DEVELOPMENT AND VALIDATION OF A MEASURE OF RELIGIOUS AND SPIRITUAL FLEXIBILITY

Jonathan E. Schmalz

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2014

APPROVED:

Amy R. Murrell, Major Professor
Joshua N. Hook, Committee Member
Randall J. Cox, Committee Member
Vicki Campbell, Chair of the Department of Psychology
Mark Wardell, Dean of the Toulouse Graduate School
Schmalz, Jonathan E. Development and Validation of a Measure of Religious and Spiritual Flexibility. Doctor of Philosophy (Clinical Psychology), August 2014, 155 pp., 6 tables, references, 182 titles.

Religion and spirituality are vital aspects of many people’s lives both in the United States and across the globe. Although many constructs and measures exist to describe and assess the experience of pursuing the sacred, the complexity of religious and spiritual experience leads to mixed results in relation to well-being and psychopathological traits. However, in broad terms, the relationship appears positive. Over the past 30 years the need for more refined and useful approaches to the study of religious and spiritual behavior has been repeatedly acknowledged. Although authors wisely caution development of further measures without due cause, extant constructs and measures do not provide clear and consistent results for understanding the influence of one’s relationships to religion and spirituality upon behaviors of clinical interest. The present project drew from the functional contextual concept of psychological flexibility, which provides clarity to understanding the encouragement and maintenance of psychological well-being. A new construct of religious and psychological flexibility is explicated as a functional approach to understanding religious and spiritual behavior in a manner that is useful in research and clinical settings alike. The development and evaluation of the Measure of Religious and Spiritual Flexibility (MRSF) is described. The MRSF evidenced adequate internal consistency and test-retest reliability. Confirmatory factor analysis results were positive, but indicate further refinement. Analyses suggested good construct validity of the MRSF in relation to psychological well-being and psychopathology; construct validity in relation to extant constructs in the psychology of religion was varied. Implications and future directions are discussed.
Copyright 2014

by

Jonathan E. Schmalz
TABLE OF CONTENTS

LIST OF TABLES .......................................................................................................................................................... v

CHAPTER 1 INTRODUCTION ................................................................................................................................. 1
  Religion, Spirituality and the Sacred .................................................................................................................. 4
  Early Theoretical Formulations of the Psychology of Religion ................................................................. 8
  Religion and General Psychological Outcomes – A Lack of Clarity ..................................................... 10
  Key Constructs and Measures in the Psychology of Religion ............................................................... 13
  Psychological Flexibility and the Sacred .......................................................................................... 34
  The Present Project and Rationale: A Measure of Religious and Spiritual Flexibility ... 51
  Hypotheses .................................................................................................................................................. 55

CHAPTER 2 METHOD ........................................................................................................................................ 57
  Participants .................................................................................................................................................. 57
  Measures ................................................................................................................................................... 57
  Procedure .................................................................................................................................................. 68

CHAPTER 3 RESULTS ....................................................................................................................................... 71
  Descriptive Statistics ................................................................................................................................. 71
  Initial Data Analysis ................................................................................................................................. 71
  Analysis of Hypothesis 1 ........................................................................................................................... 73
  Analysis of Hypothesis 2 ........................................................................................................................... 77
  Analysis of Hypothesis 3 ........................................................................................................................... 78
  Analysis of Hypothesis 4 ........................................................................................................................... 79
  Analysis of Hypothesis 5 ........................................................................................................................... 85

CHAPTER 4 DISCUSSION .................................................................................................................................. 86
  Findings ..................................................................................................................................................... 86
  Implications ............................................................................................................................................... 87
  Limitations ................................................................................................................................................. 103
  Future Directions ......................................................................................................................................... 107

APPENDICES .................................................................................................................................................... 117
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Characteristics of Sample</td>
<td>111</td>
</tr>
<tr>
<td>2</td>
<td>Exploratory Factor Analysis Factor Matrix</td>
<td>113</td>
</tr>
<tr>
<td>3</td>
<td>Means and SD of MRSF Items and Total Score</td>
<td>114</td>
</tr>
<tr>
<td>4</td>
<td>Correlations (Pearson’s R) Between MRSF and Other Measures</td>
<td>115</td>
</tr>
<tr>
<td>5</td>
<td>Correlations (Spearman’s Rho) Between MRSF and DASS Subscales</td>
<td>115</td>
</tr>
<tr>
<td>6</td>
<td>Correlations (Pearson’s R) Between MRSF and Other Measures</td>
<td>116</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

The importance of religion and spirituality is apparent in the lives of a majority of individuals globally and within the United States. As of 2009, more than 88% of people globally identify as adhering to some religion or faith. A little over 9% of people identify as non-religious and about 2% identify as atheistic (Central Intelligence Agency, 2012). In the United States, 84% of individuals claim adherence to a specific religion and 92% report that they believe in G-d (Gallup, 2011b; Gallup, 2011a). Moreover, Approximately 81% of Americans claim that religion is at least “fairly important” in their lives (Gallup, 2011b). Only 4-8% of people in the United States claim they are not at all religious (Central Intelligence Agency, 2012). While the United States has more individuals who adhere to religion than the global average, it also has more individuals who expressly do not. Even those who identify as non-theistic or atheistic are still defining this aspect of their identity in relation to the majority religious identity. That is, given the context of a majority religious nation, the non-religious are confronted with religiosity and compelled to identify themselves in response to the majority. Perhaps the near ubiquity of religious and spiritual pursuit is a reflection of feelings of connectedness to a higher power experienced throughout recorded history in most cultures. Furthermore, religion and spirituality provide explanations of the nature of life and particular ways to live and not to live. The influences of religious and spiritual worldviews on a range of behaviors suggest that the domain has clear relevance to a nuanced understanding of human behavior.

Relative to the rest of the world, Americans report higher levels of faith identification (Central Intelligence Agency, 2012), so it is not surprising that issues of popular public concern regularly reflect the impact of religious and spiritual perspectives in the United States. Ongoing
disagreement over social issues (e.g., marriage of same-sex individuals, war) often find root in religiously informed worldviews. But even on such divisive issues, the mere fact that one believes in a higher power or attends religious service regularly does not differentiate supporters of such issues from detractors. Indeed, two persons with a common faith may have very different reactions to a family member coming out as homosexual; one may open her arms with acceptance, while the other may turn away in disgust. In the past 40 years in the United States, political perspectives have become increasingly associated with levels of religious commitment and activity, rather than clearly associated with one faith group or another (Putnam & Campbell, 2012). It is perhaps not the contents of a specific faith that determine the direction of these outcomes, but the idiosyncratic interaction of the individual with his or her faith.

Religion and faith provide a framework or a “lens” through which individuals learn to navigate the world around them, and it often also provides a perspective from which to relate to one’s self. Prescriptive and proscriptive elements of religion suggest how a life ought to be lived, and what should be avoided, so that difficulties may be avoided both in the here and now and following death. Of course, difficulties and suffering are always looming, even when one follows religious precepts. Indeed, religious traditions often speak to such experiences (e.g., the story of Job in the Judeo-Christian canon).

