betrayed by infidelity were mainly frustrated because their therapists were not focused on marital infidelity but instead were focused on general marital problems (Vaughan, 2010). That suggests that Girard et al. (2020) recommendation to treat the affair as an external relationship issue from an attachment perspective vs. an internal issue will likely compound the difficulties of an affair rather than treat them. It suggests that infidelity is just a symptom or reflection of marital problems. For example, one respondent to Vaughan's (2010) survey stated:

Our counselor was trained in family systems, and most of the time was spent on family of origin, etc. While I think this was helpful, I expected more discussion on the affair, which was still ongoing. I have suffered a major depression over the last year and am still in personal therapy. (p. 49)

Many respondents to Vaughan's survey had similar statements and were much more direct with therapist criticism, as evidenced by the following statement:

Therapists needs [sic] to deal directly with the affair—not just general marital problems. Our marriage was in trouble prior to the affair. So [sic] he sees it as we "both" were wrong, so let's just forget it. . . . I see a tremendous difference in [sic] marriage problems and sleeping with someone. (p. 47)

Like other studies that evaluate infidelity's motivational factors and acknowledge some form of anxiety before an affair, it does not address the gap in the literature concerning infidelity as a trauma or the emotional or psychological consequences post-infidelity.

Post-Infidelity Stress Disorder, Trauma, and Emotional/Psychological Symptoms Post-Infidelity Stress Disorder and Trauma

Infidelity has been perceived by many as a betrayal of commitment. Betrayal in many forms may break trust in various relationships. Still, the betrayal of infidelity or adultery has farreaching emotional, mental, physical, and spiritual consequences for many couples (Rachman, 2010). PISD can manifest in a variety of ways. Post-infidelity stress can replicate from the betrayed spouse to the cheating spouse, which requires a closer look at the dynamics to inform treatment (Rachman, 2010). Glass (2004) observed that affairs impact the marriage, which can initiate many reactions (e.g., a loss of innocence, willful avoidance, preoccupation, denial, ignorance, relief). Some husbands and wives avoid acknowledging their gut intuition that an affair is occurring out of fear that their spouse will choose their affair partner (Glass, 2004, p. 70). Others might find relief when their spouse is having an affair because they are not under pressure to sexually accommodate their spouse, while other betrayed spouses have no clue that their spouse is having an affair. (Glass, 2004, p. 70). Once the affair is revealed, the consequences are often devastating, especially if the cheating spouse initially denies the affair; it is often experienced as an injury inside a traumatic injury (Glass, 2004, p. 83).

Some of the more devastating reactions after the revelation of an affair from the betrayed spouse, which sometimes moves in a rollercoaster fashion, are the following: traumatic shock, the state of feeling betrayed, numbness, tears, rage, adrenaline surge, muscle tension, increased heart rate, anxiety, aggression, panic, irritability, obsessing (rumination), and interrogating (Glass, 2004, pp. 89-90). Reactions from the cheating spouse include defensiveness, openness, aggression, ambivalence, rage, resentment, impatience, and grief (Glass, 2004, pp. 91-92). The revelation of infidelity triggers a more severe traumatic reaction in some betrayed spouses than

others because of the following suggested factors surrounding traumatic reactions: how the affair was revealed, the extent of shattered beliefs, personal and situational vulnerabilities, preexisting stressful life events, the phenomena of the betrayal, and whether the affair (betrayal) continues (Glass, 2004, pp. 94-104). Other factors to consider regarding the severity of the traumatic reaction to infidelity are contingent on how deep or emotionally involved the unfaithful spouse was with their affair partner, the length of the affair, the identity of the affair partner, emotional and financial investment with the affair partner, discretion, and perceived continuing threats of infidelity (Glass, 2004, pp. 94-104). Some of the reactions listed above are characterized as traumatic; more specifically, the literature has also shown that the betrayed spouse's reactions when there is a threat to psychological safety are parallel to PTSD (Glass, 2004, pp. 137-140; Ortman, 2005). PTSD reactions in injured spouses post-infidelity are expressed in the following ways: an excessive, obsessive need to hear every detail of the affair, hypervigilance, flashbacks, constriction (numbness), feelings of despair, isolation, hyperarousal, intrusion of images associated with the affair, intrusive thinking, self-blame, avoidance, and exhaustion (Glass, 2004, pp. 88-104).

PTSD symptoms are replicated in the literature, though they are limited. For example, in a case study, Dennis Ortman (2005) evaluated spouses traumatized by infidelity committed by their spouse as presented by a specific case study vignette, which described infidelity-related trauma as PISD. The case study presented Donna as a wife who subsequently divorced after uncovering her husband's affair with her best friend. Donna reportedly became consumed with rage and betrayal and had recurrent nightmares of her husband's affair (e.g., her husband in bed with her best friend), depressive symptoms that caused the inability to function at work, helplessness, crying spells, recurrent triggers of the affairs, reexperiencing flashbacks of the

affair, from vibrant to low-energy, numbness, hypervigilance, and irritability (Ortman, 2005). It has been suggested that vulnerabilities to developing PISD are dependent personalities, identities founded 'in love," and childhood abuse, and those with long-established patterns of abusive relationships (Ortman, 2005). PISD is not just a basic reaction to infidelity. PISD seems to disrupt the core of the betrayal and, subsequently, the marriage. Understanding PISD is vital for treatment because even if the marriage is temporarily dissolved, eradicating these symptoms (as in Donna's case) does not necessarily disappear since it profoundly impacts emotional, behavioral, mental, and core belief functioning (Ortman, 2005). As a clinician, being able to treat marital couples and individuals with these symptoms effectively starts with presentation and conceptualization.

Posttraumatic stress symptoms are replicated in unmarried couples who also experienced romantic cheating. Roos et al. (2019) conducted a study that explored whether infidelity-related PTSD symptoms were associated with other psychological health outcomes in 73 unmarried adult participants in a committed relationship who experienced infidelity within five years (Roos et al., 2019). Additionally, the researchers explored whether negative posttraumatic cognitions facilitated the relationship between infidelity-related PTSD symptoms and psychological health, which used PTSD criteria (Roos et al., 2019). Post-infidelity-related PTSD for this study was measured using the Impact of Event Scale-Revised (IES-R) (Roos et al., 2019). The Life Events Checklist-5 was used to verify lifetime exposure to traumatic events meeting DSM-5 Criterion A for PTSD) (Roos et al., 2019). The Perceived Stress Scale was used to measure the past two months' stress, and the Beck Anxiety Inventory was used to measure past-month anxiety (Roos et al., 2019). Depressive symptoms were measured using CES-D, negative cognitions post-trauma were measured using the Post-traumatic Cognitions Inventory, and an unpublished

questionnaire created explicitly for this study named the Stressful Events in Relationship Questionnaire was used to evaluate stressful events about the relationship and infidelity occurrence (Roos et al., 2019). The research suggested that 42.5% of their sample based on DSM-5 criteria for PTSD had met or exceeded the infidelity-related PTSD cutoff score (Roos et al., 2019). Infidelity-related PTSD showed a strong relationship with depressive symptoms, mixed results with perceived stress, and mixed results with anxiety (Roos et al., 2019). Posttraumatic cognitions partially facilitated depressive symptoms but fully facilitated anxiety and perceived stress (Roos et al., 2019). Roos et al. (2019) used unmarried participants when measuring infidelity, which lessens the ability to apply the results to the public, and causality cannot be implied because the research was cross-sectional. Future recommendations from this study are to use more valid instruments to measure DSM-5 criteria for PTSD and more research on the specific types of infidelity (e.g., emotional, sexual) (Roos et al., 2019). Other research regarding committed nonmarried heterosexual couples, in contrast to other literature measuring the betrayed spouse or partner of infidelity, suggested that spouses who engaged (e.g., the betrayer) in infidelity showed more psychological distress than the betrayed partner (Hall & Fincham, 2009).

Other research literature evaluated posttraumatic growth in 123 female participants betrayed in relationships (e.g., marriage), women's perception of relational betrayal (infidelity), and factors that ushered posttraumatic growth (Laaser et al., 2017). Highlighted demographics showed that the population sampled was primarily Caucasian women (95%), all heterosexual, all married, ages 41-50, Christianity as their religion (90%), and the overall sample size of 88% stated religion was critical in their life (Laaser et al., 2017). The research suggested that 60.89% of participants met DSM-5 criteria for PTSD based on many reported forms of infidelity;

posttraumatic growth was significantly and positively correlated with disturbance in core beliefs (Laaser et al., 2017). Married service members, combat-exposed married veterans from Operation Iraqi Freedom and Operation Enduring Freedom who were betrayed by their spouse's infidelity while deployed were evaluated (Kachadourian et al., 2015). Research by Kachadourian et al. (2015) suggested that combat-exposed members during deployment whose spouses committed infidelity presented with higher levels of posttraumatic stress and depressive symptoms in comparison to service members who did not know (only suspected) infidelity (Kachadourian et al., 2015). PISD impacts marriages in various ways and is not just confined to marriages. The literature shows that PISD extends to unmarried committed couples and other mental health symptoms.

Emotional/Psychological Symptoms

Reported infidelity-related psychological symptoms are not just confined to the United States; those symptoms have also been replicated in Pakistan. Azhar et al. (2018) conducted purposive sampling with 200 participants in Pakistan (100 married and 100 divorced), which evaluated the role of moderation between marital status and infidelity with the development of anxiety, stress, and depression. The study also examined the correlation between infidelity and depression, stress, and anxiety between divorced individuals and married couples (Azhar et al., 2018). The study's results showed that marital status moderated depression and anxiety (Azhar et al., 2018). There was a positive correlation between emotional and sexual infidelity and anxiety, stress, and depression in marital couples, which is replicated in other literature (Azhar et al., 2018). Among the divorced participants, the results showed a significant correlation between anxiety, depression, and stress among divorced individuals more so than the married

participants⁶ (Azhar et al., 2018). This study addressed psychological symptoms in a different cultural context, which might cause a conflict regarding external validity for marital couples in Western populations because the research examined a married population in a different country with a different cultural context. Azhar et al. (2018) listed implication(s) for research to focus more on the adult female population, but it is difficult to understand why that would be an implication for treatment because the researchers were unclear. The study provided the sample size resulting from divorced couples vs. marital couples, but it did not provide a detailed breakdown of the results for depression, anxiety, etc., per sex (Azhar et al., 2018). Because those specific data were unavailable, it lessened the external generalizability by sex, which is necessary for treating marital psychological health post-infidelity (Azhar et al., 2018).

Furthermore, that study (Azhar et al., 2018) did not consider nor test PTSD as a symptom related to infidelity.

Depression, anxiety, and low marital satisfaction appear to be a recurring theme, according to the literature. Another quantitative study investigating partner infidelity revelation and major depressive episodes (Whisman, 2016) found that discovering a partner's affair correlates significantly with increased major depressive episodes and lower marital adjustment one year later. Other literature has shown that in heterosexual marriages, wives who discovered their husband's infidelity or other humiliating marital events were six times more likely to be diagnosed with major depressive episodes in contrast to wives who had marital discord but no infidelity or other humiliating marital events (Cano & O'Leary, 2000). The results remained

⁶⁶ There is a discrepancy between the researchers abstract which suggests that there is no significant correlation vs. the actual study, figures, and results section where the offers interpreted not only a correlation, but more than the married participants.

constant even after controlling for a lifetime and familial histories of depression (Cano & O'Leary, 2000).

Shrout and Weigel (2020) conducted a study based on a transactional stress-based theory, which evaluated the effects of infidelity-related stress and negative cognitive appraisals on mental health while also evaluating self-esteem as a moderating role of 232 participants who were cheated on while being in a committed relationship in the prior three months at the time of the study. The study measured infidelity-related stress and used an adapted version of the 16item Break-up Distress Scale, replacing "breakup" with "infidelity." To assess their participants' mental health, Shrout and Weigel (2020) used a Likert scale to measure depression and anxiety symptoms on a scale from one to seven based on the weeks after the revelation of an affair and before the revelation of an affair. The remaining assessment used to appraise depressive symptoms post-infidelity was the 20-item Center for Epidemiological Studies Depression Scale-Revised (Shrout & Weigel, 2020). The study used the 7-item GAD to measure anxiety postinfidelity (Shrout & Weigel, 2020). Finally, the study used a 10-item Rosenberg Self-Esteem Scale to measure self-esteem (Shrout & Weigel, 2020). Shrout and Weigel (2020) suggested that their study found that participants who placed blame and responsibility on their cheating partners correlated with greater infidelity-related stress, which in turn had a strong relationship with increased anxiety and depression.

Additionally, the study suggested that self-esteem was a moderating factor with high self-esteem participants' infidelity-related stress regarding anxiety and depression was weakened (Shrout & Weigel, 2020). The weaknesses of their study are the following: the 90-day window on post-infidelity-related symptoms, it is cross-sectional, the participant pool was of college students, and their sample was of dating relationships, not marriage, which may present a

difficulty in using the term 'infidelity' as part of the framework (Shrout & Weigel, 2020). For future research, the study recommended a participant pool of married participants, participants in long-term relationships, and a study where measurement is of a longer timeframe after post-infidelity for future research. Post-infidelity stress has a reoccurring theme that the betrayal of infidelity is traumatic.

Post-Infidelity-Related Stress on Marriage: Revenge and Repair

Revenge

The discovery of an affair on behalf of the betrayed spouse can provoke diverse reactions due to infidelity-related traumatic stress. Indeed, not all reactions are the same, but it seems that there is a common recurring post-infidelity theme. For example, the literature has shown that some injured by the discovery of an affair have had a rollercoaster of emotions, with some reluctantly but willingly engaging in revenge behaviors toward their unfaithful spouse (Olson et al., 2002). The literature suggests vengeance is an effort to remedy an interpersonal wrong by willingly engaging in aggressive behavior toward the person seen as the offender (McCullough & Hoyt, 2002). Some primary goals of vengeance may include balancing the scales of the offense as a perceived pursuit of justice, moral instruction designed to teach the transgressor a lesson, and revenge for appearance's sake (McCullough & Hoyt, 2002). Vengefulness is usually the result of intense rumination about the offense (McCullough & Hoyt, 2002). Past research has shown the element of revenge in marriage after discovering an affair. For example, Rasmussen and Boon (2014) studied what they conceptualize as the dark triad (i.e., narcissism, Machiavellianism, and psychopathy) of personality traits and romantic revenge using a hypothetical act of infidelity. They found that Machiavellianism is strongly related to revenge (e.g., power, justice, goals). In other hypothetical infidelity research regarding reactions to

discovered infidelity, Bendixen et al. (2018) found a higher urge to commit revenge from those betrayed when sexual infidelity involved both sexes. An earlier study by Shackelford et al. (2002) used a hypothetical forced-choice method for infidelity and found that men are more likely to break up over sexual infidelity, and women are more likely to break up over emotional affairs. Violence has also been a theme as a response to infidelity (Shackelford et al., 2002).

Repair

Qualitative literature purports that marital repair efforts post-infidelity include boundary safety measures such as fixing marital walls that had been broken down due to an affair (Abrahamson et al., 2012). Married couples need high motivation, such as fear of failure, for marital repair and other factors (e.g., support, meaning-making, forgiveness, counseling, gestures of kindness, and mercy) (Abrahamson et al., 2012). O'Connor and Canevello (2019) conducted a study designed to evaluate post-infidelity breakup reaction, recovery, and moving on within the past year with 210 undergraduate participants that consisted of exclusively dating (65%), casually dating (31%), and engaged/married (3.5%) (O'Connor & Canevello, 2019). The researchers used a scale created explicitly for their study called the Recovery Following Infidelity Scale (RFIS) (O'Connor & Canevello, 2019). Additionally, the Posttraumatic Growth Inventory scale (PTGI), the Event-Related Rumination Inventory, the Core Beliefs Inventory, the PCL-5, and the Desirability Scale Short-Form (SDS) were used for their study (O'Connor & Canevello, 2019). The study purported that shattered core beliefs lead to increased intrusive rumination followed by deliberate rumination, which ultimately leads to reframing what the betrayed seek in a romantic partner, distancing themselves from former relationships, and new availability to romantic relationships (O'Connor & Canevello, 2019). The limitations and gaps of the study were the age group, the research was cross-sectional, and the number of married

participants was less than 4%. Overall, there is a significant gap in the literature measuring actual reactions after real infidelity and married participants regarding revenge, repair, or punishment motives.

Religious/Core Beliefs: Infidelity, Transgressions, Repentance, and Forgiveness
Infidelity as a Transgression

Infidelity discovery and post-infidelity reactions possibly impact treatment and marital outcomes, but what does the literature say about religious beliefs and their influence on post-infidelity forgiveness? Infidelity in marriage is a transgression that can traumatize all involved and is very distressing (Chi et al., 2019). Concerning infidelity, forgiveness has a major spiritual component, particularly for religious people. Forgiveness is contingent on the relationship between the transgressor and the transgressed, the actual transgression and the transgressed, and the transgressor and the transgression (Worthington & McConnell, 2019). In Christianity, it is suggested that there is a relationship between God and the victim of a transgression and a relationship between God and the transgressor (Worthington & McConnell, 2019). Christians feel a greater sense of harm when transgressed by another Christian than when maltreatment emanates from a non-Christian (Worthington & McConnell, 2019). In a marriage where a spouse considers marriage a sacred bond and that spouse discovers infidelity, hurtfulness is greater because marriage is meaningfully sacred. Infidelity has now desecrated the marriage (Worthington & McConnell, 2019).

Repentance

What about deep-seated transgressions (e.g., infidelity), religion, forgiveness, and repentance? The literature suggests that repentance of transgressions or sins consists of multifaceted actions and intentions that involve the following: "(a) intellectual regret, (b) regret

over the moral and interpersonal consequences of an action, and (c) the resolve not to repeat the actions in the future" (McCullough & Worthington, 1999). In all three Abrahamic faiths, Christianity, Judaism, and Islam, repentance and forgiveness are two of the central tenets of the faith. For example, in the Abrahamic faith Christianity, the forgiveness of others is mandated and is conditioned on the heavenly Father's (Yahweh) decision to forgive one's sins; repentance does have a component, but forgiveness of others is an absolute requirement (Worthington & McConnell, 2019). The literature suggests in Judaism that the transgressor must repent by asking for forgiveness from the transgressed, making restitution, and then receiving a pardon (Worthington & McConnell, 2019). In Islam, someone transgressed has a right to justice; when the transgressed forgives even though they are rightly entitled to justice, the transgressed receives bountiful blessings (Worthington & McConnell, 2019). Overall, religious people often believe they have the mandate to forgive, but there appears to be a confounding role in religion and the forgiveness of others (McCullough & Worthington, 1999).

Forgiveness

More on forgiveness, Chi et al. (2019) conducted a study focused on inter/intrapersonal mediators of forgiveness after marital infidelity based on a coping and stress framework within the Chinese marital population. The researchers studied emotional and decisional forgiveness in 154 married participants who had recently experienced or were currently experiencing marital infidelity (Chi et al., 2019). The results purported to show that participants with a solidarity personality and the perception of their spouse's reconciliation goal mediated gentle attributions and empathy followed by increased levels of decisional forgiveness, facilitating emotional forgiveness (Chi et al., 2019). Additionally, the results purported to show that the strength of the marriage before marital infidelity was predictive of a higher level of emotional forgiveness (Chi

et al., 2019). This study adds to the literature because it evaluated marital participants who experienced infidelity, their capacity to forgive, and their predictors to forgive their spouse post-infidelity (e.g., having a strong emotional bond pre-infidelity predicts emotional forgiveness). That seemingly contradicts literature suggesting that the extent of shattered assumptions about the marriage after infidelity is why some are more traumatized than others (Glass, 2004, pp. 94-96; O'Connor & Canevello, 2019). Are strong emotional bonds pre-infidelity predictive of higher emotional forgiveness? Chi et al. (2019) also have significant limitations stressing the need for further study (e.g., the population used was Chinese, the Chinese have a collectivist culture, some of the instruments used in this study were standardized for the West, instruments used in this study had not been previously used in the Chinese population, which presents a problem for validity, the research is cross-sectional) (Chi et al., 2019).

Religiosity and Marital Outcomes

In other literature relating to religiosity and marital outcomes, Tuttle and Davis (2015) synthesized data from the study *Marital Instability over the Life Course* (MILC) to investigate the impact of religiosity between longtime married couples and divorced couples (e.g., couples together a minimum of 12 years). The investigators used structural equation modeling and proportional hazard modeling from the MILC data from 1988, 1992, and 1997 (Tuttle & Davis, 2015). The study's findings suggested religiosity decreases, but does not eliminate, the probability of infidelity in marriage and serves as a marginally indirect protective factor against divorce by rising marital joy; marital infidelity did not affect marital stability or divorce (Tuttle & Davis, 2015). One of the limitations the researchers identified in their study was the underreporting of infidelity in the MILC data, which impacts the prevalence of infidelity in the data for the years scrutinized (Tuttle & Davis, 2015).

