

THE DEVELOPMENT AND VALIDATION OF A MEASURE OF BELIEFS ABOUT SEX
AND SPIRITUALITY

by

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Liberty University

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Of the Requirements for the Degree

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ABSTRACT

Spirituality and sexuality are related concepts that include sacredness and transcendence. When the spiritual concepts of sacredness and transcendence are the filter through which sexuality is understood, there are many positive benefits, including increased sexual and relationship satisfaction. Previous research has considered the concepts. However, little empirical work has addressed the idea of transcendence, spirituality, and sacredness without explicitly religious overtones. Previous measures that have considered spirituality and sexuality have been found lacking in the ability to capture the multidimensionality of sex fully and have utilized explicitly religious terminology that may not capture the experience of non-religious or spiritual individuals. This study created and validated a measure with the idea that the spiritualization of sexuality will predict an increase in sexual satisfaction and couple satisfaction. The Sexuality and Spirituality Measure (SSM) was created to explore the relationship between transcendence, sacredness, and sexuality. The results of this study suggested that there were four subscales: sacred, transcendence, peak experience, and spiritual importance. The SSM accounted for about 4% of the variance of couple satisfaction beyond what sexual satisfaction predicted. This indicated that spiritualization of sexuality is meaningful for relationship satisfaction.

Keywords: spirituality, sexuality, sacred, transcendence, assessment, relationship satisfaction, sexual satisfaction, peak experience.

Dedication

This dissertation is dedicated to my heart's home, Josh Lashua. This is also dedicated to the biggest support system in my life—Scott, Darlene, Garrett and Lindsey aka Sprinkles.

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First, I would like to thank my Chair, Dr. Fred Volk. This was a journey I could not have made it through without his support, encouragement, and constant pushing. He did a lot more than teach me statistics—he taught me that I am capable of far more than I could ever imagine and to trust myself.

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List of Abbreviations

Brief Sexual Attitudes Scale (BSAS)

New Sexual Satisfaction Scale-Short (NSSS-S)

Sacredness of Marital Sexuality Scale (SMS)

Spirituality and Sexuality Measure (SSM)

CHAPTER 1: INTRODUCTION

Sexual satisfaction and marital satisfaction are positively associated with one another (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006). Sexual expression is a key component in the human experience (Ellen, 2009) and is an important part of committed, romantic relationships. Delineating the causal sequence between marital satisfaction and sexual satisfaction presents more of a challenge. It seems quite reasonable to argue that those who have higher levels of relationship satisfaction with their romantic partner would be more likely to experience higher levels of sexual satisfaction. At the same time, it can clearly be argued that as partners become more sexually satisfied, their overall relationship satisfaction would also increase. Irrespective of the exact causal sequence, sexual satisfaction and relationship satisfaction are important. While sexual satisfaction and relationship satisfaction are highly related to one another, they both contribute uniquely to overall life satisfaction (Young, Denny, Young, & Luquis, 2004). The sexual component of romantic relationships is powerful; sexual struggles in romantic relationships are strongly related to marital dissatisfaction (McCarthy, 1997). Simply put, whether an individual is in a committed relationship or married, sex is an important factor in the dynamics of a successful relationship. In 2016, Gallup found that 89% of Americans identified as believing in God or a universal spirit, indicating that Americans believe the human condition is related in some way to the mystical (i.e., beyond mere physical experience). Given the importance of sex in relationships and the near unanimity in belief of spirituality, exploring the relationship between sexuality and spirituality/religiousness is an important endeavor in understanding human behavior and relationships.

Sacredness attribution, one aspect of spirituality and religiousness, has shown some promise in uniquely demarcating a piece of the sexual relationship puzzle (Pargament & Mahoney, 2009). When an experience is viewed as sacred (e.g., sexuality in a relationship), that sacredness attribution serves to deepen the connection with the experience (Mahoney, Pargament, & Hernandez, 2013; Pargament & Mahoney, 2005). Several studies have focused on the concept of sacredness as it relates to spirituality and sexuality (Hernandez, Pargament, & Mahoney, 2011; Pargament & Mahoney, 2005, 2009). Research indicates couples who experience their sexual relationship as sacred experience increased marital satisfaction (Mahoney & Hernandez, 2007), greater sexual satisfaction (Ellison, Henderson, Glenn, & Harkrider, 2011), and more positivity overall (Kusner, Mahoney, Pargament, & DeMaris, 2014). To date, the attribution of sacredness to sexual experiences has been overtly religious or somewhat simplistic in measurement (Hendrick, Hendrick, & Reich, 2006). Thereby, constricting the applicability of sacredness and sexual relationships to smaller population of individuals (Hernandez, Pargament, & Mahoney, 2011; Pargament & Mahoney, 2005, 2009).

Transcendence, also a spiritual term, has been used to describe sexual experiences and attitudes (Ellens, 2009; Mahoney & Hernandez, 2009; Moore, 1998; Sokol, 1986), and does not necessarily carry the same overtly religiously-bound weighting. Both sacredness and transcendence operationalize in peoples' lives by examining experiences through the framework of depth, connectedness, and meaning (Anderson & Morgan, 1994; Belk, Wallendorf, & Sherry, 1989; Ellens, 2009; Menard et al., 2015). Hernandez and colleagues (2011) created a measure of sanctification of the sexual relationship in marriage, The Sanctification of Marital Sexuality Scale (SMS). A potential weakness of the scale is that it uses explicitly religious terminology rather than spiritual terminology. Because of this overtly religious terminology, it may be

difficult for some individuals who consider themselves spiritual but not religious to relate effectively to the measure. It is estimated that 20% of Americans would categorize themselves in this “spiritual but not religious” way (Fuller, 2001). While no measure currently exists that captures the idea of transcendence in sex, the *Communion* subscale of the Brief Sexual Attitudes Scale attempts to capture data on mystical beliefs about sex. However, it is limited in the capacity to fully describe the concept. The goal of this research is to develop a measure that captures beliefs of both sacredness and transcendence of sexual behavior.

Theoretical and Conceptual Framework

The grounding of the study is connected to four theoretical constructs. First, increased sexual satisfaction is related to increased marital satisfaction (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006). Second, this study builds on the work of the spiritual component of sacredness initially studied by Pargament and Mahoney (2005, 2009), and capitalizes on the Sanctification of Marital Sexuality Scale (Hernandez et al., 2011). Third, this study links previous research on the concepts of transcendence and sexuality (Anderson & Morgan, 1994; Ellens, 2009; Menard et al., 2015). Finally, this study relies on the theoretical importance of how meaning-making of an object or experience creates significance related to sacredness (Belk et al., 1989) and transcendence.

Sexual satisfaction is a subjective assessment, positively or negatively, of a couple’s sexual relationship that elicits an emotional response (Byers, 2005; Byers & Rehman, 2014; Lawrance & Byers, 1995). Couples feel emotions related to personal sexual experiences and these emotions contribute to the individual level of satisfaction experienced in sexual encounters with their partner. The experience of satisfaction or dissatisfaction is unique to each person in the

committed relationship. The level of sexual satisfaction, or lack thereof, is prognostic of marital fulfilment and security (Byers, 2005; Sprecher, 2002; Yeh et al., 2006). Said differently, individuals who are fulfilled in their marital relationships are also sexually satisfied in the context of their committed relationships (Fallis, Rehman, Woody, & Purdon, 2016; Yucel & Gassanov, 2010). When the sexual behavior of a relationship is linked to religiosity, those sexual experiences are deepened by the spirituality of the committed couple (Ellens, 2009; MacKnee, 1997). This link of religiousness and sexual satisfaction contributes to the rationale for the development of a measure that effectively captures belief dimensions about sex that could apply equally to both the non-religious and religious alike.

Among many other things, spirituality encompasses concepts of God, a transcendent existence, and sacredness (Pargament & Mahoney, 2005, 2009); wherein the belief of such concepts determines the meaning derived. Sacredness, like spirituality, is considered to be a process that develops throughout the lifetime (Pargament & Mahoney, 2009). In other words, spirituality and sacredness transform what could be considered meaningless into something that is significant. The significance of something, someone, or an experience is then perceived as sacred because it describes that which is “set apart,” connected to God, has a mystical nature, and is worthy of reverence (Pargament & Mahoney, 2005). What is considered to be sacred does not hold the same meaning to everyone; something can only be considered sacred if the person views it as sacred (Belk et al., 1989). This view of sacredness takes on a stronger meaning when attributed to an individual’s identity. A perceived sacred object or experience is integrated into an individual’s identity when it becomes a belief—a commitment of the heart and mind (Belk et al., 1989). That is to say, beliefs are intertwined with identity. For instance, when an individual perceives that sex in his or her relationship is sacred, he or she is more likely to dedicate time,

energy, and resources into this relationship (Hernandez et al., 2011). This suggests that when sex is valued, it receives high priority, and when one devotes his or her resources to the sexual aspect of the relationship, then sexual satisfaction follows. Therefore, increased spiritual importance can be associated with increased sexual satisfaction (Pargament & Mahoney, 2005) if someone attributes sacredness to it. Spiritual importance continues to take precedence in meaning-making. For example, when an individual regards God in high esteem, he or she will likely create positive meaning out of any experience that is given divine attributions (Minto, 2016). Consequently, sexual experiences are more likely to be seen as sacred (Mahoney & Hernandez, 2007). To reiterate, sacredness is experienced subjectively and impacts one's view of self, emotions, and desires (Seidlitz et al., 2002). The impact of sacredness is a form of spiritual transcendence (Seidlitz et al., 2002) and further associates these two spiritual concepts.

Transcendence is associated with concepts like depth (Menard et al., 2015), oneness, unity, connectedness (Ellens, 2009; Piedmont, 1999), and the experience of deep meaning and fulfillment (Piedmont, 1999; Roa, 1978). Connectedness is an expression of humanity and spirituality (Anderson & Morgan, 1994), and connectedness brings meaning to relationships through sexuality and spirituality (Anderson & Morgan, 1994; Ellens, 2009). Connectedness and spirituality illustrate the profound and bonding meaning found in the experience of transcendence during sexual expression. The relationship between sexuality and spirituality is so strong that individuals that have connected the two reported how good sex became great sex when it involved the element of depth, which includes fulfillment, closeness, kindness, love, fidelity, and security in relationships (Menard et al., 2015). This deep, transcendent connection can also lead to more mystical qualities of sex and the feeling of loss of self (Ellens, 2009), which is often reported during peak experiences. When couples experience transcendence as a

part of their sexual expression, it is likely that intimacy and a sense of vulnerability increase (Mahoney & Hernandez, 2009), thus leading to increased sexual satisfaction.

Research supports sexual satisfaction as a predictor of overall marital satisfaction (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006). This may also help marital relationships persevere and flourish; therefore, it is worthwhile to examine sexuality in the context of marriage and committed relationships. Viewing sex with a spiritual component provides an additional layer of understanding to the satisfaction experienced in committed relationships. Transcendence takes the spiritual experience and applies a deep, connective aspect to it, increasing the closeness and intimacy one feels, specifically during sexual activity (Anderson & Morgan, 1994; Ellens, 2009). Furthermore, when an experience is considered sacred, the individual will maintain positive attributions related to the experience (Belk et al., 1989; Minton, 2016). It is arguable that when an experience is considered spiritually important and sacred, the satisfaction connected to that experience increases (Pargament & Mahoney, 2005). In other words, when someone believes an object or experience is sacred, there is increased likelihood of a positive attribution and therefore increased satisfaction. Thus, it is important to consider the impact a sacred, transcendent sexual experience has on overall marital and sexual satisfaction.

Background to the Problem

This section addresses the background to the problem. First, sexuality and sexual experiences are an expected part of intimate relationships (Leiser, Tambling, Bischof, & Murry, 2007; Schwartz & Young, 2009), and if there are sexual issues, these issues can become progressively more serious, both sexually and relationally (Brassard, Peloquin, Dupuy, Wright,

& Shaver, 2012; Campion, 1982; de Graaf & Kalmijm, 2006; McCarthy, 1997). Next, sexuality and sexual experiences are interconnected with spirituality (Ellens, 2009). When sacredness, related to spirituality (Pargament & Mahoney, 2005, 2009), is combined with the sexual expression in a committed relationship, one can experience an increase in sexual satisfaction and relational satisfaction (Ellison et al., 2011; Murray, Pargament, & Mahoney, 2005; Pomerleau et al., 2015). Finally, related to sacredness, transcendent experiences during sex lead to more attributions of deeper meaning about sex in relationships. There is a need to understand spiritual experiences in the context of transcendence to extend the understanding of spiritual beliefs to a larger part of the population.

Sexuality, Sexual Satisfaction, and Intimate Relationships

Sexuality has been linked to the development and maintenance of intimate relationships (Leiser et al., 2007), and sex is commonly considered a barometer for the romantic relationship (Barrientos & Paez, 2006; Davis et al., 2006). In other words, couples that report a healthy sexual relationship commonly report a healthy marriage. Sexual satisfaction accounts for as much as 15-20% of marital satisfaction. Conversely, a significant portion of marital dissatisfaction, as much as 50-75%, has been attributed to sexual dissatisfaction (McCarthy, 1997). When sex is dysfunctional or when couples are unsatisfied with their sexual relationships, their relationship suffers as a whole.

Every marriage can expect to have sexual issues; some will be major, and some will be minor (Campion, 1982). Sexuality experts, Masters and Johnson (1980), conservatively claim that at least half of all marriages will experience sexual dysfunction. Recent research suggests that more than 60% of couples experience sexual difficulties such as pain, desire issues, and a lack of communication (Brassard et al., 2012); yet, couples who seek long-term, committed

relationships expect great sex as a component of the relationship (Schwartz & Young, 2009). In other words, couples are likely to experience sexual issues and yet do not expect to have these issues, which can make these struggles that much more damaging. This understanding suggests that if one or both partners are struggling in the sexual relationship, there is cause for concern because sexual issues can have implications to the broader relationship, including the threat of divorce (de Graaf & Kalmijm, 2006). Even though sexual activities are a small part (3%) of the experiences in one's lifetime, sexual experiences are an important part of one's sexuality and relationship (Campion, 1982). The quality of the sex in committed relationships has implications for the overall relationship in that it can be diagnostic as well as a positive model of two partners relating to one another (Campion, 1982). Ascribing aspects of spirituality to their sexual interactions may further enable committed couples to relate to one another more effectively and fully in their non-sexual interactions (Anderson & Morgan, 1994; Ellens, 2009). As mentioned previously, greater sexual satisfaction is positively correlated with spiritual importance (Pargament & Mahoney, 2005), which makes sexuality in conjunction with spirituality an important focus for study in committed relationships.

Sexuality, Sexual Satisfaction, and Spirituality

Spirituality includes sacredness and transcendence; although different concepts, sacredness and transcendence are closely linked (Pargament & Mahoney, 2005, 2009). Sanctification is the process through which someone or something is made sacred (Pargament & Mahoney, 2005). The view of something or an experience as sacred means that it is so special it deserves to be respected, is viewed as unique, and involves mystical qualities (Pargament & Mahoney, 2005). Transcendence means the experience of deep meaning, fulfillment, unity,

connectedness, and awe (MacKnee, 2002; Maslow, 1970, 1973; Moshner, 1980; Piedmont, 1999; Roa, 1978). Each of these concepts can be applied to the sexual aspect of relationships.

Sanctification in sexuality is moderately correlated with marital satisfaction, sexual satisfaction, sexual intimacy, and spiritual intimacy (Pomerleau et al., 2015). Couples who value sanctification in sexuality also tend to experience greater frequency in sexual encounters and increased sexual satisfaction (Murray, Pargament, & Mahoney, 2005). Sanctification and sacredness tend to be used in a religious context and previous researchers have studied these concepts with explicitly religious populations; it is possible that these findings would extend to nonreligious individuals who identify as spiritual (Fleischacker, 2017). In secular or spiritual circles, words like transcendence and communion may be more relatable than sanctification or sacredness. However, the two concepts of transcendence and sacredness are connected. For example, in a sexual experience, individuals may struggle to put both sacred experiences and transcendent experiences into words and exactly express what was felt (Anderson & Morgan, 1994; Ellens, 2009; Fleischacker, 2017; Menard et al., 2015). Simply, the terms of sacredness and transcendence have been used to describe similar experiences, but treated as different concepts. Put another way, while sacred and sanctification verbiage may appeal to more religious individuals when discussing beliefs about sexual experiences, using words like transcendence and connection may be more accepted and applicable to spiritual but not religious individuals. Ultimately, when the spiritual and sexual selves are viewed as related, there is an experience of oneness and completeness through attending to the present (Giblin, 2014). This experience of oneness and completeness helps deepen sexual desire and protect against its decrease (Ellens, 2009; Giblin, 2014), which relates to increased sexual satisfaction.

In summary, spirituality and sexuality are related (Ellens, 2009) and are larger concepts wherein sacredness and transcendence can be found. The spiritual significance of sexuality is positively correlated to increased sexual satisfaction (Pargament & Mahoney, 2005). Sacred experiences, much like transcendent experiences, may increase a healthy sexual relationship (Mahoney & Hernandez, 2009), which leads to an overall healthy marriage (Barrientos & Paez, 2006; Davis et al., 2006). Addressing both sexual issues and spirituality within a sexual context are relevant because of the high instance of sexual difficulties (Brassard et al., 2012), coupled with the expectation of great sex in long-term, committed relationships (Schwartz & Young, 2009). It is imperative that beliefs about sexual experiences be understood within the context of spirituality to protect against and heal the wounds of sexual difficulties. One of the main ways these beliefs are understood is through communicating with verbiage that is applicable to a larger percent of the population.

Statement of the Problem

While there has been research focused on spirituality, sexuality, sacredness, and some on transcendence, little empirical work has addressed the idea of transcendence, spirituality, and sacredness without explicitly religious overtones. Further, previous research has primarily focused on experience rather than belief of transcendence on sexuality and relationship measures. Specifically, researchers have demonstrated the relationship between sexual satisfaction and relationship satisfaction as important, but a limited set of work has focused on the development of assessments that fully capture the multidimensionality of sex. Furthermore, existing measures use explicitly religious terminology that may not capture the experience of

non-religious or spiritual individuals, thus, limiting the applicability of such measures to a subset of the overall population.