But, as difficulties worsen, endure, and become debilitating, individuals may look to their religion for other explanations. In relation to the perception of psychological difficulties, some persons of faith view psychological distress as an indicator of a sinful existence; some see it as a failure to adequately “give it over to G-d;” and still some see it as an indication of the need for better political systems or a call to reach out and lend aid. Those who return from serving in combat or who have experienced some other form of trauma, often find their faith tested in ways
they seemingly cannot rectify. For example, consider the following client situation: A young trauma survivor presented in therapy with the author of this paper, stating that religion was important to him, but he found it impossible to understand how G-d would allow the horror he had seen, and the loss he experienced and witnessed. In the course of treatment, he returned to church on a weekly basis, because he knew he wanted his son to grow up with faith. But still, he could not (yet) allow himself to fully re-emerge as a man of faith. While this man found himself struggling to recover his faith, other survivors of trauma find solace in their faith. Some find redemption. Still, others remain steadfast in their faith, but are plagued by a persistent sense that they are not good enough for G-d, let alone for anyone else in their lives.

In any of the above of scenarios, religion and spirituality easily become highly relevant factors in psychotherapy. Much like other domains of human values, religion and spirituality are important to the process of psychotherapy (Bergin, 1991; Oakes, 2000). Data suggest that incorporating a client’s religion and spirituality into therapeutic approaches is only maleficent if done insensitively (Knox, Catlin, Casper, & Schlosser, 2005), but is generally well-received – in fact, desired by religious clients – and beneficial to therapeutic outcomes (Worthington & Sandage, 2001; Worthington, Hook, Davis, & McDaniel, 2011).

An interesting paradox emerges when one considers the high level of importance given to religion by many clients and therapists in their personal lives and the low import given by the therapists to the same domain within the therapeutic context (Bergin, 1991). Despite therapists’ tendency to neglect their clients’ spirituality, many clients understand their problems as spiritual ones, or the nature of their presenting problem is inherently related to their religious or spiritual functioning (Worthington & Sandage, 2001). Highly religiously committed individuals evidence differing expectations of their therapists and the therapy process than less committed persons.
(Worthington et al., 1996). In one study, more than one half (55%) of therapy clients expressed the desire to discuss religious and spiritual concerns in therapy; only 18% of respondents specifically stated they would not like to discuss such issues in counseling (Rose, Westefeld, & Ansley, 2001). Moreover, they often turn to their religion to cope with illness, adjustment to life change, and psychological difficulty (Ano & Vasconcelles, 2005).

This paper initially offers definitions for the use of the terms religion and religiosity, spirituality, and the sacred. I then briefly discuss prominent theories of the psychology of religion from early psychologists then move on to discuss more contemporary theories and empirical investigations of the role of religion in psychological processes. The emphasis in this section is on the nature of the approach itself (i.e., definition of constructs and development of related measures), with minor consideration of specific findings. Next, I turn to the concept of psychological flexibility and the proposed idea of flexible religious behavior. In doing this, the conceptual theoretical framework of functional contextualism is addressed. In addition, the nature of a behavior analytic inspired approach to the psychology of religion and spirituality, which focuses more on the various functions of religious and spiritual behavior than the forms of it, is covered. Finally, a new construct of religious and spiritual flexibility is delineated and the development of a related measure is discussed.

Religion, Spirituality and the Sacred

To this point, I have used the words religion and spirituality interchangeably. Hill and Pargament (2008) point out that within psychology, the term religion is a referent for both individual and institutional activity. James (1958) used the term in such a manner and distinguished the personal experience of religion from rites, rituals, and traditions handed down
by religious institutions. Recently, the term *religion* finds itself more often relegated solely to those latter forms of experience (Hill & Pargament, 2008; Wulff, 1996). The term spirituality is on the rise to capture those personal experiences of religiousness. Particularly in the United States, a polarization between religiousness and spirituality is growing (Koenig et al., 2012; Hill & Pargament, 2008). The 1960s created a young generation who would engage in “spiritual seeking” and in many ways disavow the shackles of religious dogma and ritual that previously dominated the American religious experience (Marler & Hadaway, 2002). Spirituality embodies the intrinsic dimension of the religious experience, whereas religiosity is defined by the formalized extrinsic components (Pargament, 1999; Marler & Hadaway, 2002).

The interaction or mutual exclusivity of religiousness and spirituality is uncertain. Survey investigations reveal that the majority of Americans consider themselves religious *and* spiritual, while seeing the two as separate, but interrelated concepts (Marler & Hadaway, 2002). Data also suggests the existence of a cohort effect. Younger persons are somewhat more likely to identify as being spiritual and not religious, a tendency that Marler and Hadaway (2002) suspect indicates a trend towards less religiousness, rather than one towards more spirituality.

Nevertheless, Hill and Pargament (2008) warn against splitting the two constructs in research. The demarcation of one as individualized and the other institutionalized risks becoming insensitive towards the effects of the contexts surrounding each construct; individual expression of spirituality occurs in a social context and the institutionalized formulations of religion are inherently interested in the life of the individual (Hill & Pargament, 2008; Wuthnow, 1998). A second warning against the bifurcated representation of the spiritual experience suggests that the evolution of the two constructs involves the unnecessary valences of religion as bad and spirituality as good, an issue that impedes effective evaluation of the benefits and detriments of
each (Pargament 2002; Hill & Pargament, 2008). Furthermore, individuals tend to see their spiritual experience as rather unified and though most may endorse a distinction between religion and spirituality, the two occur for them as interdependent (Marler & Hadaway, 2002; Hill & Pargament, 2008). Lastly, Hill and Pargament (2008) caution that the polarized view of the spiritual experience may lead to the development of measures of spiritual constructs already adequately assessed by similar constructs applied to religion.

The constructs of religion and spirituality are invariably interwoven; however, a blanket definition of one as the other has its own problems (Hill & Pargament, 2008). Nevertheless, both constructs reflect a search of the sacred. Spirituality, perhaps, reflects the quest for the sacred, and religion denotes a possible means for that search to occur (Hill & Pargament, 2008). Hill and Pargament (2008) define the sacred as:

What distinguishes religion and spirituality from other phenomena. It refers to those special objects or events set apart from the ordinary and thus deserving of veneration. The sacred includes concepts of God, the divine, Ultimate Reality, and the transcendent, as well as any aspect of life that takes on extraordinary character by virtue of its association with or representation of such concepts. (p. 4)

The sacred represents a domain of human experience that is sought. The behaviors that reflect the pursuit can be religious and/or spiritual. For some persons, the sacred is actively avoided or otherwise reacted towards as aversive. An example of this might be someone who develops staunchly atheistic beliefs in reaction to aversive experiences with the organized religion of their family of origin. In such instances, the behaviors may not be particularly spiritual or religious in their common definitions as outlined above; however, such behaviors are still functionally related to the sacred.

Furthermore, behaviors that do not appear blatantly religious or spiritual may still function to serve the pursuit of the sacred. Such pursuit does not even necessitate a belief in a personal or even ethereal god. One who aligns with an atheistic or agnostic version of
transcendentalism may find a walk in nature, or around the block, to be a uniquely spiritual experience approaching the sacred. From the outside the person is merely walking; however, from her perspective she is engaging with the sacred.

The present project develops a construct (and measure) of those behaviors that can be understood as religious and/or spiritual, including (but not limited to) behaviors relevant to approaching or reacting against the sacred. Behaviors, for the purpose of this project, are defined as including both overt and covert (i.e., thoughts, feelings) activities as explicated in third-wave behavioral approaches (Hayes, Wilson, & Strosahl, 2012). A distinction between religion and spirituality is not made in this project, as that differentiation is one based on form, not function, and this project utilizes a functional approach.