Treatment for Post-Infidelity Marital Trauma: TBCT and IBCT

TBCT

Infidelity is one of the most difficult marital issues to treat (Gordon et al., 2005). It is suggested that a major difficulty and complexity of treating infidelity is the traumatic nature of infidelity and acknowledging the aggressive emotions from the injured spouse toward the cheating spouse, including rage and internalized emotions of abandonment, shame, and victimization (Gordon et al., 2005). Kristina C. Gordon et al. (2005, 2008) offered treatment for infidelity in marriage with a foundation based on forgiveness models and trauma models in the following three stages: (1) managing shock and damage control, (2) exploring context and finding meaning, and (3) moving on. The first stage of treatment evaluates infidelity's impact individually and on the marriage along with a complete assessment, containment of intense emotions, joint spousal exploration of the affair and its impact, conceptualization of "flashbacks," and the act of expressing remorse from the cheating spouse to the injured spouse's satisfaction (Gordon et al., 2008). The second stage of treatment is a further exploration of variables that contributed to the affair, reducing any residual intense negative emotions and implementing critical behavioral changes for long-term relationship viability (Gordon et al., 2008). The third stage of treatment is focused on the married couple moving past the affair and involves written work by the couple and therapist designed to formulate the understanding of violated assumptions (Gordon et al., 2008). The couple further explores the viability of their relationship and commitment to change (Gordon et al., 2008). Another aspect of this stage may be seeking and giving forgiveness without stipulating reconciliation (Gordon et al., 2008). Forgiveness in this treatment model has the following three components: (a) a realistic, nondistorted balance of the relationship, (b) a release from being controlled by negative affect

toward the participating partner, and (c) a lessened desire to punish the participating partner (Gordon et al., 2008). Gordon et al.'s (2005) treatment model was tested using the case-study method with a married couple who experienced infidelity and a six-month post-termination follow-up (Gordon et al., 2005). The follow-up reportedly found that the couple reported forgiveness, lower depression scores, lower marital distress scores, better marital problem-solving, and marital reconciliation. There have been some case studies regarding this infidelity-specific model, but no known quantitative studies have been completed to date.

Kröger et al. (2012) conducted a small randomized controlled trial with 89 marital couples who experienced infidelity in the last six months; 46 couples were assigned to the treatment group, and 43 couples were assigned to a control group with treatment delayed for three months. The type of therapy used was standardized TBCT for 29 conjoint sessions of 1.5 hours each over three stages with individual sessions for sessions 3 and 4 (Kröger et al., 2012). The TCBT study purported that their treatment helped marriages conquer their PTSD-like symptoms (e.g., intrusion, hyperarousal) (Kröger et al., 2012). There was no improvement in depressive symptoms for the betrayed spouse (Kröger et al., 2012). The study's sample size was small and had large participant dropouts. The study did not assess or measure forgiveness, participant recovery was based on self-rated instruments, and the affairs treated had ended six months before the study. So, there was no way to evaluate whether some PTSD-like symptoms were already declining (Kröger et al., 2012). Relationship satisfaction was insignificant in this study (Kröger et al., 2012).

TBCT and IBCT

Concerning TCBT and IBCT, researchers conducted a five-year follow-up of post-infidelity relationship outcomes (Marín et al., 2014). Some six-month follow-up studies

decreased anxiety and depression and increased couples' satisfaction and forgiveness (Marín et al., 2014). Other studies showed five-year follow-up post-therapy complete infidelity recovery and relationship approval, while others showed continued marriage with lower marital satisfaction (Marín et al., 2014). Additionally, most post-therapy five-year marital therapy follow-up post-infidelity had more than two times the divorce rate than marriages with no infidelity (Marín et al., 2014).

Summary

Infidelity is not a new phenomenon, and its prevalence has increased in both sexes regarding traditional marriage. Although this study adheres to the strict definition of infidelity, which is sex outside of marriage, making the definition exclusive to marriage, the literature has a major discrepancy with how infidelity is defined. Some definitions of infidelity include emotional, romantic bonds, and sexual exchanges via the internet in marriage and committed dating relationships. The conceptual framework is a neurological, biological, cognitive-schemabased, psychological-emotional, trauma, marital trauma, infidelity-related, repair-based, and transgressional-repair-based perspective to understand marital infidelity as trauma in context. The literature shows that although certain themes regarding motivation for infidelity (e.g., low marital satisfaction) tend to reoccur, motives vary, and it is important to understand the nuances to inform treatment. The literature shows some nuances regarding the response to infidelity in marriage but is mostly consistent regarding mental, emotional, and behavioral responses. The limited literature consists mostly of hypothetical infidelity scenarios not exclusive to married couples, insufficient real infidelity situations, and infidelity stress-related symptoms in married participants. The literature is limited regarding marital outcomes (e.g., punishment, revenge) because of infidelity and infidelity-related stress, though there is more literature related to

infidelity-related forgiveness. Literature related to forgiveness for transgressions in religious and non-religious people seems to show that forgiveness is an emotional and decisional process impacted by the type of transgression, the relationship between the transgressor and the transgressed core beliefs, and the amount of anger with rumination used because of the transgression. Though limited, the literature is mostly consistent regarding post-infidelity symptoms or PISD as parallel to ASD and PTSD. Some limited research literature that suggested that the unfaithful spouse has more post-infidelity stress symptoms than the betrayed spouse expands the understanding of infidelity-related trauma symptomology. Treatment model considerations for infidelity in the literature are thin, with no substantial quantitative studies for marital infidelity-specific therapy and no clinical consensus on what is effective marital infidelity-specific treatment. Not understanding PISD as trauma on par with PTSD presents a research gap and problem that can be detrimental to effective treatment that must be answered. PISD must be understood, recognized, accepted, and conceptualized as a legitimate trauma not only for effective treatment but for legitimacy and validation to the individuals and marriages that were or are currently struggling with their infidelity-related experience.

CHAPTER THREE: METHODS

Overview

This quantitative correlational study used surveys and established measures to evaluate PISD and marital outcomes for participants who had experienced infidelity in their marriage. Quantitative methods such as the survey method were chosen for this study to fill the gaps in the literature regarding PISD and marital outcomes to inform treatment for treating infidelity in married couples as a marital trauma. Additionally, this study measured the possible relationships between PISD and other variables regarding marital outcomes using online assessments and survey methods. Chapter 3 addresses this study's design, research questions, hypothesis, participants and settings, procedures, data analysis, and summary.

Design

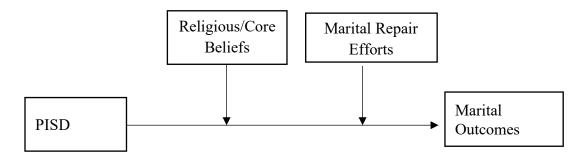
The primary function of survey research is to explain, explore, and describe the phenomenon (Heppner et al., 2016). Survey research is designed to study a population and describe the findings by asking standardized questions related to the study's research questions (Heppner et al., 2016). The researcher chose a cross-sectional design because of time constraints. Quantitative methods that are descriptive, explanatory, and correlational were chosen as the designs for this study. Descriptive research provides basic information about a phenomenon, and explanatory research attempts to identify variables that can explain the event of a phenomenon (Heppner et al., 2016). This study utilized surveys and assessments. Survey research was selected for this study because it allowed research variables to be evaluated and described and explained relationships between the phenomena of PISD and marital outcomes. Survey research can either be longitudinal (e.g., changes over time) or cross-sectional (Heppner et al., 2016).

Research Questions

RQ1: Do religious/core beliefs and marital repair efforts moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate?

Figure 3

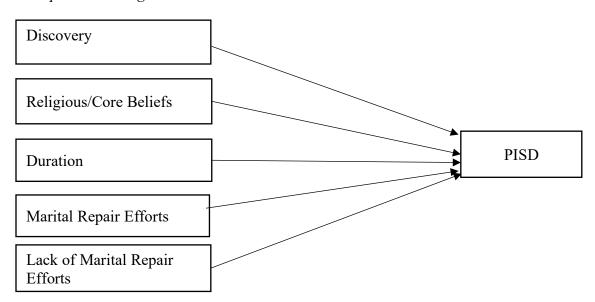
Moderation



RQ2: Do any of the following factors have a relationship with the level of PISD in the injured spouse: how the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts?

Figure 4

Multiple Linear Regression Predictors



RQ3: Is there a statistically significant difference in the positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD?

RQ4: Is there a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire between participants with PISD and participants who do not have PISD?

Hypotheses

This descriptive correlational study expanded on Dennis Ortman's (2005) case study on PISD and Shirley Glass's (2004) research on infidelity, post-infidelity-related symptoms, and marital infidelity recovery. Therefore, this correlational study clearly assessed PISD and related infidelity distress symptomology and surveyed marital satisfaction/dissatisfaction, religious/core beliefs, and marital infidelity repair attempts (or lack thereof) within a sample of participants who experienced marital infidelity within the last month to 1.5 years and evaluated specific outcomes of those marriages for the injured spouse. The following are the directional/alternative hypotheses and their corresponding null hypotheses for this study:

RQ1: Do religious/core beliefs and repair efforts moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate?

H₀1: Religious/core beliefs and marital repair efforts will not moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate post-marital infidelity.

- H_a1: Religious/core beliefs and repair efforts will moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate post-marital infidelity.
- **RQ2:** Do any of the following factors have a relationship with the level of PISD in the injured spouse: How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts?
- H₀2: How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts will not be associated with the PISD level in the injured spouse.
- H_a2 : How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts will have a relationship with the PISD level in the injured spouse.
- **RQ3:** Is there a statistically significant difference in the positive marital outcomes of healing, forgiveness, marital repair, or benevolence in participants with PISD and participants who do not have PISD?
- H₀3: Participants without PISD will not have a statistical difference in positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD.
- **Ha3:** Participants without PISD will have a statistical difference in positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD.

RQ4: Is there a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD?

H₀4: Participants will not have a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD.

Ha4: Participants without PISD will have a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD.

Participants and Setting

The participants for this study were selected from people living in the Southeast, West, Southwest, Midwest, and Eastern parts of the United States. Participants had diverse ethnicities, socioeconomic statuses, religions, and a minimum age of 21 with no maximum age. Due to the nature of this study, participants must have been heterosexually married for at least one month and experienced infidelity in their marriage within the 30-day to 18-month timeframe. The minimum sample size for this study was determined by selecting the largest required sample size of these three calculations, which was 186 individual participants, as shown in Figure 5. The sample size was calculated by determining the power size using G*Power analysis for the confidence level (Faul et al., 2009), which was 95%, and the effect size was 0.15 for multiple linear regression with four predictors (Table 1). The minimum sample size was also considered for moderation analysis: the power size was 95%, the medium effect size was 39%, and the sample size was 186 (Table 1). The G*Power analysis for the confidence level for the multivariate analysis of variance (MANOVA): special effects and interactions were 85%, the

effect size was 0.0625%, and the sample size was 139 (see Figure 6). Overall, this investigation used the G*Power analysis, which required the largest sample size for moderation.

Figure 5G*Power Analysis Multiple Regression

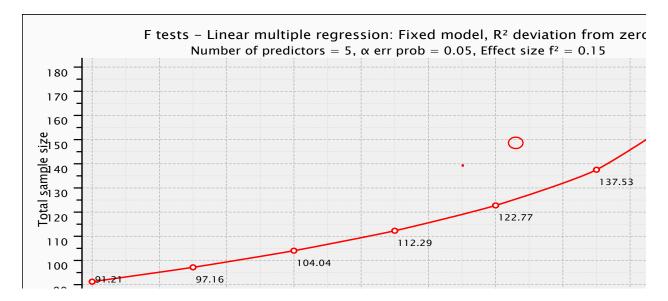
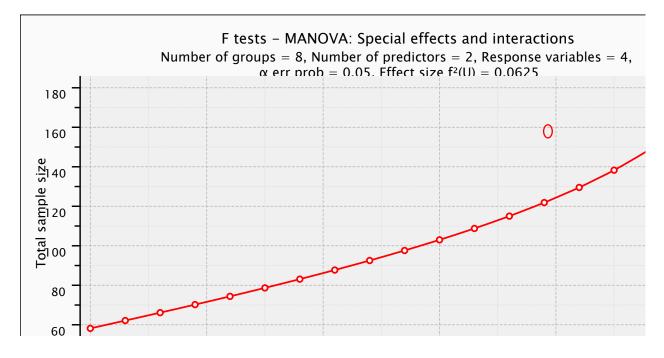


Table 1

Type I Error Rates and Empirical Power for Model 2

			Sample Size						
Test	Regression Coefficients	50	100	200	500	1000			
first	.00	.000	.000	.000	.000	.001			
first	.14	.006	.032	.200	.798	.988			
first	.39	.521	.942	1.000	1.000	1.000			
first	.59	.950	.999	1.000	1.000	1.000			
second	.00	.000	.000	.000	.000	.001			
second	.14	.005	.025	.170	.784	.987			
second	.39	.488	.937	1.000	1.000	1.000			
second	.59	.943	.999	1.000	1.000	1.000			
boot	.00	.002	.000	.001	.001	.002			
boot	.14	.024	.099	.348	.880	.993			
boot	.39	.630	.950	1.000	1.000	1.000			
boot	.59	.964	1.000	1.000	1.000	1.000			
bc	.00	.005	.003	.002	.004	.009			
bc	.14	.049	.175	.460	.912	.993			
bc	.39	.706	.962	1.000	1.000	1.000			
bc	.59	.970	1.000	1.000	1.000	1.000			
bca	.00	.004	.003	.002	.004	.009			
bca	.14	.050	.174	.461	.912	.993			
bca	.39	.705	.962	1.000	1.000	1.000			
bca	.59	.970	1.000	1.000	1.000	1.000			

Figure 6G*Power Analysis MANOVA



Recruitment

Heterosexual married or formerly married participants who experienced infidelity while married were voluntarily recruited from several universities, different organizations, radio advertisements, and social media. A website through Qualtrics was created specifically for the study of recruitment, qualification criteria, and a link to the recruitment website to complete the quantitative surveys. This study does not purport to provide any significant benefit for participation. Qualification for participation in this study required participants to have been heterosexually married when the infidelity occurred (even if they were in the process of divorce) and experienced infidelity within the last 30 days to 18 months of the recruitment announcement. The participants must have been traditionally married (one husband and one wife), heterosexual, biologically male and biologically female (i.e., XX and XY), married at least one month, and be the minimum age of 21 with no maximum age. Participants who had been officially divorced

from their spouse were qualified if the divorce was related to the specific marriage in which infidelity was discovered within the last 30 days to 18-month timeframe at the time of the survey announcement. Participants with specific conditions diagnosed as pre-infidelity-related were excluded. Specific conditions are listed under the prescreening criteria.

Prescreening

Participants were prescreened before the survey. Participants who met the exclusion criteria were automatically disqualified. The following were the disqualification criteria for this study: polygamous marriage, same-sex marriage, transgender/transexual/gender dysphoria identification, under the age of 21, married less than one month, or infidelity that exceeded the predetermined timeframe. Additionally, automatic disqualification occurred if there had been a diagnosis based on DSM-5 of the following preceding infidelity discovery/exposure/suspicion: all schizophrenia and other psychotic disorders in that category (except brief psychotic disorder), neurocognitive disorders (e.g., Alzheimer's, dementia), and bipolar and related disorders (Appendix A). While it is true that infidelity-related stress symptoms can be true for candidates who have the conditions listed above, screening for certain psychological disorders was included to minimize confounding variables so that PISD and other variables could be accurately measured. This study reduced threats to construct and external validity by measuring what this study purported to measure.

Instrumentation

The PCL-5

The PCL-5 (PTSD Checklist for DSM-5) is a 20-item self-report measure that evaluates PTSD symptoms, screens for PTSD and PTSD severity, and screens symptoms post-treatment based on DSM-5 criteria. The PCL-5 can be completed over the phone or online; this study used

the online version. The PCL-5 measures PTSD symptoms for the past 30 days or the last week and assists in making a provisional PTSD diagnosis. Participants rate the PCL-5 on a Likert-type scale from 0-4 (e.g., Not at all-0, A little bit-1, Moderately-2). There are three PCL-5 formats: the PCL-5 without the Criterion A verification component, the PCL-5 with extended Criterion A assessment, and the PCL-5 with LEC-5 and extended Criterion A assessment (National Center for PTSD, 2021).

A severity of symptoms score from 0-80 is obtained by scoring the sum of an item in each given cluster. The PCL-5 is a public domain instrument used to diagnose PTSD provisionally based on criteria with a suggested cutoff score between 31-33 or higher, which qualifies for provisional PTSD diagnosis (National Center for PTSD, 2021). A sample question of the PCL-5 is as follows: "In the past month, how much were you bothered by repeated disturbing and unwanted memories of the stressful experience?" The PCL-5 without Criterion A can be used when other methods assess trauma exposure. This study used PCL-5 without Criterion A because the infidelity-related trauma exposure (Criterion A) was verified by the demographic screening and another instrument utilized by this study (Appendix B). The instructions have been adopted using the original PCL-5 language and added clarification that the traumatic exposure event the participants are rating is infidelity exposure/discovery; received permission from the publisher to modify instructions as needed. This instrument measured participant infidelity-related PTSD, called PISD, for research questions one and two. The PCL-5 scores have high internal consistency of $\alpha = .95$ and strong internal consistency for all four subscales α 's > .79 (Ashbaugh et al., 2016), test-retest reliability of r = .82, convergent validity of rs = .75 to .85, and discriminant validity of rs = .31 to 0.60 (Blevins et al., 2015).

Help for Therapists and Their Clients in Dealing with Affairs

Help for Therapists and Their Clients in Dealing with Affairs is a 35-item survey created by Peggy Vaughan (1998, 2010) designed to discover elements involved in whether marriages will survive after an affair/infidelity has taken place along with factors facilitating recovery of the betrayed spouse after infidelity. This instrument measured the variables discovery (of the marital infidelity), the duration (of the marital infidelity/affair), marital outcomes healing and forgiveness for research questions 2-4. The original 1998 survey in another study reported Cronbach internal consistency of α = .79 (Shelton, 2003). The replicate 2010 survey showed statistically significant reliability results (p < .001) on all eight hypotheses using Chi-square tests (Vaughan, 2010). Sample items from the survey include the following: Did you suspect an affair? | How did you find out about the affair? | Have you healed? This study used items 6 and 14 from Vaughan's 1998 survey (as adopted by Shelton, 2003) and items 4, 6, 7, 12, and 13 from her 2010 survey because there is a slight variation between certain questions in the two surveys. This adopted version omitted six items concerning children and counseling unrelated to the research variables, bringing the survey total to seven items.

Transgression-Related Inventory (TRIM-18)

The Transgression-Related Inventory (TRIM-18) is an 18-item self-report inventory designed to assess an individual's motivational changes from negativity to forgiveness (McCullough et al., 2006). This instrument measured the participant's marital outcomes post-infidelity for research questions 1, 3, and 4. Scores and categories from this instrument were combined with this study's other marital outcome measures. Scoring instructions for the TRIM-18 require items for each subscale to be added based on how the participant rated each item on a Likert scale from 1-5 (e.g., Strongly disagree [1], Agree [2], Neutral [3], Agree [4]). To evaluate

motivational changes, this inventory has an Avoidance subscale, consisting of seven items (i.e., 2, 5, 7, 10, 11, 15, and 18) that assess motivation to avoid a transgressor(s), a five-item (i.e., 1, 4, 9, 13, and 17) Revenge subscale assessing the motivation to seek revenge, and a six-item Benevolence subscale assessing benevolence motivation (i.e., items 3, 6, 8, 12, 14, and 16) (McCullough et al., 2006). Some sample items of the TRIM-18 consist of the following: I'll make him/her pay. | I am avoiding him/her. | I want to see him/her hurt or miserable. For this survey, the instructions adopted the language to reflect "spouse" or "former spouse" who hurt the participant instead of "person" who hurt the participant for context. The TRIM-18 Avoidance and Revenge subscales reportedly have replicated high internal consistency ($\alpha \ge .85$), mild test-retest stability ($rs \approx .50$), and construct validity (McCullough et al., 1998, 2001). The Benevolence subscale reportedly has high reliability (McCullough et al., 2003; McCullough & Hoyt, 2002) (Appendix C). The author granted written permission to use the TRIM-18.

The Religious Commitment Inventory–10 (RCI-10)

The Religious Commitment Inventory–10 (RCI-10) is a 10-item instrument that measures religious commitment to the participant's religious/core beliefs (Worthington et al., 2012). This measure originally had 17 items (RCI-17) and is based on Everett Worthington's theory of religious values (Worthington et al., 2003). This study only used three items from the RCI-10, statements 4, 5, and 7. The RCI-17 has a high internal consistency of α = .94 (Worthington et al., 2003). The internal consistency for the RCI-10 is α = .94 for the full scale, α = .93 for the Intrapersonal Religious Commitment subscale, and α = .87 for the Interpersonal Religious Commitment subscale (Worthington et al., 2003). Pearson's correlational coefficient between the two subscales is r(154) = .72, p < .001 (Worthington et al., 2003). Test-retest reliability after three weeks for the complete scale was .87, Intrapersonal Religious Commitment was .86, and

Interpersonal Religious Commitment was .83 (Worthington et al., 2003). Regarding construct validity, the full scale's construct validity was 60.93, and the criterion validity for the full scale was .70.

The ten items are measured from 1 = not at all true of me to 5 = totally true of me.