Purpose of the Study

A review of current models of sexuality and spirituality measures reveals a need for a spirituality and sexuality measure that is able to capture the beliefs of those who would consider themselves spiritual but not religious. In other words, this study is designed to develop and validate a measure with the idea that spiritualization of sexuality will predict an increase in sexual satisfaction. More precisely, the purpose of this study is to address the gap in the literature that exists in relation to the association between sexuality and non-religious, spiritual sacredness. This study will explore the relationship between spiritual transcendence and sexuality as assessed by a new measure. The Sacredness of Marital Sexuality Scale (SMS) (Hernandez, 2008) will be used as the foundation for the new scale, the Sexuality and Spirituality Measure (SSM).

Research Questions

The following research questions are explored in this study:

RQ1 – What are the latent constructs identified through the analysis of the relationships of the item pool created to assess sacredness and transcendent sexual beliefs?

RQ2 – If the latent constructs, sacred and transcendence, emerge, what is the relationship between these constructs?

RQ3 – Do the factors the of SSM account for greater variance in relationship satisfaction beyond what sexual satisfaction would account for?

RQ4 – To determine if convergent validity exists, what is the correlation between this new measure and the SSMS and BSAS-Communion?

Assumptions and Limitations

As mentioned previously, the conceptualizations and definitions of the concept of transcendence vary. The construct itself has been defined differently and referred to by similar names like depth and connection (Ellens, 2009). In this study, transcendence means the experience of deep meaning, fulfillment, unity, connectedness and awe (MacKnee, 2002; Maslow, 1970, 1973; Moshner, 1980; Piedmont, 1999; Roa, 1978).

This is a pilot study; therefore, limitations exist. The sampling method will be through Amazon Mechanical Turk (MTurk). It is assumed that participants are representative of a broader population related to the constructs of transcendence, sexual satisfaction, and spirituality; the study is limited to those who choose to respond to the survey. The validity of the results is contingent on the belief that the participants respond truthfully to the questions.

Content validity is a concern for this study because the questions may not accurately reflect the literature. Although the questions were created based on the literature, it is possible they may not reflect the concepts accurately. Additionally, sexuality is commonly a taboo topic that can be accompanied by discomfort or shame. Due to the nature of the topic, questions can incite avoidance or embarrassment within those who take the assessment. This could prevent truthful answers and cause participants to answer in socially desirable ways, or in ways that do not accurately reflect their opinions or beliefs.

Definition of Terms

Spirituality. Spirituality here is defined as seeking sacredness in one's life. It embodies a deeper process of sacredness becoming part of that person, leading to personal growth (Pargament & Mahoney, 2009). Spirituality often includes concepts like God, the divine, and a transcendent reality (Pargament & Mahoney, 2005, 2009).

Sacred. Throughout time, society has believed sacredness embodied reverence, fear, worship, and respect (Belk et al., 1989). The concept of viewing something as sacred is perceived as needing to be "set apart," divine, having a transcendent nature, and deserving respect. (Pargament & Mahoney, 2005). In this study, sacredness means an aspect of a relationship or experience is revered and respected by the individual(s) in the relationship.

Transcendence. Transcendence means oneness, unity, and connectedness (Ellens, 2009; Piedmont, 1999). Transcendence is connected to an ability to be outside time and space (Piedmont, 1999) and involves peak experiences (Woodward, Findlay, & Moore, 2009). In this study, transcendence means the experience of deep meaning, fulfillment, unity, connectedness, and awe (MacKnee, 2002; Maslow, 1970, 1973; Moshner, 1980; Piedmont, 1999; Roa, 1978).

Sexual Satisfaction. Sexual satisfaction here is defined as a positive or negative subjective evaluation of one's sexual relationship that results in an affective response (Lawrance & Byers, 1995, p.268).

Relationship Satisfaction. Relationship satisfaction here is adapted from Lawrance and Byer's (1995) definition of sexual satisfaction. It is a positive or negative subjective evaluation of one's relationship which impacts the emotions the individual experiences about his or her relationship (Fallis et al., 2016; Lawrance & Byers, 1995).

Sacred Attribution. In this study, attribution is defined as an individual's perceptions of the reasons behind behaviors, body states, and interpretations of his or her experiences (Proudfoot & Shaver, 1975).

Significance of Study

There is hope the Spirituality and Sexuality Measure (SSM) will serve as a new method of measuring the connection between spirituality and sexuality. Additionally, this measure may contribute to further advancement of research on sexuality and spirituality. The assessment is expected to be applicable across broad fields of study, including marriage and intimate relationships, sexuality, intimacy, sex therapy, and clinical assessment.

This instrument can also be used as a clinical measure of a client's spiritual meaning of his or her sexual experience. The assessment can assist with treatment planning by better understanding clients' attributions regarding sexuality and spirituality. By reviewing the clients' responses in the assessment, the therapist can assist clients in understanding how spirituality and sexuality are impacting their lives, how spirituality within sexuality can increase or decrease levels of connectedness and satisfaction, as well as implement strategies to deepen the sacredness of sex in the clients' marriage.

Organization of Remaining Chapters

Chapter Two expands on the relevant research. Specifically, research on sanctification, transcendence, and sexual satisfaction are summarized. The Sanctification of Marital Sexuality Scale (SMS) will be briefly explained and the need will be expounded upon for the exclusion of

religiosity. The conceptual link between sanctification and transcendence are demonstrated. Finally, a discussion on sexual satisfaction meaning, predictors, creators, and outcomes of use will create a conceptual bridge between sexuality and spirituality. Chapter Three will provide an overview of the method delineating the research design of the study to be used, the creation of the measure, data analysis techniques used, and ethical considerations of the study. Chapter Four will address the results of the study, including the hypotheses, statistical analyses conducted, and the data obtained. Last, Chapter Five will explore the findings, including a summary and interpretation of the results, implications of the findings, limitations of the study, and areas for future research.

Summary of the Chapter

This chapter provided a brief overview of the theoretical and conceptual constructs that form the framework of this study. Sexual satisfaction and relational satisfaction are closely connected. Spirituality can increase the positivity and depth of the experience. Transcendence is an aspect of spirituality that deepens the richness of the experience and provides a vehicle for greater connectedness. The depth of a couple's connection is theorized to increase sexual satisfaction in the relationship, thereby potentially increasing overall marital satisfaction. Based on this theory, and to extend the extant literature to non-religious individuals, the SSM was created.

Despite the popularity of research on spirituality and sexuality as a broad concept, there is only one assessment that considers sexuality and spirituality specifically. This assessment (Hernandez, 2008) utilizes more religious jargon and, while useful, limits the applicability of this assessment to those in the population that are more spiritual rather than religious. This study

builds on the work of sexuality and sacredness by removing the religious jargon and adding constructs related to transcendence that seeks to create a more inclusive measurement.

CHAPTER 2: REVIEW OF THE LITERATURE

The purpose of this study is to create a measure to assess the relationship between sexuality and spirituality (i.e., sacredness and transcendence) that can be utilized with both religious and non-religious populations. Conceptualizations of both sacredness and transcendence have not been effectively delineated in the research literature, with the exception of just a few theorists that have proposed that a belief in sacredness can increase the likelihood of transcendent sexual experiences (MacKnee, 1996; Privette & Bundrick, 1991). These experiences bring meaning (MacKnee, 2002), connectedness (Anderson & Morgan, 1994; Ellens, 2009), oneness (Anderson & Morgan, 1994; MacKnee, 1996), healing, and wholeness (MacKnee, 2002), which impact the view of the experience, and therefore the overall satisfaction of the relationship (Fallis et al., 2016).

This chapter will articulate the importance of sexual satisfaction and relational satisfaction. Additionally, this chapter will provide a brief overview of the theoretical constructs of sacredness and transcendence. This chapter will also explore two specific assessments, the Sanctification of Marital Sexuality Scale (Hernandez, 2008) and the Brief Sexual Attitudes Scale (Hendrick, Hendrick, & Reich, 2006). Finally, the research questions, hypotheses, and theoretical model are discussed.

Satisfaction

In general, satisfaction is when an individual makes a judgment of circumstances in comparison to what he or she considers standard experience, and these judgments are internal rather than external assessments of the circumstances (Diener, Emmons, Larsen, & Griffin, 1985). The construct of satisfaction can involve ideals differently. For example, satisfaction

involves an emotional or cognitive response, focuses on a particular aspect or cumulative aspects, and occurs at a specific period of time (Giese & Cote, 2000). Different types of satisfaction have been identified in the literature. This section will focus on sexual satisfaction and the association between relationship satisfaction and sexual satisfaction.

Sexual Satisfaction

Lawrance and Byers (1995) define sexual satisfaction as “an affective response arising from one’s subjective evaluation of the positive and negative dimensions associated with one’s sexual relationship” (p. 268; Byers, 2005; Byers & Rehman, 2014). In other words, individuals experience a unique positive or negative emotional response related to their sexual relationship. Research reports that demographic factors (e.g., age, gender, sexual orientation) appear to have little influence on sexual satisfaction (Byers & Rehman, 2014). Variables that do positively impact sexual satisfaction are desired frequency (Smith et al., 2011; Yucel & Gassanov, 2010; Young et al., 2004), consistency in self or spouse orgasm, and willingness to participate in a variety of sexual activities (Young et al., 2004).

Sexual satisfaction is an important part of marital satisfaction (Young, Denny, Young, & Luquis, 2004). When the sexual aspect of a marriage is positive, it accounts for about 15-20% of overall marital satisfaction, serving to heighten intimacy, provide pleasure, and reduce stress (McCarthy, 2003). However, when the sexual aspect of a relationship is considered negative, dysfunctional, or deficient, it accounts for 50-70% of overall dissatisfaction, which ultimately impacts intimacy (McCarthy, 2003).

Sexual intimacy. Intimacy and satisfaction are related. Intimacy may even be synonymous with satisfaction (Pascoal, Narciso, & Pereira, 2014; Patrick, Sells, Giordano, & Tollerud, 2007), and is vital to understanding both relationship and sexual satisfaction. Increases

in sexual satisfaction correlate with a rise in sexual partner intimacy and overall general intimacy within the relationship (Haning et al., 2007). Much like the association between sexual satisfaction and relationship satisfaction, the casual sequence between relationship intimacy and sexual intimacy is difficult to delineate. The close association between satisfaction and intimacy, and the nearly simultaneous temporal changes to each in the ebbs and flows of relationships, makes them nearly inseparable from a statistical perspective. Couples reported that it takes intentionality to keep sexual intimacy alive, and the more time couples have for each other, the greater the experience of sexual satisfaction (Reynolds & Knudson-Martin, 2015). It would make sense then that when couples spend purposeful time together sexually, there would be an increase in sexual satisfaction and intimacy. In the same way, when couples feel emotionally close, they are more likely to attribute to each other the term “best friend,” and he or she is more likely to report a satisfying sex life (Reynolds & Knudson-Martin, 2015).

Emotional intimacy. Emotional intimacy also appears crucial in sexual satisfaction. The emotional connection felt by the couple impacts sexual satisfaction (Yoo et al., 2014). Emotional variables are asserted to be more important in sexual satisfaction than physical variables (Barrientos & Paez, 2007). Higher levels of emotional intimacy predict increased relationship security (Mizrahi et al., 2015). For men, emotional intimacy signifies high levels of sexual satisfaction, increased sexual desire (Carvalho & Costa, 2015; Stulhofer, Ferreira, & Landripet 2014; Yoo et al., 2014), continued attachment formation (Mizrahi et al., 2015), and is also a predictor for the relationship as a whole (Byers, 2005; Mark & Jozkowski, 2013). For women, sexual satisfaction appeared to increase emotional intimacy, which improved overall relationship satisfaction (Yoo et al., 2014). Ultimately, avoidance of intimacy leads to sexual dissatisfaction because the lack of emotional connection negatively impacts sexual functioning (Brassard et al.,

2012). Said differently, emotional intimacy and sexual satisfaction create a positive feedback loop for sexual relating. Therefore, daily increases in intimacy lead to a higher likelihood of engaging in intercourse and greater sexual satisfaction (Rubin & Campbell, 2011). Arguably, increased emotional closeness perpetuates increased sexual frequency, which contributes to sexual satisfaction. Sexual intimacy is also closely associated to non-sexual variables related to sexual satisfaction.

Non-sexual variables. The non-sexual components of a relationship also influence overall sexual satisfaction (Lawrance & Byers, 1995; Young et al., 2004). For example, the personality traits of an individual, or the personality traits of his or her spouse, impact sexual satisfaction (Yucel & Gassanov, 2010). Also, the strength of a couple's communication sexually and non-sexually impacts both sexual satisfaction and relationship satisfaction (Byers, 2005, 2008, 2011; MacNeil & Byers, 2009; Mark & Jozkowski, 2013; Montessi, Fauber, Gordon & Heimberg, 2010; Yoo et al., 2014). The connection between sexual satisfaction and relationship satisfaction is formidable (MacNeil & Byers, 2005). Sexual satisfaction can even moderate some of the effect that variables like poor communication, differentiation, and attachment have on a marriage (Litzinger & Gordon, 2005; Timm & Keiley, 2011). In other words, numerous variables can impact the relationship, but the sexual aspects of a relationship have the biggest impact on relationship satisfaction.

Relationship Satisfaction and Sexual Satisfaction

Marital satisfaction is a primary factor in overall happiness (Young et al., 2004). Studies have indicated that sexual satisfaction and marital satisfaction change concurrently (Byers, 2005; Sprecher, 2002; Yeh et al., 2006), and an individual who is satisfied in his or her marriage is often satisfied sexually (Young et al., 2004; Yucel & Gassanov, 2010). Some assert that

relationship satisfaction is a contributor to sexual satisfaction (Davis et al., 2006; Kisler & Christopher, 2008) because of concepts like steadiness and exclusivity (Barrientos & Paez, 2006). However, other research suggests sexual satisfaction impacts relationship satisfaction (Byers, 2008), marital quality and stability (Yeh et al., 2006), and can even predict marital satisfaction, rather than marital satisfaction predicting sexual satisfaction (Fallis et al., 2016). The delineation of this causal relationship is complex. It is reasonable to assert, then, that the direction of the causal relationship is much less important and attention should be directed at the strength of the relationship between the two.

The influence of sexual satisfaction and relationship satisfaction is different based on gender. Sexual satisfaction appears to be a greater predictor of relationship satisfaction for men than for women (Fallis et al., 2016; Yeh et al., 2006). Male partners tend to place greater significance on his female counterpart's experience of sexual satisfaction related to the overall appraisal of the relationship (Yoo et al., 2014). Consistent with other research (Byers, 2005; Lawrence & Byers, 1995), relationship satisfaction accounted for 46% of sexual satisfaction in women and 49% in men (Mark & Jozkowski, 2013). In other words, the relationship between sexual satisfaction and relationship satisfaction is intertwined for both men and women.

Individuals who perceive their partner as responsive to them experience greater sexual and relational satisfaction (Gadassi et al., 2016). Not surprisingly, women who experience greater relationship satisfaction also have a greater desire for vaginal intercourse, along with kissing and petting (Santilla et al., 2008). This makes sense because the more one feels like his or her partner is open to them and with them, satisfaction increases. A positive feedback loop is created for couples because relational attention perpetuates sexual affection cyclically. The earlier a couple can get in this cycle, the greater the likelihood of long-term marital satisfaction

(Fallis et al., 2016). This cycle also impacts those who have been together for a significant period of time (Byers, 2005). Irrespective of the relationship length, satisfaction in one area predicates satisfaction in another. In addition to both relational and sexual aspects, spirituality can heighten the overall satisfaction of couples (Pargament & Mahoney, 2005) and will be discussed in the next section.

Spirituality

Spirituality and religion are commonly used interchangeably or treated as if one takes precedence over the other. Religion is best referred to as an individual or institutional realm, whereas spirituality is more embodied by the pursuit and growth of sacredness in one's life (Pargament & Mahoney, 2009). Spirituality is "an individual's efforts to construe a broad sense of personal meaning within an eschatological context" (Piedmont, 2001, p. 5). Spirituality is also considered a motivational trait that directs, guides, and helps people choose behaviors (Piedmont, 2001). Spirituality includes concepts like God, the divine, and a transcendent reality (Pargament & Mahoney, 2005, 2009). Essentially, spirituality is the belief that there is a higher power or something greater than the self in the universe, and the association that an individual has with this belief will then motivate behaviors. This section will describe the impact of spirituality on relationships and sex. It will further explain the spiritual constructs of sacredness and transcendence, and the connections of these constructs with relationships and sex.

Spirituality and Relationships

Connecting on spiritual matters has rich benefits for relationships and perpetuates feelings of intimacy. Spiritual intimacy in the context of relationship is defined as "engaging in

spiritual disclosure about one's own spiritual journey, questions and doubts, and providing non-judgmental support when a partner makes spiritual disclosures" (Kusner, Mahoney, Pargament, & DeMaris, 2014, p. 612). Spiritual intimacy is increased through the pursuit of communion with a higher power or divine being (Kusner et al., 2014). This pursuit motivates couples to preserve and protect their relationship (Kusner et al., 2014) because this intimate connection is important. Further, when an individual places spiritual importance sexually or relationally, it contributes to greater overall satisfaction (Kusner et al., 2014; Pargament & Mahoney, 2005). Additionally, when couples have similar beliefs in regards to spirituality and religious practices, they are far more likely to have higher levels of relationship satisfaction that can mediate issues (e.g., financial stressors) (Lichter & Carmalt, 2009; Wolfinger, 2008). A couple's common beliefs provide unity and direct the focus of the relationship to the spiritual, which produces intimacy. Another aspect of intimacy in relationships is sex, which will be further discussed in the next section.