A formal approach to classification draws together behaviors, which appear topographically similar (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). From a formal approach, prayer of any type is easily grouped together. A functional approach is informed by functional analysis. Functional analysis considers the antecedents and consequences surrounding a behavior to determine the function, the why, of a behavior (Hayes, et al., 1996). From this perspective, prayer could function as a form of coping, a form of compulsiveness, or a form of rule-governed behavior, among other things. This project’s intention is to examine a functional construct with equal relevance to religious, spiritual, and non-theistic experiences, when any of these variables are relevant to a functional analysis. To be clear, this functional construct – religious and spiritual flexibility – applies to behaviors with functions, at least in part, that serve to pursue, or actively deny, the sacred. In an attempt to maintain definitional clarity, the remainder of this paper uses the terms religion and spirituality somewhat interchangeably, because they are being used to functionally refer to any behavior which, in part, functions in
relation to a pursuit, or denial, of the sacred. In considering the works of other writers, I discuss their definitions of the terms when pertinent and necessary for clarity.

Early Theoretical Formulations of the Psychology of Religion

Many early psychologists came from religious backgrounds as the children of ministers and pastors (Hall, Francis, & Callaghan, 2011). Edwin Starbuck’s *The Psychology of Religion* book, published in 1899, is often cited as the earliest textbook in the field (Hall, Francis, & Callaghan, 2011). In conceptualizing and discussing religion and spirituality, psychologists generally follow the bifurcated approach established by philosophers and theologians before them. Wulff (1996b) suggests that the sub-field of psychology of religion approaches religious experience in two distinct manners. A descriptive method seeks to present religious expression on its own terms in an informative and impartial manner. The explanatory approach seeks to consider the concomitants of religious experience through an understanding of psychological, biological, and environmental factors relevant to its expression. Wulff (1996b) also prescribes a pan-theoretical approach to the psychology of religion and cautions against over-identification with any one approach, descriptive or explanatory, as it may be more a reflection of the scientist or clinician’s personal experience of religion.

William James generally took a descriptive approach (Fuller, 2008) to his discussion of religion and focused most thoroughly on the nature of the individual’s right to religious experience as well as the inherently idiosyncratic nature of it (James, 1958). He described religious experience as something that cannot be broken down into a single essence across individuals’ experiences: the various formulations of religiosity are reflections of the intricacies of each individual’s (psychological) uniqueness (James, 1958).
The remainder of the theorists described in this section generally offered explanatory approaches to religion and spirituality. Freud generally characterized religion as an illusion that develops when wish fulfillment becomes too large a motivating factor (Freud, 1964[1927]). Religion, for Freud, is inextricably linked to a childhood desire for comfort and support from the father as a solution to weakness and helplessness (1962[1930]). Freud notably considered religion a social neurosis (Hall, Francis, & Callaghan, 2011). His pathologizing view of religion, like many of his views, highly influenced the field of psychology for decades.

Whereas Freud denied credibility to the experience of G-d, Carl Jung posited that G-d is an apparent psychological fact (1969) that needs no proof, only the direct experience. Jung actually suggested that the absence of religion is a primary cause of psychopathology in adulthood (Hall, Francis, & Callaghan, 2011). Related to his theory of archetypes, Jung saw distinguishing the archetype of the self from that of G-d as impossible (1969). Achievement of self-distinction, true individuality, is attainment of divine status (Fuller, 2008).

Similar to Freud, Albert Ellis harbored a pessimistic view of religiousness. He equated strong religious sentiments to irrationality, but he did clarify that it was religiosity that he saw as the problem, not religion (Ellis, 1992). Ellis, relying on his clinical experience, asserted that although religion has some therapeutic value for some people, he regularly found that those with dogmatic beliefs were more prone to emotional disturbance (Ellis, 1986). Ellis’ perception that dogmatic religiosity reflects irrationality and subsequently pathology shaped some of the empirical investigations discussed below.

The intention of the present project (i.e., the development of a measure of religious and spiritual flexibility) falls within the explanatory domain; however, the purpose is not to explain how or why a person behaves in relation to their pursuit of the sacred (e.g., determination of
early childhood patterns or personality characteristic). Rather, the focus is on how such pursuit interacts with broader aspects of psychological and behavioral functioning. The functional approach does not assume that religious behavior necessarily causes certain psychological outcomes, nor does it assume the inverse.

**Religion and General Psychological Outcomes – A Lack of Clarity**

To date, findings on the relationship between psychological functioning and religious variables are somewhat unclear (Knox, Casper, & Schlosser, 2005). However, findings generally favor positive psychological outcomes in relation to religiosity, despite predictions that religiosity is related to psychopathology or defect (e.g., Freud, Ellis). Not until 1983 did a meta-analysis by Bergin provide strong empirical evidence that religiosity is not related to pathology, and is in fact modestly related to positive outcomes. In their review of the literature, Seybold and Hill (2001), agree that although research results are variable, the general trend is towards positive relationships between religious and spiritual variables and both physical and mental health. Hackney & Sanders (2003) conducted a more recent meta-analysis and found a modest statistically significant relationship between religiosity and mental health ($r = .10$). This modest relationship is a reflection of the inconsistency of findings; some studies find that religiosity is related to bolstered psychological health, while others find it related to hindered symptomatological outcomes. As a sample of this inconsistency, consider the following recent studies. In one survey, college students who reported higher religiousness evidenced better adjustment to college life (Kneipp, Kelly, & Cyphers, 2009). Yet, another survey of college students found that while religiousness was related to greater well-being and less distress, spirituality evidenced an inverse relationship (Burris, Brehting, Salsman, & Carlson, 2009).
Both Bergin (1983) and Hackney and Sanders (2003) suggest that issues of definitional specificity and subsequent measurement account for the majority of the inconsistency observed in the literature. Indeed, when only measures of spirituality (not religiosity) are considered in relation to measures of quality of life a generally consistent moderate positive relationship emerges (Sawatsky, Ratner, & Chiu, 2005). Bergin (1983; 1991) suggests that differential findings among religion researchers likely reflect heterogeneity within the sub-groups demarcated by existing constructs and measures. In an analysis of data from the 2006 General Social Survey, Green and Elliott (2010) found that identification as religious is related to better health and increased levels of happiness. The authors report these findings exist regardless of religious affiliation or activity, though they found that type of religious beliefs (liberal vs. fundamentalist) yield differing happiness and health levels; those with liberal beliefs tend to be healthier and those with fundamentalist beliefs tend to be happier.

Hackney and Sanders (2003) suggest that the measurement of religious variables should examine the nature of a person’s religious practice, rather than the intensity or level of devotion of that practice. However, a recent review of the relationships between religious and non-religious belief and psychological distress suggest that level of certainty in one’s beliefs or non-beliefs is very important (Weber, Pargament, Kunik, Lomax, & Stanley, 2012). Believers who are confident in their beliefs, as well as non-believers who are confident in their lack of belief, show significantly greater psychological well-being than those who are less certain. However, a 2012 Gallup poll found that non-religious and atheistic individuals, overall, report significantly lower levels of well-being using Gallup’s Well-Being Index; it has been theorized that the effects of being a minority and marginalized group could explain such findings (Weber et al., 2012).
The same 2012 Gallup poll found that in the United States, members of some groups who are more intensely religious endorse higher well-being, while intensity is less related to well-being for other religious groups. Perhaps in partial support of Hackney and Sanders’ (2003) suggestion, Jews and Mormons reported the highest levels of well-being, despite a large difference in their religious intensity; 73.4% of Mormons reported being “very religious,” while only 16.9% of Jews reported that level of religiousness. Still, the benefit of being very religious was seen among that smaller proportion of Jews compared to less religious ones (Gallup, 2012). Clearly, multiple phenomena are at play in the interaction between being religious or non-religious and well-being.