Sample items for the RCI-10 are: "I spend time trying to grow in understanding of my faith. |

Religion is especially important to me because it answers many questions about the meaning of life. | My religious beliefs lie behind my whole approach to life. | Religious beliefs influence all of my dealings in life. | It is important to me to spend periods in private religious thought and reflection. | I make financial contributions to my religious organization." Scores and categories from this instrument were combined with other moderation and predictor variables for marital outcome measures of this study for research question two and the relationship for PISD in research question one (Appendix D). Written permission for use had been granted by the author.

Relationship Repair Strategies Scale

RRSS is a 7-point Likert scale of 24 items created to evaluate an individual's ability to cope when deception is discovered in their relationship (Aune et al., 1998). For the purposes of this study, deception is infidelity, and the relationship is the marriage that was explicitly listed in the directions. This instrument measured post-infidelity repair attempts. The ability to cope is labeled and scored by selecting either "not relevant" or "very relevant" when assessing whether the respondent's spouse attempts to repair the damage to the respondent caused by deception (Aune et al., 1998). This research used the RRSS as adopted by Shelton (2003), which has 11 items (the 12th item was redundant and is covered in a different survey), which are labeled (as in the original) and measured by the following strategies: truth-telling, excusing the behavior, justifying the behavior, refusing/denying, avoiding/evading, apologizing, soothing and

ingratiation, impression management/image manipulation, invoking the relationship, working on qualities of the relationship, and performing relational rituals. Shelton's (2003) adopted version of RRSS slightly changed one of the items to reflect the context of infidelity and was modified from measuring repair responses from the deceiving spouse to measuring the betrayed spouse's perception of effectiveness or lack thereof from the repair attempt of their spouse (e.g., I told the truth vs. My spouse told the truth). Other modifications include, instead of rating relevance between two statements per item, there is only one statement per item to rate (Shelton, 2003).

Sample items of the RRSS are: "My spouse told the truth from the time the extramarital involvement was discovered or disclosed and continued to tell the truth. | My spouse tried to make me see that he/she had a very good reason for doing what he/she did. | My spouse talked about extramarital involvement but withheld or omitted some information." The reliability of the RRSS Cronbach alpha ranges from .60 to .84 (Aune et al., 1998; Shelton, 2003). Scores and categories from this instrument were combined with other moderation variables for the marital outcome measures of this study for research questions 1, 3, and 4. This instrument was used to measure the association with PISD in research question two (Appendix E). Written permissions to use this instrument as adopted had been granted by the author.

Weiss- Cerretto Marital Status Inventory (MSI)

The Weiss-Cerretto MSI is a 14-item measure designed to assess proneness to divorce and reportedly has high validity and reliability (Gottman & Gottman, 2017). This instrument reportedly has high discriminant validity (Weiss & Cerretto, 1980). The format is in the form of true or false questions and the year it happened. The true scores of this measure are calculated with the cutoff score being four or more. This instrument measured the post-infidelity marital outcomes of the participants for research questions 3-4. This study only used 9/14 items: 1, 3, 4,

6, 9, 10, 11, 12, and 14. The instructions explicitly asked participants to measure their relationship status post-infidelity. For example, "I have made specific plans to discuss separation (or divorce) with my partner. I have considered what I would say: True | False | Year [sic]" (Appendix F). The author had granted written permission to use this instrument in any way needed.

Procedures

This study began after receiving institutional review board (IRB) approval from Liberty University to elicit participants and the necessary approval for the instruments used in this study. Approvals for the instruments used in this study are in Appendix I. Next, the project was created and administered using Qualtrics for the website and survey, including the initial screening, demographic questionnaire, and instruments. Next, the researcher corresponded with each additional university and site used for advertising and recruitment for the study and received additional IRB approvals from the universities that required it for recruitment; sample correspondence is located in Appendix J. Advertisement and recruitment were conducted at several universities in the United States, radio, social media, and the Faith and Healing Marriage & Family Therapy website for the participant criteria following site approvals. Participants recruited were directed to the secure website via a link or QR code in the recruitment flyers, where participants first signed a consent form that described the expectations of the research study, confidentiality, and understanding that their identity would remain anonymous (participants were assigned a code). The consent form outlined that the risks are no more than those encountered in daily life. Participants completed the initial qualification screening with full informed consent and an electronically coded signature for privacy. The participants who passed the initial screening continued the process and were informed they had ten calendar days to

complete the survey. Participants disqualified during the initial screening were immediately notified with a "thank you notice of discontinuance" and a reiteration of their anonymity. Upon participant completion of the survey, the researcher ensured that the data were complete and did not include personal identifying information such as the IP addresses of the participants. After data verification, the data from Qualtrics were exported and downloaded via the Excel spreadsheet and saved on an encrypted hard drive.

Data Analysis

Data Screening

After completing the surveys, data were securely exported from Qualtrics to IBM SPSS and IBM SPSS PROCESS macro and screened for errors, inconsistencies, missing values, missing values, and outliers for data analysis. This study's data analyses were PROCESS model 2 (Hayes, p. 584), multiple linear regression, and MANOVA: special effects and interactions. The sample size was determined by calculating the power size for multiple linear regression (Figure 5), which is $1 - \beta = 0.85$, predictors = 4, effect size $f^2 = 0.15$, and error probability $\alpha =$ 0.05. MANOVA: special effects and interactions number of groups = 8, number of predictors = 2, response variables = 4, error probability $\alpha = 0.05$, effect size $f^2(V) = 0.0625$, and power size 1 $-\beta = 0.85$. Moderation analysis via Hayes PROCESS model 2 (Hayes, 2018, p. 584) was used to explore variables between PISD (predictor), religious/core beliefs (moderator), marital repair efforts (moderator), and marital outcomes (dependent variables that are listed in) in Ha1 and RQ1. Moderation is a term identical to interaction (Warner, 2013, p. 421) that impacts the strength or direction of the relationship between independent and dependent variables (Heppner et al., 2016, p. 300). Multiple linear regression was used for RQ2 and Ha2 for predictor variables: the marital infidelity discovery method, religious/core beliefs, marital repair efforts, or

duration of marital infidelity with PISD level (criterion variable). Multiple linear regression is used when more than one predictor variable is involved in predicting the outcome variable (Warner, 2013, p. 547). MANOVA: special effects and interactions were used for RQ3-RQ4 and Ha3-Ha4 to verify any statistical significance between the PISD group and the non-PISD group regarding specific marital outcomes. MANOVA is used when the investigator wants to compare multiple outcome variables between groups, incorporating intercorrelations among the outcome variables (Warner, 2013, p. 780).

Assumption Testing

Assumptions must be made when using multiple regression or a moderation model, but violating assumptions can sometimes harm inferences (Hayes, 2018, p. 71). One of the most meaningful assumptions in testing is linearity because a violation of linearity endangers the regression coefficient interpretation and makes it meaningless (Hayes, 2018, p. 71). To that end, assumptions in this study were tested using SPSS, which tested for normal distribution, linearity, homogeneity of variance of the residuals, and homogeneity of regression slopes. Assumptions concerning MANOVA were first checked for univariate normality by using the Kolmogorov-Smirnov statistic. Multivariate normality with bivariate scatterplots was checked.

Summary

Chapter 3 provided an in-depth analysis of the research questions, hypotheses, research design, participant sample, recruiting, instrumentation, and data analysis for PISD and marital outcomes. This investigation addressed the gaps in the literature concerning the relationship between PISD and marital outcomes and whether the religious/core beliefs of the injured spouse and repair efforts by the offending spouse moderate that relationship. This research addressed the PISD level in the injured spouse and its predictors. This study addressed the gap by evaluating

injured spouses with PISD and those without PISD to determine whether there was a disparity between the groups' positive and negative marital outcomes to inform future infidelity therapy treatment models or modify existing marital infidelity treatment models to include the trauma component.

CHAPTER FOUR: RESULTS

Overview

This chapter thoroughly presents statistical findings measures on PISD and marital outcomes for participants who had experienced infidelity in their marriage. In this quantitative study, SPSS was used to investigate PISD and specific marital outcomes in various ways. One way the relationship between PISD in the injured spouse and specific marital outcomes was evaluated was through moderation, with the variables religious/core beliefs and marital repair investigated as moderators. This study investigated the marital infidelity discovery method, religious/core beliefs, the duration of the marital infidelity, marital repair efforts, and lack of marital repair efforts as predictor variables concerning the PISD level in the injured spouse. Additionally, this study evaluated differences in positive and negative marital outcomes with participants with and without PISD. Chapter Four begins with descriptive statistics pertaining to this study (e.g., sex, age, religious orientation, previous diagnostic history, marital status). Following descriptive statistics, the data results are presented in Chapter Four.

Descriptive Statistics

The demographic survey (located in Appendix A) was used to collect essential data related to age, sex, religious identification, marital status, and mental health diagnostic history. The descriptives presented provided a greater understanding of the background of the participants relative to the study. The participants' demographic data provided a more holistic context of the population before evaluating the results. Other descriptives of specific instruments are included as well.

Participant Demographics

The participant size for the study was n = 202. The original participant size was 242. Through data screening, 40 participants were removed due to missing data. After removal, with complete data screening criteria, the final sample size was n = 202 participants.

Sex and Age

Of those participants, the top three percentages based on age range were 21-29 (35.1%), 30-39 (33.7%), and 40-49 (21%). The sex of the participants was 45.5% male and 54.5% female. Please see Table 2 for the summary of descriptives regarding the frequency for age and Table 3 for the summary of descriptives regarding the percentages for sex.

Table 2

Age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
21-29	71	35.1	35.1	35.1
30-39	68	33.7	33.7	68.8
40-49	43	21.3	21.3	90.1
50-59	17	8.4	8.4	98.5
60 and over	3	1.5	1.5	100.0
Total	202	100.0	100.0	

Table 3
Sex

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Male	92	45.5	45.5	45.5
Female	110	54.5	54.5	100.0
Total	202	100.0	100.0	

Religious Identification

The religious identification frequency shows that participants who identify as Christian accounted for 70.8% of the participants, followed by atheists at 13.4 %, and the third highest is

agnostic at 6.4% (Table 4). Regarding the frequency of specific Christian denominations, the most commonly identified denomination was Catholic, with 56 participants. Pentecostal and Baptist denominations each had 11 participants (Table 4). The third highest frequency related to Christian denominations was Apostolic and Seventh Day Adventist, with six participants each (Figure 7).

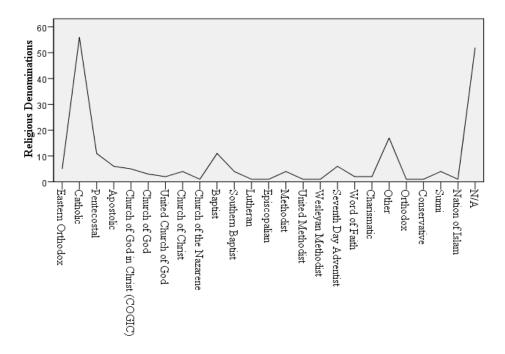
Table 4

Religious Identification

	Frequency	Percent	Valid Percent	Cumulative Percent
Christian	143	70.8	70.8	70.8
Jewish	2	1.0	1.0	71.8
Muslim	5	2.5	2.5	74.3
Hindu	4	2.0	2.0	76.2
Mormon	1	.5	.5	76.7
Atheist	27	13.4	13.4	90.1
Agnostic	13	6.4	6.4	96.5
Other	7	3.5	3.5	100.0
Total	202	100.0	100.0	

Figure 7

Religious Denominations

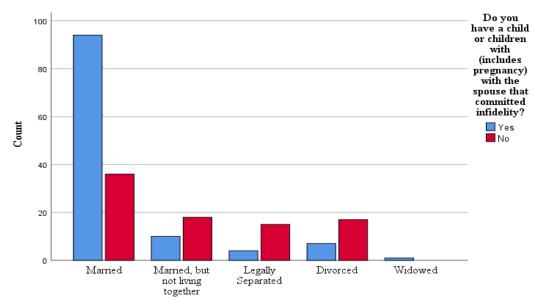


Marital and Parental Status

Participants' marital status at the time of taking the survey frequencies showed that 64.4% were married, 13.9% were married but were not living together, and 11.9% were divorced. Regarding parental status, 104 participants who were married, including couples living apart, had children with their spouses who committed marital infidelity. Seven participants were divorced and had children with their ex-spouse who committed infidelity (Figure 8).

Figure 8

Marital and Parental Status



Current status of marriage to the snouse who committed infidelity:

Prior Diagnosis History

Participants were asked if they had specific diagnoses prior to discovering their spouse's marital infidelity (e.g., PTSD, ASD, borderline personality disorder). Of the 202 participants, ten were previously diagnosed with GAD, five each with PTSD, social anxiety disorder, and tobacco use disorder, three each had autism spectrum disorder and ADD/ADHD, two each with persistent depressive disorder and panic disorder, and one each for opioid use disorder, adjustment disorder, and cannabis use disorder (Table 5).

Table 5Prior Diagnosis History

	n	Max.	Min.	M	SD
None	174	1	1	1.00	.000
PTSD	5	1	1	1.00	.000
ASD	1	1	1	1.00	.000
ADD/ADHD	3	1	1	1.00	.000
Autism spectrum disorder	3	1	1	1.00	.000
Aspergers disorder	0				
Major depressive disorder	4	1	1	1.00	
Persistent depressive disorder	2	1	1	1.00	
Disruptive mood regulation disorder	0				
Premenstrual depressive disorder	0				
Obsessive-compulsive disorders	0				
Generalized anxiety disorder	10	1	1	1.00	
Social anxiety disorder	5	1	1	1.00	
Panic disorder	2	1	1	1.00	
Agoraphobia	0				
Adjustment disorder	1	1	1	1.00	
Dissociative identity disorder (i.e., multiple personalities)	0				
Borderline personality disorder	0				
Histrionic personality disorder	0				
Narcissistic personality disorder	0				
Antisocial personality disorder	0				
Alcohol use disorder	0				
Cannabis use disorder	1	1	1	1.00	
Opioid use disorder	1	1	1	1.00	•
Sedative, hypnotic, or anxiolytic use disorder	0				
Phencyclidine use disorder	0				
Hallucinogen use disorder	0				
Stimulant use disorder	0				
Tobacco use disorder	5	1	1	1.00	•
Paranoid personality disorder	0				
Schizoid personality disorder	0				
Schizotypal personality disorder	0				
Avoidant personality disorder	0				
Dependent personality disorder	0				
Obsessive-compulsive personality disorder	0				
Stimulant use disorder	0				

Instruments

PCL-5

The PCL-5 (PTSD Checklist for DSM-5), a 20-item self-report measure, was used to measure PTSD/PISD symptoms and severity for diagnosis purposes. PTSD can be diagnosed provisionally with PCL-5 itself but can be diagnosed outright if Criterion A is verified (PISD for this study); the diagnosis is based on DSM-5 criteria. Criterion A was verified using a different instrument in this study. The descriptive statistics in Table 6 for the PCL-5 in this study for the variable PISD had a mean of 54.8317 (SD = 1.35545) with a 95% confidence interval. Of the 202 participants, 174 qualified for PISD diagnosis; one was removed as an outlier (Table 7). The PCL-5 item descriptives that measured the variable PISD are listed in Table 8. All item descriptives, corresponding research questions, and variables are listed in Appendix D.

 Table 6

 PISD Variable Sum Score

PISD sum score PCL	Statistic	Std. Error
Mean	54.8317	1.35545
95% confidence interval lower bound	52.1589	
95% confidence interval upper bound	57.5044	
5% trimmed mean	55.4675	
Median	57.0000	
Variance	371.126	
Std. deviation	19.26462	
Minimum	.00	
Maximum	97.00	
Range	97.00	
Interquartile range	26.50	
Skewness	454	.171
Kurtosis	271	.341

Table 7

PISD Variable (Diagnosis)

	Frequency	Percent	Valid Percent	Cumulative Percent
No diagnosis	27	13.4	13.4	13.4
Diagnosis	175	86.6	86.6	100.0
Total	202	100.0	100.0	

Table 8PCL-5 Descriptives

-						
	n	Min	Max	M	SD	Variance
Repeated, disturbing, and unwanted memories of the	202	0	4	2.55	1.155	1.333
stressful experience?						
Repeated, disturbing dreams of the stressful	202	0	4	1.95	1.357	1.843
experience?						
Suddenly feeling or acting as if the stressful	202	0	4	2.12	1.238	1.532
experience were actually happening again (as if you						
were actually back there reliving it)?						
Feeling very upset when something reminded you of	202	0	4	2.83	1.034	1.069
the stressful experience?						
Having strong physical reactions when something	202	0	4	2.04	1.273	1.620
reminded you of the stressful experience (for						
example, heart pounding, trouble breathing,						
sweating)?						
Avoiding memories, thoughts, or feelings related to	202	0	4	2.56	1.055	1.113
the stressful experience?						
Avoiding external reminders of the stressful	202	0	4	2.48	1.066	1.136
experience (for example, people, places,						
conversations, activities, objects, or situations)?						
Trouble remembering important parts of the stressful	202	0	4	1.15	1.226	1.504
experience?						
Having strong negative beliefs about yourself, other	202	0	4	2.21	1.307	1.708
people, or the world (for example, having thoughts						
such as: I am bad, there is something seriously						
wrong with me, no one can be trusted, the world is						
completely dangerous)?						
Blaming yourself or someone else for the stressful	202	0	4	2.02	1.287	1.656
experience or what happened after it?						
Having strong negative feelings such as fear, horror,	202	0	4	2.30	1.190	1.416
anger, guilt, or shame?						
Loss of interest in activities that you used to enjoy?	202	0	4	2.19	1.311	1.719

	n	Min	Max	M	SD	Variance
Feeling distant or cut off from other people?	202	0	4	2.28	1.236	1.527
Trouble experiencing positive feelings (for example,	202	0	4	2.18	1.204	1.451
being unable to feel happiness or have loving						
feelings for people close to you)?						
Irritable behavior, angry outbursts, or acting	202	0	7	3.85	2.188	4.787
aggressively?						
Taking too many risks or doing things that could	202	0	7	2.36	2.323	5.396
cause you harm?						
Being "super alert" or watchful or on guard?	202	0	7	4.72	1.857	3.447
Feeling jumpy or easily startled?	202	0	7	3.68	2.364	5.591
Having difficulty concentrating?	202	0	7	4.53	2.062	4.250
Trouble falling or staying asleep?	202	0	7	4.82	2.162	4.675

Help for Therapists (and Their Clients) in Dealing with Affairs

The Help for Therapists and Their Clients in Dealing with Affairs survey was used to measure the variables for marital infidelity discovery method, duration of marital infidelity, marital outcomes (forgiveness and healing), and marital repair efforts. Ten items were scored from 1-3 on all items (three multiple-choice items) except one, which was scored from 1-5 (five multiple-choice items). The participants' descriptives are varied per variable (Table 9).

Table 9Help for Therapists Variables

	n	Frequency	Percent	Valid Percent	Cumulative Percent
Discovery	202	1	3	1.74	.671
Discovery	202	1	3	2.00	.789
Discovery	202	1	3	2.50	.735
Discovery	202	1	3	2.11	.888
Discovery	202	1	3	1.25	.517
Discovery	202	1	3	2.05	.751
Discovery	202	1	3	2.05	.693
Marital repair	202	1	5	2.52	1.282
Duration	202	1	3	1.15	.375
Forgiveness	202	1	3	1.69	.635
Healing	202	1	3	1.79	.620

Transgression-Related Inventory (TRIM-18)

TRIM-18 was used to measure the variables avoidance, benevolence, and revenge. These subscales are scored on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The items that correspond with each subscale are calculated and scored based on the high/low ratings for each item that corresponds with each subscale. See Table 10 for the mean and median score for each variable (benevolence median = 18.0000 and SD = 5.93821).

Table 10

TRIM-18 Variables

	n	Min.	Max.	M	SD
Avoidance	202	6.00	30.00	19.054	6.75782
Revenge	202	4.00	20.00	8.4406	3.73086
Benevolence	202	6.00	30.00	17.6832	5.93821

The Religious Commitment Inventory—10 (RCI-10)

The RCI-10 for this study used 3/10 items to measure the variable religious/core beliefs on a Likert scale from 1 (Not at all true of me) to 5 (Totally true of me). The overall mean score for item 1 ("My religious beliefs lie behind my whole approach to life") was 2.87 (SD = 1.581). The mean score for item 2 was 2.84 (SD = 1.527), and the mean score for item 3 was 3.11 (SD = 1.605). See Table 11 for descriptives.

Table 11

Religious/Core Beliefs Variable

	n	Min.	Max.	M	SD
Religious/Core Beliefs	202	1	5	3.11	1.605
Religious/Core Beliefs	202	1	5	2.87	1.581
Religious/Core Beliefs	202	1	5	2.84	1.527

Relationship Repair Strategies Scale

The RRSS is an 11-item instrument that measured the variables of marital repair attempts/lack of marital repair attempts based on the participants' responses. The overall mean of the RRSS marital repair attempts was 4.46 (SD = 1.352). The overall mean of the RRSS lack of marital repair attempts was 4.06 (SD = 1.305). The overall descriptives of both marital repair/lack of marital repair attempts are listed in Table 12.