Spirituality and Sex

Spirituality and sexuality are some of the most important areas of life that influence many aspects of human identity, beliefs, and behaviors (Ellens, 2009). Spirituality and sexuality are separate but corresponding parts of the whole individual that enrich the relationship between the two (Ellens, 2009; Lombaard, 2009; MacKnee, 1997). In other words, while sexuality and spirituality are separate constructs, the relationship between the two is interconnected and additive to each. Only when these two aspects of self are viewed as united is there a sense of completeness (Ellens, 2009) in the individual. In the same way, sexuality is at the core of being human and involves one's view of self, body, and spirit, related to how these parts impact and connect with the world (MacKnee, 1996). Sexuality can also be described as "the irrepressible

quest for union with other persons, and the meaning and life found in the wholeness and fulfillment that such union brings” (Ellens, 2009, p. xvi). Said differently, humans were created for intimate connection (e.g., desire for mutuality, relationship, and communion) (Giblin, 2014) with others, and this connection brings fulfillment.

In a study of newlyweds, viewing sex as having a spiritual component increased participants’ reports of sexual closeness, sexual fulfillment, marital fulfillment, and spiritual closeness (Hernandez et al., 2011). It is imperative that sex involves spirituality because if they are separated, couples are likely to experience a wane in desire (Ellens, 2009), which will impact sexual satisfaction. Therefore, it is arguable that the connection of sexuality and spirituality is preventative of diminished sexual satisfaction and increases sexual satisfaction for committed relationships. It makes sense, then, to discuss concepts of spirituality, like transcendence and sacredness, since the spiritual concepts serve to deepen the connection of sexual experience (Hernandez et al., 2011). Sacredness will be discussed in the next section, followed by a discussion of transcendence.

Sacredness and Sanctification

In order to begin a discussion on sacredness, sanctification must first be addressed. Sacredness and sanctification are interconnected; sanctification is the process through which someone or something is made sacred (Pargament & Mahoney, 2005). Sanctification has to do with perceiving an aspect of one’s existence as having divine “character and significance” (Mahoney et al., 2013, pp. 398). If a person views something as sanctified, he or she is much more likely to pursue it in his or her life, regardless of religious or spiritual affiliation (Pargament & Mahoney, 2005). Sanctification also influences the way a person uses his or her

resources, the areas of life that a person safeguards, emotional expression, where a person finds satisfaction and significance, and commonly, his or her greatest vulnerability (Pargament & Mahoney, 2005). Essentially, sanctification involves perceiving a part of one's life as encompassing God or the divine, and the pursuit of the process of sanctification impacts an individual's behaviors. It is through the process of sanctification that a person or thing becomes sacred. Sacredness is when something, someone, or an experience is perceived as "set apart," divine, having a transcendent nature, or deserving respect (Pargament & Mahoney, 2005). Said differently, the view of an object, individual, or event as sacred means it is regarded as exceedingly special, has mystical properties, is extremely valuable, and relates to a higher power.

Individuals differ in what they consider to be sacred (Belk et al., 1989; Pargament & Mahoney, 2005), and two people, therefore, may consider an object or concept differently. Furthermore, when a person considers something to be sacred, it is not a disconnected experience, but rather something with which individuals have a relationship (Pargament & Mahoney, 2005). Simply, sacredness is not separate from the self, but rather, a deep connection is felt with the sacred object, person, or event. Accordingly, the relationship or deep connection with the sacred leads to a sense of personal identity (Pargament & Mahoney, 2005).

Although sacredness is typically discussed in a religious context, there is a place for sacredness for those who have a secular morality (Fleischacker, 2017), which can be differentiated by theistic and non-theistic sanctification (Mahoney et al., 2013). Theistic sanctification attributes experiences to a relationship with God, whereas non-theistic sanctification attributes sacred experiences to a sense of purpose, value, and transcendence (Mahoney et al., 2013). The view something as sacred has several implications for human functioning, whether religious or spiritual:

(a) people invest a great deal of his or her time and energy in sacred matters; (b) people go to great lengths to preserve and protect whatever he or she perceives to be sacred; (c) sacred aspects of life are likely to elicit spiritual emotions of attraction (e.g., love, adoration, gratitude) and trepidation (e.g., awe, fear, humility); (d) the sacred represents a powerful personal and social resource that people can tap into throughout his or her lives; and (e) the loss of the sacred can have devastating effects. (Pargament & Mahoney, 2005, p.180)

Individuals seek out what they consider to be significant, and significance includes satisfaction (Pargament & Mahoney, 2005).

Sacredness is deeply associated with creating or uncovering the experience of connectedness (Belk et al., 1989). Ultimately, people seek to believe in something that transcends their ordinary experiences and is more powerful and awe-inspiring than them (Belk et al., 1989). In other words, people are searching for deep connection that moves beyond normal to positively overwhelming. This desire moves an individual to commit to something he or she considers sacred, psychologically and emotionally, and it becomes a part of his or her identity (Belk et al., 1989). This identity can be found in many other areas that would not be considered religious or spiritual.

Sacredness in Other Areas

Contemporary Western society tends to regard things like clothing, songs, particular days, relics, shrines, and certain gods as sacred (Belk et al., 1989). Sacred experiences have a wide range including, but not limited to, things like travel, eating, and sporting events (Belk et al., 1989). Rituals can even make an ordinary commodity sacred and serve to maintain its sacredness (Belk et al., 1989); rituals include habitualized behaviors such as church attendance, a weekly run, or sporting event. Some report a connection between sports and a religious feeling wherein there is an awareness of the mystery of the body and the soul, and power that is outside human control (Cipriani, 2012). Music can also access a similar feeling or experience that is

described as mystical (Till, 2010), wherein the listener (or worshipper) of the music seeks a direct connection with the icon. This connection lends itself to a sense of “catharsis or purification, the emptying out of the self, addressing the void, stillness and space so that the ‘divine’ popular icon can indwell the empty vessel” (Till, 2010, p. 143-144). This icon (e.g., the legendary musician Prince) is a person the individual does not know, and yet there is a deep connection and spiritual-like experience during the concert performance. There is even an assertion that justice is a sacred concept and that if one violates it, he or she brings disgrace into his or her innermost self (Fleischacker, 2017). If the opposite of sacredness is the profane, one will be horrified at the very idea of breaching in any capacity what is sacred (Fleischacker, 2017). This need to protect the sacred insinuates a strong specialness in the things, people, or experiences one considers as sacred. However, the idea that something (e.g., music, art, sports, justice) is sacred may not apply to everyone (Belk et al., 1989), and that is known as an attribution.

Sacred Attributions

As aforementioned, almost anything can be ascribed sacred meaning (Belk et al., 1989), and things that are sacred should be “revered, feared, worshipped, and treated with the utmost respect” (Belk et al., 1989, p. 2). Sacred things may not appear sacred to everyone; the sacred will only manifest if the person views it as sacred in the first place (Belk et al., 1989).

Accordingly, when one views an area of his or her life as sacred, the person tends to find greater associations to sacredness in that area (Mahoney et al., 2013), regardless of whether he or she considers oneself religious or spiritual. Essentially, when one believes something is sacred, it will be sought out and found due to the ability to make meaning out of anything.

It makes sense that those who are religious are more likely to attribute sacred meaning to an event, especially when the attributions are particularly significant (Minton, 2016). Simply, religious people are more likely to assign sacred meaning than secular meaning due to their underlying beliefs, which are considered sacred. Attribution theory asserts that “labeling and interpretation are fundamental parts of the religious experience” (Proudfoot & Shaver, 1975, p. 324) and the spiritual experience. This makes sense because attributions are an individual’s way of attempting to understand and make meaning of life experiences. The meaning made of an experience then evokes positive or negative emotion as the meaning is assimilated with the belief, which may or may not be rational (Belk et al., 1989; Weiner, 1986). In other words, one creates meaning out of an experience and then ascribes emotions to the experience, regardless of whether it could be deemed logical.

Similarly, more positive evaluations are reported about a product when the attribution of an event is associated with God (Minton, 2016). It would make sense, then, that when sex embodies a sacred spiritual attribution, more positive evaluations of the experience occur. Likewise, when a person receives sacred cues from a business, he or she places higher expectations on the company (Minton, 2016). If this company fails, he or she views the company lower than if there were no sacred cues at all (Minton, 2016). This suggests that if an individual attributes sacred meaning to a sexual experience, but the experience fails in some way, the individual would likely have a stronger negative association with the experience than if it had not been attributed a sacred meaning.

Sanctified and Sacred Qualities in Relationship and Sex

This study addresses sanctification in relationships and sex because sanctification makes someone or an experience sacred—ultimately, sanctification is an action while sacredness is a

belief about relationships and sex. Sanctification in marriage is defined as “viewing one’s marriage as embodying such sacred qualities as being eternal or holy or reflecting God’s intentions” (Kusner et al., 2014, p. 612). Essentially, the way spouses view marriage seems to change when God is a part of the overall picture (DeMaris, Mahoney, & Pargament, 2010). When an individual views his or her relationship as sanctified, it is a strong (Stafford, Prabu, & McPherson, 2014) to moderate predictor of overall marital satisfaction, commitment, positive coping, and communication (Pomerleau et al., 2015). This view is related to more optimistic feelings, increased frequency of bonding experiences (Ellison et al., 2011), and positive overall marital quality (Kusner et al., 2014; Stafford et al., 2014). Sanctification not only applies to relationships in general, but also to the sexual aspect of the relationship.

When sexual experience is sanctified, it is perceived to be a manifestation of the divine and as having sacred qualities (Hernandez et al., 2011). In other words, sex is believed to be extremely special and believed to involve a higher power on some level. Similar to sanctification of relationships, couples who believe that sexuality is sanctified believe that God is part of the experience (Mahoney & Hernandez, 2009). Essentially, when sex is attributed a spiritual meaning it is moderately correlated to things like sexual intimacy, marital satisfaction, spiritual intimacy (Pomerleau et al., 2015), and a more rewarding sex life (Ellison et al., 2011; Murray et al., 2005; Pomerleau et al., 2015). Couples who have a sanctified view of sex tend to have a greater frequency of sexual experiences (Murray et al., 2005). Simply, the belief in sanctification of sexuality correlates with positive sexual satisfaction.

Both men and women in college who viewed sexual intercourse as sanctified tended to have greater pleasure and sexual satisfaction from their experiences (Murray et al., 2005; Pargament & Mahoney, 2005). Essentially, these students experienced more positive perceptions

and increased frequency when God was viewed as part of sexual intercourse (Pargament & Mahoney, 2005). Similar results have been found in newly married couples. The more newlyweds viewed sex as having a spiritual element, the greater the reported experience of sexual satisfaction, sexual intimacy, marital satisfaction, and spiritual intimacy (Hernandez et al., 2011). This spiritual element can also include the belief that intercourse is special, connects, and involves a heightened spiritual union with a higher power or one's partner—not just the relationship to God. Sanctification of sexuality appears to be particularly important for newlyweds (Mahoney & Hernandez, 2009) because the view of sex as sacred leads to an increase in time, energy, and resources devoted to this connection (Hernandez et al., 2011). It is arguable that this is important for all committed relationships, and not just newlyweds, because what is sacred receives time, energy, and resources (Pargament & Mahoney, 2005) and correlates to increased satisfaction. Therefore, viewing marital sexuality as being sacred is advantageous and the key to couples maintaining a positive sex-life (Ellison et al., 2011; Mahoney & Hernandez, 2007, 2009). Sacredness and transcendence share similar qualities; however, transcendence tends to relate more to the spiritual rather than the religious.

Transcendence

Like sacredness, transcendence is commonly associated with religious and spiritual avenues; however, it can be expressed through other avenues like “patriotism, self-sacrificing altruism, nationalism, and secular humanism” (Piedmont, 1999, p. 988). Transcendence differs from sacredness in that it is a search to connect with the divine rather than a personal journey for greater sacredness (Piedmont, 1999). Both involve the spiritual, but transcendence is the search for deep meaning and connection, while the focus of sacredness is on increasing respect and

reverence. Transcendence in Sanskrit is nirvana, “a state of fulfillment, of equanimity, of calm contentment, of supreme intelligence” and an undistorted state with perfect knowledge (Rao, 1978, pp.1-2). It is in this perfect knowledge the connection with the divine is found and spiritual transcendence is experienced.

Spiritual Transcendence

Transcendence is a spiritual concept in and of itself, but there are also different types of transcendence. Spiritual transcendence is described as “a subjective experience of the sacred that affects one’s self-perception, feelings, goals, and ability to transcend difficulties” (Seidlitz et al., 2002, p. 441). Essentially, transcendence involves a more emotional experience of what is considered sacred, and this experience impacts thoughts and behaviors similar to that which is perceived as sacred. Much like Pargament and Mahoney’s (2005) assertions regarding sacredness, transcendence is the basic ability of the individual, a foundation of inherent motivation that helps one determine, focus on, and choose behaviors (Piedmont, 1999).

Spiritual transcendence involves an ultimate unity, an intact bonding experience, and a sense of commitment (Piedmont, 1999). Transcendence attaches to the inherent desire for humans to discover profound meaning and connection in life, and this ability develops with time (Piedmont, 1999). In both secular and religious domains, transcendence involves connectedness, universality, and prayer fulfillment (Piedmont, 1999). Piedmont (1999) expounds on these concepts:

Connectedness, a belief that one is part of a larger human orchestra whose contribution is indispensable in creating life’s continuing harmony; *universality*, a belief in the unitive nature of life; *prayer fulfillment*, feelings of joy and contentment that result from personal encounters with a transcendent reality. (p. 989)

Spiritual transcendence relates to many different areas. It can foster deeper desire and stronger passion to one’s hopes; it can impact the ways in which individuals interact with others; and it

can assist in redefining one's view of the world and the goals one chooses to pursue (Piedmont, 1999). Said differently, transcendence is powerful in that it internally fosters positive feelings, impacts relationships, and changes one's view of the world and desires. The power of spiritual transcendence also translates to sexual transcendence, and serves to deepen that experience, impact interactions, and influence sexual pursuits.

Sexual Transcendence

Sexual transcendence has been defined by different names or descriptions. Commonly, it is labeled as a trance, ecstasy, mystical, “wall-socket” sex, or electrifying to the body, soul, and mind (Moshner, 1980; Schnarch, 1997). Couples who recognize a transcendent element as they express sexually experience a greater sense of intimacy and vulnerability (Mahoney & Hernandez, 2009). Sokol (1986) further describes a transcendental state in sex as involving:

(1) the loss of self through the apparent merging of partners as god and goddess until there is a diffuseness of body boundaries and the ‘two become one,’ realizing the state of non-separation; or (2) the realization of pure consciousness where there are no distinctions between self and not-self, i.e., all the arises in consciousness sensory experience—‘thou are that.’ This state of non-duality is always accompanied by bliss/ecstasy, luminosity, and energy. (p. 226)

Transcendent sexual experiences often involve a loss of self or the experience of mystical-like qualities that foster deep connection (Ellens, 2009; Moore, 1998). This connection helps individuals find the soul through experiencing openness and passion (Ellens, 2009; Moore, 1998). Said differently, together individuals and couples discover depth within the self or relationship they may not have previously thought existed. Transcendental states are fostered when individuals feel present and relaxed, allow the self to undergo strong emotions, experience comfort with their partner, and participate in ritualized practices (Sokol, 1986).

The allowance of the self to be in the moment, to feel, and to participate in mystical sexual activities leads to oneness or union with his or her partner, God, or the universe (Sokol, 1986), and creates the environment to experience an overwhelming sense of love (Moshner, 1980). In other words, these ecstatic experiences are all-consuming, deep, overwhelming, and intimate (Moshner, 1980; Schnarch, 1997). Essentially, everything feels connected, affect melts, and couples feel like one and are often moved to tears by the power of the emotion (Schnarch, 1997). It is as if what was not whole in the individual or relationship is now whole (Sokol, 1986). The individual is so inwardly transformed that his or her view of life has changed during this heightened spiritual experience (Moshner, 1980; Schnarch, 1997). These heightened mystical experiences may appear like altered states of consciousness by transforming everyday awareness into trance-like spiritual experiences or ecstatic oneness with God (Moshner, 1980; Woodward, Findlay, & Moore, 2009). Similarly, a sexual trance can be described like a drug high, full of sensations, meaning, and feeling completely absorbed in-the-moment; sex is like a transformation of consciousness where some people report seeing sounds or hearing emotion (Schnarch, 1997). In these moments, orgasm is not the goal; rather orgasm may or may not happen (Moshner, 1980; Sokol, 1986). Ultimately, these intense sexual states create a schema for these moments where expressions that would feel normal now have a deeper meaning (Moshner, 1980). Simply, sexual transcendence is moving, connecting, healing, transforming, and unifying to individuals and couples who have the opportunity to experience them. The experience of sexual transcendence as connecting and unifying is another way to describe these experiences.

Transcendence as Connection and Oneness

Words that are commonly associated with both spirituality and sexuality are depth (Menard et al., 2015), “contact, communication, connection, communion, union, ecstasy, and

eternity” (Ellens, 2009, p. xvii). Sexual experience is about wholeness, union, and communion that construct the environment for transcendence to be experienced (MacKnee, 1997). So many of these words and constructs can be used interchangeably to describe the deep connection and unity felt through transcendent sexual experience. For instance, depth was defined as intimacy, care, connection, love, trust, safety, and communication felt with his or her partner (Menard et al., 2015). Adults aged 60-82 found that depth was one of the main elements that took good sex to great sex (Menard et al., 2015), which can be found in the experience of connectedness.

There is a sexual aspect of humanity and spirituality that is expressed and experienced most purely through connectedness (Anderson & Morgan, 1994), and this connection brings meaning to relationships (Anderson & Morgan, 1994; Ellens, 2009). Meaning is found in the removal of the cognitive and the focus on the emotional aspect, moving from thoughts of connection to the experience of connection (Anderson & Morgan, 1994). Essentially, connectedness is about the meaning made through feelings of closeness. When young women feel spiritually close or connected to their partner, they tend to be more open to a greater frequency of vaginal sex (Burriss, Smith, & Carlson, 2009). Openness is, then, a precursor for the desire for closeness and action on the need for closeness, which increases sexual satisfaction (Peloquin, Brassard, Lafontaine, & Shaver, 2014). It is arguable that openness and frequency are a positive feedback loop that perpetuates action that leads to sexual satisfaction through transcendent sexual experiences.