Bergin (1983) suggests, “perhaps the most definitive thing that can be said is that religious phenomena are multidimensional” (p. 179), and unlikely to be easily divided into healthy and unhealthy. Seybold and Hill (2001) suggest that the moderate positive relationship of religion and spirituality to psychological health likely occurs through a number of mechanisms including: social network establishment, healthier lifestyles, cognitive factors (e.g., locus of control, coping, acceptance, existential meaning), and beneficial physiological effects. The authors also indicate the importance of developing measures with applicability to a variety of religious traditions and the delineation of means by which to more fully incorporate religion and spirituality into mental health services.

Wink and Dillon (2008) found that religiousness and spirituality (operationalized as separate constructs) were related to well-being from positive social experiences and well-being from intrapersonal processes (e.g., personal growth, wisdom), respectively in a sample of older adults. An analysis of the 2005 National Survey of Midlife in the United States found that religious participation was related to increased purpose in life and personal growth (Greenfield,
The authors also found that a higher level of spiritual perceptions was related to increased well-being in terms of affect, sense of purpose in life, positive social relations, personal growth, self-acceptance, environmental mastery, and autonomy.

Certainly, given the nature of the phenomenon, much of the data and literature addressing the relationships of religion and spirituality with psychological outcomes (both defined in broad strokes) are correlational in nature. Furthermore, results of this type not only lack specificity of constructs they typically do not account for various potentially intervening variables. The experiences that people have with religion can fundamentally alter the way that religion is beneficial or detrimental for them. As an example, Johnson et al. (2011) found that although a sense of spiritual well-being was related to decreased anxiety and depression in severely ill patients, for patients who had a history of bad experiences with religion, religiousness was associated with greater anxiety and depression.

In sum, evaluations of the relationships of religion and spirituality with psychological health and well-being at broad levels (e.g., general belief, intensity of belief, general well-being) suggest a moderately positive relationship. However, conflicting results indicate that the nature of the subject matter is multi-faceted and the nature of its relationship to broader psychological functioning is complex. Unsurprisingly, numerous specific constructs have been developed to capture various aspects of the pursuit of the sacred.

Key Constructs and Measures in the Psychology of Religion

While many constructs have been developed, the inclusion of religious and spiritual variables in psychological research remains surprisingly scant. Only 2.7% of published studies in seven major psychological journals between 1991 and 1994 included measures of religious or spiritual variables.
spiritual variables. Multiple specialized journals house the majority of research in the domain (Weaver et al., 1998). However, as an important feature of so many people’s experience, Weaver and colleagues (1998) express concern over the segregation of religious and spiritual research from more mainstream psychology. Imprecise definitional clarity may be one facet hindering more widespread incorporation of religion and spirituality variables into broader psychological research.

Furthermore, lack of agreement about what constructs within the area are of most relevance and utility exacerbate the issue (e.g., Bergin, 1983; Hackney & Sanders, 2003). Moreover, in some instances, more than one validated measure captures the construct. In sum, questions of how and what to measure have yet to be answered clearly. Early traditional research approaches assess religiosity in a quick, global, and thus imprecise manner, asking research participants to simply indicate frequency of religious service attendance, frequency of prayer, or self-assessed religiousness (Pargament, Feuille, & Burdzy, 2011). Though easily used and convenient, there are many subtleties to religious experience that are not captured by such global indices (Pargament, Feuille, & Burdzy, 2011). For example, a person who attends church regularly may do so for any number of reasons. In particular, a college student still living with her parents may attend because her parents more or less force her to do so. Her religious attendance in this example is a measure of her obedience to her parents, not her own religiosity. Clearly, a descriptive approach cannot glean such information. But, even common explanatory approaches may not be able to delineate why the young woman attends church in a manner that is helpful in clinical settings. The functions of the young woman’s church attendance are unclear. Perhaps she goes to religious services because she is afraid of disappointing her parents, or maybe she goes to maintain an important relationship with her parents. She may even go to
church with them because she finds church genuinely important on her own as well wanting to follow her parents’ rules. Most explanatory approaches do not allow for these questions to be answered.

However, there are numerous scales that attempt to develop a more exacting understanding of religious experiences across the various, and somewhat disparate, constructs psychology of religion researchers have developed. The following consideration of existing measures in the psychology of religion is organized in congruence with the organization into 17 thematic types of scales set forth by Hill and Hood (1999) in their compendium of measures of religiosity. Although each of the 135 measures included in the compendium is not specifically discussed, a review of the nature of the type of measures and brief description of key existing measures is provided. In some sections there may be multiple sub-constructs, only some of which are addressed here. Some measures that were either not included in the compendium or that were developed since its publication are also included. Lastly, some key measures with empirical findings and criticism relevant to the present project are addressed.

Before considering the domains of measures as outlined by Hill and Hood (1999), I would like to acknowledge a fundamental challenge asserted by them, one that this project intends to address. Hill and Hood (1999) put together their compendium of measures, in large part to create an easy reference place for measures in the area, so that researchers could easily find a measure to match their interests, rather than developing a new measure for a construct already measured. They contend that there are already copious measures of variables relevant to the psychology of religion and that most of these measures are psychometrically adequate. Specifically, the authors resound warnings by Gorsuch (1984) that excessive emphasis on
measure development can hinder progress when development continuously supersedes the emphasis on actually using those measures in research.

In recognition that there may be cause for the development of a new measure of religious and spiritual behavior, Hill and Hood (1999) offer the following guidelines for justification of developing a new scale: “a) existing measures are not psychometrically adequate to the task, b) conceptual or theoretical issues demand modification of existing measures, [or] c) there are no measures available for particular constructs” (p. 3). Following discussion of the existing measures and the explication of the proposed construct, religious and spiritual flexibility, an appropriate justification for the development of a new measure is made.

Religious Beliefs and Practices

Scales of beliefs and practices outlined by Hill and Hood (1999) examine the content or substance of beliefs and practices. Rather than exploring why a person holds particular beliefs, the scales attempt to describe what they believe. The majority of measures in this section specifically consider to what extent a person endorses beliefs pertaining to Christianity or Judeo-Christianity. Several measures in this section also assess for traditionalism or orthodoxy versus liberalism.

Yinger’s (1969, 1977) Nondoctrinal Religion Scales are notably agnostic in language and attempt to assess interest in existential questions and issues. Yinger (1969) assumed that interest in such matters is fundamental to the religious viewpoint. Yinger did not endorse summing the items into a scale. In the limited research conducted, he evaluated items individually. Indeed, subsequent evaluations of internal consistency using a summed scale format suggested that the scale is multidimensional and not reliable (Nelsen, Eveerett, Mader, & Hamby, 1967).
Another measure of religious beliefs, the God Survey (Shapiro, 2012) is still under development. Shapiro is still gathering responses from Jewish participants to develop a descriptive understanding of the nature of beliefs about G-d held by Reform Jews. The measure considers beliefs in domains such as, the existence of G-d, connection to G-d, wrestling with faith, and existential purpose, among others.