Table 12Marital Repair Efforts and Lack of Marital Repair Efforts

	n	Min.	Max.	M	SD
Marital repair attempts	202	1.00	7.00	4.4632	1.35238
Lack of marital repair	202	1.00	7.00	4.0619	1.30532

Weiss - Cerretto Marital Status Inventory (MSI)

The MSI for this study is a nine-item instrument that consists of true/false statements that measure the variables: (marital) separation/desire to separate, divorce/desire to divorce. Because there are nine different items in this instrument, there are nine different means (Table 13). The mean for the first item (e.g., I have made specific plans to discuss separation or divorce with my spouse. I have considered what I would say) is .49 (SD = .501). The first item measures both the desire to divorce and the desire to separate. The remaining descriptives for the MSI can be viewed in Table 13.

Table 13Separation/Desire to Separate, Divorce/Desire to Divorce Variables

Variable	n	Min.	Max.	M	SD
Separation/desire to separate	202	0	1	.49	.501
Desire to divorce	202	0	1	.61	.489
Desire to divorce	202	0	1	.55	.598
Separation/desire to separate	202	0	1	.26	.441
Desire to divorce	202	0	1	.49	.501
Desire to divorce	202	0	1	.24	.430
Desire to divorce	202	0	1	.48	.501
Desire to divorce	202	0	1	.33	.470
Desire to divorce	202	0	1	.61	.489

Results

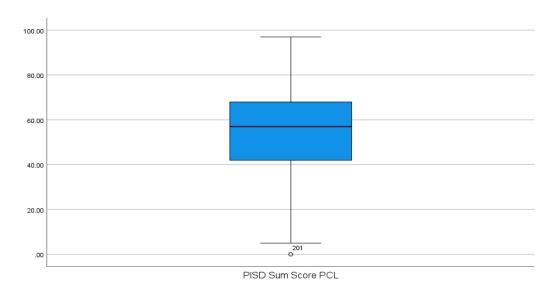
Data Screening

Data screening was completed to identify any errors, missing values, inconsistencies, and outliers that could cause issues when conducting data analyses (Warner, 2013, p. 125). All scoring was conducted in Qualtrics for each instrument. Prior to the survey being officially distributed, the entire survey from start to finish was tested, screened, and scored 60 times to anticipate any scoring errors, data errors, and any technical errors (e.g., timeout, internet). All research data collected on Qualtrics were auto-scored based on the instrument's scoring instructions on Qualtrics, then scores were screened on Qualtrics for accuracy and were then exported into an SPSS statistics syntax file. Those files were then imported to SPSS for further analysis. The original participant pool was n = 241; however, 39 participants' data were removed due to missing data, revising the participant sample size to n = 202. The outliers for each variable and each hypothesis were evaluated in SPSS. Outliers are extreme scores on both the high and low end of the spectrum regarding the circulation of quantitative variable's frequency (Warner,

2013, p. 153). The specific method used to screen for outliers in SPSS was Mahalanobis distance (Mahalanobis D) since the methods for this study were multivariate. Mahalanobis D explains to what extent multivariate outliers exist (Warner, 2013, p. 572). Mahalanobis D screening discovered two outliers that were identified as extreme scores that were removed. Mahalanobis was probed with df = 4 (n - 1) and a cutoff of 18.47. One extreme outlier participant for RQ2 was removed from the multiple regression analysis, and one outlier participant for RQ3 was removed from the MANOVA analysis. Figures 16-17 display data with/without outliers.

Figure 9

With Outliers



Assumption Testing Analysis

Research Questions 1-2

As previously mentioned in Chapter 3, assumptions for RQ1-RQ2 were tested using SPSS, which assessed the following four assumptions for multiple regression analysis and moderation analysis: normal distribution, linearity, homogeneity of variance of the residuals (homoscedasticity), and homogeneity of regression slopes (no collinearity/statistical independence). RQ1 used moderation analysis Hayes PROCESS model 2 (2018, p. 584) and

ordinary least squares regression (OLS) to verify the fitness of data based on the four assumptions. Normality is an assumption that is rarely met typically because of the type of procedures (e.g., Likert scales) that researchers employ; most studies and measurements in research are not distributed normally (Hayes, 2018, p. 70). Regarding normality for RQ3-RQ4, the dependent variables are slightly skewed except for the DV benevolence (Figures 10 - 18). The central limit theorem dictates that moderately large sample sizes (e.g., sample size larger than n = 30) will always be normally distributed (Gibson, 2014). The sample size for this study is n = 202. Homoscedasticity assumptions are complex but can be explained by implying errors of estimation concerning y are equivalently variable conditioned on \hat{y} (Hayes, 2018, p. 71). Mild violations of assumptions concerning homoscedasticity in moderation, mediation, and multiple regression models are not a major concern. Homoscedasticity for RQ1-RQ2 was not violated for all the dependent variables (Figures 10-18). Violations of linearity can negatively impact a meaningful interpretation of the regression coefficient (Hayes, 2018, p. 71), though there are ways to correct/treat possible violations. Figures 10-17 show normality, homogeneity, and linearity scatterplots. The assumption of homogeneity of regression slopes would violate any variance inflation factor (VIF) above 10; there are no violations for RQ1-RQ2, which can be viewed in Table 14.

Figure 10

Tests of Normality, Homoscedasticity, and Linearity

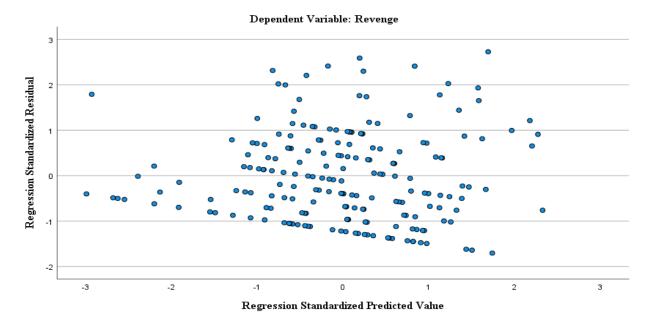


Figure 11

Tests of Normality, Homoscedasticity, and Linearity

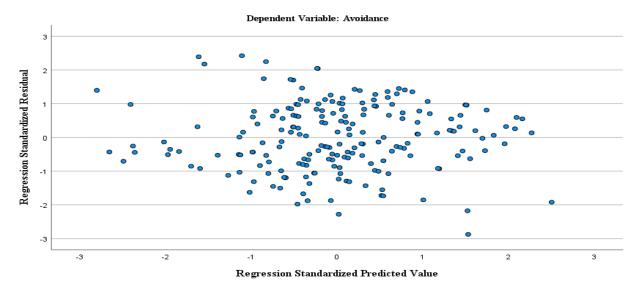


Figure 12

Tests of Normality, Homoscedasticity, and Linearity

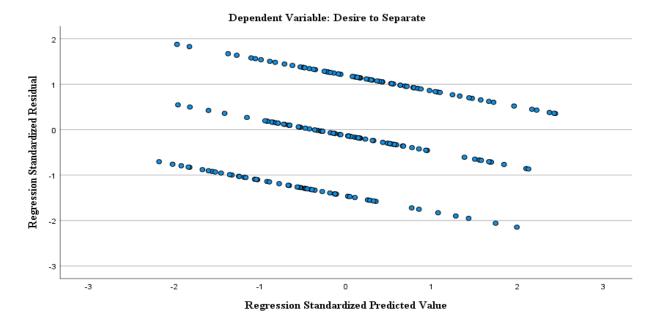


Figure 13

Tests of Normality, Homoscedasticity, and Linearity

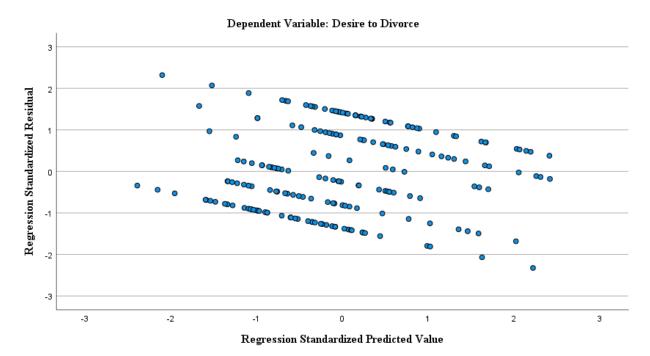


Figure 14

Tests of Normality, Homoscedasticity, and Linearity

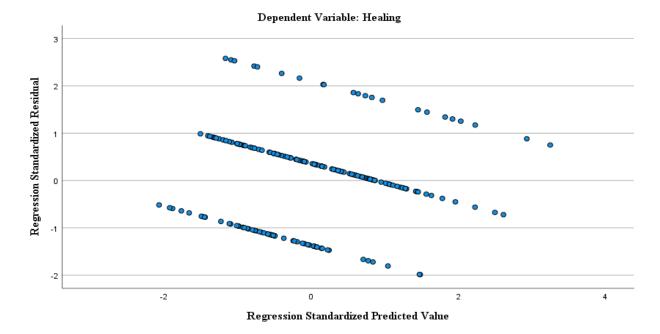


Figure 15

Tests of Normality, Homoscedasticity, and Linearity

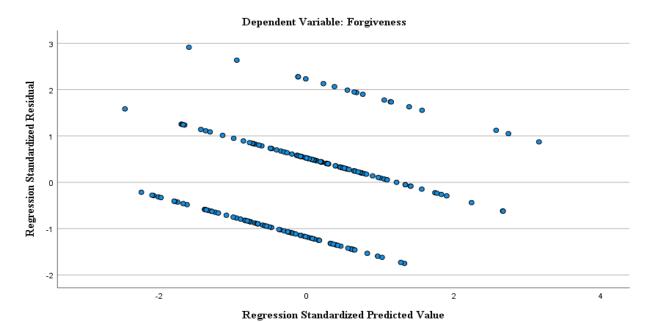
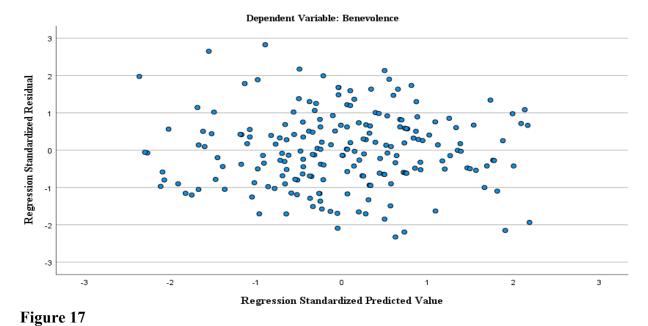


Figure 16

Tests of Normality, Homoscedasticity, and Linearity



Tests of Normality, Homoscedasticity, and Linearity

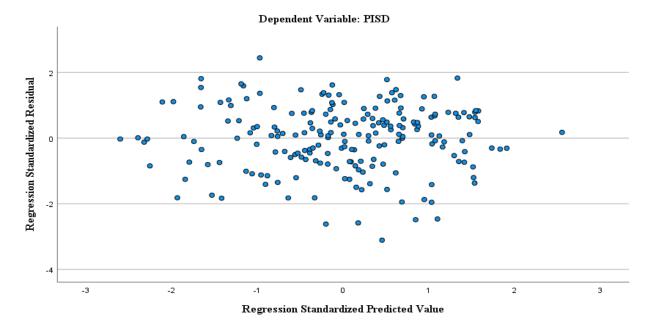


Figure 18

Tests of Normality, Homoscedasticity, and Linearity

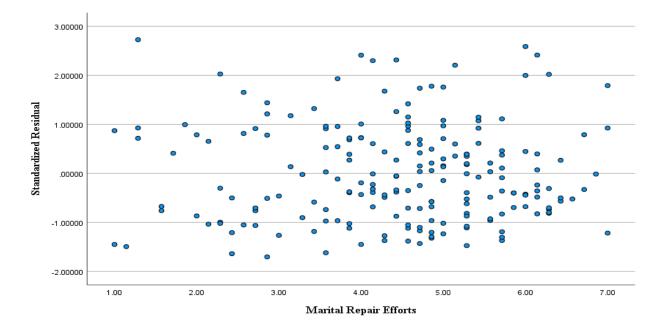


Table 14

Test of Homogeneity of Regression Slopes (Research Questions 1-2)

	Uns	tandardized	Standardi	zed		Collinearity	
	C	pefficients	Coefficie	nts	_	Statistics	
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.339	.177		13.178	< .001		
PISD	-0.12	.002	381	-5.749	< .001	.981	1.020
Marital repair efforts	0.35	.031	.076	1.136	.257	.966	1.036
Religious/core beliefs a. DV: Healing	-0.14	.031	-0.31	455	.649	.958	1.043
(Constant)	1.448	.181		8.010	< .001		
PISD	009	.002	262	-3.979	< .001	.981	1.020
Marital repair efforts	.143	.031	.306	4.604	< .001	.966	1.036
Religious/core beliefs	.037	.031	.078	1.176	.241	.958	1.043
a. DV: Forgiveness							
(Constant)	8.776	1.115		7.869	< .001		
PISD	.040	.013	.205	2.966	.003	.981	1.020
Marital repair efforts	288	.192	105	-1.497	.136	.958	1.036
Religious/core beliefs	424	.192	154	-2.207	.028	.966	1.043
a. DV: Revenge							
(Constant)	8.776	1.115		7.869	< .001		
PISD	.040	.013	.205	2.966	.003	.981	1.020
Marital repair efforts	288	.192	105	-1.497	.136	.958	1.036
Religious/core beliefs	424	.192	154	-2.207	.028	.966	1.043

a. DV: Desire to separate/div.

Research Questions 3-4

Research questions 3-4 used MANOVA: special effects and interactions. Assumptions concerning MANOVA regarding normality and linearity were previously discussed regarding the variables in RQ1-RQ2 and are the same for the variables of RQ3-RQ4. The homogeneity of variance/covariance matrices for the DVs was also conducted using a box test, which shows no violation of the assumption of homogeneity of variance in Table 15.

Table 15

Box's Test of Equality of Covariance Matrices

Box's M	17.476
F	1.082
df1	15
df2	8170.168
Sig.	.367

a. Design: Intercept + PISD

Hypotheses Data Analysis: Hypothesis One

RQ1: Do religious/core beliefs and marital repair efforts moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate?

H₀1: Religious/core beliefs and marital repair efforts will not moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate post-marital infidelity.

H_a1: Religious/core beliefs and repair efforts will moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate post-marital infidelity.

Moderation Data Analysis

RQ1 data were tested using SPSS Hayes PROCESS model 2 macro, the purpose of which was to evaluate if religious/core beliefs and marital repair efforts moderate the relationship between the independent variable (IV) PISD and dependent variable (DV) marital outcomes. The alternate hypothesis suggests that religious/core beliefs and repair efforts moderate the relationship between religious/core beliefs and marital outcomes post-infidelity. PISD was the independent variable; marital outcomes was the dependent variable, and religious/core beliefs

and marital repair efforts were the moderators. The marital outcomes are positive (healing, forgiveness, and benevolence) and negative (revenge, avoidance, divorce/desire to divorce, and separation/desire to separate).

Main Effects

The analysis shows the main effects of these interactions are that higher Marital Repair Efforts significantly negatively predict Revenge, b = -.5097, t(196) = -2.68, p = .008. Higher Marital Repair Efforts significantly negatively predict Avoidance, b = -2.229, t(196) = 7.15, p = .001. Higher Marital Repair Efforts significantly negatively predict the Desire to Separate, b = -.185, t(196) = -4.63, p = .001. Higher Marital Repair Efforts significantly negatively predict the Desire to Divorce, b = -.567, t(196) = -5.99, p = .001. Higher Marital Repair Efforts significantly positively predict Forgiveness, b = .148, t(196) = 4.79, p = .001. Higher Marital Repair Efforts significantly positively predict Benevolence, b = 2.084, t(196) = 7.56, p = .001. See Tables 16-22. Marital Repair Efforts did not significantly predict Healing.

The main effect analysis shows that Religious/Core Beliefs significantly negatively predict the Desire to Divorce, b = -.2534, t(196) = -2.68, p = .008. Religious/Core Beliefs significantly negatively predicts Revenge, b = -.1222, t(196) = -2.17, p = .031. Religious/Core Beliefs significantly negatively predict avoidance, b = -.8685, t(196) = -2.82, p = .005. Religious/Core Beliefs significantly positively predict benevolence, b = 1.1737, t(196) = 4.3659, p = .001 (Tables 16-22). Religious/Core Beliefs did not significantly predict Healing or Forgiveness.

The main effect analysis PISD significantly negatively predicts benevolence, b = -.0445, t(196) = -2.3606, p = .019. PISD significantly negatively predicts Healing, b = -.01, t(196) = -5.62, p < .001. PISD significantly negatively predicts Forgiveness b = -.0084, t(196) = -3.80, p = -0.0084, t(196) = -0.0084

= .001. PISD significantly positively predicts avoidance, b = .1074, t(196) = 4.88, p = .001. PISD significantly positively predicts Revenge, b = .04, t(196) = 3.08, p = .002. See Tables 16-22.

Moderation Outcomes

The interaction between IV PISD and Religious/Core Beliefs as a moderator related to the DV Revenge was insignificant, b = .00, t(196) = 1.63, p = .105, as shown in Table 17. The interaction between IV PISD and Religious/Core Beliefs as a moderator related to the DV avoidance was insignificant, b = .01, t(196) = .641, p = .52 (Table 18). The interaction between IV PISD and Religious/Core Beliefs as a moderator related to the DV Separate/Desire to Separate was insignificant, b = -.00, t(196) = -1.36, p = .1751 (Table 19). The interaction between IV PISD and Religious/Core Beliefs as a moderator related to the DV Divorce/Desire to Divorce was insignificant, b = .00, t(196) = .196, p = .844 (Table 20). The interaction between IV PISD and Religious/Core Beliefs as a moderator related to the DV Healing was insignificant, b = -.00, t(196) = -1.49, p = .136 (Table 21). The interaction between IV PISD and Religious/Core Beliefs as a moderator related to DV Forgiveness was insignificant, b = -.00, t(196) = -1.87, p = .061 (Table 22). The interaction between IV PISD and Religious/Core Beliefs as a moderator related to the DV benevolence was insignificant, b = -.00, t(196) = -1.12, p = .260 (Table 23).

The interaction between IV PISD and Marital Repair Efforts as a moderator related to the DV Revenge was insignificant, b = .00, t(196) = -9.58, p = .338 (Table 16). The interaction between IV PISD and Marital Repair Efforts as a moderator related to DV avoidance was insignificant, b = -.014, t(196) = -1.00, p = .314 (Table 17). The interaction between IV PISD and Marital Repair Efforts as a moderator related to the DV Separate/Desire to Separate was insignificant, b = -.00, t(196) = -.854, p = .3940 (Table 18). The interaction between IV PISD

and Marital Repair Efforts as a moderator related to the DV Divorce/Desire to Divorce was insignificant, b = -.00, t(196) = -.565, p = .572 (Table 19). The interaction between IV PISD and Marital Repair Efforts as a moderator related to DV Healing was insignificant, b = -.00, t(196) = -.191, p = .848 (Table 20). The interaction between IV PISD and Marital Repair Efforts as a moderator related to DV Forgiveness was insignificant, b = -.00, t(196) = -.737, p = .462 (Table 21). The interaction between IV PISD and Marital Repair Efforts as a moderator related to the DV benevolence was insignificant, b = .00, t(196) = .183, p = .854 (Table 22).

The data analysis showed many predictors and effects within the variables. However, Religious/Core beliefs were not statistically significant as moderators. Marital Repair Efforts as a moderator did not have any statistical significance. Therefore, the alternate hypothesis for RQ1 was rejected; the null hypothesis was accepted.