Connectedness is similar to oneness in that it is unifying. When oneness is experienced, it involves a focus on the present, feelings of bliss, harmony, and deep satisfaction through an altered state of consciousness (Anderson & Morgan, 1994). When individuals lose themselves to the oneness of the sexual experience, they transcend what is physically happening and have a

profound love experience (MacKnee, 1996). It is as if the lines between them and their partners are blurred; that is, it feels as if each were one with their partner (MacKnee, 2002). Oneness and connectedness are just two other ways to describe the experience of sexual transcendence. Deep connection and oneness are also a part of what has been described as peak experiences (MacKnee, 1996, 2002).

Peak Experiences

Mystical, sexual peak experiences are believed to exist and yet have rarely been studied (Woodward et al., 2009). Peak experiences are related to significant positive relationships and positive spiritual and personal outcomes (Woodward et al., 2009). These moments are intense, embody significant value (MacKnee, 1996; Privette & Bundrick, 1991), and are characterized by feelings of euphoria, ecstasy, a sense of completeness, and overall wellbeing (MacKnee, 2002; Privette & Bundrick, 1991). Peak experiences are composed of intense joy and happiness that stand out from other experiences, and involve feelings of mysticism and transcendence (Privette & Bundrick, 1991). These experiences are often coupled with deep meaning and bring wholeness and feelings of healing (MacKnee, 2002). Peak experiences are depicted as “indescribable” (Privette & Bundrick, 1991) and people report experiencing loss of time and space (MacKnee, 1996). Maslow (1973) notes those who experienced powerful peak moments described them in this manner:

There were the same feelings of limitless horizons opening up to his or her vision, of the feeling of being simultaneously more powerful and also more helpless than one ever was before, the feeling of great ecstasy and wonder and awe, the loss of placing in time and space with, finally, the conviction that something extremely important and valuable had happened so that the subject is to some extent transformed and strengthened even in his [sic] daily life by such experiences. (p. 190)

Maslow (1970, 1973) is one of the main theorists who discusses self-actualization. However, he believes people do not have to be self-actualized to have peak experiences. These experiences are unique and potent (Maslow, 1973), and especially mystical, overpowering, and ecstatic if the person is self-actualized (Maslow, 1970). Said differently, anyone can have a peak experience, but the peak experience is likely to be even more significant if the person is self-actualized. Like other theorists, Maslow (1968) also describes a loss of self due to being completely consumed by an aesthetic or love experience. Peak experiences have similarities with sacred sexual experiences in that they both describe the inability to put the experience into words as a result of an all-consuming experience (Fleischacker, 2017; MacKnee, 1996).

Sacredness is tied to peak experiences through reverence of the experience or closeness to the divine (MacKnee, 1996; Privette & Bundrick, 1991), and the view of the relationship as sacred (Woodward et al., 2009). This deep connection moves to a feeling of awe and towards closeness with God (MacKnee, 1996). For Christian individuals, transcendence activates feelings of reverence and holiness related to the sacred experience (MacKnee, 2002). One participant even described confusion from talking to God at the same time she was having sex (MacKnee, 2002). Individuals are described as recognizing the existence of God during the sexual experience through colors, smells, loving words, or experiencing deep peace (MacKnee, 2002). This unique experience was a special gift from his or her partner and God, and this gift mirrored being chosen by God (MacKnee, 2002). It would be reasonable to assert that peak sexual experiences relate to both sacred and transcendent experiences, embodying significant spiritual meaning.

Those who receive the gift of a peak experience describe intensely positive moods during or after (MacKnee, 1996), and they report an overflow of emotions (MacKnee, 2002). These

positive experiences can increase the belief in fated relationships or soul mates (Woodward et al., 2009) and can take the person from feeling love for the other to feeling like the other person is love (Moshner, 1980). Individuals can feel as if they have gone beyond their own limits where there was a loss of time and space (MacKnee, 2002; Privette & Brundrick, 1991). What appears different about this kind of connection versus the kind experienced in Tantric sex, where orgasm is not encouraged, is these individuals experienced full body gratification through orgasm (MacKnee, 2002).

Other Religions

Other religions discuss transcendent, sacred, peak sexual experiences similarly to what has been described above. Tantric sexuality is a Buddhist and Hindu practice of wholeness, spirituality, and transcendence through sex (Jones & Hostler, 2005; Turner, Fox, Center, & Kiser, 2006). Tantric sexuality asserts that depth in sexuality is a result of the spiritual connection, and the focus of tantric sex is to evoke the presence of God (Bullis, 1998). Tantric sexual expression can be an avenue to spiritual formation and transformation (Bullis, 1998). In *sattva* sex, the expression of the couple is sacred and involves openness and depth, and fosters wholeness (Bullis, 1998). Taoism asserts that satisfying sexual expression is a manifestation of one's spirituality in a successful way (Turner et al., 2006). Sexual expression is a way for the two to be united, connect with the divine, and bring health to the body (Turner et al., 2006). Like the others, it promotes oneness and connectedness (Turner et al., 2006). Simply, irrespective of spiritual or religious beliefs, all viewpoints seem to arrive at the same understanding of spiritual sexual experiences. That is, sex involving the spiritual connects, is deep, unifies, and involves mystical and divine properties.

Spirituality encompasses both the sacred and the transcendent (Pargament & Mahoney, 2005, 2009). Both sacredness and transcendence lead to great depth and connectedness in sexual experiences (Belk et al., 1989, MacKnee, 1996; Sokol, 1986; Woodward et al., 2009). The greater the connection, the higher the likelihood of increased sexual satisfaction (Rubin & Campbell, 2011). For this reason, Hernandez (2008) conducted a study to understand the impact of sanctification on marital sexuality.

Foundational Scales

Sanctification of Marital Sexuality Scale

Hernandez (2008) conducted a study on the sanctification of marital sexuality. Participants were recruited by postcards, but only 84 out of 1068 completed the assessments. The questions were structured in the form of a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) (Hernandez, 2008; Hernandez et al., 2011). The subscales were highly correlated ($r=.82, p<.01$), indicating strong concurrent validity.

Although this study represents the foundational study on sanctification in marital sexuality, there are many limitations in the design of the research and in the measure itself. Hernandez (2011) listed the following limitations: (1) The sample was primarily Christian (71.9%) and therefore more religious than the national average; (2) the study was primarily female (61.9%), and (3) participants were newlywed individuals. A problem with the participants used in this study is that previous research indicates individuals who experienced peak sexual experiences were likely to be older and in long-term relationships (Woodward et al., 2009); therefore, research using a more representative and older sample is indicated. A second weakness in this study was the low response rate from participants; Hernandez (2008) indicated only 84 of

the 1086 participants that received cards actually completed the study. Third, the verbiage of this inventory is highly religious (e.g., “I experience God through the sexual bond I have with my spouse” or “There are moments when I feel a strong connection with God when I am sexually intimate with my spouse,” Hernandez, 2011, p. 130). In the *Manifestation of God* subscale, most respondents scored below neutral, except for two questions where a predominately Christian sample would be expected to have higher scores (e.g. “God played a role in my decision to have a sexual relationship with my spouse” and “Being in a sexual relationship with each other is a reflection of God’s will”) (p. 131). It seems likely the highly religious verbiage limits the acknowledgement of experience or belief due to the lack of positive agreement on the scale’s items.

The present study seeks to address these limitations in several ways. First, new items that are not overtly religious and may be more acceptable to non-religious individuals have been created. Religious individuals and spiritual individuals should not be treated as encompassing the same population. Although there will be overlap between the two groups, there is also differentiation among the groups (Saucier & Skrzypinska, 2006). Second, the sample will include individuals who are in a more mature, committed relationship and may be more likely to have experienced sexual transcendence. Third, a larger sample size will be obtained. Fourth, a sample size of similar amounts of males and females will be sought.

Brief Sexual Attitudes Scale

The original Sexual Attitudes Scale contained 43 items (Hendrick & Hendrick, 1987) and was created to understand sexual attitudes. This study utilizes the brief version with 23 items called the Brief Sexual Attitudes Scale (BSAS) (Hendrick, Hendrick, & Reich, 2006), which was revalidated and found to be more valid and reliable than the original. The same four subscales of

Permissiveness (casual sexuality), Birth Control (formerly Sexual Practices), Communion (idealistic sexuality), and Instrumentality (biological, utilitarian sexuality) were maintained with the new scale. The Permissiveness subscale measures views on casual sex; the subscale Birth Control measures views on responsible sex, the subscale Communion measure emotional views of sexuality, and the subscale Instrumentality measures objective sexuality (Hendrick et al., 2006).

For the purposes of this study, the *Communion* subscale will be focused on. The reason this scale and subscale cannot be used to assess sexual and spiritual beliefs accurately is because the scale briefly assesses sexual emotions. Out of five of the items, two come close to measuring what this study addressed (e.g., “At its best, sex seems to be the merging of two souls” and “Sex is usually an intensive, almost overwhelming experience”). It fails to accurately capture the mystical and measure, even briefly, the concepts of sexual sacredness and transcendence. First, the literature review outlines that these experiences seem to be rare, rather than usual experience. Second, sex as a merging of two souls fits the literature, but cannot cover or represent the literature completely. Third, while this measure is assumed to measure attitudes about sex, it appears to address an actual experience rather than an attitude about it. It is for these reasons that the BSAS is not a viable option to attempt to understand individuals beliefs about sexual experience(s) accurately.

Research Questions, Hypotheses, and Theoretical Model to be Tested

A review of sacredness and transcendence literature reveals a lack of sexuality measures that consider the relationship spiritual beliefs have on beliefs about sexual experience. The main objective of this study is to address this need by developing such a measurement, the Spirituality

and Sexuality Measure (SSM). The second objective of this study is to provide some initial validity data by correlating the SSM with other significant and conceptually associated constructs. The SSM is designed to measure the belief about the experience of non-theistic sacredness and transcendent beliefs about sexual activities. Identifying these beliefs helps make meaning out of the experiences(s) and will potentially provide a greater understanding of the beliefs people have.

The SSM is beneficial for the current field of research in spirituality and sexuality for several reasons. First, there are three spirituality and sexuality measures (Hernandez, 2008; Hendrick, Hendrick & Reich, 2006; Horn, Piedmont, Fialkowski, Wicks, & Hunt, 2005). The first two measures were discussed above (Hernandez, 2008; Hendrick, Hendrick, & Reich, 2006) and indicate the ways in which they are lacking. The items for the *Embodied Spirituality Scale* (Horn, Piedmont, Fialkowski, Wicks, & Hunt, 2005) are not published and the focus is on individual differences as a means to integrate spirituality and sexuality. Secondly, two of these measures (Hernandez, 2008; Hendrick, Hendrick, & Reich, 2006) focused on purposeful Christian sampling (Horn et al., 2005) or a primarily Christian sample by responses submitted. Due to the increasing number of individuals in both spiritual and religious groupings, this study seeks those of all spiritual and religious backgrounds. Thirdly, the SSM is designed to ascertain the beliefs about sexual experiences irrespective of whether one has actually experienced them or not, and the meanings attributed to sexual experiences.

Research Questions and Hypotheses

RQ1 – What are the latent constructs identified through the analysis of the relationships of the item pool created to assess sacredness and transcendent sexual beliefs?

RQ2 – If the latent constructs, sacred and transcendence, emerge what is the relationship between these constructs?

RQ3 – Do the factors the SSM account for greater variance in relationship satisfaction beyond what sexual satisfaction would account for?

RQ4 – To determine if convergent validity exists, what is the correlation between this new measure and the SSMS and BSAS-Communion?

The research questions will be investigated with the following research hypotheses:

H1- The latent constructs that emerge will be sacredness and transcendence.

H2- There will be a moderate correlation between sacredness and transcendence.

H3- Latent factors will explain greater variance in relationship satisfaction, beyond the variance explained by sexual satisfaction.

H4-1- The SSM would be strongly correlated with the SMSS.

H4-2- The SSM would be moderately correlated BSAS-Communion.

Chapter Summary

The sexual aspects of the relationship cannot be separated from the relational aspects (Ellens, 2009). Furthermore, the elements of spirituality deepen the richness of sexual experiences, which tie into overall relational well-being and satisfaction. The issue with the concepts of spirituality, sacredness, and transcendence involve elements like God and the divine, and these constructs can be difficult to discuss scientifically and make researching these topics challenging (Pargament & Mahoney, 2005, 2009). This struggle is also echoed in the communal, connected, and transcendent aspects of spirituality. These spiritual parts are related to sexual experiences on a theoretical level, but with very limited research on their empirical associations.

This research would extend what is currently available and provide the groundwork for future research to build on. In this chapter, the literature on satisfaction, sacredness and sanctification, as well as spirituality and transcendence was reviewed. The Sanctification of Marital Sexuality Scale and the Brief Sexual Attitudes Scales were reviewed and included limitations of the assessment. The review revealed a need for a new sexuality and spirituality measure that is less religiously exclusive in the verbiage.

CHAPTER 3: METHODS

This chapter will detail the methods used to assess the relationship between sexuality and spirituality, specifically non-theistic sacredness and transcendence. As a preliminary study of the SSM, concurrent validity, discriminant validity, and convergent validity were examined using a sample from Amazon Mechanical Turk. This chapter will reiterate the purpose of the study, the research questions, and hypotheses. Next, the chapter will discuss the research design, the process of obtaining participants, and the instruments used in this study. Last, the research procedures will be explained and the plan for processing and analyzing the data collected will be explicated.

Research Purpose

The purpose of this study is to explore the relationship between sexuality and spirituality, specifically non-theistic sacredness, transcendence, and sexuality. More precisely, the purpose of this study is to address the gap in the literature that exists in relation to the relationship between sexuality and non-theistic sacredness and transcendence as assessed by a new measure. It is hoped to bring a greater understanding to sexual experiences and thereby help those who work with sexual issues.

Research Questions and Hypotheses

As stated in the previous chapter, the research questions that will be explored in this study are:

RQ1 – What are the latent constructs identified through the analysis of the relationships of the item pool created to assess sacredness and transcendent sexual beliefs?

RQ2 – If the latent constructs, sacred and transcendence, emerge what is the relationship between these constructs?

RQ3 – Do the factors the SSM account for greater variance in relationship satisfaction beyond what sexual satisfaction would account for?

RQ4 – To determine if convergent validity exists, what is the correlation between this new measure and the SSMS and BSAS-Communion?

The research questions will be investigated with the following research hypotheses:

H1- The latent constructs that emerge will be sacredness and transcendence.

H2- There will be a moderate correlation between sacredness and transcendence.

H3- Latent factors will explain greater variance in relationship satisfaction, beyond the variance explained by sexual satisfaction.

H4-1- The SSM would be strongly correlated with the SMSS.

H4-2- The SSM would be moderately correlated BSAS-Communion.

Research Design

The purpose of the proposed research is to validate an instrument that assesses beliefs about non-theistic sacredness and transcendence related to sexuality. Quantitative methods will be used in a cross-sectional, non-experimental research design. A correlational research design was used to explore the psychometric properties of the SSM.

Selection of Participants

Participants were recruited via an online data collection service, Amazon Mechanical Turk (MTurk). Some of the benefits of using MTurk include fast data collection, large sample sizes, and lower costs compared to other methods (Buhrmester, Kwang, Gosling, 2011; Casler, Bickel, & Hackett, 2013). Participants recruited through MTurk have shown to be more diverse than the commonly used sample of college students or average Internet samples (Buhrmester et al., 2011; Casler et al., 2013). Casler and colleagues (2013) conducted an experiment with three different sample populations (MTurk, social media, in person college students) and found that MTurk was more socio-economically and ethnically diverse. In fact, utilizing MTurk as a data source can assist in the generalizability of the data (Rouse, 2014). The psychometric standards associated with published literature have been met or exceeded by the quality of data collected by MTurk (Buhrmester et al., 2011; Casler et al., 2013; Rouse, 2014), and therefore, MTurk is an excellent choice for data collection.

Participants were adults from the United States, aged 18 and over. The target sample size was 500 participants in order to increase the likelihood of significant effects and sufficient variability. Participants were required to say if they paid attention and if they answered honestly; if the participant said no, then the survey was excluded. Surveys were also excluded if there was missing data to where it invalidated individual scales.

Instrumentation: Descriptive Information

Demographic information. A demographic questionnaire was used in this study to include participants' age, gender, sexual orientation, ethnicity, marriage or relationship status,

religious or spiritual affiliation, education level, income bracket, and employment status (see Appendix A).

Global religiousness. In order to assess global levels of religiousness, four individual items were used to assess self-reported religiousness and spirituality, regularity of prayer, and regularity of attendance at religious services (Mahoney et al., 1999). These items have been used in the General Social Survey (GSS; National Opinion Research Center, 2016). The frequency of attendance at religious services was rated on a 9-point scale ranging from 1 (*never*) to 9 (*more than once a week*). The frequency of prayer was rated on a 6-point scale ranging from 1 (*never*) to 6 (*several times a day*). Self-reported religiousness was rated on a 4-point scale ranging from 1 (*not religious at all*) to 4 (*very religious*), and self-report spirituality was rated on a 4-point scale ranging from 1 (*not spiritual at all*) to 4 (*very spiritual*). (See Appendix B).

Belief in God or Higher Power. These items have been used in the GSS (National Opinion Research Center, 2016). Belief in God or a Higher Power was rated on a 6-point scale ranging from 1 (*don't believe*) to 6 (*know God exists*), with 3 acknowledging a Higher Power. (See Appendix C).

Relationship and sexual history. For descriptive purposes, several details regarding previous relationships, marital status, and sexual history were assessed (see Appendix D). These items were included the length of current relationship, the length of the marriage and/or prior marriages, the age of first sexual intercourse, the age of first sexual experience, sexual activity, and perceived spousal sexual activity with other partners.

Spirituality and Sexuality Measure. This measure was created through the items from literature (Anderson & Morgan, 1994; Belk, Wallendorf & Sherry, 1989; Ellens, 2009; Ellison et al., 2011; Hernandez, Mahoney & Pargament, 2005, 2011; Lombaard, 2009; MacKnee, 1996,

2002; Moshner, 1980; Pargament & Mahoney, 2005, 2007; Piedmont, 1999; Privette & Bundrick, 1991; Schnarch, 1997; Sokol, 1986; Yoo et al., 2014). After the items were constructed, which focused on experiences, expert colleagues were consulted about the inclusion, removal, or modification of items. The experts and researcher agreed the focus should be on the beliefs about the experiences or the possibility of experiences, rather than the actual experience because one can believe the truth of the items but have never experienced them. Measure items are included in Appendix E.