The Post-Critical Belief Scale (PCBS; Hutsebaut, 1996, 1997) was developed to measure the inter-individual differences in the approach to religion as outlined by Wulff (1996). Wulff proposed that approaches to religion could be conceptualized on a two-dimensional plane along two bipolar dimensions. These dimensions are Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic interpretation of text. The former dimension describes the extent to which one believes that the objects of religious worship partake in transcendent spiritual reality or not and has shown meaningful relationships to variables like church attendance, religious beliefs, religious involvement, authoritarianism, predictability, and preference for order (Fontaine, Duriez, Luyten, & Hutsebaut, 2003). The latter dimension is a measure of to what extent one believes in the literality of religious teachings and has shown meaningful relationships with constructs like perspective taking, empathy, tolerance for ambiguity and openmindedness (Fontaine, Duriez, Luyten, & Hutsebaut, 2003). From these intersecting dimensions four quadrants are defined. Wulff (1996, 1997) labeled the quadrants as literal affirmation, literal disaffirmation, reductive interpretation, and restorative interpretation.

Literal affirmation represents a position in which the literal existence of a transcendent spiritual realm is endorsed, as well as a belief in the literality of religious teachings and writings. Individuals who fall in this quadrant tend to also score higher on measures of prejudice and lower in cognitive development (Wulff, 1996, 1997). Wulff suggests that these individuals are
characteristically rather rigid and less capable of adapting. The classic example for this quadrant is a fundamentalist (Wulff, 1996, 1997). Individuals in this quadrant are the kinds of religious persons that Ellis, in his more subdued moments, identified as often having psychological difficulties seemingly related to their faith (Ellis, 1992). Below there is a section dedicated to fundamentalism; Hill and Hood (1999) acknowledge the potential for overlap in their categorization.

Literal disaffirmation represents a position which denies the existence of a transcendent spiritual realm, but which maintains the historical veracity of religious texts, and thus denies the presence of symbolic meaning in them. Wulff (1996, 1997) suggests that individuals who score in this quadrant are less dogmatic and more intellectual, but also less fair-minded, less able to evaluate ideas, and rather rigid and unable to adapt. A classic example for this quadrant might be a firm believer in the empiricism of science, with an almost dogmatic disregard for religion and belief. Both literal affirmation and literal disaffirmation delineate a style of religious beliefs indicative of rigidity and difficulties with adaptation (Wulff, 1997).

The reductive interpretation quadrant represents a position in which the existence of a religious realm is rejected, while at the same time, the themes of religious myth and religious practices are seen as important perspectives. Wulff (1996, 1997) claims that persons in this quadrant are generally “complex, socially sensitive and insightful, rather unprejudiced and original” (Fontaine, Duriez, Luyten, & Hutsebaut, 2003, p. 503). Wulff’s description of this quadrant suggests qualities of flexible and complex thinking.

Individuals in the restorative interpretation quadrant maintain the existence of a spiritual realm and are interested in the symbolic meaning of the religious language. Wulff (1996, 1997) argued that it is hard to characterize individuals in this quadrant as they have been largely
neglected by empirical research, and furthermore, due to the highly idiosyncratic nature of this type of belief, measurement by standardized questionnaire may well be inadequate.

**Religious Attitudes**

The next section of measures assesses the attitudes that one holds towards their own beliefs or towards the beliefs of others. Oftentimes items address preferences for or against aspects of Christian belief, or general perceptions of evangelism. Multiple measures in this section address preferences for more traditional or contemporary religious lifestyles. The Religious Attitude Inventory (Ausubel & Schpoont, 1957) considers the extremity of one’s positively or negatively valenced perceptions of the Church. The trend towards an emphasis on Western Christianity is again observed with this grouping of measures, as most of them assess attitudes about particular Christian beliefs and practices.

**Religious Orientation**

Allport and Ross (1967) developed a measure of religious orientation that dominates the empirical research in the sub-field of the psychology of religion. The Religious Orientation Scale (ROS; Allport & Ross, 1967) is a measure of a conceptual model in the psychology of religion formulated by Allport (1954). The model is comprised of two components of religious orientation, intrinsic and extrinsic. The intrinsically oriented individual experiences religion as an internally satisfying and meaningful process and aspect of his or her life. The extrinsically oriented individual finds meaning in religious experience more often through external sources, such as the community that a church might offer and the experience of praying in large groups. This model of religious experiences and its associated measure have been the impetus for
perhaps the largest body of work in the measurement of religious orientation (Brewczynski & MacDonald, 2006; Duck & Hunsberger, 1999; Fulton, Gorsuch, & Maynard, 1999; Hills, Francis, Argyle, & Jackson, 2004; Kirkpatrick & Hood, 1990; Mahalik & Lagan, 2001; Oakes, 2000; Palmer & Sebby, 2003; Ryckman, Van Den Borne, Thornton, & Gold, 2004; Sciarra & Gushue, 2003; Zaleski & Schiaffino, 2000). Extensive research has also investigated the relationship between religious orientation and social outcomes like helping behavior or prejudice (Batson, Schoenrade, & Ventis, 1993; Brewczynski & MacDonald, 2006; Hood, Spilka, Hunsberger, & Gorsuch, 1996) and psychological variables (Kirkpatrick, 1992, 1995; Laurencelle, Abell, & Schwartz, 2002; Pargament, 1992; Pargament & Park, 1995; Spilka & McIntosh, 1995).

There is, however, a great deal of difficulty associated with both the theory and the measure (Kirkpatrick & Hood, 1990). Kirkpatrick and Hood (1990) suggest that “religious orientation” is not as easily defined as one might hope, nor as was outlined above. Reviews of the seminal Allport and Ross paper (1967) have concluded that intrinsic and extrinsic orientations are really intrinsic and extrinsic motivation (Hunt & King, 1971), rather than measurement of behavior itself (Hoge, 1972). However, Hunt and King (1971) as well as Allen and Spilka (1976) suggest that the Religious Orientation Scale, and indeed the entire conceptual framework, might better be described as a measure of intrinsic and extrinsic personality characteristics.

When put to psychometric testing, the ROS produces three factors, Intrinsic (I), Extrinsic-Social (Es) and Extrinsic-Personal (Ep), not just two as theorized by Allport and Ross (Gorsuch & McPherson, 1989; Hoge, 1972; Kirkpatrick, 1989; Radiker et al., 1988). McFarland (1989) found residual E items that did not load onto either of these Extrinsic scales, rather they
showed strong negative loadings on the Intrinsic factor. McFarland scored these items as a third separate Extrinsic scale, “religious seriousness.” Batson and Ventis (1982) proposed a third dimension which they called Quest, intended as an aspect of mature religion. Kirkpatrick and Hood (1990) emphasize that these added dimensions of the E factor, or a Quest dimension, were derived empirically and not theoretically, and as such, should not be considered the new frontier for research in the psychology of religion, but rather inadvertent psychometric anomalies which highlight the scale and theory’s lack of clarity.

One last enduring critique of the ROS is the value-laden tradition it entails (Kirkpatrick & Hood, 1990). Dittes (1971) remarked that the Intrinsic-Extrinsic distinction carried with it value judgment unlikely to be left behind. Indeed, Ross (1950) initially wrote about the maturity and immaturity of different ways of being religious. Although he later softened his language and turned to using the terms intrinsic and extrinsic (Hill & Hood, 1999), it is arguable that the same values judgment stayed with the evolved constructs and many of the researchers who used them (Dittes, 1971). While this is not a final blow to the ROS, it does however have potential to stymie scientific discourse and inhibit scientific progress in insidious ways (Kirkpatrick & Hood, 1990).