Table 16Moderation Analysis – Revenge

R	R^2	MSE	F	df1	df2	р
.3188	.1016	12.8237	4.4345	5.0000	196.0000	.0008

	Coeff	se	t	p	LLCI	ULCI
Constant	1.1101	.0535	20.7387	.0000	1.0045	1.2157
PISD	.0033	.0028	1.1617	.2468	0023	.0088
Religious/CB	.0120	.0018	1.0159	.3109	0113	.0354
PISD*Religious/CB	0008	.0006	-1.3608	.1751	0019	.0004
Marital Repair E.	1854	.0400	-4.6391	.0000	2643	1066
PISD*Marital R. E.	0016	.0019	8542	.3940	0053	.0021

Table 17 *Moderation Analysis – Avoidance*

-						
R	R^2	MSE	F	df1	df2	p
.5113	.2614	34.5887	13.8767	5.0000	196.0000	.0000

	Coeff	se	t	р	LLCI	ULCI
Constant	19.1047	.4174	45.7728	.0000	18.2816	19.9278
PISD	.1074	.0220	4.8824	.0000	.0640	.1508
Religious/CB	0865	.3076	-2.823	.0052	-1.4751	-2.619
PISD*Religious/CB	.0101	.0158	.6416	.5219	0210	.0412
Marital Repair E.	-2.229	.3117	-7.1527	.0000	-2.8440	-1.6147
PISD*Marital R. E.	0146	.0145	-1.0095	.3140	0432	.0139

Table 18Moderation Analysis – Separate/Desire to Separate

R	R^2	MSE	F	df1	df2	p
.3394	.1152	.5689	5.1042	5.0000	196.0000	.0002

	Coeff	se	t	p	LLCI	ULCI
Constant	1.1101	.0535	20.7387	.0000	1.0045	1.2157
PISD	.0033	.0028	1.1617	.2468	0023	.0088
Religious/CB	.0120	.0118	1.0159	.3109	0113	.0354
PISD*Religious/CB	0008	.0006	-1.3608	.1751	0019	.0004
Marital Repair E.	1854	.0400	-4.6391	.0000	2643	1066
PISD*Marital R. E.	0016	.0019	8542	.3940	0053	.0021

Table 19Moderation Analysis – Divorce/Desire to Divorce

R	R^2	MSE	F	df1	df2	p
.4181	.1748	3.1920	8.3045	5.0000	196.0000	.0000

	Coeff	se	t	р	LLCI	ULCI
Constant	2.4910	.1268	19.6457	.0000	2.2409	2.7410
PISD	.0095	.0067	1.4259	.1555	0037	.0227
Religious/CB	2534	.0944	-2.6849	.0079	4395	0673
PISD*Religious/CB	.0010	.0048	.1968	.8442	0086	.0105
Marital Repair E.	5677	.0947	-5.9961	.0000	7545	3810
PISD*Marital R. E.	0025	.0044	5655	.5724	0112	.0062

Table 20 *Moderation Analysis – Healing*

R	R^2	MSE	F	df1	df2	р
.4001	.1600	.3311	7.4692	5.0000	196.0000	.0000

	Coeff	se	t	p	LLCI	ULCI
Constant	1.7990	.0408	44.0518	.0000	1.7184	1.8795
PISD	0124	.0022	-5.7409	.0000	0166	0081
Religious/CB	.0065	.0090	.7248	.4695	0113	.0243
PISD*Religious/CB	0007	.0004	-1.4943	.1367	0015	.0002
Marital Repair E.	.0335	.0305	1.0987	.2732	0266	.0936
PISD*Marital R. E.	0003	.0014	1915	.8484	0031	.0025

Table 21 *Moderation Analysis – Forgiveness*

R	R^2	MSE	F	df1	df2	р
.4187	.1753	.3407	8.3337	5.0000	196.0000	.0000

	Coeff	se	t	р	LLCI	ULCI
Constant	1.7035	.0414	41.1239	.0000	1.6218	1.7852
PISD	0083	.0022	-3.7846	.0002	0126	0040
Religious/CB	.0110	.0092	1.1999	.2316	0071	.0290
PISD*Religious/CB	0008	.0004	-1.8785	.0618	0017	.0000
Marital Repair E.	.1485	.0309	4.7994	.0000	.0875	.2095
PISD*Marital R. E.	0011	.0014	7371	.4620	0039	.0018

Table 22Moderation Analysis – Benevolence

R	R^2	MSE	F	df1	df2	p
.4187	.1753	.3407	8.3337	5.0000	196.0000	.0000

	Coeff	se	t	p	LLCI	ULCI
Constant	17.7208	.3689	48.0315	.0000	16.9932	18.4484
PISD	0400	.0195	-2.0587	.0408	0784	0017
Religious/CB	.1913	.0816	2.3451	.0200	.0304	.3521
PISD*Religious/CB	0045	.0039	-1.1287	.2604	0122	.0033
Marital Repair E.	2.0846	.2755	7.5666	.0000	1.5413	2.6280
PISD*Marital R. E.	.0023	.0128	.1831	.8549	0229	.0276

Hypotheses Data Analysis: Hypothesis Two

RQ2: Do any of the following factors have a relationship with the level of PISD in the injured spouse: How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts?

 H_02 : How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts will not be associated with the PISD level in the injured spouse.

H_a2: How the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts will have a relationship with the PISD level in the injured spouse.

Data Analysis

RQ2 was tested using SPSS linear multiple regression; the purpose was to evaluate if the marital infidelity discovery, religious/core beliefs, marital repair efforts, lack of marital repair efforts, or the duration of marital infidelity have a relationship with the PISD level in the injured spouse. The alternate hypothesis suggested that how the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts have a relationship with the PISD level in the injured spouse. The IV was discovery

of marital infidelity, religious/core beliefs, marital repair efforts, lack of marital repair efforts, and duration of the marital infidelity; the DV was the PISD level.

Multiple Regression Analysis Findings

Regression analyses revealed that the overall regression model with PISD was significant, $R^2 = .12$, F(7, 193) = 3.68, p < .001. R^2 is the square of the multiple correlation coefficient percentage of the differences (variability) of the DV explained by the IV (Heppner et al., 2016). The overall model suggested that 12% ($R^2 = .12$) of the variation of DV in PISD is due to true differences in all of the predictor variables (Table 23). However, only Discovery, B =1.71, SE = .56, p = .002, Lack of Marital Repair Efforts, B = 2.52, SE = 1.02, p = .014; and Duration, B = -7.028, SE = 3.564 (p = .050), the significance level was under or equal to p = .050) predicted PISD. In other words, as scores on Discovery and Lack of Marital Repair Efforts increased, so did the PISD level in the participants; therefore, it made those variables positively predictive. Duration of marital infidelity was negatively predictive regarding PISD level, which would suggest as the duration of marital infidelity decreases, the PISD level increases (see Table 24 for frequency). PISD level scores were well predicted from three of five variables. Discovery as a predictor accounted for 4% of the variance ($sr^2 = 0.4$) regarding PISD, and Duration as a predictor of PISD accounted for 2% of the variation ($sr^2 = 0.2$) (Table 25). Religious/Core Beliefs as a predictor accounted for 0.7% (sr² = 0.7) of the variation of PISD (Table 25). Lack of Marital Repair Efforts as a predictor accounted for 2.8% of the variance ($sr^2 = 2.8$) related to PISD (Table 25). Marital Repair Efforts as a predictor accounted for 0.3% of the variance ($sr^2 =$ 0.3) related to PISD (Table 25). Due to the findings of the results showing partial confirmation, the alternate hypothesis was accepted, and the null hypothesis was rejected.

Table 23

Multiple Regression Model Summary

				Std. Error		Chang	Change Statistics			
				of the		F			Sig. F	
	Model R	R^2	Adjusted R^2	Estimate	R^2 Change	Change	df1	df2	Change	
1	.343ª	.118	.086	18.08942	.118	3.676	7	193	< .001	

a. Predictors: (Constant) Marital Repair Efforts, Duration, Lack of Marital Repair Efforts,

Religious/Core Beliefs, Discovery

b. Dependent variable: PISD

Table 24

Duration Frequency

Duration	n of Marital Infidelity	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than a year	172	85.1	85.1	85.1
	One to five years	29	14.4	14.4	99.5
	More than five years	1	.5	.5	100.0
	Total	202	100.0	100.0	

Table 25

Coefficients

						05	00/				
	TT 4 1	1' 1	C ₄ 1 1 1	95.0% Confidence							
	Unstand	ardized	Standardized								
	Coeffic	cients	Coefficients			Interva	1 for B	Co	rrelatio	1S	
		Std.				Lower	Upper	Zero-			
Model	В	Error	Beta	t	Sig.	Bound	Bound	order	Partial	Part	
(Constant)	25.828	9.249		2.79	93.006	7.587	44.070				
Discovery	1.711	.556	.225	3.0	77.002	.614	2.808	.227	.216	.208	
Duration	-7.028	3.564	140	1.9	72.050	-14.05	8 .001	070	141	133	
Religious/core	1.424	1.139	.102	1.25	51.213	822	3.671	.112	.090	.085	
beliefs											
Lack of	2.520	1.021	.172	2.46	58.014	.506	4.533	.224	.175	.167	
marital Repair											
efforts											
Marital repair	898	1.079	061	83	32.406	-3.027	1.231	016	5060	056	
efforts											

a. Dependent Variable: PISD.

Hypotheses Data Analysis: Hypothesis Three

RQ3: Is there a statistically significant difference in the positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD?

H₀3: Participants will not have a statistical difference in positive marital outcomes, healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD.

Ha3: Participants will have a statistical difference in positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD.

Data Analysis

RQ3 was tested using SPSS MANOVA: special effects and interactions and univariate follow-up analysis for MANOVA to evaluate if significant differences exist in positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with a PISD diagnosis vs. participants without PISD. The alternate hypothesis suggests that there are significant differences in higher positive marital outcomes for participants without PISD vs those with PISD.

MANOVA Overall Findings

Ultimately, the findings are that the MANOVA model is significant: There was a statistically significant difference among Positive Marital Outcomes based on the diagnosis of PISD (PTSD), F(5, 195) = 3.129, p < .010; Wilks lambda = .926, partial $n^2 = .074$ (Table 26). There was a statistically significant difference among Positive Marital Outcomes based on the diagnosis of PISD, F(4, 196) = 3.287, p < .012; Wilks lambda = .937, partial $n^2 = .06$ (Table 26).

Due to the overall findings of this model, the alternative hypothesis was partially confirmed; therefore, it was accepted, and the null hypothesis was rejected.

Univariate Follow-Up Test Findings

Univariate follow-up tests demonstrated that there was a significant difference between those with and without a PISD diagnosis on Healing, F(1, 199) = 10.81, p < .001, partial $n^2 = .001$ whereby those without a PISD diagnosis (M = 2.15, SD = .12) scored higher on Healing compared to those with a PISD diagnosis (M = 1.74, SD = .05). There was also a significant difference between those with and without a PISD diagnosis on Forgiveness, F(1, 199) = 8.00, p = < .005, partial p = .039 whereby those without a PISD diagnosis (p = 1.64, p = .05) (Table 27). There was no statistically significant difference between the groups regarding Marital Repair and Benevolence.

Table 26 MANOVA – Multivariate Test

							Partial	Noncent.	Observed
Effect		Value	F	Hypothesis	df Error df	Sig.	Eta ²	Parameter	Power ^c
Intercept	Pillai's trace	.936	568.868 ^b	5.000	195.000	< .001	.936	2844.341	1.000
	Wilks' lambda	.064	568.868 ^b	5.000	195.000	< .001	.936	2844.341	1.000
	Hotelling's trace	14.586	568.868 ^b	5.000	195.000	< .001	.936	2844.341	1.000
	Roy's largest	14.586	568.868 ^b	5.000	195.000	< .001	.936	2844.341	1.000
	root								
PISD	Pillai's trace	.074	3.129^{b}	5.000	195.000	.010	.074	15.646	.872
	Wilks' lambda	.926	3.129^{b}	5.000	195.000	.010	.074	15.646	.872
	Hotelling's trace	.080	3.129^{b}	5.000	195.000	.010	.074	15.646	.872
	Roy's largest	.080	3.129^{b}	5.000	195.000	.010	.074	15.646	.872
	root								

a. Design: Intercept + PISD b. Exact statistic

c. Computed using alpha = .05

Table 27 Between-Subjects Effects

	Dependent	Type III Sum		Mean			Partial Eta	Noncent.	Observed
Source	Variable	of Squares	df	Square	F	Sig.	Squared	Parameter	Power ^f
Corrected	Healing	3.977^{a}	1	3.977	10.806	.001	.052	10.806	.905
model	Forgiveness	3.064^{b}	1	3.064	8.003	.005	.039	8.003	.804
	Marital repair	$.769^{d}$	1	.769	.430	.513	.002	.430	.100
	Benevolence	81.598e	1	81.598	2.341	.128	.012	2.341	.331
Intercept	Healing	352.555	1	352.555	957.839	< .001	.828	957.839	1.000
	Forgiveness	309.333	1	309.333	807.947	< .001	.802	807.947	1.000
	Marital repair	590.014	1	590.014	362.122	< .001	.645	362.122	1.000
	Benevolence	31395.429	1	31395.429	900.683	< .001	.819	900.683	1.000
PISD	Healing	3.977	1	3.977	10.806	.001	.052	10.806	.905
	Forgiveness	3.064	1	3.064	8.003	.005	.039	8.003	.804
	Marital repair	.769	1	.769	.430	.513	.002	.430	.100
	Benevolence	81.598	1	81.598	2.341	.128	.012	2.341	.331

a. $R^2 = .052$ (Adjusted $R^2 = .047$) b. $R^2 = .039$ (Adjusted $R^2 = .034$) c. $R^2 = .002$ (Adjusted $R^2 = .003$) d. $R^2 = .012$ (Adjusted $R^2 = .007$)

Hypotheses Data Analysis: Hypothesis Four

RQ4: Is there a statistically significant difference in the negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD?

H₀4: Participants will not have a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, and separation/desire to separate between participants with PISD and participants who do not have PISD.

Ha4: Participants will have a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD.

Data Analysis

RQ4 was tested using SPSS for MANOVA: special effects and interactions and univariate follow-up analysis for MANOVA to evaluate if significant differences exist in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, and separation/desire to separate between participants with a diagnosis of PISD vs. participants without PISD. The alternate hypothesis suggests that there are significant differences in lower negative marital outcomes of revenge, avoidance, divorce/desire to divorce, and separation/desire to separate for participants without PISD vs. those with PISD.

MANOVA Overall Findings

Ultimately, the findings are that the MANOVA model is significant: There was a statistically significant difference among negative marital outcomes based on the diagnosis of PISD, F(4, 197) = 3.726, p = .006; Wilks lambda = .070, partial $n^2 = .070$ (Table 28). In other words, participants without the diagnosis of PISD have lower negative marital outcomes than

participants with a PISD diagnosis. There was a statistically significant difference between PISD and non-PISD groups in negative marital outcomes for DV avoidance. Based on these results, evidence was sufficient to partially support the alternative hypothesis. Therefore, it was accepted; the null hypothesis was rejected.

Univariate Follow-Up Test Findings

Univariate follow-up tests demonstrated that there was a significant difference between those with and without a PTSD diagnosis on Avoidance, F(1, 200) = 11.85, p < .001, partial $n^2 = .056$, whereby those with a PTSD diagnosis (M = 15.00, SD = .13) scored higher on Avoidance compared to those without a PTSD diagnosis (M = 19.69, SD = .50). There was also a significant difference between those with and without a PTSD diagnosis on Revenge, F(1, 200) = 8.58, p = .004, partial $n^2 = .041$ whereby those with a PTSD diagnosis (M = 6.52, SD = .71) scored higher on Revenge compared to those without a PTSD diagnosis (M = 8.74, SD = .28); please see Table 29. There was no significant difference between the groups regarding divorce/desire to divorce and separation/desire to separate.

Table 28 $MANOVA - Multivariate\ Test$

							Noncent.	Observed
	Value	F	Hypothesis df	Error <i>df</i>	Sig.	Partial Eta ²	Parameter	Power ^b
Pillai's trace	.070	3.726 ^a	4.000	197.000	.006	.070	14.902	.880
Wilks' lambda	.930	3.726^{a}	4.000	197.000	.006	.070	14.902	.880
Hotelling's trace	.076	3.726^{a}	4.000	197.000	.006	.070	14.902	.880
Roy's largest root	.076	3.726^{a}	4.000	197.000	.006	.070	14.902	.880

a. Exact statistic

b. Computed using alpha = .05

Table 29 Tests of Between-Subjects Effects

		Type III Sum		Mean			Partial Eta	Noncent.	Observed
Source	Dependent Variable	of Squares	df	Square	F	Sig.	Squared	Parameter	Power ^e
Corrected model	Avoidance	513.573 ^a	1	513.573	11.853	< .001	.056	11.853	.929
	Revenge	115.138 ^b	1	115.138	8.584	.004	.041	8.584	.830
	Separate/desire to separate	.577°	1	.577	.920	.339	.005	.920	.159
	Divorce/desire to divorce	8.903 ^d	1	8.903	2.376	.125	.012	2.376	.335
Intercept	Avoidance	28141.791	1	28141.791	649.497	< .001	.765	649.497	1.000
	Revenge	5443.930	1	5443.930	405.862	< .001	.670	405.862	1.000
	Separate/desire to separate	101.488	1	101.488	161.807	< .001	.447	161.807	1.000
	Desire to divorce	467.121	1	467.121	124.685	< .001	.384	124.685	1.000
PISD	Avoidance	513.573	1	513.573	11.853	< .001	.056	11.853	.929
	Revenge	115.138	1	115.138	8.584	.004	.041	8.584	.830
	Separate/desire to separate	.577	1	.577	.920	.339	.005	.920	.159
	Divorce/desire to divorce	8.903	1	8.903	2.376	.125	.012	2.376	.335

a. $R^2 = .056$ (adjusted $R^2 = .051$) b. $R^2 = .041$ (adjusted $R^2 = .036$) c. $R^2 = .005$ (adjusted $R^2 = .000$) d. $R^2 = .012$ (adjusted $R^2 = .007$)

e. Computed using alpha = .05

Summary

Chapter Four provided data analysis concerning this study, which included data descriptives, research methodology (e.g., moderation, multiple regression, MANOVA), assumption testing, data synthesis, and results. The data were synthesized using SPSS. Variables (marital) repair efforts and religious/core beliefs were tested as moderators between PISD and marital outcomes for RQ1. The main effects of RQ1 were explored, but the alternate hypothesis was rejected because there was no statistical significance. RQ2 explored IV religious/core beliefs, (marital infidelity) discovery method, duration of the affair, and (marital) repair efforts with the DV PISD level in the injured spouse. The alternate hypothesis for RQ2 was accepted; it was partially supported because the discovery method, duration of the affair, and repair efforts predicted the PISD level in the injured spouse. RQ3 evaluated whether significant differences exist in positive marital outcomes of healing, forgiveness, marital repair efforts, and benevolence between participants without a PISD diagnosis vs. participants with PISD; the alternate hypothesis was accepted. The RQ3 alternate hypothesis was partially supported because there were differences between the groups related to the variables healing and forgiveness; the non-PISD group has higher healing and forgiveness. RQ4 evaluated if significant differences exist in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, and separation/desire to separate between participants without a PISD diagnosis vs. participants with PISD; the alternate hypothesis was accepted. The RQ4 alternate hypothesis was partially supported because the group without a PISD diagnosis had lower negative marital outcomes than participants with PISD, only related to the variables of revenge and avoidance. Overall, this study was conducted to help close the literature gap on PISD and post-infidelity marital outcomes. The impact of PISD and other post-infidelity symptomology on marital outcomes presented a problem because it had not been previously fully addressed.

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five summarizes the overall purpose of the study. This section has a discussion of each research question's findings in light of the literature, conceptual framework, and other studies related to trauma, emotional and psychological distress, and post-infidelity marital outcomes. Following the discussion, Chapter Five discusses the implications and limitations of the study's research. Last, recommendations for future research are discussed along with a brief ending summary.

Discussion

The purpose of this quantitative study was to further close the gap in the literature by exploring marital infidelity, PISD, and the subsequent post-infidelity marital outcomes between injured participants with PISD and injured participants without PISD. Much of the literature does not explicitly evaluate post-infidelity marital outcomes in light of traumatic or emotional distress, though prior research demanded an evaluation of infidelity because of its seriousness and the underlying factors that trigger its mental health consequences (Shrout & Weigel, 2020). As previously mentioned, heterosexual married or formerly married participants who experienced infidelity while married in the last 30 days to 18 months at the time of recruitment were voluntarily recruited from several universities, different organizations, radio advertisements, advertisements, media, and social media. The original participant pool was n = 241; however, 39 participants' data were removed due to missing data, revising the participant sample size to n = 202.

Conceptual Framework Concurrence

This study was based on a multifaceted yet comprehensive conceptual framework, with one of its primary foundational bases being PISD. Dennis Ortman (2005) coined PISD as specific marital-infidelity-exposure/discovery-related PTSD based on practical clinical research

and case studies. Ortman (2005) conceptualized that spouses betrayed by the discovery of infidelity experience it as a life-threatening event that typically develops into marital infidelityrelated PTSD, which is PISD. Ortman also postulated that injured spouses with PISD engage in avoidance behaviors, emotional numbing, irritability, rage, heightened anxiety, and reexperiencing. This study showed that of the 202 participants who discovered their spouse's or former spouse's infidelity, 174 participants met PISD diagnosis (1 removed as an outlier) criteria screened by the PCL-5, which also confirms the cognitive framework that posits adverse events are not necessarily experienced as tragic, but one is predisposed to emotional traumatization when an event contradicts a person's basic worldview (Gordon et al., 2005; Janoff-Bulman, 1989; McCann et al., 1988). Ortman's (2005) conceptualization concerning PISD and avoidance behaviors and rage were relevant as this study's findings show that PISD positively predicted avoidance and revenge behaviors. This suggests that participants with PISD experienced and, at the time of the survey, still experienced the revelation of their spouse's marital infidelity betrayal more strongly than those without PISD. Schupp (2015) conceptualized that trauma shifts the sympathetic nervous system into high gear, which leads to increased threat sensitivity, triggering the fight, flight, or freeze reflex (p. 120). Ortman (2005) conceptualized that those who have PISD engage in avoidance behaviors. This study confirmed the conceptualization of avoidance because participants with PISD had scored statistically significantly higher on the variable avoidance as a negative marital outcome than participants without PISD.