Sanctification of Marital Sexuality Scale. A 20-item measure (Murray-Swank et al., 2005) was modified (Hernandez, 2008) to assess the sanctification of sexuality in marriage and comprised two 10-item subscales: Manifestation of God ($\alpha = .97$; participants could substitute Higher Power, Allah, Buddha, etc. for “God”) and Sacred Qualities ($\alpha = .95$). The participants rated items on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Because the subscales were highly correlated ($r = .82, p < .01$), all items were summed for a total score ($\alpha = .98$). This measure is included to assess if there is a correlation between the new measure and the old one (see Appendix F).

Sexual frequency. The participants’ sexual frequency was assessed utilizing the GSS (National Opinion Research Center, 2016) on sexual frequency. The frequency of sex was rated on a 7-point scale, ranging from 0 (*not at all*) to 6 (*4+ times a week*) (See Appendix G).

The Brief Sexual Attitudes Scale. The original Sexual Attitudes Scale contained 43 items (Hendrick & Hendrick, 1987). A briefer version was created, which resulted in the 23-item Brief Sexual Attitudes Scale. The same four subscales of Permissiveness, Birth Control (formerly Sexual Practices), Communion, and Instrumentality were maintained with the new scale. The brief version was revalidated and found to be more valid and reliable than the original

scale (Hendrick, Hendrick, & Reich, 2006). The Sexual Attitudes Scale consists of four dimensions: Permissiveness, Sexual Practices, Communion, and Instrumentality. The Permissiveness subscale measures views on casual sex; the subscale Birth Control measures views on responsible sex, the subscale Communion measures emotional views of sexuality, and the subscale Instrumentality measures objective sexuality (Hendrick et al., 2006). This scale is included to identify any correlations between beliefs and the potential experience of non-theistic or transcendent experiences (see Appendix H).

New Sexual Satisfaction Scale. The New Sexual Satisfaction Scale-Short (NSSS-S) was developed by Stulhofer, Busko, and Brouillard (2011). The original NSSS contained 20 Likert-type items (Stulhofer, Busko, & Busko, 2010). The short version contains 12 Likert-type items. It contains multiple response scales and formats. The two subscales of the instrument are the Ego-Centered subscale and the Partner/Sexual Activity Centered subscale. The Ego-Centered subscale measures personal sexual satisfaction through experience and sensation and the Partner/Sexual Activity Centered subscale measures sexual satisfaction stemming from an individual's experience of the partner's sexual behaviors and responses, in addition to the frequency and variety of sexual activities (Stulhofer et al., 2011).

This measure was selected because it was developed for those of all backgrounds, sexual orientations, relationship statuses, and genders (Mark, Herbenick, Fortenberry, Sanders, & Reece, 2014). The researcher chose the shorter form due to its ease of answering, while comparable reliability and validity were similar to that of the longer form (Stulhofer et al., 2011). There were over 2,000 original participants to use this instrument from the United States and Croatia; three of the populations were college students, one was a clinical population, two were community samples, and one was a non-heterosexual sample of men and women (Stulhofer et

al., 2011). The test-retest reliability was slightly higher over a month for women than men and ranged from .72 to .84; the researchers also found that the test-retest reliability in the study was high at ($r = .81$) (Mark et al., 2014). The connection between the single item measure of sexual satisfaction and the scale was ($r = .67$), supporting convergent validity (Stulhofer et al., 2011). This scale was included to understand the level of sexual satisfaction the individual experiences and the correlation with non-theistic sacredness or transcendent experiences. (See Appendix I).

Problems and distress related to marital sexuality. As mentioned previously, 60% of couples are likely to experience sexual difficulties in the course of their relationship (Brassard et al., 2012), and this may impact sexual satisfaction. Hernandez (2008) created a checklist of 25 stressors (McCarthy, 2003) that consists of items related to sexual problems (Guldner & Guldner, 1992), and items from “various internet sources” (Hernandez, 2008, p. 36). The participants rated whether he or she personally has experienced the issue, or whether his or her spouse has. The checklist was intended to prime for the global question, which assessed “the extent to which the participant had experienced distress from such sexual difficulties in one’s current marriage thus far” (p. 36). The participants’ rate on a scale from 1-7; the higher the rating, the greater the level of distress (See Appendix J).

Time spent maintaining sexual bond. As mentioned previously, time and intentionality were important factors in increased sexual satisfaction (Reynolds & Knudson-Martin, 2015); it is also suspected that in order to experience transcendent or non-theistic sacred experiences, these factors would be pivotal in creating the right environment. Hernandez (2008) created a checklist of 15 items, 5 of which came from McCarthy (2003), and the other 10 “various internet sources”

(Hernandez, 2008, p.37) and the participant were rated whether he or she personally, his or her spouse has, or as a couple have engaged in an activity (see Appendix K).

The Couples Satisfaction Index. The Couples Satisfaction Index (CSI) was developed by Funk and Rogge (2007). It contains 32 Likert-type items and multiple response scales and formats. It can be reduced to a 16-item or a 4-item version. This measure was selected because the CSI provides more information compared to other assessments of relationship satisfaction (Funk & Rogge, 2007). Also, the CSI seems to measure relationship satisfaction with more precision compared to other measures and to have higher power for detecting differences in participants' satisfaction (Funk & Rogge, 2007). The CSI has demonstrated good internal consistency and convergent validity in the initial use of the measure (Funk & Rogge, 2007). As mentioned previously, the correlation between marital satisfaction is strong (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006) and contributed to the understanding of the participants' subjective experience. For the purposes of this study, the 32-item measure was used (see Appendix L).

Instrumentation: Qualitative Information

Participants were asked to provide additional information to the researcher. They were asked to reflect on the role spirituality has in their marriage, how spirituality has shaped their marital sexuality, and to describe a transcendent experience. These questions are provided in Appendix M.

Additional Items

When utilizing MTurk, it is common for participants not to pay attention to the questions or to respond randomly (Rouse, 2015). For this reason, "catch trial" items were included to identify negligent responding (Chandler, Mueller, & Paolacci, 2013). Also, an item to self-

identify if the participant honestly answered each of the items that would not impact rating or payment was included (Rouse, 2015). These items increased the reliability of the responses (Rouse, 2015) (see Appendix N).

Research Procedures

Approval for all research procedures were obtained from the International Review Board on March 20, 2018. After a thorough review of the literature, themes were retained to create items for this measure. A Likert scale was used with the items. The author included enough items in this measure, so internal validity and construct validity were not threatened due to an insufficient number of items in the measure.

The author consulted with experts in this subject matter regarding the content of the items. The consultation should result in increased content validity and construct validity. The experts were asked how well the items related to the constructs that were being measured. Experts provided feedback on the wording of the items to ensure that they are clear. Items were discarded if they are unrelated to the construct. The experts provided feedback on wording to ensure questions are not double barreled or leading. Experts screened items to verify the wording was approximately at a sixth-grade reading level.

After approval is received from the IRB, an anonymous survey was submitted to MTurk for a pilot test of the survey. After the survey is tested, a request for the study participants were submitted. Participants were be told they would be participating in a study concerning spirituality, attitudes towards sex, and sexual experiences. Participants were educated that their participation is confidential and completely anonymous. Participants were informed that participation is voluntary and they can stop at any time, but if chosen to do so, a preemptive exit

would not result in compensation. They were told that the data collected was specifically for the purposes of this study. Participants were provided with all the information to give informed consent to participate and once they agree, they were able to move forward with the survey. The participants were paid \$1.00 for completion of the study.

Data Processing and Analysis

The psychometric properties of this measure were calculated. Chronbach's alpha were computed to examine internal consistency. The correlation coefficients for this measure and other measures were calculated to determine the concurrent validity. Since the other measures were assessed using similar constructs, it was anticipated that coefficients were in the moderate range.

Exploratory factor analysis was used to determine the common factors that cause observable variables (Heppner, Wampold, & Kivlighan, 2008). This procedure was used due to the extensive Likert-type items on the survey (Heppner et al., 2008). In order to extract the potential latent factors underlying variability, principal axis factoring was used (PAF). The data were screened to ensure sufficient variance and that the assumptions for PAF were not violated. The data were screened to see if there were outliers. Histograms of each of the items were created to determine whether there was acceptable item distribution. The correlation coefficients of the items were calculated to verify that they are all greater than 0.

Responses to the items were subjected to a factor analysis using PAF with direct oblimin (oblique) rotation, consistent with best practices for sexuality researchers (Sakaluk & Short, 2017). Next, the analysis was conducted on the matrix of correlation coefficients, and squared multiple correlations were used as prior communality estimates. After oblimin rotation was calculated, the variance related to each variable was detailed and reported. Also, eigenvalues

were calculated; factors with eigenvalues of at least 1.0 were retained and all items had an absolute loading of at least 0.3. The weakest loading items (<0.3) were removed to reduce the noise in the item pool. The scree plot and eigenvalues were examined to assess an interpretable factor structure.

Ethical Considerations

Efforts were made to ensure ethical codes were followed (ACA, 2014). Before any data were collected, IRB approval was received. Participants are able to answer questions anonymously through MTurk and thereby protected confidentiality. In order for participants to complete the survey, they had to agree to the informed consent approved by the IRB. Any participant who did not meet the criteria approved was rejected from the study.

Risks were minimal with this proposal because the focus was on attaining information anonymously rather than providing a treatment. Participants understood via the informed consent that he or she would be sharing potentially embarrassing or personal information and that the researchers would not have any access to this data. Participants were provided the contact information for online counseling services in the event emotional distress was experienced.

Chapter Summary

This chapter included an overview of the procedures used in this study, including the research purpose, hypotheses, collection of the participants, the assessments used, and the statistical procedures utilized. Ethical considerations were also discussed and how ethical conduct was upheld.

CHAPTER 4: DATA ANALYSIS AND RESULTS

The purpose of this study was to assess and validate a non-theistic, spiritual measure of beliefs about sex. This study examined the relationship between non-theistic sacred and transcendent concepts with beliefs about sex. This study hypothesized that the latent constructs were sacred and transcendence, there was a moderate correlation between these two constructs, the latent constructs predicted relationship satisfaction beyond what sexual satisfaction predicted based on individuals who have these beliefs, and the SSM was strongly related to the SMSS and moderately related to the BSAS-Communion.

This study used a sample of 461 adults who completed the Sexuality and Spirituality Measure. Participants completed demographic items as well as questions related to spirituality, religiosity, and sexual behaviors. Participants completed measures that assessed their relationship satisfaction, sexual satisfaction, sexual beliefs, and distress related to sexual beliefs or behaviors. This chapter explains the data analysis used to assess whether the data support the hypotheses. The findings are summarized in this chapter.

Data Screening

A sample of 461 participants was acquired through data collection from MTurk in March of 2018. The data were screened through several methods. First, efforts were made to remove cases with careless responses. The average length of time that participants completed the survey was 34 minutes and 58 seconds ($SD = 120$ minutes and 28 seconds). Participants who completed the survey in less than 12 minutes and 46 seconds were removed because that meant he or she spent less than 2 seconds per question. Twelve cases were deleted at this step. Next, participants

with incorrect responses to the catch trial items were deleted. Also, those who answered “no” to questions about paying attention and answering honestly were deleted. This step resulted in 25 participants being deleted. After time deletions, catch trial items, and “no” deletions, 424 cases were retained at this step.

Participants were evaluated for careless responding. Cases where participants responded with the same answer for 10 or more items in a row on the SSM, CSI, NSSS, and SMSS were deleted. Syntax was created to detect cases where participants selected the same consecutive responses 10 or more times. The data were visually inspected to assure no consecutive responders were missed. When these individuals were identified, their qualitative responses were analyzed to determine if their consecutive responses were consistent with their responses to the qualitative items. For example, one participant selected 10’s for many of the questions on the SSM. When asked to describe a transcendent experience, the participant said, “Many times I feel like I am almost floating because of the surge of pleasure and happiness.” Because a participant with a qualitative response like this would be more likely to endorse transcendent and sacred items on the SSM strongly, the participant was not deleted. Also, it was expected some participants would have a run of 10 or more consecutive scores on the CSI (relationship satisfaction) and NSSS (sexual satisfaction). Research indicates a correlation between relationship satisfaction and sexual satisfaction (Byers, 2005; Sprecher, 2002; Yeh et al., 2006). Therefore, when consecutive responses were correlated, those responses were not deleted. The syntax created to identify 10 or more cases of the same response 10 or more times indicated that 27 cases had consecutive responses of 10 or more. Of these 27 cases, 17 were retained, leaving 414 participants. After checking for runs visually, 9 more participants were removed, with 405 remaining participants.

Participants were also deleted who did not complete more than 2 items on the SSM, which removed 1 participant. This criterion was used because the SSM was the very first measure in the survey missing items initially indicated the possibility of continued careless responses. One participant who complained about pay in several fill-in-the-blank responses was deleted because it was believed the responses would be careless. One participant was removed who consecutively alternated extreme ends of the scale in answering items, indicating a careless response. There was a participant who responded to the problems and distress measure and stated that he or she is a “sex addict.” This person was removed because the belief in extreme behavior or negative self-label may have influenced responses to the items. These deletions left 401 participants.

The data were then examined for outliers. The mean and standard deviation was calculated for the total points of the SSM. All participants were within ± 3.0 standard deviations of the mean, which indicated none of the participants were an outlier on this measure (Warner, 2013). Therefore, none were removed. The data was collected with surveys about pornography use and masturbation frequency. While those surveys were not assessed for this study, participants who were outside ± 3.0 standard deviations of the mean (Warner, 2013) on the amount of pornography used weekly or masturbation frequency were removed because the compulsive and impulsive nature of those behaviors could potentially influence the distribution of the scale. This criterion resulted in 17 participants being removed who were not removed based on previous criteria, leaving 384 participants.

Finally, the open-ended items (i.e., free response text fields) were assessed for consistency with scale items. Responses entered with incorrect format were reformatted. For example, a participant who responded to the number of hours per week of pornography use with “30 minutes” was reformatted to 0.5. Also, two participants’ responses were recoded from “less than 1 hour” to

0.75. This recoding approach was also applied to the length of time married to current spouse, resulting in two responses that were less than a year to be recoded.

Participant Demographics

Of the participants who completed the survey after data screening ($N = 384$), 55.5% of participants were female, 44.3% were male, and one participant selected “other” to describe their gender. Participants’ ages ranged from 18 to 72 years of age ($M = 38.1$, $SD = 11.6$). The majority of the sample was Caucasian (78.6%), with 9.9% describing their race as African American, 5.5% Hispanic, 4.9% Asian, 0.8% American Indian or Alaska Native, and 0.3% choosing “other.” Concerning participants’ highest reported level of education, the majority of participants (43.5%) endorsed having at least a bachelor’s degree. The remaining participants endorsed a high school diploma or GED (11.7%), college freshman (5.7%), college sophomore (6.3%), college junior (7.3%), college senior (2.1%), trade or technical school (10.9%), master’s degree (8.3%), professional degree (3.1%), and doctorate (1%). The majority of participants (70.1%) selected “employed for wages,” while 11.5% chose self-employed, 3.5% not employed, 6.3% homemaker, 3.4% student, 0.5% military, 3.1% retired, and 1.6% unable to work. Most participants (47.4%) reported they are currently married or have a life partner. Other responses to current relationship status included currently single and never in a relationship (3.6%), single and not currently in a relationship (15.9%), in a non-committed dating relationship (2.9%), in a monogamous dating relationship (21.4%), married but legally separated (1.3%), divorced (6.5%), and widowed (0.8%). Regarding marital history, 47.9% of participants had been married once, 9.4% married twice, 1.8% married three times, 0.8% married more than three times, and 39.8% had never been married. See Table 4.1 for demographic information.

Table 4.1

Participant Demographics

	<i>N</i> or Range	% or <i>M</i>
Age	18-72	38.1
Gender		
Male	170	44.3
Female	213	55.5
Other	1	0.3
Racial Identity		
Caucasian/White	302	78.6
African American	38	9.9
Hispanic	21	5.5
Asian	19	4.9
American Indian or Alaska Native	3	0.8
Other	1	0.3
Educational Background		
High School diploma or equivalent (e.g., GED)	45	11.7
College Freshman	22	5.7
College Sophomore	24	6.3
College Junior	28	7.3
College Senior	8	2.1
Trade, Technical, or Vocational Training	42	10.9
Bachelor's Degree	167	43.5
Master's Degree	32	8.3
Professional Degree	12	3.5
Doctorate	4	1.0
Employment Status		

Employed for Wages	269	70.1
Self-Employed	44	11.5
Not Employed	14	3.6
Homemakers	24	6.3
Students	13	3.4
Military	2	0.5
Retired	12	3.1
Unable to Work	6	1.6
Marital History		
Never Married	152	39.6
Married Once	184	47.9
Married Twice	36	9.4
Married Three Times	7	1.8
Married More than Three Times	3	0.8
Current Relationships Status		
Currently Single – Never in a Relationship	14	3.7
Single – Not Currently in a Relationship	61	15.9
Non-committed Dating Relationship	11	2.9
Monogamous Dating Relationship	82	21.4
Married/With a Life Partner	182	47.5
Married, but Legally Separated	5	1.3
Divorced	25	6.5
Widowed	3	0.8

Several questions were asked to understand the participants' spirituality and religiosity. In regards to frequency of attendance of religious services, a majority of the responses were never (43.2%). Other responses were less than once a year (14.8%), once a year (5.7%), several times a year (13.3%), once a month (3.4%), 2-3 times a month (3.6%), nearly every week (5.2%), every

week (7.3%), and more than once a week (3.4%). The majority of participants (38.5%) said they never pray. The remaining participants said they prayed less than once a week (13%), once a week (7%), several times a week (14.3%), once a day (12.5%), and several times a day (14.3%).