Alternatively, the ROS can be considered through a less value-laden lens, if approached as a means of determining reinforced patterns of behavior. Hunt and King (1971) and Allen and Spilka (1976) are conjunctively correct in appraising the ROS as measuring the motivation of an individual’s religious experience as related to their learning history of generalized operants. Importantly, this framework also allows one to take a step back from the value judgment of Intrinsic as “good” and Extrinsic as “the sort of religion that gives religion a bad name”
(Donahue, 1985, p. 416). In contrast, both the Intrinsic and Extrinsic orientation to religion function to serve multiple purposes for the individual.

Ross, Allport, and other researchers made multiple revisions of the ROS and developed numerous other measures derived from the intrinsic/extrinsic approach. In response to the ROS, Batson and Shoenrade (1991) developed the construct and related scale of a Quest orientation to religion. Those with a Quest orientation are thought of as process-oriented spiritual seekers, who readily engage with the contradictions and tragedies of existence (Batson, Shoenrade, & Ventis, 1993). The Quest construct intended to capture aspects of the mature religious orientation left unaccounted for by intrinsic orientation (Batson, 1976, Batson & Ventis, 1982). The Quest construct evidences a significant relationship with the personality trait of openness and related descriptors such as originality, imagination, broad interests, and risk-taking (Simpson, Newman, & Fuqua, 2010). Conceptually and empirically, the Quest orientation represents a fluid, non-dogmatic, and potentially flexible approach to religion, but findings between quest orientation and psychological outcomes tend to be non-existent or indicative of undesirable psychological outcomes like anxiety (e.g., Watson, Morris, & Hood, 1987) and distress (Genia, 1996).

However, psychometrically, the Quest orientation does not show clear validity; Donahue (1985) and Simpson, Newman, and Fuqua (2010) report that Quest orientation measurement does not evidence a relationship to other measures of religiousness in a manner befitting designation as a religious construct. Another study found consistent inverse relationships between quest orientation and psychological well-being, but inconsistent and non-patterned relationships between quest and other religious and spiritual variables (Steger et al., 2010).

In sum, the sheer volume of studies rendered by religious orientation and derivative constructs and measures clearly suggest their importance. However, the religious orientation
framework is perhaps the thorn in its own side as it struggles with a lack of theoretical clarity, issues of construct validity, and a value-laden conceptual framework.

Religious Development

The development of one’s religious beliefs and ways of being religious is a lifelong process (Hill & Hood, 1999). Although many conversions and general faith beliefs are developed by adolescence or young adulthood, people often report continued change and growth in their religious and spiritual lives (Hill & Hood, 1999; Köse, 1996). A number of faith development measures exist and are aimed at adults, asking them to reflect on the changes they have experienced in their faith to that point in their life. The majority of the measures are focused on Christianity.

Fowler’s faith development theory and associated Interview Guide (Fowler, 1981) are not solely applicable to Christianity. Fowler’s Faith Development Interview Guide focuses on faith as a process of constructing a personal framework for making sense of the world and for making meaning (Hill & Hood, 1999). Fowler identifies seven, non-ordinal stages of faith development: primal, intuitive-projective, mythic-literal, synthetic-conventional, individuative-reflective, conjunctive, and universalizing (Fowler, 2000).

Fowler’s model is also a value-laden approach to understanding the religious experience (Hill & Hood, 1999). Emphasis on growth toward an aspirational form of faith is inherently value-laden and has resulted in notable criticism for Fowler’s approach (Coyle, 2011). It is also an attempt to describe the nature of one’s religious worldview, though it arguably taps into more experiential processes (e.g., mysticism) potentially more relevant to other behaviors than what is captured by measures of beliefs and practices. Nevertheless, Fowler’s work has been influential
in the provision of clinical and pastoral treatment (Lownsdale, 1997), particularly because it is
not tradition-specific, allowing for greater utility with a breadth of religiously inclined clients
(Parker, 2011).

Religious Commitment and Involvement

Measures of religious commitment attempt to assess how committed individuals are to
their religions in a more standardized and thorough manner than traditional approaches that
relied on a single question asking a person to self-rate religious commitment. Religious
commitment measures typically include items related to frequency of religious behaviors, such
as praying, reading scripture, etc. Often, these measures also ask respondents to indicate the
importance of their beliefs and/or practices to their lives and their understanding of the world. A
review of 139 studies involving a religious commitment variable found that 39% of studies found
a relationship between religious commitment and mental health. Of those studies, 72% indicated
a positive relationship (Larson, Sherrill, Lyons, & Craigie, 1992).

The Religious Commitment Inventory – 10 (RCI-10; Worthington et al., 2003) measures
intrapersonal and interpersonal commitment to religion. It measures to what extent an individual
bases their understanding of life on their religious ontology as well as how much they enjoy
engaging in the social practices associated with religion. The most notable intention of the
development of the measure was as a therapeutic tool for determining to what extent a person in
therapy bases their life on their religion, so that proper interventions could be determined
(Worthington et al., 2003). In many respects, the two factors (intrapersonal and interpersonal
commitment) of the RCI-10 are similar to the intrinsic and extrinsic domains of the ROS. The
difference is that Worthington and colleagues (2003) suggest that only a composite score of both
domains be used in therapy and research, rather than parsing them apart, as individuals could theoretically be highly committed to both intrapersonal and interpersonal aspects of religion.

Religious Experience

This group of measures attempts to assess the affective experiential component of religious life that William James (1958) argues dominates the cognitive one. A paucity of measures of religious experience exists, perhaps due to the difficulty of assessing the experiential affective process (Hill & Hood, 1999). Those that do exist typically embody clear cultural and/or tradition-specific biases. However, the Daily Spiritual Experience Scale (DSES; Underwood & Teresi, 2002; Underwood, 2006) is arguably the most neutral and appears adaptable to a variety of faiths and spiritual orientations. The DSES intentionally does not use the word religion in its approach to measuring the importance of spirituality. Underwood and Teresi (2002) intend the DSES as a measure for determining to what extent persons feel a connection with the divine, or a transcendent nature in their daily lives, rather than to what extent they engage in dogmatic or religious practice. An underlying assumption of the DSES is that there are beneficial health outcomes related to the sense of spiritual connectedness and experience (Underwood & Teresi, 2002).

While the DSES emphasizes, in part, connection to the sacred, for some individuals the experience of the sacred is relational. The Dedication to the Sacred Scale (DS; Davis, Worthington, Hook, & Van Tongren, 2009) focuses on the nature of relational commitment of the respondent towards the sacred. Using an approach modeled off of romantic relationship research, the measure taps into the extent to which a person feels relationally integrated or
connected with the sacred, and how committed to maintaining that relationship he or she is (Davis, Worthington, Hook, & Van Tongren, 2009).

Religious Values or Personal Characteristics

Religious beliefs often entail expectations or ideals for the character and values of a person. Organized faiths emphasize various characteristics as ideal and certain cultural values as more important than others (Hill & Hood, 1999). Two scales in Hill and Hood’s compendium are specific to the development of Christian character as emphasized in the Christian Bible and traditional canon. Two other measures of values evaluate support of values outlined as important by the Christian faith. Finally, the Rokeach Value Survey (Rokeach, 1973) is a measure of human values, religious and non-religious and is not specific to any religious or cultural tradition.