Glass (2004) conceptualized marital infidelity discovery as a trauma by postulating that when a spouse discovers or receives revelation of marital infidelity from their spouse, the betrayed spouse is traumatized, with the degree of traumatization based on how the infidelity was discovered and duration of the infidelity (nature of the betrayal), which can trigger disclosure shock (pp. 94-104). Additionally, Glass's (2004) framework posited that marital

repair causes the traumatic wounds that marital infidelity caused to dissipate, and the adulterous spouse must transition from being the injurer toward the injured spouse to being the soother (pp. 320-338). This study had statistically significant findings that confirmed Glass's marital repair conceptual framework that increased marital repair efforts from the adulterous spouse toward the injured spouse negatively predicted avoidance behaviors, revenge behaviors, and the desire to separate/divorce. Additionally, Glass's concepts are further confirmed regarding marital repair efforts in this study's findings because marital repair efforts also proved statistically significant in that high marital repair efforts positively predict forgiveness and benevolence from the injured spouse toward the spouse that has injured them through marital infidelity. The lack of marital repair efforts/marital repair efforts, duration of the affair, and discovery methods of the affair were statistically significant predictors of PISD level, which confirms Glass' conceptualization regarding determining the degree of traumatization post-infidelity discovery.

Worthington (2006) theorized that, regarding transgressions and transgression repair, infidelity can attack the injured spouse's confidence and competence. An overstressed victim of betrayal/transgression evaluates nearly every offense as a threat, which reduces the capacity to forgive the transgressor, but the reduction of stressors makes the gateway to forgiveness a great possibility (Worthington, 2006). In the event that the transgressor did not show sensitivity toward the transgressed, the perceived lack of caring presented as a threat to the betrayed person's competence, making forgiveness from the transgressed toward the betrayer unlikely (Worthington, 2006). This study's findings confirm Worthington's conceptualization by showing that high marital repair efforts positively predict forgiveness and benevolence from the injured spouses toward the spouses who have injured them through marital infidelity. Regarding religious beliefs, Worthington (2006) postulated that highly religiously committed individuals usually rely on their religious beliefs and values across situations longer than those with a moderate religious commitment (Worthington, 2006). This proved relevant as this study's

findings show that religious/core beliefs significantly and negatively predict the desire to divorce, revenge, avoidance, and avoidance; they significantly positively predict benevolence in the participants of this study concerning their adulterous spouse. In other words, the stronger the religious beliefs and commitment, the more the aforementioned variables decreased and benevolence increased. The next section elaborates on the research questions and their findings in light of the conceptual framework and literature.

Research Question One

RQ1 asked: Do religious/core beliefs and marital repair efforts moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, separation/desire to separate? Prior research literature explored post-romantic breakup, negative cognitive appraisal, and infidelity-related stress on mental health using self-esteem as a moderator of infidelity-related distress in the injured partner (Shrout & Weigel, 2020). The analysis of the research showed that self-esteem moderated distress by showing that having higher self-esteem lowered distress (Shrout & Weigel, 2020).

RQ1 used Hayes PROCESS model 2 to test religious/core beliefs and (marital) repair efforts and moderators between PISD and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, and separation/desire to separate. The main effects from testing revealed that higher marital repair efforts significantly negatively predict revenge, avoidance, desire to separate, and desire to divorce, and significantly positively predict forgiveness and benevolence. Religious/core beliefs significantly negatively predict the desire to divorce, revenge and avoidance behaviors and significantly positively predict benevolence. PISD significantly negatively predicts benevolence, healing, and forgiveness and significantly positively predicts avoidance and revenge. Ortman (2005) found that avoidance behaviors are common in those with PISD, and revenge (McCullough & Hoyt, 2002) is one of

the diverse reactions and aggressive behaviors that are common that the injured spouse will engage in toward their unfaithful spouse (Olson et al., 2002). This is also relevant to Bendixen et al. (2018), who found a greater urge to commit revenge from those betrayed when sexual infidelity involved both sexes, which is also relevant to the other research questions to be discussed. The religious/core belief effects are relevant to Worthington and McConnell (2019), who suggested that forgiveness is a foundational concept for religious people and that forgiveness is a relationship between the transgressor, transgressed, and the transgression, which is also relevant to other research questions in this study. Regarding religious beliefs and desire to divorce, these findings confirmed components of Tuttle and Davis's study (2015), which purported that religiosity decreases and indirectly serves as a protective factor from divorce by increasing marital joy and marital infidelity did not affect marital stability or divorce; that literature is also relevant to other research questions in this study.

This study hypothesized that religious/core beliefs and marital repair efforts would moderate the relationship between PISD in the injured spouse and marital outcomes of healing, forgiveness, benevolence, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate post-marital infidelity. RQ1's alternative hypothesis was rejected, and the null hypothesis was accepted because religious/core beliefs or marital repairs did not statistically significantly act as moderators between PISD and marital outcomes. They served as predictors for numerous variables, not just as moderators. The main effects overall confirm much of Glass's (2004) conceptualizations regarding the adulterous spouse engaging in marital repair toward the injured spouse, decreasing traumatic wounds, but does not concur with marital repair acting as a moderator between PISD and marital outcomes.

Research Question Two

RQ2 asked: Do any of the following factors have a relationship with the level of PISD in the injured spouse: How the marital infidelity was discovered, religious/core beliefs, the

duration of marital infidelity, marital repair efforts, or lack of marital repair efforts? Prior research literature suggested how marital infidelity was discovered (Glass, 2004; Whisman, 2016), the duration of marital infidelity (Glass, 2004) and marital repair efforts (Abrahamson et al., 2012; Glass, 2004; Worthington, 2006) impacts the traumatic distress level, which impacts the level of traumatization post-infidelity discovery. This study hypothesized for RQ2 that how the marital infidelity was discovered, religious/core beliefs, the duration of marital infidelity, marital repair efforts, or lack of marital repair efforts has a relationship with the PISD level in the injured spouse. The alternative hypothesis was supported for the marital infidelity discovery, marital repair efforts, and duration of the marital infidelity. The findings for religious/core beliefs and PISD level were not statistically significant. Marital infidelity discovery methods and marital repair efforts support Abrahamson et al. (2012), Glass (2004), Whisman (2016), and Worthington's (2006) prior findings and concepts. Additionally, this affirms Vaughan's (2010) research and participants' responses to infidelity exposure and reactions to it as posttraumatic-disorder-related.

Interestingly, the duration of marital infidelity had a negative relationship with PISD according to the results of this study; 85% of respondents stated that the duration of their spouse's marital infidelity was ongoing for less than a year when it was discovered. So, the results suggest that the duration of discovered marital infidelity under a year is predictive of higher PISD levels. This partially confirms Glass' (2004) theory that the duration of marital infidelity impacts the intensity of the traumatic reaction linked with the nature of the betrayal (marital infidelity), but in reverse. Glass (2004) inferred that marital infidelity that lasts for years is impactful. This also suggests that there are other confounding factors related to the duration of marital infidelity to be explored that are in line with Glass's (2004) postulations regarding the nature of the betrayal, such as the extent of the marital infidelity and other factors such as individual vulnerabilities within the injured spouse, the threat of continued marital

infidelity, and shattered assumptions about the marriage. Though the overall model for RQ2 is statistically significant, the low degree of variability for each predictor strongly suggests that there are other factors at play.

Research Question Three

RQ3 asked: Is there a statistically significant difference in the positive marital outcomes of healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD? The alternate hypothesis for RQ3 suggested that participants without PISD have statistically different marital outcomes concerning healing, forgiveness, marital repair, or benevolence between participants with PISD and participants who do not have PISD; the alternate hypothesis was partially supported for the variable outcomes for healing and forgiveness between the two groups. The non-PISD group had higher levels of healing and forgiveness as a marital outcome vs. the PISD group. The differences in forgiveness between the PISD and non-PISD groups lend credence to Worthington's (2006) conception that an overstressed victim of betrayal/transgression evaluates nearly every offense as a threat. In contrast, stress reduction in the betrayed makes forgiveness more possible. Participants with PISD are overstressed and, as replicated in the results, have significantly lower levels of forgiveness than the non-PISD group.

Research Question Four

RQ4 asked: Is there a statistically significant difference in negative marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD? The alternate hypothesis stated that participants without PISD have a statistically significant difference in marital outcomes of revenge, avoidance, divorce/desire to divorce, or separation/desire to separate between participants with PISD and participants who do not have PISD. The alternate hypothesis was partially supported regarding the statistical difference in marital outcomes between the PISD

group and non-PISD group regarding avoidance and revenge, which is a recurring theme throughout all the research question results overall. The PISD group has statistically higher levels of avoidance and revenge. Prior literature confirms the marital outcome of revenge and avoidance behaviors (McCullough & Hoyt, 2002; Olson et al., 2002; Ortman, 2005) being consistent with PISD. It makes sense that the PISD group would score statistically significantly higher with those two outcomes, which confirms research by Bendixen et al. (2018), who found a higher urge to commit revenge from those betrayed when sexual infidelity involved both sexes.

Implications

This study not only has implications for traumatology, marriage and family therapy (and marital infidelity recovery treatment), pastoral counseling, clinical mental health counseling, community care and counseling, but it also has implications for the biblical Christian worldview and other religions universally. As mentioned in the introduction, infidelity is one of the most difficult issues to treat in marital therapy (Moller & Vossler, 2015), purportedly because of its traumatic nature (Gordon et al., 2005). The development of PISD regarding the injured spouse is one of the major outcomes related to post-marital infidelity exposure.

This study's results show the significance of how PISD impacts and predicts marital outcomes such as avoidance and revenge. PISD makes healing and forgiveness more difficult, as evidenced by the comparison results in the PISD vs. non-PISD group. This seems to suggest that PISD makes it difficult to recover from marital infidelity exposure in the injured spouse unless other factors intervene, such as marital repair and religious/core beliefs, as Glass (2004) and Worthington (2006) purported. The spouse who committed the injury must also contribute greatly to healing the wound their actions caused (Glass, 2004). As evidenced by the results of this study, the lack of marital repair efforts predicts increased PISD. In contrast, the higher the marital repair efforts, the lower the desire to separate/divorce and engage in avoidance

behaviors. The higher the marital repair efforts, the higher the levels of forgiveness and benevolence. From a biblical worldview, this would be similar to the atonement process regarding sin/transgression (Worthington, 2006) in Leviticus 19:22-23; 5:6-18.

The implication further suggests that clinicians such as marriage and family therapists or traumatologists who treat trauma separately from marital therapy should consider how integrating the treatment of the PISD/trauma into marital therapy as a part of a restoration process may have more favorable results because the injurer and injured are jointly present for marital repair. For clients who have indicated ambivalence to marital therapy, this study can provide education, hope of understanding, and a tangible roadmap for treatment. In the event individual therapy is indicated for the injured spouse, the treating clinician should consider these findings of treating the PISD and other symptomology within the context in which they developed, which is marital infidelity.

Other implications of these findings draw focus on the discovery of marital infidelity because it predicted PISD levels in the participants. This suggests that clinicians should focus on how the infidelity was discovered to inform treatment because the imagery of the infidelity discovery is likely to recur in the injured spouse, as evidenced by this study. The duration of marital infidelity was also predictive of PISD level, which can be evaluated as a subset of the discovery process, which has implications as well.

Duration had a negative association with PISD level, more so when the marital infidelity was less than a year. This should be evaluated in light of other factors, such as the extent of the discovered marital infidelity. Did the injured spouse believe it was a one-time affair but discovered it was ongoing for years? Did the injured spouse discover that their spouse's infidelity was more serious than initially believed? Were there any assumptions about the marriage that are now shattered post-infidelity? These findings support clinicians conducting a

sensitive and methodical process that should assess specifics regarding the discovery and duration of marital infidelity.

For Christian clinicians and non-Christian clinicians, based on this study, strong consideration of the injured spouse's religious beliefs should be considered because of the benefits of increased forgiveness and benevolence, which are Christian virtues (Worthington, 2006). In addition to marital repair efforts, religious/core beliefs are strongly associated with a decrease in the desire to separate/divorce, revenge behaviors, and avoidance behaviors. Pastoral counselors, Christian counselors, and marriage and family therapists who want to have a firmer Bible-based counseling method can engage these research findings when treating married couples and individuals by exploring the Old Testament narratives (e.g., Jeremiah 3) of Israel's consistent adultery, Yahweh's plea to His [sic] bride Israel to repent, and Yahweh's conditions for reconciliation (atonement). The findings support clinicians utilizing their client's faith/beliefs as a tool for healing vs. a cudgel to inflict more infidelity exposure pain. Overall, the implication remains that PISD must not be disregarded and should be prioritized in marital therapy based on this study's findings. Clinicians who engage in marital infidelity recovery maritally, individually, and in a group setting should consider these aspects evaluated in this study when engaging their clients in treatment planning. This study reaffirmed Vaughan's (2010) research implication regarding marital infidelity and reactions, which further highlights the implications of this study, which the following participant's quote can exemplify: "Professional help would probably be much more effective if counselors would deal with the issue as a trauma and draw on the literature on the treatment of PTSD, rather than to systematically regard affairs as signs of underlying relational problems" (Vaughan, 2010).

Limitations

Limitations are not uncommon in research studies; therefore, limitations should be considered when interpreting the results of this quantitative study. One limitation that should be

considered is that this study is cross-sectional. Cross-sectional data can only capture and evaluate relationships between data variables within a specific moment in time (Heppner et al., 2016). Therefore, causal inferences cannot be made regarding any of the relationships between the independent/predictor variables and dependent variables evaluated for this study. Another limitation of this study is that it was self-reported data. Self-reported data are vulnerable to intentional or unintentional distortions from the participant (Heppner et al., 2016).

Another important limitation of this study was threats to external validity. External validity refers to the amount of generalizability of a study's results across settings (Heppner et al., 2016). This study was conducted online, so certain aspects related to settings could not be completely controlled. To manage threats to external validity from the aspect of a setting, the researcher enabled the inability of participants to repeat the survey via Qualtrics once the survey from a specific participant had been successfully completed. The external validity of a study is increased when the associations between the independent and dependent variables are evaluated across various settings (Heppner et al., 2016). The survey being conducted online did have some limitations, but it also strengthened against threats toward external validity because the survey could be accessed via the internet, which is available across a variety of settings. Threats to external validity can happen when researchers make incorrect inferences from the sample data to "other persons, other settings, and past or future situations" (Creswell & Creswell, 2020). Research questions three and four have no generalizability beyond the participants in this study regarding the comparison between two groups related to positive and negative marital outcomes because of the unequal group sample sizes; the PISD group size was 175, and the non-PISD group size was 27. Research questions one and two, including main effects, have generalizability because the minimum sample size needed was 139 plus 10% for attrition of 153; this study size was 202.

Internal validity threats are related to experimental processes, experiences, or treatments that present a threat to the researcher's ability to make accurate conclusions from the data about the population in the study (Creswell & Creswell, 2020). Internal validity threats specific to this study were related to the selection of participants. Selection threats suggest that the participants chosen may have certain qualities that predispose them to certain outcomes (Creswell & Creswell, 2020). Because the nature of this study was specific as it was measuring PISD, required marital infidelity discovery within a specific period, required a traditional or former traditional marital status, and minimum age range, the selection presented an internal threat to validity regarding this study. To minimize the threat to internal validity regarding predispositions to certain outcomes, the researcher screened out potential participants for certain mental/psychological disorders that would cause too much similarity or overlap with PISD. Additionally, this study did not require that the participants be currently married, just that they were married during the time of marital infidelity discovery. Between-group comparisons were solely based on PISD vs. no PISD, not based on marital status.

Recommendations for Future Research

Recommendations for future research are first geared toward creating and testing a comprehensive survey that evaluates Glass's (2004) comprehensive conceptualizations as to why some spouses are more traumatized than others post-marital infidelity discovery. This could be accomplished quantitatively or qualitatively; however, a mixed method of both might prove effective in receiving more holistic comprehensive data. Glass's concepts that were not evaluated and should be considered are the extent of shattered assumptions in the injured betrayed spouse about the marriage and about their spouse and individual and situational vulnerabilities in the injured betrayed spouse such as low self-esteem, premarital fractured trust, and witnessed parental infidelity. Also, other aspects of the nature of betrayal that were not tested in this study should be explored, such as double betrayals, which involve with whom the

adulterous spouse committed adultery. One other concept from Glass' framework that should be researched in the future is whether the threat of marital infidelity/betrayal continues because this could contribute to the exacerbation of prolonged PISD/PTSD symptomology post-marital infidelity discovery. Although the duration of marital infidelity was explored in this study, it is recommended that future research expand on duration due to the negative correlation in response to PISD: The timespan of marital infidelity negatively correlated with the increase of PISD.

Other recommendations for future research are to explore marital repair efforts and/or religious/core beliefs as mediators between PISD and specific marital outcomes, as listed in this study. These two variables did not act together as moderators between PISD and specific marital outcomes, but it is possible that they may act as mediators independently between the two since they were positively and negatively predictive of many marital outcomes.

Additionally, religious/core beliefs within the Christian context, as well as other religious beliefs, should be created and evaluated by an instrument that is similar to Worthington et al.'s (2012) RCI-10 but with constructs specifically geared toward measuring religious/core beliefs regarding marriage, fidelity, infidelity, marital repair efforts via repentance, and marital forgiveness using Worthington's transgression repair. It is also recommended that differences between PISD and non-PISD participants require further exploration with a closer to equal group sample size based on power to explore truer differences between the two groups.

Summary

This study evaluated marital infidelity, PISD, and its potential moderators (i.e., religious/core beliefs, and marital repair efforts) and predictors (i.e., religious/core beliefs, marital repair efforts, lack of marital efforts, discovery, and duration) and specific post-infidelity marital outcomes (i.e., healing, forgiveness, benevolence, marital repair, revenge, avoidance, divorce/desire to divorce, or separation/desire to separate). It was conducted to add

to the body of literature regarding PISD and specific post-infidelity marital outcomes. Overall, no quantitative studies have conclusively evaluated the questions and variables addressed in this study related to PISD and marital outcomes. Prior recommendations for research advised measuring specific types of infidelity (Roos et al., 2019), a participant pool of married participants (Shrout & Weigel, 2020), and increasing the length of timeframe to measure post-infidelity reactions (Shrout & Weigel, 2020); Shrout and Weigel's (2020) post-infidelity reaction study time was 90 days and was not exclusive to marital couples.

The overall findings support that marital infidelity discovery and lack of marital repair efforts positively predicted PISD level, and duration of marital infidelity negatively predicted PISD level. This study found that higher marital repair efforts significantly negatively predicted revenge, avoidance, desire to separate, and desire to divorce and significantly positively predicted forgiveness and benevolence. Religious/core beliefs significantly negatively predicted the desire to divorce, revenge and avoidance behaviors and significantly positively predicted benevolence. PISD significantly negatively predicted benevolence, healing, and forgiveness and significantly positively predicted avoidance and revenge in the participants of this study. The study also found that there were statistically significant differences between participants with PISD, who had higher marital outcomes of avoidance and revenge and lower marital outcomes of healing and forgiveness than participants without PISD.

The implications of the study are for traumatologists, marriage and family therapists, pastoral counselors, and mental health clinicians to consider the role of marital infidelity as a trauma, specifically PISD, regarding marital outcomes to inform treatment for PISD, trauma, marriage therapy, and marital infidelity recovery. This study also emphasizes the predictive nature of religious/core beliefs, lack of marital repair efforts, and marital repair efforts as they relate to marital outcomes and PISD so that clinicians can conceptualize these factors regarding treatment planning. Some of the limitations of the study are the cross-sectional design, self-

reporting, and the fact that there were unequal group comparisons regarding marital outcomes. Recommendations for future research include exploring other factors not tested from Glass's framework and testing religious/core beliefs and marital repair efforts independently as a mediation analysis between PISD and specific marital outcomes.

References

- Abrahamson, I., Hussain, R., Khan, A., & Schofield, M. J. (2012). What helps couples rebuild their relationship after infidelity? *Journal of Family Issues*, 33(11), 1494-1519. doi:10.1177/0192513X11424257
- Allen, E. S., Rhoades, G. K., Stanley, S. M., Markman, H. J., Williams, T., Melton, J., & Clements, M. L. (2008). Premarital precursors of marital infidelity. *Family Process*, 47(2), 243-259. doi:https://doi.org/10.1111/j.1545-5300.2008.00251.x
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.). American Psychiatric Publishing.
- Ashbaugh, A. R., Houle-Johnson, S., Herbert, C., El-Hage, W., & Brunet, A. (2016).