Participants were asked to what extent they would consider themselves religious. The majority (46.6%) indicated not religious at all, with 21.6% slightly religious, 23.2% moderately religious, and 8.6% very religious. In regards to spirituality, participants endorsed not spiritual at all (26.8%), slightly spiritual (26.3%), moderately spiritual (26.8%), and very spiritual (20.1%).

Finally, participants were asked to endorse which statement relates mostly to what is believed about God. A majority of participants said, “I know God really exists, and I have no doubts about it” (31.8%). The remaining participants said “I don’t believe in God” (20.1%), “I don’t know whether there is a God and I don’t believe there is any way to find out” (17.2%), “I don’t believe in a personal God, but I do believe in a Higher Power of some kind” (10.4%), “I find myself believing in God some of the time but not at others (4.7%), and “While I have doubts, I feel that I do believe in God” (15.9%). See Table 4.2 for religious and spiritual demographic information.

Table 4.2

Participant Religious and Spiritual Demographics

	<i>N</i> or Range	% or <i>M</i>
How often do you attend religious services?		
Never	166	43.2
Less than once a year	57	14.8
Once a year	22	5.7
Several times a year	51	13.3
Once a month	13	3.4
2-3 times a month	14	3.6
Nearly every week	20	5.2

Every week	28	7.3
More than once a week	13	3.4

About how often do you pray?

Never	148	38.6
Less than once a week	50	13.0
Once a week	27	7.0
Several times a week	55	14.4
Once a day	48	12.5
Several times a day	55	14.4

To what extent do you consider yourself a religious person?

Not religious at all	179	46.6
Slightly religious	83	21.6
Moderately religious	89	23.2
Very religious	33	8.6

To what extent do you consider yourself a spiritual person?

Not spiritual at all	103	26.8
Slightly spiritual	101	26.3
Moderately spiritual	103	26.9
Very spiritual	77	20.1

Which of these statements comes closest to express what you believe about God?

I don't believe in God.	77	20.1
I don't know whether there is a God and I don't believe there is any way to find out.	66	17.2
I don't believe in a personal God, but I do believe in a Higher Power of some kind.	40	10.4
I find myself believing in God some of the time but not at other.	18	4.7

While I have doubts, I feel that I do believe in God.	61	15.9
I know God really exists, and I have no doubts about it.	122	31.8

Several questions were asked to understand the participants' sexuality and relationships. In regards to attraction, a majority of the responses were men only (46.1%). The remaining participants said women only (40.9%), and both men and women (13%). Those who responded (N=200) said they had been married to their current partner 1-3 years (21%), 4-6 years (18.5%), 7-10 years (16%), 11-15 years (15.5%), 16-26 years (18%), and 27-46 years (12%). The majority of participants had been sexually active with their current romantic partner in the last 6 months (71.4%). The remaining participants said they had not been sexually active with their current partner in the last six months (13.3%), and some did not have a current romantic partner (15.4%). The majority of participants (89.4%) indicated they were sexually active with their spouse prior to marriage and a smaller portion (5%) indicated they were not. Of those participants who responded (N = 181), 6.8% engaged in sexual intercourse between the ages of 6-14, 24.3% between 15-18, 11.2% between 19-22, 4.2% between 23-29, and 0.9% between 30-39. See Table 4.3 for sexuality and relationship demographics.

Table 4.3
Participant Sexuality and Relationship Demographics

	<i>N</i> or Range	% or <i>M</i>
What sexes are you attracted to?		
Men only	177	46.1
Women only	157	40.9
Men and women	50	13

Have you been sexually active in the last 6 months with your current romantic partner?

No	51	13.3
Yes	274	71.4
I don't have a current romantic partner.	59	15.4

Prior to marrying your spouse, were you sexually active with your spouse?

Yes	163	89.6
No	19	10.4

How long have you been married to your current spouse?

1-3 Years	42	21
4-6 Years	37	18.5
7-10 Years	32	16
11-15 Years	31	15.5
16-26 Years	35	18
27-46 Years	23	12

At what age, approximately, did you first engage in sexual intercourse?

Ages 6-14	77	6.8
Ages 15-18	66	24.3
Ages 19-22	40	11.2
Ages 23-29	18	4.2
Ages 30-39	61	.9

Many of the participants endorsed various sexual problems and distress related to their relationship for either themselves or their partner. Some participants said they have anxiety before/during/after sexual intercourse with their spouse (64, self; 31, partner). Seventy-nine participants said they avoid engaging in sexual activities, while 57 participants feel like their partner does this. In regards to being rejected by their partner, 72 said they had been rejected and

60 said their spouse feels this way. Several participants said they disagree with the sexual attitudes and values of their partner (41), and that their partner disagrees with their sexual attitudes and values (35). Many of the participants endorsed experiencing discrepancies in desired frequency with their partner (self, 133; partner, 124). Sixty participants said they have “difficulty becoming aroused sexually when with spouse” and 41 said their partner has this problem with them. Some of the participants said they have difficulty communicating sexual interests and needs (83) and some said their partner has this problem (61). Of the 97 participants that endorsed this item, 43 said they experience sexual dysfunction of some kind and 54 said their spouse does. Some participants said they feel embarrassment, shame, or guilt during sexual intercourse with their spouse (45, self; 23, partner). Fifty-five of the participants responded to feeling sexually inadequate and that 39 of their partners feel that way. Many of the participants acknowledged feeling sexually unattractive (self, 117; partner, 57). Some of the participants endorsed feeling rushed when engaging in sexual activity (57, self; 36, partner). Thirty-six participants said they have engaged in sexual activity with someone other than their spouse since getting married, while 25 participants said their partner had engaged in sexual activity with someone other than spouse. In regards to experiencing a lack of sexual intimacy with and/or physical affection for a spouse, 41 said they feel this and 32 said their spouse feels this way. Several participants said they need more time for foreplay (94) and their partner would say they need more time for foreplay (44). Thirty-two participants said they derive little or no satisfaction from sexual intercourse with their spouse and 8 participants said their partner has this problem with them. Some of the participants said they experience low sexual desire in general (67) and some said their partner has this problem (46). Of the 58 participants that endorsed this item, 32 said they experience low desire in relation to their partner and 26 said their partner experiences low desire towards them. Some participants said

sexual intercourse is painful (31, self; 26, partner). Thirty-two of the participants that they have experienced sexual trauma or abuse and 16 said their partners had. Several participants said that do or have engaged in compulsive sexual behavior (e.g., pornography, online sex-related websites and/or chat-rooms) (50, self; 26, partner). Eighteen participants said they have sexual problems related to physical illness and/or disability, while 17 participants said their partner has this issue. In regards to being unable to relax during sexual activity, 45 participants said they experience this and 18 said their spouse does. Several participants said they worry about not pleasing their spouse sexually (89) and some said their partner has this worry (45). A small number of participants said they experience an issue not listed (self, 5; partner, 3). These issues were: timing and inability to orgasm. See Table 4.4 for the demographic information on those who experience problems and distress sexually in their relationship.

Table 4.4

Problems and Distress Sexually in Committed Relationship

Common Sexual Difficulties	Female		Male	
	Self	Partner	Self	Partner
Have anxiety before/during/after sexual intercourse with spouse	37	16	27	15
Avoid engaging sexual activity	57	22	22	35
Have been rejected sexually by spouse	36	47	36	13
Disagree with other's sexual values and attitudes	24	16	17	19

Want more or less frequent sexual intercourse	76	75	57	49
Difficulty becoming aroused sexually when with spouse	34	18	26	23
Difficulty communicating sexual interests and needs	53	28	30	33
Sexual dysfunction (e.g. anorgasmia, premature ejaculation, erectile difficulties)	12	45	31	9
Feel embarrassment, shame, or guilty during sexual intercourse with spouse	32	12	13	11
Feel sexually inadequate (e.g., too much or too little sexual experience)	36	20	19	19
Feel sexually unattractive	88	21	29	36
Feel rushed when engaging in sexual activity	39	16	18	20
Have engaged in sexual activity with someone other than spouse since getting married	16	12	20	13
Lack of sexual intimacy with and/or physical affection for spouse	26	17	15	15
Need more time for foreplay	69	15	25	39
Derive little/no satisfaction from sexual intercourse with spouse	19	2	13	6
Low sexual desire, in general	46	14	21	32
Low sexual desire for spouse	20	10	12	16
Sexual intercourse is painful	26	1	5	25
Experienced sexual trauma or abuse	25	6	7	10
Engage in compulsive sexual behavior (e.g. pornography, online sex-related websites, and/or chat-rooms)	17	22	33	4
Have sexual problems related to physical illness and/or disability	11	13	7	4
Unable to relax during sexual activity	35	6	10	12
Worry about not pleasing spouse sexually	54	30	35	15

Others	2	1	3	2
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Note. N=383.

Data Analysis

Principle Axis Factoring of the Initial Item Battery

The initial item battery of the SSM consisted of 40 items and was reduced to 27 by addressing the potential latent factors causing variability in the correlation matrix. Principle axis factoring (PAF) with oblimin (oblique) rotation was used because it is considered best practice for sexuality researchers (Sakaluk & Short, 2017). The original PAF kept all factors having an eigenvalue of at least one: all items had an absolute factor loading of at least 0.3. The weakest-loading items were iteratively removed on any of the factors that had cross-loadings < 0.3 as a means to refine the instrument and decrease noise. The scree plot suggested four meaningful factors that consisted of seven, six, five, and nine items, and together explained 70.97% of the total variance of the remaining 27 items (see Table 4.5).

Factor 1: Sacred. The first factor consists of seven items that assess to what degree one believes the sexual relationship is sacred. The items address explicit sacredness (e.g., “The sexual connection I have a with a partner is sacred”), sex has a strong, sacred meaning (e.g., “Sexual relationship can feel like it has purpose beyond the relationship” and “I feel in awe by the power of the sexual experience”), and there is a sacred connection with sexual experience (e.g., “Nothing in the world matches the closeness experience during sex” and “There can be no words to describe the closeness felt during sex”). This subscale has a high internal consistency (Cronbach’s $\alpha = .90$). This factor is expected to be positively related with the SSMS because sanctification is how

something or someone becomes sacred (Pargament & Mahoney, 2005). It would also be related to the BSAS, spirituality, and a belief in God.

Factor 2: Transcendence. The second factor consists of six items that suggest one believes that sexual experience can be transcendent. The items address specialness (e.g., “Sexual experience can feel deeply special” and “A sexual experience can feel inspiring”), effort given to have these experience (e.g., “Time and energy should be invested into maintaining the closeness of sexual connection”), and the depth of sexual experience (e.g., “I can find fulfillment in sexual experience(s)” and “A profound sense of love can be experienced during or after sex”). This factor has a high internal consistency (Cronbach’s $\alpha = .89$). This subscale is expected to be positively related with the BSAS-Communion and the SSMS, but is expected to have a weaker relationship with the SSMS. However, it would be expected that it would also be positively related to sexual satisfaction due to the nature of the questions.

Factor 3: Peak Experience. The third factor consists of five items indicative of a belief in peak experiences. The first subset of items involves physical properties (e.g., “Sex can give an unexplained energy” and “A trance-like experience can be felt during sex”). The other items consider a metaphysical experience (e.g., “During sex, loss of consciousness or an altered state can be experienced” and “Sex can make one feel limitless”). This subscale has a high internal consistency (Cronbach’s $\alpha = .87$). This factor is expected to be positively related to the BSAS-Communion and the SSMS, like the other subscales.

Factor 4: Spiritual Importance. The fourth factor consists of nine items that describe the belief of spiritual importance on the sexual relationship. These items address the influence of spirituality (e.g., “The more spiritual a sexual connection feels, the closer I would feel with a sexual partner” and “The level of emotional connection to a sexual partner would increase when a

sexual relationship feels spiritual”), and the expression of spirituality within sexuality (e.g., “My spiritual self can be expressed within a sexual relationship” and “The sexual and spiritual parts of me seem strong intertwined”). This subscale has a high internal consistency (Cronbach’s $\alpha = .97$). This factor is expected have the strongest relationship with the SSMS with no significant relationship to the BSAS-Communion. This scale is highly spiritual and so it would have the strongest relationship of the all the factors to religiosity, spirituality, and belief in God.

Each of the four factors addresses unique aspects of the relationship between spirituality and sexuality. SSM-Sacred addresses the belief of sacred sexuality explicitly, the strength of the connection between sacredness and sexuality, and the sacred connection involved in sexual experience. The remaining parts of this chapter are intended to assess the research hypotheses on the potential effectiveness of the SSM in identifying users who believe in sacred sexual experiences, transcendent sexual experience, peak experiences, and the spiritual importance of sexuality. This also includes a discussion on convergent validity and the correlations between sexual satisfaction and relationship satisfaction. It is important that any new measure of sexuality and spirituality be generalizable to a large percentage of the population without an overly religious focus in order to capture meaningful information.

Table 4.5

Final Factor Structure (Pattern Matrix) of Principal Axis Factor Analysis (PAF) with Oblique Rotation

	Factors				R^2
	1	2	3	4	
There can be no words to describe the connection felt during sex.	.748				.56
I feel in awe by the power of sexual experience.	.676				.46
Nothing in the world matches the closeness experienced during sex.	.668				.45

The authentic closeness of sexual connection is something only few experience.	.647	.42
Sexual relationships are able to put me in touch with the deepest parts of who I am.	.568	.32
The sexual connection I can have with a sexual partner is sacred.	.556	.31
A sexual relationship can feel like it has a purpose beyond the relationship.	.473	.22
A profound sense of love can be experience during or after sex.	.778	.61
A sexual experience can feel deeply special.	.695	.48
Time and energy should be invested into maintaining the closeness in sexual connection.	.684	.47
Overwhelming sense of euphoria can be felt from sexual experience.	.682	.47
I can find fulfillment in sexual experience(s).	.661	.44
A sexual experience can be inspiring.	.647	.42
During sex, loss of consciousness or an altered state can be experience.	.656	.43
A trance-like experience can be felt during sex.	.653	.43
Sex can make one feel limitless.	.517	.27
A sexual experience can create the feeling of oneness with the universe.	.501	.25
It is possible to feel a loss of self during sex.	.424	.18
My spirituality can strengthen the connection I have with a current sexual partner through sex.	.945	.89
My spirituality influences the sexual relationship I have with a sexual partner.	.912	.83
My spirituality plays a role in my decision to have a sexual relationship.	.889	.79
The more spiritual a sexual connection feels, the closer I would feel with a sexual partner.	.879	.77
My spiritual self can be expressed within a sexual relationship.	.851	.72

The sexual and spiritual parts of me seem strongly intertwined.	.841	.71
The level of emotional connection to a sexual partner would increase when a sexual experience feels spiritual.	.833	.69
Sexual relationship can be used to speak of the existence of a spiritual realm.	.750	.56
The spiritual connection through sex brings meaning to one's relationship.	.565	.32

Table 4.6.

Pearson Correlations, Means and SD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1) SSM-Sacred	1	.677**	.664**	.638**	.653**	.356**	.078	.265**	.226**	.263**	.096	.326**	.287**	.348**
(2) SSM-Transcendence		1	.657**	.362**	.305*	.361**	.268**	.315**	.260**	.352**	.141*	.206**	.159**	.188**
(3) SSM- Peak Experience			1	.480**	.361**	.386**	.082	.172**	.151*	.200**	.092	.206**	.089	.162**
(4) SSM- Spiritual Importance				1	.794**	.165**	.031	.119*	.155*	.146*	.010	.570**	.470**	.531**
(5) SSMS					1	.099	.293*	.207	.323*	.290*	.106	.392**	.443**	.408**
(6) BSAS-Communion						1	.111	.224**	.147*	.156**	.023	.017	.024	.064
(7) CSI							1	.443**	.551**	.543**	.312**	.070	.080	.084
(8) NSSS-Self								1	.708*	.917**	.508**	.094	.162**	.130*
(9) NSSS-Partner									1	.931**	.463**	.144*	.163**	.181**
(10) NSSS-Total										1	.530**	.124*	.153*	.146*
(11) PDRMS											1	.086	.008	.033
(12) Spirituality												1	.640**	.690**
(13) Religiosity													1	.763**
(14) Belief in God														1
<i>M</i>	45.42	47.63	30.79	41.41	95.44	3.46	130.96	3.60	3.70	3.76	10.54	2.40	1.94	3.75
<i>SD</i>	16.86	11.24	12.32	28.74	33.59	0.71	27.97	1.03	0.95	0.84	7.01	1.01	1.02	2.0

*Correlation is significant at the .05 level (2-tailed).

** Correlation is significant at the .01 level (2-tailed).

Research Question One

The first research question sought to determine which latent constructs would be identified in the item pool to assess sacred and transcendent sexual beliefs. It was hypothesized that the latent constructs that would emerge would be sacred and transcendence. This hypothesis was supported. The data were screened to ensure sufficient variance and that assumptions for PAF were not violated. The data were screened to see if there were outliers. Histograms of each of the items were created to determine whether there is skew in the items. To verify a positive association, the correlation coefficients were calculated to confirm that each was statistically different from zero. There were also two additional constructs that emerged as a result of the item pool: Peak Experience and Spiritual Importance. The four dimensions of the SSM correlated strongly with one another: accounting for 46% (Sacred and Transcendence), 44% (Sacred and Peak Experience), 40% (Sacred and Spiritual Importance), 43% (Transcendence and Peak Experience), 13% (Transcendence and Spiritual Importance), and 23% (Peak Experience and Spiritual Importance) of the variance in one another. The strong correlations of the subscales indicate they are highly related (see Table 4.5).

Research Question Two

As mentioned previously, Sacred and Transcendence emerged as latent constructs. Research question two asked what the relationship was between these constructs. By calculating the correlation between sacred and transcendence, hypothesis two is supported in that there is a strong correlation between sacred and transcendence ($r=.677, p < .001$). According to the criteria provided by Cohen (1988), the size of this correlation indicates a significant effect. This also signifies that the constructs hypothesized to be related do have a positive relationship (see Table 4.6 for correlations).