Multidimensional Scales

As a patently multidimensional construct (Bergin, 1983; Hill & Hood, 1999) some researchers have developed measures that attempt to capture multiple domains of religious behavior at once. Most multidimensional scales address beliefs, knowledge of doctrines, religious experiences, religious commitment, and/or impact of beliefs on daily life. However, there is a great deal of variability in the combination of these domains, as well as a few idiosyncratic ones left out. Measures of this variety have typically been geared toward Christians, though some could be cautiously used with Western, non-Christian traditions (Hill & Hood, 1999).
Religious Coping and Problem-Solving

That people often turn to religion and spirituality in times of distress merits no debate. Pargament and his colleagues lead the way in how to measure this phenomenon, with an emphasis on identifying adaptive versus maladaptive forms of religious coping. The Brief R-COPE (Pargament, Feuille, & Burdzy, 2011) and the previous longer form are the most commonly used measures of religious coping. The Brief R-COPE yields a positive coping subscale and a negative coping subscale. The former assesses “a sense of connectedness with a transcendent force, a secure relationship with a caring G-d, and a belief that life has a greater benevolent meaning” (Pargament, Feuille, & Burdzy, 2011, p. 58). The negative coping subscale is “characterized by signs of spiritual tension, conflict and struggle with G-d and others, as manifested by negative reappraisals of G-d’s powers… spiritual questioning and doubting, and interpersonal religious discontent” (Pargament, Feuille, & Burdzy, 2011, p. 58). Correlational findings indicate that positive religious coping typically evidences significant direct relationships with measures of well-being and occasionally exhibits significant inverse relationships with measures of psychological symptoms. In contrast, negative religious coping typically correlates directly with measures of poorer functioning and occasionally evidences significant inverse relationships with measures of well-being (Pargament, Feuille, & Burdzy, 2011). To date, no data exists to suggest a direction of causality between religious coping and well-being or psychopathology outcomes.

Spirituality and Mysticism

These measures tap into aspects of direct experiences of the sacred and of general belief, with little to no emphasis on practice and ritual. Furthermore, these measures – though not
exclusively – tend to be more tradition-neutral because their language is not geared to particular aspects of Christianity. These measures regularly refer to G-d, but do so in a more inclusive manner. Hill and Hood (1999) also include measures of spiritual well-being and spiritual health in this section. Such measures assess for both general quality of life (e.g., “I feel that life is a positive experience”), and also satisfaction in spirituality (e.g., “I believe that G-d loves me and cares about me.”

_G-d Concept_

Another aspect of religious experiences is captured by scales that assess how one views G-d. Some approaches are steeped in psychoanalytic and psychodynamic perspectives that see one’s image of G-d as perhaps related to one’s internal representation of their parents (e.g., object relations therapy; Vergote, 1969). Many of these scales assess personal accessibility and degree of intervention from G-d. A non-verbal measure is based in Piagetian concepts of the development of ideation of G-d representation and uses visual depictions of the sacred from very formal and concrete (e.g., robed man with a beard) to abstract and conceptual (e.g., five intersecting circles).

_Religious Fundamentalism_

Religious fundamentalism is not easily defined, and depending on the researcher’s interest, receives varying operationalizations (Hill & Hood, 1999). Definitions typically carry some aspects of rigidity and dogmatism of beliefs about absolute veracity of one’s tradition or text; however, measures more specific to Christian fundamentalism do not necessarily interpret fundamentalism in the same way (Hill & Hood, 1999). A clear inverse relationship between
fundamentalism and quest orientation appears in the literature (McCleary, Quillivan, Foster, & Williams, 2011). Items on religious fundamentalism scales generally reflect the nature of the respondent’s beliefs regarding the theological correctness and accuracy of one faith over the many other faith perspectives. Altemeyer and Hunsberger (1992) offer a fundamentalism measure – and subsequent shortened form in 2004 – that is free of specific doctrinal content (Hill & Hood, 1999). Their Religious Fundamentalism Scale asks to what extent individuals agree with statements such as, “to lead the best, most meaningful life, one must belong to the one, fundamentally true religion.” Religious fundamentalism is consistently related to right-wing authoritarian aggression and racial/ethnic and homophobic prejudice (Altemeyer & Hunsberger, 2004).

Laythe and colleagues (2002) determined that religious fundamentalism among Christians actually represents two sub-constructs: orthodoxy and right-wing authoritarianism. As discussed before, orthodoxy is about the contents of one’s beliefs (i.e. veracity of specific texts and doctrines), while right-wing authoritarianism reflects how one holds his or her beliefs (Laythe, Finkel, Bringle, & Kirkpatrick, 2002). Self-report and implicit association experimentation indicate that Christian orthodoxy is inversely related to racial prejudice, while right-wing authoritarianism is directly related to racial prejudice (Laythe, Finkel, Bringle, & Kirkpatrick, 2002; Rowatt & Franklin, 2004). The features of rigid adherence to textual veracity and objective Truth of only one iteration of faith (i.e. orthodoxy) are theoretically consistent with an inflexible approach to the sacred, though notably are empirical inconsistent with racial prejudice.
Views of Death and Afterlife

In part, religions often provide practitioners with a coherent story about the nature of life and death and what happens after one passes away. Some measures focus on the experience of death anxiety and acceptance, some on belief in an afterlife, and others consider the way one’s religion informs expectations about the experience of dying (Hill & Hood, 1999). For example, one measure included in the compendium assesses how anxious individuals are about death and how they perceive the transience of their lifetime (e.g., “I am often distressed by the way time flies”). Another measure considers the acceptance of death as an aspect of life to be experienced when it comes without fear. In many respects, this domain of scales could be considered a subsection of religious and spiritual beliefs with specific emphasis on the elements of meaning-making and existential issues.

Divine Intervention or Religious Attribution

For some people, their experience of the sacred partially helps them make sense of the world around them (Hill & Hood, 1999). This domain of scales addresses issues of daily divine intervention and attributions of the causes of events to G-d versus to their own doing or other secular phenomena. Findings generally suggest that people typically rely on naturalistic/secular explanations; when those explanations become unsatisfactory in some way, the level of attributions to the divine increase notably (Hill & Hood, 1999). Findings typically suggest that belief in divine intervention is not associated with external locus of control, but is moderately related to internal locus of control (Degelman & Lynn, 1995; Jackson & Coursey, 1988).
Forgiveness

Forgiveness is not always specifically conceptualized as a religious variable, despite clear roots for the concept in religious and spiritual traditions (Worthington, et al., 2007). However, because of the importance of forgiveness in the Christian tradition, it most often finds its way into studies of Christian psychology (Hill & Hood, 1999). Indeed, Muslims, Christians, and Jews report higher levels of attitudinal and projective forgiveness than secular persons (Fox & Thomas, 2008). In clinical work, forgiveness is an important concept. Research on the efficacy of encouraging forgiveness as a spiritual process in therapy, in congruence with the experimental findings of Davis and colleagues (2012), suggests that couples and individuals experience improved outcomes when forgiveness is approached in ways congruent with their religious background (Worthington et al., 2011; Belcher, Morano, DeForge, 2004). The importance of idiosyncratic perspectives of forgiveness even extends beyond religious traditions and into broader cultural domains. Individuals from collectivistic cultures tend to forgive more in the interest of restoring social harmony, than for inner peace (Hook, Worthington, & Utsey, 2009).