 Psychometric validation of the English and French versions of the posttraumatic stress disorder checklist for DSM-5 (PCL-5). *PloS ONE*, *11*(10).

 doi:https://doi.org/10.1371/journal.pone.0161645
- Aune, R. K., Metts, S., & Ebesu-Hubbard, A. S. (1998). Managing the outcomes of discovered deception. *The Journal of Social Psychology*, *138*(6), 677-689.
- Azhar, A., Abbas, J., Wenhong, Z., Akhtar, T., & Aqeel, M. (2018). Linking infidelity stress, anxiety, and depression: Evidence from Pakistan married couples and divorced individuals. *International Journal of Human Rights in Healthcare, 11*(3), 214-228. doi: https://doi.org/10.1108/IJHRH-11-2017-0069
- Barraca, J., & Polanski, T. X. (2021). Infidelity treatment from an integrative behavioral couple therapy perspective: Explanatory model and intervention strategies. *Marital and Family*, 47(4), 909-924. doi:https://doi.org/10.1111/jmft.12483

- Bendixen, M., Kennair, L. E., & Grøntvedt, T. V. (2018). Forgiving the unforgivable: Couples' forgiveness and expected forgiveness of emotional and sexual infidelity from an error management theory perspective. *Evolutionary Behavioral Sciences*, *12*(4), 322-335. doi:https://doi.org/10.1037/ebs0000110
- Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress*, 28(6), 489-498. doi:https://doi.org/10.1002/jts.22059
- Bradfield, M., & Aquino, K. (1999). The effects of blame attributions and offender likableness on forgiveness and revenge in the workplace. *Journal of Management*, 25(5), 607-631. doi:https://doi.org/10.1016/S0149-2063(99)00018-5
- Brunning, L. (2018). The distinctiveness of polyamory. *Journal of Applied Philosophy*, *35*(3), 513-531. doi:https://doi.org/10.1111/japp.12240
- Cano, A., & O'Leary, K. D. (2000). Infidelity and separations precipitate major depressive episodes and symptoms of nonspecific depression and anxiety. *Journal of Consulting and Clinical Psychology*, 68(5), 774-781. doi:10.1037/0022-006X.68.5.774
- Chi, P., Tang, Y., Worthington, E. L., Chan, C. L., Lam, D. O., & Lin, X. (2019). Intrapersonal and interpersonal facilitators of forgiveness following spousal infidelity: A stress and coping perspective. *Journal of Clinical Psychology*, 75(10), 1896-1915. doi:https://doi.org/10.1002/jclp.22825
- Creswell, J. W., & Creswell, D. (2020). Research design qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE.

- Easton, P. (2003a, February 6). *Harris pain over seeing husband's lover's car in hotel parking lot*. (Houston Chronicle) Retrieved March 15, 2022, from Chron. https://www.chron.com/news/article/Harris-pain-over-seeing-husband-s-lover-s-car-in-7712916.php
- Easton, P. (2003b, February 7). *Wife says she was aiming for lover's SUV*. Retrieved March 15, 2022, from Chron. https://www.chron.com/news/article/Wife-Says-She-Was-Aiming-for-Lover-s-SUV-7076364.php
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analysis using G*power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Gibson, J. (2014). *Central limit theorem: Part 1-2* [Video]. Sage Research Methods. https://doi.org/10.4135/9781473979376
- Girard, A. C., Connor, J. J., & Woolley, S. R. (2020). An exploratory study of the role of infidelity typologies in predicting attachment anxiety and avoidance. *Journal of Marital and Family Therapy*, 46(1), 124-134. doi:https://doi.org/10.1111/jmft.12371
- Glass, S. (1981). Sex differences in the relationship between satisfaction with various aspects of marriage and types of extramarital involvements. *Dissertation Abstracts International*, 41(10).
- Glass, S. P. (2004). Not "just friends": Rebuilding trust and recovering your sanity after infidelity. Simon and Schuster.
- Glass, S. P., & Wright, T. L. (1977). The relationship of extramarital sex, length of marriage, and sex differences on marital satisfaction and romanticism: Athanasiou's data reanalyzed. *Journal of Marriage and the Family*, 39(4), 691-703.

- Glass, S. P., & Wright, T. L. (1992). Justifications for extramarital involvement: The association between attitudes, behaviors, and gender. *Journal of Sex Research*, 29(3), 361-387.
- Gordon, K. C., Baucom, D. H., & Snyder, D. K. (2005). Treating couples recovering from infidelity: An integrative approach. *Journal of Clinical Psychology*, 61(11), 1393-1405.
- Gordon, K. C., Baucom, D. H., & Snyder, D. K. (2008). Optimal strategies in couple therapy:

 Treating couples dealing with the trauma of infidelity. *Journal of Contemporary Psychotherapy*, 38(3), 151-160. doi:https://doi.org/10.1007/s10879-008-9085-1
- Gottman, J., & Gottman, J. (2017). Treating trauma and affairs: A Gottman approach for therapists on the treatment of affairs and posttraumatic distress disorder. The Gottman Institute Inc.
- Hall, J. H., & Fincham, F. D. (2009). Psychological distress: Precursor or consequence of dating infidelity? *Personality and Social Psychology*, 35(2), 143-159.
 doi:10.1177/0146167208327189
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis:*A regression-based approach (2nd ed.). The Guilford Press.
- Heppner, P. P., Wampold, B., Owen, J., Thompson, M. N., & Wang, K. T. (2016). *Research design in counseling* (4th ed.). Cengage.
- Hertlein, K. M., Wetchler, J. L., & Piercy, F. P. (2011). Infidelity: An overview. In K. M.Hertlein, J. L. Wetchler, & F. P. Piercy, *Handbook of the clinical treatment of infidelity*.Routledge. https://doi.org/10.4324/9780203051429
- Houston Chronicle. (2002, July 25). *Dentist accused of running over husband three times*.

 Retrieved March 15, 2022, from Chron. https://www.chron.com/news/article/Dentist-accused-of-running-over-husband-three-8742603.php

- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition*, 7(2), 113-136. doi:https://doi.org/10.1521/soco.1989.7.2.113
- Kachadourian, L. K., Smith, B. N., Taft, C. T., & Vogt, D. (2015). The impact of infidelity on combat-exposed service members. *Journal of Traumatic Stress*, 26(5), 418-425. doi:10.1002/jts.22033
- Kröger, C., Reißner, T., Vasterling, I., Schütz, K., & Kliem, S. (2012). Therapy for couples after an affair: A randomized-controlled trial. *Behaviour Research and Therapy*, 50(12), 786-796. doi:https://doi.org/10.1016/j.brat.2012.09.006
- Laaser, D., Putney, H. L., Bundick, M., Delmonico, D. L., & Griffin, E. J. (2017). Posttraumatic growth in relationally betrayed women. *Journal of Marital and Family Therapy*, 43(3), 434-447. doi:https://doi.org/10.1111/jmft.12211
- Labrecque, L. T., & Whisman, M. A. (2017). Attitudes toward and prevalence of extramarital sex and descriptions of extramarital partners in the 21st century. *Journal of Family Psychology*, *31*(7), 952-957. doi:https://doi.org/10.1037/fam0000280
- Lalasz, C., & Weigel, D. (2011). Understanding the relationship between gender and extradyadic relations: The mediating role of sensation seeking on intentions to engage in sexual infidelity. *Personality and Individual Differences*, 50, 1079-1083. doi:10.1016/j.paid.2011.01.029
- Lawson, A. (1988). Adultery: An analysis of love and betrayal. Basic Book.
- Marín, R. A., Christensen, A., & Atkins, D. C. (2014). Infidelity and behavioral couple therapy:

 Relationship outcomes over 5 years following therapy. *Couple and Family Psychology:*Research and Practice, 3(1), 1-12. doi:https://doi.org/10.1037/cfp0000012

- McCann, I. L., Sakheim, D. K., & Abrahamson, D. J. (1988). Trauma and victimization: A model of psychological adaptation. *The Counseling Psychologist*, *16*(4), 531-594. doi:https://doi.org/10.1177/0011000088164002
- McCullough, M. E., & Hoyt, W. T. (2002). Transgression-related motivational dispositions:

 Personality substrates of forgiveness and their links to the big five. *Personality & Social Psychology Bulletin*, 28(11), 1556-1573. https://doi.org/10.1177/014616702. *Personality & Social Psychology Bulletin*, 28(11), 1556-1573.

 doi:https://doi.org/10.1177/014616702
- McCullough, M. E., Bellah, C., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness:

 Relationships with forgiveness, rumination, well-being, and the big five. *Journal of Personality and Social Psychology Bulletin*, 27, 601-610.
- McCullough, M. E., Fincham, F. D., & Tsang, J. (2003). Forgiveness, forbearance, and time:

 The temporal unfolding of transgression-related interpersonal motivations. *Journal of Personality and Social Psychology*, 84, 540-557.
- McCullough, M. E., Rachal, K., Sandage, S. J., Worthington, E. L., Brown, S. W., & Hight, T.
 L. (1998). Interpersonal forgiving in close relationships: II. theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 75, 1586-1603.
- McCullough, M. E., Root, L. M., & Cohen, A. D. (2006). Writing about the benefits of an interpersonal transgression facilitates forgiveness. *Journal of Consulting and Clinical Psychology*, 74(5), 887-897.
- McCullough, M. E., & Worthington, E. L. (1999). Religion and the forgiving personality.

 *Journal of Personality, 67(6), 1141-1164. https://doi.org/10.1111/1467-6494.00085
- McDaniel, B., Drouin, M., & Cravens, J. (2017). Do you have anything to hide? Infidelity-related behaviors on social sites and marital satisfaction. *Computers in Human Behavior*, 66, 88-95. doi:http://dx.doi.org/10.1016/j.chb.2016.09.031

- Moller, N. P., & Vossler, A. (2015). Defining infidelity in research and couple counseling: A qualitative study. *Journal of Sex & Marital Therapy*, 487-497. doi:http://dx.doi.org/
- Monson, C. M., Fredman, S. J., Macdonald, A., Pukay-Martin, N. D., Resick, P. A., & Schnurr, P. P. (2012). Effect of cognitive-behavioral couple therapy for PTSD: A randomized controlled trial. *JAMA: The Journal of the American Medical Association*, 308(7), 700-709. doi:https://doi.org/10.1001/jama.2012.9307
- National Center for PTSD. (2021, December 12). *Using the PTSD checklist for DSM-5 (PCL-5)*. U.S. Department of Veteran Affairs.

 http://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp
- Negash, S., & Morgan, M. L. (2016). A family affair: Examining the impact of parental infidelity on children using a structural family therapy framework. *Contemporary Family Therapy*, 38(2), 198-209. doi:https://doi.org/10.1007/s10591-015-9364-4
- Nowak, N., Weisfeld, G., Imamoğlu, O., Weisfeld, C., Butovskaya, M., & Shen, J. (2014).

 Attractiveness and spousal infidelity as predictors of sexual fulfillment without the marriage partner in couples. *Human Ethology Bulletin*, 29, 18-38.
- O'Connor, V., & Canevello, A. (2019). Recovery and moving on after breakups caused by infidelity. *Journal of Loss & Trauma, 24*(7), 636-649. doi:https://doi.org/10.1080/15325024.2019.1603005
- Olson, M. M., Russell, C. S., Higgins-Kessler, M., & Miller, R. B. (2002). Emotional processes following disclosure of an extramarital affair. *Journal of Marital and Family Therapy*, 28(4), 423-434. doi:https://doi.org/10.1111/j.1752-0606.2002.tb00367.x
- Ortman, D. C. (2005). Post-infidelity stress disorder. *Journal of Psychosocial Nursing and Mental Health Services*, 43(10), 46.
- Ortman, D. C. (2009). Transcending post-infidelity stress disorder. Crown Publishing.

- Pittman, F. S., & Wagers, T. P. (2005). The relationship, if any, between marriage and infidelity. *Journal of Couple & Relationship Therapy*, 135-148. doi:10.1300/J398v04n0212
- Rachman, S. (2010). Betrayal: A psychological analysis. *Behaviour Research and Therapy*, 48(4), 304-311. doi:10.1016/j.brat.2009.12.002
- Rasmussen, K. R., & Boon, S. D. (2014). Romantic revenge and the dark triad: A model of impellance and inhibition. *Personality and Individual Differences*, *56*, 51–56. doi:https://doi.org/10.1016/j.paid.2013.08.018
- Regas, S. (2019). Infidelity, self-differentiation, and intimacy: The mindful differentiation model of couple therapy. In C. C. Datchi, & P. J. Pitta, *Integrative couple and family therapies: Treatment models for complex clinical issues* (pp. 71-90). American Psychological Association. doi:https://doi.org/10.1037/0000151-004
- Resick, P. A., Monson, C. M., & Chard, K. M. (2017). Cognitive processing therapy for PTSD:

 A comprehensive manual. The Guilford Press.
- Roos, L. G., O'Connor, V., Canevello, A., & Bennett, J. M. (2019). Post-traumatic stress and psychological health following infidelity in unmarried young adults. *Stress and Health*, *35*(4), 468-479. doi:https://doi.org/10.1002/smi.2880
- Russell, V. M., Baker, L. R., & McNulty, J. K. (2013). Attachment insecurity and infidelity in marriage: Do studies of dating relationships really inform us about marriage? *Journal of Family Psychology*, 27(2), 242-251. doi:10.1037/a0032118
- Sakman, E., Urganci, B., & Sevi, B. (2021). Your cheating heart is just afraid of ending up alone: Fear of being single mediates the relationship between attachment anxiety and infidelity. *Personality and Individual Differences*, *168*(110366). doi:https://doi.org/10.1016/j.paid.2020.110366
- Schupp, L. J. (2015). Assessing and treating trauma and PTSD. PESI Publishing and Media.

- Schwartz, A. (2016). The complex PTSD workbook: A mind approach to regaining emotional control & becoming whole. Althea Press.
- Selterman, D., Garcia, J. R., & Tsapelas, I. (2019). Motivations for extradyadic infidelity revisited. *The Journal of Sex Research*, *56*(3), 273-286. doi:https://doi.org/10.1080/00224499.2017.1393494
- Shackelford, T. K., Buss, D. M., & Bennett, K. (2002). Forgiveness or breakup: Sex differences in responses to a partner's infidelity. *Cognition and Emotion*, 16(2), 299-307. doi:https://doi.org/10.1080/02699930143000202
- Shelton, P. R. (2003). Personal recovery and relationship repair after extramarital involvement:

 An exploratory study of controversial issues [Doctoral dissertation, California Graduate

 School of Psychology] (Publication No. 3391573). ProQuest Dissertations Publishing.
- Shrout, M., & Weigel, D. (2020). Coping with infidelity: The moderating role of self-esteem. *Personality and Individual Differences*, *154*.

 doi:https://doi.org/10.1016/j.paid.2019.109631
- Shrout, R. M., & Weigel, D. J. (2018). Infidelity's aftermath: Appraisals, mental health, and health-compromising behaviors following partner's infidelity. *Journal of Social and Personal Relationships*, 35(8), 1067-1091. doi:10.1177/0265407517704091
- Snyder, D. K., Baucom, D. H., & Gordon, K. C. (2008). An integrative approach to treating infidelity. *The Family Journal*, 16(4), 300-307. doi:https://doi.org/10.1177/1066480708323200
- Sori, C. F. (2007). An affair to remember: Infidelity and its impact on children. In P. Peluso, Infidelity: A practitioner's guide to working with couples in crisis. Routledge.
- Strong, J. (2015). A comprehensive strong dictionary of the Bible. Bestbooks.
- Stuckless, N., & Goranson, R. (1992). The vengeance scale: Development of a measure of attitudes toward revenge. *Journal of Social Behavior and Personality*, 7, 25-42.

- Turner, A. (2003, February 4). *Clara Harris "was no longer" no. 1 to dentist.* (Houston Chronicle) Retrieved March 15, 2022, from Chron.

 https://www.chron.com/news/houston-texas/article/Clara-Harris-was-no-longer-No-1-to-dentist-2096396.php
- Tuttle, J. D., & Davis, S. N. (2015). Religion, infidelity, and divorce: Reexamining the effect of religious behavior on divorce among long-married couples. *Journal of Divorce & Remarriage*, 56(6), 475-489. doi:https://doi.org/10.1080/10502556.2015.1058660
- Uhernik, J. A. (2017). *Using neuroscience in trauma therapy: Creative and compassionate counseling*. Routledge.
- VandenBos, G. R., & American Psychological Association. (2013). *APA dictionary of clinical psychology*. American Psychological Association.
- Vaughan, P. (2010). Help for therapists (and their clients) in dealing with affairs. Dialog Press.
- Warach, B., & Josephs, L. (2021). The aftershocks of infidelity: A review of infidelity-based attachment trauma. *Sexual and Relationship Therapy*, *36*(1), 68-90. doi:https://doi.org/10.1080/14681994.2019.1577961
- Warach, B., Josephs, L., & Gorman, B. S. (2018). Pathways to infidelity: The roles of self-serving bias and betrayal trauma. *Journal of Sex & Marital Therapy*, 44(5), 497-512. doi:10.1080/0092623X.2017.1416434
- Warner, R. M. (2013). *Applied statistics from bivariate through multivariate techniques* (2nd ed.). SAGE.
- Weigel, D. J., & Shrout, M. R. (2021). Suspicious minds: The psychological, physical, and behavioral consequences of suspecting a partner's infidelity. *Journal of Social and Personal Relationships*, 38(3), 865-887. doi:https://doi.org/10.1177/0265407520975851

- Weiser, D. A., Lalasz, C. B., Weigel, D. J., & Evans, W. P. (2014). A prototype analysis of infidelity: Infidelity prototype. *Personal Relationships*, 21(4), 655-675.
 doi:https://doi.org/10.1111/pere.12056
- Weiser, D. A., Weigel, D. J., Lalasz, C. B., & Evans, W. P. (2017). Family background and propensity to engage in infidelity. *Journal of Family Issues*, 2083-2101. doi:https://doi.org/10.1177/0192513X15581660
- Weiss, R. L., & Cerretto, M. C. (1980). The marital status inventory: Development of a measure of dissolution potential. *The American Journal of Family Therapy*, 80-85. doi:https://doi.org/10.1080/01926188008250358
- Wentland, J. J., & Reissing, E. (2014). Casual sexual relationships: Identifying definitions for one-night stands, booty calls, fuck buddies, and friends with benefits. *The Canadian Journal of Human Sexuality*, 23(3), 167-177. doi:https://doi.org/10.3138/cjhs.2744
- Whisman, M. A. (2016). Discovery of a partner affair and major depressive episode in a probability sample of married or cohabiting adults. *Family Process*, 55(4), 713-723. doi:10.1111/famp.12185
- Whisman, M. A., Dixon, A. E., & Johnson, B. (1997). Therapists' perspective of couples problems and treatment issues in couple therapy. *Journal of Family Psychology*, 11(3), 361-366.
- Whisman, M. A., & Snyder, D. K. (2007). Sexual infidelity in a national survey of American women: Differences in prevalence and correlates as a function of method of assessment.

 *Journal of Family Psychology, 21(2), 147-154. doi:10.1037/0893-3200.21.2.147
- Wiederman, M. W. (1997). Extramarital sex: Prevalence and correlates in a national survey.

 The Journal of Sex Research, 34(2), 167.
- Worthington, E. L., Jr. (2006). Forgiveness and reconciliation: Theory and application. Taylor & Francis Group.

- Worthington, E. L., Jr., Hook, J. N., Davis, D. E., & McDaniel, M. A. (2011). Religion and spirituality. *Journal of Clinical Psychology*, 67(2), 204-214. doi:https://doi.org/10.1002/jclp.20760
- Worthington, E. L., Jr., B. E., & McConnell, J. M. (2019). Forgiveness in committed couples:

 Its synergy with humility, justice, and reconciliation. *Religions*, 10(1), 13.

 doi:https://doi.org/10.3390/rel10010013
- Worthington, E. L., Jr., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J.
 W., Schmitt, M. M., Berry, J. T., Bursley, K. H., & O'Connor, L. (2003). The Religious
 Commitment Inventory-10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, 50(1), 84-96.
 doi:https://doi.org/10.1037/0022-0167.50.1.84
- Worthington, E. L., Jr., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., Schmitt, M. M., Berry, J. T., Bursley, K. H., & O'Connor, L. (2012). The Religious Commitment Inventory-10 (RCI-10). *Measurement Instrument Database for the Social Science*. https://www.midss.ie

APPENDIX A

IRB Approval Letter

LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

June 13, 2023

Faith Roby Pamela Moore

Re: IRB Exemption - IRB-FY22-23-1333 INFIDELITY, POST-INFIDELITY STRESS DISORDER, AND POST-INFIDELITY STRESS MARITAL OUTCOMES

Dear Faith Roby, Pamela Moore,

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

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

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

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

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

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

APPENDIX B

Recruitment Flyer

Research Participants Needed

Infidelity, Post-Infidelity Stress Disorder, and Post-Infidelity Stress Marital Outcomes

- Are you or were you legally in a heterosexual marriage (e.g., one biological man & one biological woman and identify as such) and discovered your spouse's sexual infidelity in the last 30 days to 18 months?
- Are you biologically male or female and strictly identify with your biological sex without sexual identity or gender identity disorder or confusion/conflict?
 - Are you at least 21 years old?
 - Are you or were you married for at least 30 days when you discovered your spouse's sexual infidelity?
- Have you <u>never</u> been diagnosed with schizophrenia, Alzheimer's, dementia, traumatic brain injury (TBI), or bipolar I, II, and other related bipolar disorders?

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

The purpose of this research study is to is to better understand marital infidelity discovery and PISD (post-infidelity stress disorder) related to marital outcomes.

Participants will be asked to complete an anonymous, online survey that will take approximately 15 minutes to complete. If you meet my participant criteria, the screening will direct you to proceed with the online survey.

If you would like to participate, please click here https://liberty.co1.qualtrics.com/jfe/form/SV_bwNq0D6e1IJmusC and complete the survey.

A consent document is provided as the first page of the survey. The consent document contains additional information about my research. After you have read the consent form and completed the screening, please proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the study.

Faith C. L. Roby, LMFT, a doctoral candidate in the Community Care & Counseling: Traumatology, School of Behavioral Sciences at Liberty University, is conducting this study.

Please contact Faith C. L. Roby at

for more information.