Research Question Three

Research question three asked if the factors of the SSM would account for greater variance in relationship satisfaction above what sexual satisfaction would account for. It was hypothesized that the latent factors would explain greater variance in relationship satisfaction beyond the variance explained by sexual satisfaction. Data were analyzed using hierarchical multiple regression. The criterion variable was relationship satisfaction for all analyses. Predictor variables were added to the regression in two steps. In the first step, the two control variables (Sexual Satisfaction-Partner and Sexual Satisfaction-Self) were added, creating Model 1. The results are displayed in Table 4.7.

Table 4.7.

Results from Hierarchical Multiple Regression: Predicting Variance Beyond Sexual Satisfaction for Couple satisfaction

Step	Predictors added	R ²	ΔR ²	β	ρ	β	ρ
Step 1	(Creating Model 1)	.311	.305				
	NSSS-Partner			.470	.000**		
	NSSS-Self			.116	.120*		
Step 2	(Creating Model 1)	.356	.340				
	NSSS-Partner					.504	.000**
	NSSS-Self					.042	.587
	SMS-Sacred					-.178	.038*
	SMS-Transcendence					.287	.000**
	SMS-Peak Experience					-.040	.673
	SMS Spiritual Importance					-.010	.880

Note. N=240. Model R²= Percent of the variance in the criterion variable accounted for by all variables in the model. ΔR²= Increase in the percent of variance accounted for by the variables added at a specific step. β= Standardized multiple regression coefficients (beta weight).

* $p < .05$. ** $p < .001$.

In table 4.6, the R^2 for Step 1 has a value of .311, which means the regression equation containing just the two variables (Sexual Satisfaction-Partner and Sexual Satisfaction-Self) accounted for about 31% of the variance in couple satisfaction, $F(2, 240) = 54.14, p < .001$. With alpha set at $\alpha = .05$, the β weight was small but meaningful for sexual satisfaction-self, but moderate for sexual satisfaction-partner. This indicates that sexual satisfaction contributes to couple satisfaction.

At Step 2, the four variables that constitute the four-factor scale of the SSM were added to the equation that contained sexual satisfaction-partner and sexual satisfaction-self. The $R^2 = .356, F(4, 236) = 4.133, p < .01$. In other words, adding the four SSM subscales resulted in a model that accounted for about 4.5% of the variance of couple satisfaction, beyond the variance already accounted for by sexual satisfaction alone. Although this number is small, it has great statistical significance in what it accounts for beyond sexual satisfaction.

With respect to the four predictor variables that constitute the SSM measure, these results indicate that the regression coefficients for two of the four variables were significantly different from zero ($p < .05$) and in the direction predicted by the four-factor model. Two of the four predictor variables, peak experience and spiritual importance, displayed beta weights that were not significantly different from zero. For peak experience $\beta = .04, p = .57$, and for spiritual importance, $\beta = .01, p = .88$. Overall, this hypothesis was partially supported because the SSM accounted for variance unaccounted for by sexual satisfaction, with only two of the subscales (sacred and transcendence) being significantly different from zero.

Research Question Four

The focus of research question four is to determine if convergent validity for the SSM. First, it was hypothesized that the SSM would be strongly correlated with the SMSS. Through an analysis of the correlation between the SSM and the SSMS, hypothesis one is supported because there is a strong correlation between the SSM and the SSMS ($r = .757, p < .01$). The size of this correlation indicates a significantly large effect and signifies that the constructs hypothesized to be positively related do have a positive relationship. Second, it was hypothesized that the SSM would be moderately correlated with the SMSS. Through an analysis of the correlation between the SSM and the SSMS, hypothesis two is supported in that there is a moderate correlation between the SSM and the BSAS-Communion ($r = .341, p < .01$). The size of this correlation indicates a significant strong effect and signifies that the constructs hypothesized to be related do have a positive relationship (see Table 4.8 for correlations). These hypotheses support the overall research question of convergent validity because the scale was correlated with measures with which it was hypothesized to be related.

Table 4.8

Correlations between the SSM and the SMSS and the BSAS-Communion

SSM	Frequency of Use Pearson Correlation Coefficient (r)
SMSS	-.757*
BSAS-Communion	.341*

Note. *Correlation is significant at the 0.01 level (2-tailed).

Additional Analyses

Gender differences. In order to determine if there were significant differences in participants' total scores on the SSM, the mean of the SSM was first calculated. The average

score on the SSM was 165.26 ($SD = 57.41$). The range of scores was from 0 to 270. As mentioned previously, these outliers were kept due to meaningful responses elsewhere. An independent samples t test was calculated to explore whether there were differences between men and women in their scores on the SSM. The average total score for men ($n = 170$) was 154.99 ($SD = 53.52$), while women ($n = 212$) had an average score of 173.33 ($SD = 59.30$). There was a significant relationship in the total scores on the SSM between men and women, $t_{382} = -3.14, p = .002$, two-tailed.

Summary

A sample of 384 participants was used in this study after the data cleaning process. Principle axis factoring was conducted to answer the first research question: What latent constructs will be identified in the item pool to assess sacred and transcendent sexual beliefs. Four constructs emerged out of the item pool: sacred, transcendence, peak experience, and spiritual importance. The second research question inquired if sacredness and transcendence are correlated. These two constructs were moderately correlated, which supports the hypothesis. The third research question sought to determine if the factors of the SSM would account for greater variance in relationship satisfaction beyond that which sexual satisfaction would account. This hypothesis was supported because the latent factors of the SSM explained greater variance in relationship satisfaction beyond the variance explained by sexual satisfaction. The final research question asked what the correlation is between the SSM with the SSMS and the BSAS-Communion to determine convergent validity. The first hypothesis was supported because the SSM had a strong correlation with the SMSS. The SSM had a moderate correlation with the BSAS-Communion supporting the second hypothesis. These results are discussed in greater

detail in Chapter Five.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study is based on four theoretical constructs, which are supported by the literature. First, people with higher sexual satisfaction tend to have higher marital satisfaction (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006). Second, sexuality is related to spirituality, and this relationship positively impacts satisfaction, both sexually and relationally (Ellens, 2009; MacKnee, 1997; Pargament & Mahoney, 2005). Third, transcendence and sacredness are aspects of spirituality that can also connect to sexuality (Anderson & Morgan, 1994; Ellens, 2009; Hernandez et al., 2011; Menard et al., 2015; Pargament & Mahoney, 2005). Fourth, one's meaning-making of an object or experience creates significance related to sacredness (Belk et al., 1989) and transcendence. Essentially, the meaning that people make can impact their beliefs and experiences of sexual transcendence and sacredness in relationships. These concepts were explored and interwoven to create the Spirituality and Sexuality Measure using the Sanctification of Marital Sexuality Scale (Hernandez et al., 2011) as a base.

This study was created to develop and validate a measure of sacredness and transcendence in sexuality, with the notion that spiritualization of sexuality will predict an increase in sexual satisfaction and relationship satisfaction. This study examined the connection between non-theistic sacredness and transcendent concepts related to beliefs about sex. First, it was hypothesized that the latent constructs from the analysis would be sacred and transcendence. Next, it was hypothesized there will be a moderate correlation between these two constructs. Third, the latent constructs will predict relationship satisfaction beyond what sexual satisfaction will predict based on individuals who have these beliefs. Fourth the SSM will be strongly related to the SMSS and moderately related to the BSAS-Communion.

The previous chapter described data analysis and results; this chapter discusses the significance of the study's findings. Research questions one through four are explored, including the subscales discovered, the variance addressed by the SSM, and the convergent validity of the SSM. This chapter explains implications for practice, implications for counselor educators and supervisors, limitations of the study, and suggestions for future research.

Summary of Findings and Implications

Participants were recruited through MTurk in March of 2018. A sample of 461 participants completed a survey that included the SSM, SMSS, NSSS, CSI, sexual problems and distress in a relationship, and a set of qualitative items. Of the participants who completed the survey, 393 were retained through data screening. The participants were between the ages of 18 to 72 years ($M = 38.1$, $SD = 11.6$) and a majority of the participants were female (55.5%), Caucasian (78.6%), married or have a life partner (47.4%), bachelor's degree (43.5%), and employed (70.1%). The research questions addressing this sample are further discussed below.

Research Question 1

Research question one asked which latent constructs would be identified in the item pool to assess sacred and transcendent sexual beliefs. It was hypothesized that the latent constructs that would emerge would be sacredness and transcendence (Belk et al., 1989; Ellens, 2009; MacKnee, 2002; Maslow, 1970, 1973; Moshner, 1980; Pargament & Mahoney, 2005, 2009; Piedmont, 1999; Roa, 1978; Woodward et al., 2009) because these are thought to be distinct constructs. Additionally, two unexpected constructs appeared as a result of the item pool: Peak Experience and Spiritual Importance.

Each of the four factors appears to address unique aspects of the relationship between spirituality and sexuality. The first factor that emerged was SSM-Sacred, which addresses the belief of sacred sexuality explicitly, the strength of the connection between sacredness and sexuality, and the sacred connection involved in sexual experiences. These sacred sexual beliefs are consistent with previous research about sacredness and sacred sexuality (Anderson & Morgan, 1994; Ellens, 2009; et al., 2011; Hernandez et al., 2011; Pargament & Mahoney, 2005). The second factor that emerged was SSM-Transcendence, which considers the beliefs about specialness, depth, and the effort involved in a transcendent sexual experience. These beliefs about transcendent experiences are consistent with findings in previous research related to sexuality and spirituality, transcendence, attributions, and peak experiences (Ellens, 2009; Belk et al., 1989; Hernandez et al., 2011; MacKnee, 1996; Moshner, 1990; Pargament & Mahoney, 2005, 2007). The third factor that emerged was SSM-Peak Experience, which addresses the beliefs about the physical and metaphysical alterations involved in transcendent sexual experiences. These beliefs about transcendent experiences are consistent with findings in research related to sexuality and peak experiences, ecstasy, euphoria, and trance-like states (Anderson & Morgan, 1994; Ellens, 2009; MacKnee, 2002; Moshner, 1990; Privette & Bundrick, 1991; Schnarch, 1997; Sokol, 1986). The fourth and final factor that emerged was SSM-Spiritual Importance. This subscale is comprised of items that measure the belief about the influence of spirituality on sexuality and the expression of spirituality within sexuality. This subscale is consistent with other research on sacredness, sacred sexuality, and the Sanctification of Marital Sexuality Scale (Anderson & Morgan, 1994; Ellens, 2009; Hernandez et al., 2011; Lombaard, 2009; Pargament & Mahoney, 2005; Yoo et al., 2014).

It is believed that Peak Experience emerged as a construct separately from transcendence itself because individuals who have had a peak experience would be more likely to endorse those items, along with the rest of the SSM items. Participants were invited to clarify their experiences in qualitative items. For example, participants who scored higher (≥ 49) on this scale endorsed aspects of peak experiences, including having a close bond (e.g., “It brought us closer together and definitely strengthened our feelings towards each other”); inability to put their experiences into words (e.g., “It makes me greedy, in the sense that I honestly feel that no one else can ‘comprehend’ my partner like I do and no one else can understand me as she does. Even when we can't be together physically, the longing remains yet we can comfort ourselves with this thought”); limitlessness, loss of self, and an altered state (e.g., “I used to feel this way, like I was amazing and it was the only time I truly felt like myself with nothing between myself and the world. I felt one with this person like we would completely lose ourselves in each other and lose sense of time and place. Sometimes, it would feel like I was floating out of myself”). Participants’ descriptions of transcendent sexual experiences and peak experiences were consistent with the literature on sexual transcendence.

Research Question 2

Sacredness and transcendence have been described in similar ways, but have been and should continue to be treated as distinct constructs. Sacredness represents what is revered, feared, worshipped, respected (Belk et al., 1989), or as having divine qualities (Pargament & Mahoney, 2005). Transcendence involves oneness, unity, connectedness (Ellens, 2009; Piedmont, 1999), is related to an ability to be outside time and space (Piedmont, 1999), and involves peak experiences (Woodward et al., 2009). The constructs of sacredness and transcendence tend to be applied to different populations. Sacredness tends to be used in a religious context (Fleischacker,

2017), while words like transcendence and communion may be more applicable in spiritual or secular arenas, rather than sacredness. The two concepts are related in that spiritual individuals may still respond to sacred items (Fleischacker, 2017) and those who are religious may agree with transcendent items, but are two distinct constructs irrespective of their overlap. Because of this similarity, it was hypothesized that the relationship between sacredness and transcendence would be moderate. This hypothesis was supported because there was a strong, positive relationship between the two. This finding is meaningful because the strength of the correlation suggests a relationship between these two constructs, but the correlation was not so high as to indicate that they are the same thing. Rather, the correlation was weak enough to indicate that these are two separate constructs. This correlation is meaningful because these constructs capture a unique set of beliefs related to spirituality and sexuality that have not been delineated in research. These subscales provide the assessment that is needed to further the discussion on both sexuality and spirituality.

Research Question 3

Research question three asked if the factors of the SSM would account for greater variance in relationship satisfaction above that which sexual satisfaction would account. It was hypothesized that the latent factors would explain greater variance in relationship satisfaction beyond the variance explained by sexual satisfaction. It was believed that this finding could help further the understanding of what contributes to sexual satisfaction and relationship satisfaction. As previously mentioned, relationship satisfaction is a positive or negative subjective evaluation of one's relationship, which impacts the emotions the individual experiences about his or her relationship (Fallis et al., 2016; Lawrance & Byers, 1995). Similarly, sexual satisfaction is a subjective assessment of a couple's sexual relationship, positively or negatively, that elicits an

emotional response (Byers, 2005; Byers & Rehman, 2014; Lawrance & Byers, 1995). Because of this relationship, when a couple reports a satisfying sexual relationship, both members tend to also report a satisfying marriage (Barrientos & Paez, 2006; Davis et al., 2006; Fallis et al.; Leiser et al., 2007; Yucel & Gassanov, 2010). Furthermore, the spirituality of a committed couple deepens the sexual experiences (Ellens, 2009; MacKnee, 1997), which increases sexual satisfaction (Pargament & Mahoney, 2005).

Previous research suggests sexual satisfaction is a predictor of marital satisfaction (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006). It was hypothesized that the SSM would account for variance not accounted for by sexual satisfaction alone. When an experience is considered spiritually important and sacred, the satisfaction connected to that experience increases (Pargament & Mahoney, 2005). The SSM accounted for 4% additional variance in couples' satisfaction beyond sexual satisfaction, which indicates this hypothesis is supported. This small addition of explained variance is meaningful because it signifies an increase in both sexual and relational satisfaction. It can also provide information as to why an individual or couple's satisfaction may be low, especially if one or both believe sex should be experienced in a sacred or transcendent way that is not being experienced. In other words, if a couple ascribes sacred or transcendent meaning to sexual experiences, but these experiences are riddled with dysfunction or issues, the experience can be perceived as even worse, creating a deeper plummet in satisfaction. This furthers previous research indicating that if an individual attributes sacred meaning to a sexual experience, the individual is likely to have a stronger negative association with the experience if it fails in any way than if it had not been attributed a sacred meaning (Minton, 2016). This stronger negative association with something that is believed to be sacred

can potentially create significant struggles, in the long run, contributing to sexual issues accounting for 50-75% of marital dissatisfaction (McCarthy, 1997).

Research Question 4

The focus of research question four is to assess convergent validity by examining the relationship of the SSM subscales with the SMSS and the BSAS-Communion. First, it was hypothesized that the SSM would be strongly correlated with the SMSS, which was supported because there is a strong positive correlation between the SSM and the SMSS. The relationship was stronger than anticipated, which may have occurred for several reasons. First, the SMSS was used as a foundation for many of the items, even though the wording was changed to reflect spirituality rather than religiosity. Second, there were additional sacred items that were added based on literature. Third, the sacred subscale accounted for the largest weight in the factors. Fourth, the spiritual importance scale contains primarily sacred items, half of which are from the SMSS model. Fifth, the scale was only given to those who attended church, which would give weight to those who are more religious. In retrospect, it is reasonable that the SSM is strongly correlated with the SMSS.

Second, it was hypothesized that the SSM would be moderately correlated with the BSAS-Communion. Hypothesis two is supported because there is a moderate positive correlation between the SSM and the BSAS-Communion. This moderate correlation was expected because the BSAS-Communion contained only a few items that assessed the constructs in the SSM. Only two out of the five items came close to measuring similar transcendent constructs (e.g., “At its best, sex seems to be the merging of two souls” and “Sex is usually an intensive, almost overwhelming experience”). When the SSM was separated by subscales, the relationship of the BSAS-Communion was weakly correlated to all, except the SSM-Spiritual Importance subscale,

where there was no relationship. This is likely because the SSM-Total focused on the spiritual beliefs of the experience rather than the experience itself.

Additional Findings

Differences between genders on the SSM. In the study, there were statistically significant differences in the average total score on the SSM between men and women, with women having higher scores on the mean than men. These findings indicate that women tended to score higher on the SSM and that there was greater variability in the beliefs about spirituality and sexuality for women. This outcome is surprising because both genders tend to have greater pleasure and sexual satisfaction from an experience they perceive as sanctified (Murray et al., 2005; Pargament & Mahoney, 2005), and men tend to place greater weight on sex and the sexual experience of their partner (Yoo et al., 2014). However, women tend to be more open to a greater frequency of sex when they feel spiritually close or connected to their partner (Burriss et al., 2009). It was not expected that the potential for spiritual closeness or connection would be stronger for women than for men. It is possible that the wording of the scale was more appealing to women or that the female users of MTurk are a different population than those previously studied.

Qualitative findings. The qualitative responses revealed a need for further research because many responses provided a richness and depth to the scale. One participant affirmed what research said about the Buddhist and Hindu practice of Tantric sexuality (Jones & Hostler, 2005; Turner et al., 2006). Tantric sexuality involves openness and depth, and it fosters wholeness (Bullis, 1998). The participant was asked to describe a transcendent sexual experience. She said, “Tantric. There are no words to describe the completeness and pleasure that my husband and I bring to one another. I do not believe that anyone else in the world

experiences what we do together and my vast vocabulary is woefully inadequate when attempting to describe this.”

There were participants who said they did not believe sexuality and spirituality were related. However, participants with a high total score on the SSM affirmed their belief in the powerful connection between spirituality and sexuality (e.g., “Sexuality and spirituality are both deeply personal and connected to my life force energy. God supports Sexuality grounded in love and commitment”). They affirmed the sacred connection mentioned in the SSM-Sacred (e.g. “I feel that my partner and I have a connection. We are soul mates. When we have sex, we are experiencing a spiritual moment as well as a physical one”). Even those who consider themselves not religious were able to affirm this connection (e.g., “Not at all religious, but I do feel there is a spirituality to sexuality”). One participant even likened sexuality to the ritual of prayer (e.g., “I feel that they are all very connected. Not that I am having sexual experiences with God but that I can elevate my body and my spirituality to a heightened plain of feeling and thinking. That heightened plain is something that God has designed for us to attain for. Sex is a ritual just as prayer or going to church, in fact, I'd argue that sex is a form of prayer, in it you can express love, and appreciate two bodies forming one, a union”). The qualitative data further the research in a tangible way rather than a theoretical way. Several of the participants add additional support for the quantitative items of the SSM with their qualitative responses.

Limitations of the Study

It is conceivable that the participants from MTurk do not represent the overall population well enough for the findings to be generalizable. MTurk samples tend to be younger, better educated, and make less money than the overall population (Paolacci et al., 2010). While these

seem like miniscule things, these demographical differences could impact that data in a way that makes the data less generalizable. The difference of age could have a more significant negative impact on this data because the depth in sex seems to be associated with increased age (Menard et al., 2015). Also, MTurk is used by individuals who know about it and chose to complete the study. This data collection method could have resulted in selection bias. Even though samples through MTurk are diverse (Buhrmester et al., 2011), generalizations should be made with caution because the samples may not be representative of the population within the United States.

Self-report measures are another limitation of the study. There is a possibility that the responses of the participants are not an accurate representation of the individual's experience because they may lack insight into themselves, be turned off by the spiritual language, or triggered by questions of a sexual nature. For example, the SSM is designed to measure items related to sexuality and spirituality, but all items may not relate to everyone (e.g., some participants were atheist or not "spiritual" enough to feel that the items were relevant to them). Also, participants may have difficulty labeling experiences (Fleischacker, 2017; MacKnee, 1996) and some of the qualitative responses indicated this as well. This could make measuring this concept difficult. Even though anonymity is guaranteed, individuals may have concerns about answering honestly due to the taboo nature of the sexual material.

Another challenge to assessing beliefs about sexuality and spirituality is that spirituality is more of an intangible experience than a tangible one (Piedmont, 2001). In other words, there may be variability in participants' responses regarding beliefs about spiritual experience. Additionally, the relationship between sexuality and spirituality is something rarely studied, and sexuality with non-theistic sacredness and transcendence is rarer to find in literature. This limits

the study in the ability to compare to other research because current literature tends to be more theoretical in nature.

Finally, it is suspected that the Spiritual Importance subscale of the SSM may have inadvertently triggered participants to answer in a certain way or created a ceiling effect. The scale had priming phrases (e.g., “My spirituality plays...,” “My spirituality influences...,” and “My spiritual self...”) that may have influenced the participants to answer in a way that may not have authentically reflected their perspective. This is suspected because of the moderate correlation of this subscale with belief in God ($r = .531, p < .01$) and the moderate correlation with self-identified spirituality ($r = .570, p < .01$). It seems that for spiritual individuals, any item that discusses spirituality may automatically cue participants to score higher. When using spirituality in survey items, caution should be used because it can confound the differences between spirituality and religiosity (Saucier & Skrzypinska, 2006). This subscale should be thoughtfully considered before included in future research.

Suggestions for Future Research

Future research should continue exploring the relationship between sexuality and spirituality. Research including additional variables that are related to sexuality and spirituality are warranted. In order to better understand the relationship between sexuality and spirituality, controlling for specific variables may also be important for future research. The more other variables are considered, the amount of variance accounted for is increased and helps to further the understanding of sexuality and spirituality. Other variables that might be included in these studies are assessments of sexual shame (e.g., the Test of Self-Conscious Affect; Tangney, Dearing, Wagner, & Gramzow, 2000; the Kyle Inventory of Sexual Shame; Kyle, 2013),

psychopathology (e.g., the Depression Anxiety and Stress Scale; Lovibond & Lovibond, 1995), self-compassion (e.g., Self-Compassion Scale; Neff, 2003), attachment (e.g., Adult Attachment Scale; Collins, N.L., & Read, S.J., 1990), religiosity (e.g., The Religious and Spiritual Struggles Scale; Exeline, Pargament, Grubbs, Yali, 2014; The Religious Commitment Inventory; Worthington, E.L. et al., 2003), well-being (e.g., the Ryff Scales of Psychological Well-Being; Ryff & Keyes, 1995), spirituality, and other related constructs.

The preliminary data gathered in this study indicated the SSM scale had many strong psychometric properties and provided the initial validation of the concepts of sexual sacred and transcendence. While this study demonstrated convergent validity of the scale with positive correlations between the SSM and both the SMSS and the BSAS-Communion, there were no tests of discriminant validity. One possibility is to use a measure of social desirability (Marlow-Crowne Social Desirability Scale-Short (MCSS); Reynolds, 1982) to make sure social desirability is not impacting the participants' responses to the answers (Warner, 2013). Another possibility would be to explore attachment (Adult Attachment Scale; Collins, N.L., & Read, S.J., 1990) to determine the relationship with the SSM. Research on the SSM should be directed at refining the subscales for noise reduction and norming the scales on sources off-line.

There is some meaningful work that can be expounded on with couples. After further validation of the scale, continued assessment of spirituality on the beliefs about sexual experiences can add to the discussion on current research. The addition of a focus on attachment with couples and the SSM could contribute to the research (Brassard et al., 2012; Mizrahi et al., 2015; Timm & Keiley, 2011). Attachment insecurity is related to sexual dissatisfaction (Brassard et al., 2012; Butzer & Campbell, 2008) and positive relationships between both family-of-origin and parent-child experiences are associated with sexual satisfaction (Strait, Sandberg, Larson &

Harper, 2016). Further, a focus on same-sex couples, those who have experienced affairs, the experience of infertility and distress, and one's religious upbringing would also be interesting topics to explore in regards to sexuality and spirituality. Finally, a qualitative study exploring the peak and transcendent experiences of individuals and couples is warranted. As mentioned above, the richness of the data that was collected through MTurk was enlightening. It would be worthwhile to broaden this understanding qualitatively. This qualitative research would provide the opportunity to explore the meaning made of an object or experience to create significance related to sacredness (Belk et al., 1989) and transcendence.

Clinical and Counselor Education and Supervision Implications

For clinicians, there are no measurements that adequately assess beliefs about spirituality and sexuality or the connective beliefs identified by the SSM. This measure could help clinicians understand how a couple is perceiving their sexual relationship, the meaning they make of their sexual experiences, and what they believe it should be like, but how it is not measuring up. If one or both partners scored low on this assessment, it would be an indicator that they are likely to be experiencing distress in both relationship satisfaction and sexual satisfaction. This is even more likely if they consider themselves spiritual or believe in God. Many clinicians admit trepidation about this topic and will talk about everything related to the relationship, except sexuality. Therefore, this measure could help with broaching the topic. Also, clinicians can have difficulty discussing spirituality, especially if it is different from their own view. While this instrument cannot address the fear of discussing sex or spirituality, it can provide a way to talk about sex and spirituality through discussing the results.

Counselor educators and supervisors have an important role in the field and in helping clinicians. First, most counseling students, unless they are marriage and family therapists or are required by their state licensing board, are not required to take a course on human sexuality. Because of the taboo nature of this topic, it can be difficult to discuss. There can even be a lack of understanding related to the questions to ask about sex or the relationship. Counselor educators and supervisors have a responsibility to increase students' and supervisees' comfort with this topic because it is part of the whole bio-psycho-social-spiritual individual (Hunt, 2014). This could include activities like normalizing words, talking about sexuality in regards to couples, or including a sexual aspect in required intakes for mock-clients. Both sexuality and spirituality need to be weaved into teaching. Addressing spirituality can be a lot like addressing sexuality. If an individual's spirituality is different than the clinician's, it may not be discussed in the context of counseling, which results in the counselor neglecting that part of the individual. While a multi-cultural class is a requirement for licensure for master's level counseling students, spirituality may not be addressed much in this class. This can be an issue if the student goes to a university where there is only one "correct" way to believe and by default, other religions or spiritualities are not discussed. Conversely, spirituality could be disregarded in the teachings of a secular institution. Counselor educators and supervisors have a responsibility to help the next generation of counselors to be well-rounded and comfortable in addressing taboo or uncomfortable topics. Finally, counselor educators and supervisors have a responsibility to further the research on sexuality and spirituality. It is those who work with the next generation of counselors that are aware of the gaps in training, understanding, and comfort with these topics. Therefore, it is their responsibility to continue research that furthers the field and helps students and supervisees grow.

Summary of the Chapter

This chapter presented a summary of the findings, clinical and counselor educator implications, limitations of the study, and some areas for future research. There were four key findings. First, the SSM has four constructs to explain sexuality and spirituality. Second, the sacred and transcendence subscales are moderately correlated. Third, the SSM accounted for 4% of the variance beyond sexual satisfaction for couple satisfaction. Fourth, the SSM has convergent validity due to the weak relationship with the BSAS-Communion and the strong relationship with the SMSS. Potential areas for future research include further validation of the SSM, inclusion of additional variables, using this measure with different populations of couples (e.g., affairs, same-sex), further exploring the role of meaning making in sexuality and spirituality, and pursuing qualitative studies on transcendent peak experiences. The findings from this study inform counselor educators and supervisors to prepare students to be well-rounded clinicians through teaching and modeling discussion on spirituality and sexuality. The ability to understand and discuss these topics further informs the work of clinicians.

Summary of the Study

Previous research suggests the positive connection between sexual satisfaction and relationship satisfaction (Byers, 2005; McCarthy, 1997; Sprecher, 2002; Yeh et al., 2006). Sexuality and spirituality are related. Spirituality includes the concepts of sacredness and transcendence, which operationalize in peoples' lives by the examination of experiences through the framework of connectedness, depth, and meaning (Anderson & Morgan, 1994; Belk, Wallendorf, & Sherry, 1989; Ellens, 2009; Menard et al., 2015). When sexuality is spiritualized in this manner, it increases sexual satisfaction (Burriss et al., 2009; Murray et al., 2005;

Pargament & Mahoney, 2005). The concepts of sexuality, sacredness, and transcendence have rarely been studied together and there is no measure that existed that adequately captured individuals who considered themselves spiritual but not religious. Therefore, it was proposed that a measure be created to understand the relationship between spirituality and sexuality, and the impact that relationship has on couple satisfaction.

This study recruited participants through MTurk. Of the 461 participants, only the 383 were retained after the data screening. Data analysis indicated four subscales for the SSM: sacred, transcendence, peak experience, and spiritual importance. The sacred and transcendence subscales were moderately correlated and will be the ones used in future quantitative studies. However, the peak experiences subscale will inform qualitative studies. This scale did indicate convergent validity, suggesting that there is a strong foundation for further validation. Furthermore, the SSM described variance beyond what sexual satisfaction accounted for in relationship satisfaction. This study provides support that this research is a meaningful pursuit of sexuality and couple satisfaction, and can provide meaningful information for those doing relationship counseling.

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Appendix A

DEMOGRAPHIC INFORMATION

1. Gender:

Female Male Other, Please specify: _____

2. Age: _____

3. Ethnicity:

Multi-ethnic/racial Native American African American
 Asian American Caucasian/Euro-American
 Hispanic or Latin American Other, Please specify: _____

4. Educational Background—Highest level of school completed:

Less than 7 years
 Junior high school
 Partial high school (10-11th grade)
 High school graduation
 Partial college/post high school training (1 year or more)
 Standard college graduation
 Graduate/professional degree

5. Employment Status—Current employment status:

Employed full-time Employed part-time Full-time homemaker
 Retired School/ Student Unemployed
 Other, Please specify: _____

6. Annual Income—Approximate annual, gross household income:

less than \$25,000 \$50,001-\$75,000 \$100,001-\$130,000
 \$25,001-\$50,000 \$75,001-\$100,000 more than \$130,000

7. Religious Preference—Religious preference:

Buddhist Islamic Hindu Christian/Catholic
 Christian/Non-denominational Christian/Protestant Atheist
 Agnostic Other, Please specify: _____

Appendix B

GLOBAL RELIGIOUSNESS

Due to copyright issues, the questions of global religiousness have been removed but can be found at <https://gssdataexplorer.norc.org/variables/>.

Appendix C

BELIEF IN GOD

Due to copyright issues, the questions of belief in God have been removed but can be found at <https://gssdataexplorer.norc.umd.edu/variables/>.

Appendix D

RELATIONSHIP AND SEXUAL HISTORY

Due to copyright issues, the questions of relationship and sexual history have been removed but can be found at https://etd.ohiolink.edu/rws_etd/document/get/bgsu1213832819/inline.

Appendix E

ORIGINAL SCALE QUESTIONS FOR SPIRITUALITY AND SEX MEASURE

	Sacredness Subscale
1	The sexual connection I can have with a sexual partner is sacred.
2	A sexual relationship can feel like it has a purpose beyond the relationship.
3	The depth of sexual connection can feel like a spiritual experience.
4	Sexual closeness is a reminder that there is a stronger power than myself.
5	A sexual experience can feel deeply special.
6	Sexual relationships are able to put me in touch with the deepest parts of who I am.
7	A sexual relationship is able to help me be my most genuine self.
8	My spirituality plays a role in my decision to have a sexual relationship.
9	My spirituality influences the sexual relationship I have with a sexual partner.
10	In mysterious ways, sex can deepen the connection I have with a sexual partner.
11	My spirituality can strengthen the connection I have with a current sexual partner through sex.
12	There is a force beyond myself at work during sexual experiences with a sexual partner.
13	Sexual relationship can be used to speak of the existence of a spiritual realm.
14	My spiritual self can be expressed within a sexual relationship.
	Transcendence Subscale
15	Sexual experience can give a sense of wholeness
16	The sexual and spiritual parts of me seem strongly intertwined.
17	The more spiritual a sexual connection feels, the closer I would feel with a sexual partner.
18	The level of emotional connection to a sexual partner would increase when a sexual experience feels spiritual.
19	Nothing in the world matches the closeness experienced during sex.
20	It is possible to be unable to distinguish where I end and the other person begins during a sexual experience.
21	The authentic closeness of sexual connection is something only few experience.
22	Time and energy should be invested into maintaining the closeness in sexual connection.
23	One should go to great lengths to protect his or her deep sexual connection with another person.

24	I feel in awe by the power of sexual experience.
25	There can be no words to describe the connection felt during sex.
26	Overwhelming sense of euphoria can be felt from sexual experience.
27	The spiritual connection through sex brings meaning to one's relationship.
28	It is possible to feel a loss of self during sex.
29	Sex can feel like an out of body experience.
30	A sense of wonder can be experienced as a result of a sexual experience.
31	A part of my identity can be found in sexual connection with another
32	I can find fulfillment in sexual experience(s)
33	A sexual experience can be inspiring.
34	A sexual experience can create the feeling of oneness with the universe.
35	Sex can give an unexplained energy.
36	A trance-like experience can be felt during sex.
37	During sex, loss of consciousness or an altered state can be experienced.
38	A profound sense of love can be experienced during or after sex.
39	Sex can heal hurts experienced before the encounter.
40	Sex can make one feel limitless.

Appendix F

SANCTIFICATION OF MARITAL SEXUALITY SCALE

Due to copyright issues, the Sanctification of Marital Sexual Scale items have been removed but can be found at https://etd.ohiolink.edu/rws_etd/document/get/bgsu1213832819/inline.

Appendix G

SEXUAL FREQUENCY

Due to copyright issues, the questions of sexual frequency have been removed but can be found at <https://gssdataexplorer.norc.org/variables/>.

Appendix H

BRIEF SEXUAL ATTITUDES SCALE

Due to copyright issues, the Brief Sexual Attitudes Scale have been removed but can be found in the Journal of Sex Research, Volume 43, Issue 1.

Appendix I

NEW SEXUAL SATISFACTION SCALE

Due to copyright issues, the New Sexual Satisfaction Scale have been removed but can be found at http://cw.routledge.com/textbooks/9780415801751/resources/Stulhofer_et_al.___NSSS.doc

Appendix J

PROBLEMS AND DISTRESS RELATED TO MARITAL SEXUALITY

Due to copyright issues, the questions of problems and distress related to marital sexuality have been removed but can be found at

https://etd.ohiolink.edu/rws_etd/document/get/bgsu1213832819/inline.

Appendix K

TIME AND EFFORT DEVOTED TO CREATING AND MAINTAINING SEXUAL BOND IN MARRIAGE

Due to copyright issues, the time and effort devoted to creating and maintaining sexual bond in marriage have been removed but can be found at https://etd.ohiolink.edu/rws_etd/document/get/bgsu1213832819/inline.

Appendix L

THE COUPLES SATISFACTION INDEX

Due to copyright issues, the Couples Satisfaction Index items have been removed but can be found at

<https://www.researchgate.net/file.PostFileLoader.html?id=56fc6908cbd5c2bfb45f477c&assetKey=AS%3A345489552756736%401459382536539>

Appendix M

QUALITATIVE INFORMATION

1. How is your sexuality impacted, if at all, by God (Higher Power, Allah, Buddha, etc.) and/or your spirituality?
2. If you believe that you have felt a transcendent sexual experience with your spouse (e.g. felt a loss of self, felt spiritual, felt one with partner or universe, felt like a trance), please explain the impact of this on your relationship and/or view of life.
3. Please provide any additional information you believe would be helpful to the researcher in regards to sexuality and spirituality.

Appendix N

BOGUS AND CATCH TRIAL ITEMS

Due to copyright issues, the bogus and catch trial items have been removed but can be found at <https://pdfs.semanticscholar.org/6314/553dd70d7e708e0ed64080709a67b9475e7f.pdf> and https://www.researchgate.net/profile/Steven_Rouse/publication/268803960_A_reliability_analysis_of_Mechanical_Turk_data/links/5a9dab210f7e9bc35fcfc413/A-reliability-analysis-of-Mechanical-Turk-data.pdf.