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

APPENDIX C

Consent Form

Consent

Title of the Project: Infidelity, Post-Infidelity Stress Disorder, and Post-Infidelity Stress

Marital Outcomes

Principal Investigator: Faith C. L. Roby, Doctoral Candidate, Department of Community Care

& Counseling: Traumatology, School of Behavioral Sciences. Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate in this study, your spouse must have committed sexual marital infidelity/adultery within the last month to 18 months. You must have been legally married in a heterosexual marriage (one man and one woman) for at least 30 days during the infidelity discovery. You must be biologically male or female and strictly identify with your biological sex without sexual identity or gender identity disorder, or confusion/conflict. You must be the minimum age of 21. Additionally, you must not have been previously diagnosed with or reasonably suspect that you have the following disorders, which include all of the following:

Schizophrenia and other psychotic disorders in that category (e.g., Schizophreniform, etc.) Alzheimer's Dementia
Traumatic Brain Injury

Bipolar I, II and related disorders

Taking part in this research project is voluntary.

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

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

This descriptive, quantitative, and correlational study aims to explore traumatic post-infidelity stress disorder in participants that discovered their spouse's infidelity and post-infidelity marital outcomes to inform clinicians and the general public to generate effective marital infidelity treatment.

What will happen if you take part in this study?

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

- 1. Participate in an anonymous, online survey directly related to the study, which will take approximately 15 minutes to complete.
- 2. The entire study must be taken in a private and confidential area and completed only by the participant.

How could you or others benefit from this study?

Participants should not expect a direct benefit from participating in this study. Benefits to society include conceptualizing, informing, and developing effective treatments for individuals and marriages that experienced infidelity.

What risks might you experience from being in this study?

Psychological and Emotional Impact: The expected risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. Risks may include reliving or reexperiencing mental, emotional, physiological, behavioral, or visual reminders surrounding the prior exposed infidelity.

Injury or Illness: Liberty University will not provide medical/mental health treatment or financial compensation if you are injured or become ill as a result of participating in this research project. This does not waive any of your legal rights nor release any claim you might have based on negligence.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Participant responses are anonymous. You must not be in a public setting when completing the screenings and surveys. Data will be stored on a password-locked computer and may be used in future presentations.

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 not to answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

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

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

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

The researcher conducting this study is Faith C. L. Roby. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at 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 D

PCL-5 Letter of Approval

From: Chandler, Heather B. on behalf of NCPTSD

To: Roby, Faith Christie Leigh

Subject: [External] RE: PCL-5 instruction modification request

Date: Thursday, May 4, 2023 12:40:53 PM

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust

the content.

Good afternoon,

Yes, you can make changes as you see fit for your dissertation.

Thank you,

Health Science Specialist National Center for PTSD

From: Roby, Faith Christie Leigh

Sent: Wednesday, May 3, 2023 7:52 PM

To: NCPTSD

Subject: [EXTERNAL] PCL-5 instruction modification request

Greetings,

As a doctoral student in the Community Care & Counseling: School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for my dissertation for a Doctor of Education in Community Care & Counseling: Traumatology.

I am writing to request your permission to *slightly modify the current instructions* for the PCL-5 for the purposes of my survey for my dissertation to list the specific **stressful experience**/*problem* that the participants will be rating. I have highlighted the word I would like to exchange for the specific stressful experience below?

Sincerely,

Faith C. L. Roby|LMFT, MMFT, MA, BS, BS Licensed Marriage & Family Therapist| TN, TX & KY Doctoral Counseling Dissertation Candidate: Traumatology

APPENDIX E

PCL-5 (With Modified Instructions)

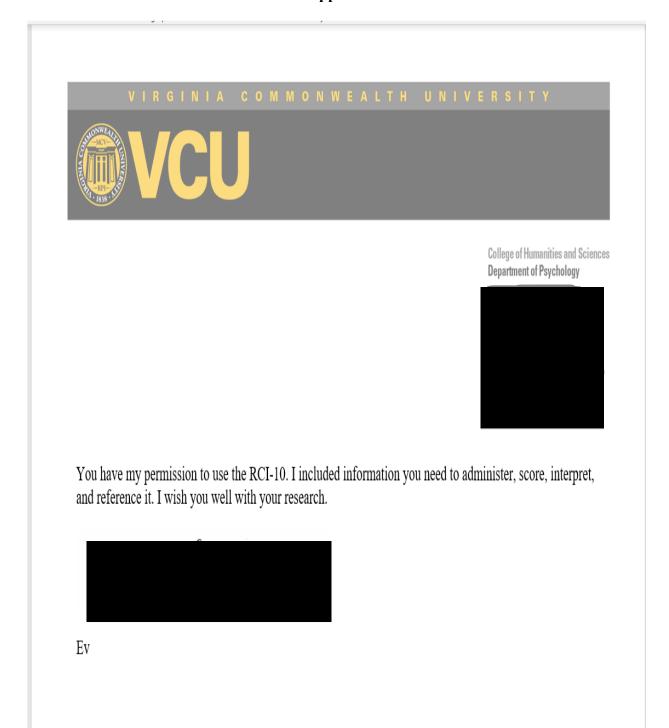
Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience like discovering their spouse's infidelity. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem of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

	n the past month, how much were you oothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1.	Repeated, disturbing, and unwanted memories of the stressful experience?	0 0	1 🔿	2 🔿	3 O	40
2. stre	Repeated, disturbing dreams of the ssful experience?	0 🔾	1 🔘	2 🔘	3 🔘	40
3.	Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0 🔿	1 🔿	20	3 🔾	40
4.	Feeling very upset when something reminded you of the stressful experience?	0 🔾	1 🔿	2 🔾	3 🔘	40
5.	Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0 🔿	10	2 🔾	3 🔘	40
6.	Avoiding memories, thoughts, or feelings related to the stressful experience?	0 O	1 🔘	2 🔾	3 🔘	4 🔿
7.	Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0 0	1 🔿	20	3 O	40
8.	Trouble remembering important parts of the stressful experience?	0 🔾	1 🔿	2 🔾	3 🔘	40
9.	Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0 🔿	10	2 🔿	3 O	40
10.	Blaming yourself or someone else for the stressful experience or what happened after it?	0 🔾	1 🔿	2 O	3 O	4 🔿

11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0 🔾	1 🔾	2 🔘	3 🔘	4 🔿
12. Loss of interest in activities that you used to enjoy?	0 (1 O	2 🔘	3 O	40
13. Feeling distant or cut off from other people?	0 🔾	1 🔾	2 🔾	3 🔘	40
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0 🔾	1 🔘	2 🔿	3 🔘	40
15. Irritable behavior, angry outbursts, or acting aggressively?	0 🔾	1 O	2 🔾	3 🔾	40
16. Taking too many risks or doing things that could cause you harm?	0 🔾	1 🔿	2 🔘	3 🔘	40
17. Being "super alert" or watchful or on guard?	0 O	1 🔾	2 🔾	3 🔘	40
18. Feeling jumpy or easily startled?	0 🔾	1 🔘	2 🔘	3 🔘	4 🔘
19. Having difficulty concentrating?	0 🔾	10	2 O	3 O	40
20. Trouble falling or staying asleep?	0 🔘	1 🔘	2 🔘	3 🔘	40

APPENDIX F

RCI-10 Approval Letter



APPENDIX G

RCI-10

Instructions: Read each of the following statements. Using the scale to the right, CIRCLE the response that best describes how true each statement is for you.

	Not at all true of me	Somewhat true of me	Moderately true of me	Mos true	tly of me		•		ne
	1	2	3 4				:	5	
	I often read books and ma	•			1	2	3	4	5
3.	I make financial contribut I spend time trying to grow	w in understandin	g of my faith.		1	2	3	4	5
4.	Religion is especially imp questions about the meani		use it answers ma	ny	1	2	3	4	5
5. 6.	My religious beliefs lie be I enjoy spending time with	•							
	Religious beliefs influence	e all my dealings	in life.						
8.	It is important to me to spethought and reflection.	end periods of tim	ne in private religi	ous	1	2	3	4	5
	I enjoy working in the act. I keep well informed about			e some	1	2	3	4	5
10.	influence in its decisions.	is my local longio	as group and nave	Jonie	1	2	3	4	5

APPENDIX H

TRIM-18 Approval Letter

From: Michael McCullough

To: Roby, Faith Christie Leigh

Subject: [External] Re: Transgression-related interpersonal motivation inventory: Request for permission to use

Date: Monday, April 4, 2022 10:50:45 AM

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Yes, of course you can.

Good luck. Best wishes, Mike Michael E. McCullough Professor Department of Psychology University of California, San Diego

New Book: "The Kindness of Strangers: How a Selfish Ape Invented a New Moral Code" Amazon: https://amzn.to/2TFnufY

On Sun, Apr 3, 2022 at 8:47 PM Roby, Faith Christie Leigh

wrote:

Greetings Dr. McCullough,

My name is Faith C. L. Roby, LMFT and I am in the process of completing my dissertation proposal on the topic of *post-infidelity stress and marital outcomes*. While I was evaluating exiting surveys and scales to answer my research questions, I came across your *transgression-related interpersonal motivations inventory*, which I believe is crucial to my research.

I would like to use your inventory for my dissertation. What are the steps necessary for gaining your permission to utilize this much needed scale? If I receive your permission to use this inventory, what are the costs associated with obtaining the inventory?

Blessings,

Faith C. L. Roby|LMFT, MMFT, MA, BS, BS Licensed Marriage & Family Therapist| TN, TX & KY Doctoral Counseling Dissertation Candidate: Traumatology

APPENDIX I

TRIM-18 (with Modified Instructions)

(McCullough, Root, & Cohen, 2006)

For the following questions, please indicate your current thoughts and feelings about the person who hurt you; that is, we want to know how you feel about that person **right now**. Next to each item, circle the number that best describes your current thoughts and feelings.

	Strongly Disagree	Disagree 2	Neutral	Agree 4	Strongly Agree 5
1. I'll make him/her pay.	1	2	3	4	5
2. I am trying to keep as much distance between us as possible.	1	2	3	4	5
3. Even though his/her actions hurt me, I have goodwill for him/her.	1	2	3	4	5
4. I wish that something bad would happen to him/her.	1	2	3	4	5
5. I am living as if he/she doesn't exist, isn't around.	1	2	3	4	5
6. I want us to bury the hatchet and move forward with our relationship.	1	2	3	4	5
7. I don't trust him/her.	1	2	3	4	5
8. Despite what he/she did, I want us to have a positive relationship again.	1	2	3	4	5
9. I want him/her to get what he/she deserves.	1	2	3	4	5
10. I am finding it difficult to act warmly toward him/her.	1	2	3	4	5
11. I am avoiding him/her.	1	2	3	4	5
12. Although he/she hurt me, I am putting the hurts aside so we can resume our relationship.	1	2	3	4	5
13. I'm going to get even.	1	2	3	4	5
14. I have given up my hurt and resentment.	1	2	3	4	5
15. I cut off the relationship with him/her.	1	2	3	4	5
16. I have released my anger so I can work on restoring our relationship to health.	1	2	3	4	5
17. I want to see him/her hurt and miserable.	1	2	3	4	5
18. I withdraw from him/her.	1	2	3	4	5

APPENDIX J

RRSS Approval Letter

From: R. Kelly Aune

To: Roby, Faith Christie Leigh

Subject: [External] Re: Using the RRSS as modified for dissertation

Date: Wednesday, April 5, 2023 9:53:09 PM

Aloha Faith,

Well, this is a blast from the past! This article was done when Dr. Amy Hubbard was doing her MA in our department and I was a lowly assistant professor. These days I am recently retired and Amy is the Chair of our department. Lots of water under the bridge!

Of course you should feel free to make use of the items we used in that article. I hope it is useful for you. As I remember we did quite a bit of work to convert the qualitative recollections of our respondents into the various categories and then create scale items out of them. My inclination has always been do work with quantitative data whenever possible. That was an adventure.

Sorry I took a moment to respond. I have multiple email addresses and although I still use my hawaii.edu address, I don't check it quite as often. If you need to reach me again, respond directly to this email and I will likely see it much sooner.

Good luck with your diss! Let me know if there is anything I can do to help. I would be happy to.

Warmest aloha

Kelly Aune

R. Kelly Aune Professor Emeritus Communicology Program School of Communication and Information University of Hawaii at Manoa http://sci.manoa.hawaii.edu/programs/communicology

On Apr 4, 2023, at 2:39 AM, Roby, Faith Christie Leigh wrote:

Greetings Dr. Aune,

My name is Faith Roby, and I am in the IRB dissertation proposal approval stage for my dissertation at Liberty University, studying post-infidelity stress. I am interested in using your Relationship Repair Strategies Scale (RRSS) as modified by the late Patricia Ross Shelton, who used it for her dissertation in 2003. I have a copy of her dissertation attached to this email and a separate copy of the modified version of the RRSS she used.2

May I receive your permission to use this modified version of the RRSS?

Sincerely,

Faith C. L. Roby|LMFT, MMFT, MA, BS, BS

Licensed Marriage & Family Therapist TN, TX & KY Doctoral

Counseling Dissertation Candidate: Traumatology

APPENDIX K

Relational Repair Strategies Scale (RRSS)

Instructions: The following items deal with how your spouse attempted to repair or correct any damage, problems, or disruptions that his/her marital infidelity caused to the marriage with you. Think about the things your spouse did during the time after the marital infidelity was discovered or disclosed.

Please indicate how relevant each item was in the attempt to repair the marriage on a scale of 1 (Not Relevant) to 7 (Very Relevant).

Not							Very
Relevant 1	2	3	4	5	6	7	Relevant

1. Truth-telling

(a) My spouse or partner⁹⁷ told the truth from the time the extramarital involvement was discovered or disclosed and continued to tell the truth.

2. Excusing the behavior

(a) My spouse or partner tried to make me see that he/she had a very good reason for doing what he/she did.

3. Justifying the behavior

(a) My spouse or partner tried to make me see that the extramarital involvement wasn't as serious as I believed it was.

4. Refusing / denying

(a) My spouse or partner talked about the extramarital involvement, but withheld or omitted some information.

5. Avoiding / evading

(a) After the first time we discussed it, my spouse or partner tried to avoid talking about the extramarital involvement.

6. Apologizing

(a) My spouse or partner said he/she was sorry and asked me to please forgive him/her.

7. Soothing and ingratiation

a. My spouse or partner tried to make me see that he/she understood and knew how I was feeling.

8. Invoking the relationship

a. My spouse/partner said he/she thought our relationship was strong enough to deal with the situation.

- 9. Working on qualities of the relationship
 - a. We spent more time together, reaffirming our caring for each other.
- 10. Performing relational rituals
 - a. My spouse/partner did things like giving me gifts, flowers, candy, cards, etc.
- 11. Discussing the extramarital involvement/relational consequences
 - a. We discussed the extramarital involvement and the impact it had on us personally, and on our relationship.

APPENDIX L

Demographics

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
21-29	71	35.1	35.1	35.1
30-39	68	33.7	33.7	68.8
40-49	43	21.3	21.3	90.1
50-59	17	8.4	8.4	98.5
60 and over	3	1.5	1.5	100.0
Total	202	100.0	100.0	

Sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	92	45.5	45.5	45.5
Female	110	54.5	54.5	100.0
Total	202	100.0	100.0	

Current status of marriage to the spouse who committed infidelity:

	Frequency	Percent	Valid Percent	Cumulative Percent
Married	130	64.4	64.4	64.4
Married, but not living together	28	13.9	13.9	78.2
Legally separated	19	9.4	9.4	87.6
Divorced	24	11.9	11.9	99.5
Widowed	1	.5	.5	100.0
Total	202	100.0	100.0	

Do you have a child or children with (includes pregnancy) with the spouse that committed infidelity?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	116	57.4	57.4	57.4
No	86	42.6	42.6	100.0
Total	202	100.0	100.0	

Religious Identification

	Frequency	Percent	Valid Percent	Cumulative Percent
Christian	143	70.8	70.8	70.8
Judaism	2	1.0	1.0	71.8
Islam	5	2.5	2.5	74.3
Hinduism	4	2.0	2.0	76.2
Mormonism	1	.5	.5	76.7
Atheist	27	13.4	13.4	90.1
Agnostic	13	6.4	6.4	96.5
Other	7	3.5	3.5	100.0
Total	202	100.0	100.0	

Religious Identification - Denomination

	Frequency	Percent	Valid Percent	Cumulative Percent
Eastern Orthodox	5	2.5	2.5	2.5
Catholic	56	27.7	27.7	30.2
Pentecostal	11	5.4	5.4	35.6
Apostolic	6	3.0	3.0	38.6
Church of God in Christ	5	2.5	2.5	41.1
Church of God	3	1.5	1.5	42.6
United Church of God	2	1.0	1.0	43.6
Church of Christ	4	2.0	2.0	45.5
Church of the Nazarene	1	.5	.5	46.0
Baptist	11	5.4	5.4	51.5
Southern Baptist	4	2.0	2.0	53.5
Lutheran	1	.5	.5	54.0
Episcopalian	1	.5	.5	54.5
Methodist	4	2.0	2.0	56.4
United Methodist	1	.5	.5	56.9
Wesleyan Methodist	1	.5	.5	57.4
Seventh Day Adventist	6	3.0	3.0	60.4
Word of Faith	2	1.0	1.0	61.4
Charismatic	2	1.0	1.0	62.4
Other	17	8.4	8.4	70.8
Orthodox	1	.5	.5	71.3
Conservative	1	.5	.5	71.8
Sunni	4	2.0	2.0	73.8
Nation of Islam	1	.5	.5	74.3
N/A	52	25.7	25.7	100.0
Total	202	100.0	100.0	

Highest Level of Education Completed

				Cumulative
	Frequency	Percent	Valid Percent	Percent
Finished high school or	21	10.4	10.4	10.4
equivalent				
Trade certificate	1	.5	.5	10.9
Some college	10	5.0	5.0	15.8
Two years of college	10	5.0	5.0	20.8
Associate degree	5	2.5	2.5	23.3
Finished four years of college	9	4.5	4.5	27.7
Bachelor's degree	77	38.1	38.1	65.8
Some graduate education	10	5.0	5.0	70.8
Professional Degree	9	4.5	4.5	75.2
Master's Degree	43	21.3	21.3	96.5
Ph.D.	5	2.5	2.5	99.0
Ed.D.	2	1.0	1.0	100.0
Total	202	100.0	100.0	

Current Personal Annual Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than \$15,000	33	16.3	16.3	16.3
Between \$15,000 and 25,000	56	27.7	27.7	44.1
Between \$26,000 and 40,000	39	19.3	19.3	63.4
Between \$41,000 and 60,000	33	16.3	16.3	79.7
Between \$61,000 and 80,000	13	6.4	6.4	86.1
Between \$81,000 and 109,000	16	7.9	7.9	94.1
Between \$110,000 and 149,000	8	4.0	4.0	98.0
Above \$150,000	4	2.0	2.0	100.0
Total	202	100.0	100.0	

Your Occupation/Career

				Cumulative
	Frequency	Percent	Valid Percent	Percent
Unemployed	14	6.9	6.9	6.9
Retired	2	1.0	1.0	7.9
Active-Duty Military/Armed	5	2.5	2.5	10.4
Forces				
Military/Department of Defense	1	.5	.5	10.9
Contractor				
Fulltime Homemaker	3	1.5	1.5	12.4
Educator	13	6.4	6.4	18.8
Professional Behavioral/Mental	12	5.9	5.9	24.8
(e.g., Marriage & Family				
Therapist, etc.)				
Professional Medical (e.g.,	7	3.5	3.5	28.2
Medical doctor, Nurse				
practitioner, etc.)				
Professional Legal (e.g.,	5	2.5	2.5	30.7
Attorney, etc.)				
Professional Technical (e.g.,	34	16.8	16.8	47.5
engineering, IT, etc.)				
Service	9	4.5	4.5	52.0
Hospitality (e.g., hotel,	4	2.0	2.0	54.0
restaurant, etc.)				
Aviation	1	.5	.5	54.5
Marketing/Sales	14	6.9	6.9	61.4
Executive	3	1.5	1.5	62.9
Administration	17	8.4	8.4	71.3
Managerial	23	11.4	11.4	82.7
Administrative Support	6	3.0	3.0	85.6
Entertainment	1	.5	.5	86.1
Other	28	13.9	13.9	100.0
Total	202	100.0	100.0	

Race/Ethnicity

	n	Min	Max	M	SD
Black	66	1	1	1.00	.000
White	91	1	1	1.00	.000
Jewish (e.g., Sephardic, Ashkenazi)	1	1	1	1.00	
West African	2	1	1	1.00	.000
Northern African	1	1	1	1.00	
South African	24	1	1	1.00	.000
Korean	1	1	1	1.00	
Indian	4	1	1	1.00	.000
Pakistan	1	1	1	1.00	
Asian (e.g., Thailand, Philippines)	3	1	1	1.00	.000
Eastern European	4	1	1	1.00	.000
Western European (e.g., England, Ireland)	3	1	1	1.00	.000
Southern Europe (e.g., the Iberian Peninsula)	1	1	1	1.00	
Central Europe	2	1	1	1.00	.000
Mesoamerican (e.g., Mexico, Guatemala)	20	1	1	1.00	.000
Native American	1	1	1	1.00	
South American	2	1	1	1.00	.000
Other	5	1	1	1.00	.000