More recently, researchers began attending to the beneficial effects of forgiveness on physical and mental health (Davis, Hook, Van Tongeren, & Worthington, 2012). Davis and colleagues (2012) report that discrepant findings regarding the relationships between religion/spirituality and forgiveness plague researchers. These authors applied the concept of sanctification to the forgiveness construct and developed a psychometrically sound measure with strong validity that potentially clarifies the nature of the relationship of religion and spirituality with forgiveness. Davis and colleagues (2012) found that sanctification predicted increased forgiveness over time by participants towards someone who had hurt them in a romantic relationship over time, whereas religious commitment did not. The psychological connection
between forgiveness and the sacred is more important than one’s general religious commitment. The measure’s specification of the application of sanctification (i.e., actual attribution of the sacred) to the construct of forgiveness gives it the potential to clarify previously contradictory findings.

*Institutional Religion*

Simple approaches to measuring religiosity often rely on asking participants about church attendance to assess the degree of a person’s commitment to organized religious experiences. Measures of institutional religion provide a more thorough understanding of a person’s sentiments about their place of worship’s micro- and macro-level organization and its impact on the world around them. These descriptive measures do so by asking respondents to consider their attitudes about the structure of their church’s (all measures included are specific to Christianity) hierarchy. Some measures included in this section are intended to ascertain individual’s satisfaction with their local church and its congregation.

*Measuring Non-Theism*

Generally, measures of religion and spirituality do not account for individuals who do not believe in a higher power or in some way pursue the sacred. As Hill and Hood (1999) point out, in some way, religious belief is ubiquitous to most major conceptualizations of religious and spiritual behavior. The language of measures and the constructs they measure, typically assume the presence of religiosity or faith at some level. Whitley (2010) confirms that earnest attempts at measuring the experience of atheism are not undertaken by psychologists; in fact, Whitley suggests that demographic forms typically provide for inadequate options for atheists, who may
identify as positive (i.e., atheists whose affirmation of atheism is important to them) or negative atheists (e.g., atheists whose denial of a higher power is secondary or tertiary to their sense of self). From the present perspective, as briefly discussed above, active non-pursuit or denial of the sacred may be functionally relevant to behaviors of research or clinical interest. Rigid adherence to atheistic principles or reactions to theistic persons and themes may follow similar functional lines as behavior motivated towards the sacred. Atheism may at times be equivalently dogmatic and rigid as theism, a theme, which anecdotally, I have observed as relevant to psychotherapeutic process and outcomes.

Summary of Extant Measures

A few important conclusions can be drawn about the state of measurement in the psychology of religion based on this brief review. The majority of measures are targeted towards Christian or Judeo-Christian believers; no measures exist (of which I am aware) that are relevant to atheists, particularly positive atheists who identify their atheistic beliefs as relevant to their worldview and daily lives in a similar manner as many theists. Many of the measures that are not specifically Judeo-Christian in approach are still oriented towards individuals from the larger Western religious canon (Hill & Hood, 1999). Existing measures of religiosity, on the whole, do not adequately serve the heterogeneity of beliefs in the United States.

Most measures of religiosity can be characterized as descriptive. Many of the domains just described and their respective measures focus on the contents of belief or descriptions of religious practice. However, researchers utilize the more explanatory measures (e.g., ROS and Brief R-COPE) more often in research. Explanatory measures, by their very nature, are more
helpful in explaining behaviors motivated by religiosity. Unfortunately, also by their nature, these measures are more vulnerable to being value-laden (e.g., ROS).

Lastly, explanatory measures are limited in explanatory scope. As an example, religious coping is a viable and useful research construct, however specific only to coping. Religious orientation similarly has limited applicability across variables of interest, particularly those of clinical interest. Not one of the construct domains described appears appropriate for a functional understanding of religious and spiritual behavior that is applicable to multiple domains of the religious experience. That is, no measure exists that addresses the fundamental process of how one’s relation to the sacred intermingles with other aspects of the individual’s life, as well as with the other dimensions of the plainly multidimensional nature of being religious and/or spiritual.

In the interest of measuring the functional relationships of those who identify with religious and/or spiritual beliefs as well as those who patently do not, the present project intends to develop a measure with agnostic language. Creating a measure appropriate for theistic – specifically not just Judeo-Christian – and non-theistic persons may increase the overall utility of the measure on a practical level. On a theoretical level, it more adequately captures the spirit of a functional approach to measuring religious behavior, or in this case, behavior that is reactive to religiosity. In either case, the sacred is a relevant variable, regardless of a person’s affirmation or disaffirmation of the concept’s existence.

Psychological Flexibility and the Sacred

As mentioned, most religious or spiritual traditions include a provided perspective on living and the nature of existence, as well as ideas on the nature of human difficulties. Indeed,
the Buddha’s first Noble Truth was that all of life is suffering. Vedantic Hindus believe that suffering is inevitable so long as the individual (atman) sees himself as separate from G-d (Brahman). Most Jews believe that at least some of the sources of suffering are not clearly understandable to humans; although, like Buddhists, many Jewish people view suffering as fairly common and, like Hindus, they tend to associate at least some distress with a turning away from G-d. Christian doctrine generally recognizes the ubiquity of human suffering and appropriates the responsibility of it to human sin. Each tradition has its own respective rites and practices, as well as precepts intended to foster the alleviation of suffering.

**Functional Approach to Psychopathology**

Not unlike religious traditions, psychologists are also broadly invested in understanding and responding to the human condition’s relationship with suffering. Much research in psychology has focused on the reduction of psychological symptoms as manifestations of suffering. The assumption, borrowed from the medical model, which underlies such an approach proceeds as if the “normal” state of being human is happiness, or at very least the absence of distress; such an assumption is in fundamental opposition to the stances taken by the religious perspectives briefly touched upon above. Given even a cursory glance at the prevalence statistics for mental disorder diagnoses in the United States it quickly becomes apparent that normality is not happiness or the absence of symptoms. Indeed, approximately half of all people will qualify for a DSM-IV diagnosis at some point in their life span (Kessler et al., 2005).

In recognition of these practical and theoretical concerns about the present diagnostic system, a group of clinical scientists began to conceptualize what has been heretofore termed “illness” or “pathology” as behavior serving a function under the control of a specific context;
when that behavior, or pattern of behavior, serves an experientially avoidant function at the expense of valued living, we (functional contextualists) term it dysfunctional.

Functional Contextualism

The functional contextual approach to science does not endorse a mechanistic worldview as many sciences do (Hayes, Hayes, & Reese, 1988; see Pepper, 1942). The root metaphor of the contextualist perspective is of the on-going act in context, rather than the metaphor of a machine seen in mechanism (Hayes, Hayes, & Reese, 1988; Biglan & Hayes, 1996). From the contextualist perspective truth is reflected in successful working; in mechanism, truth is seen as accurately depicting the natural world as it is. The functional contextualist looks to predict and influence behaviors of interest. Due to the philosophy’s pragmatic truth criterion of successful working, any action which effectively achieves these goals is therefore right and true (Biglan & Hayes, 1996).

Functional analysis is a fundamental tool that originated in behavior analysis in order to increase effectiveness of prediction and influence of behavior (Wilson & Murrell, 2004). Functional analysis, in keeping with the functional contextualist perspective, looks to identify the relevant variables that precede and follow a behavior of interest, thereby maintaining its occurrence; it is the clinical recognition of the ongoing act in its context. From this perspective all behavior, including religious and spiritual behavior, results from the ongoing confluence of prior conditioning coming into contact with present antecedents and consequences. When that confluence persistently results in a singular functional response (e.g., avoidance) to specific, or functionally equivalent, generalized stimuli - despite the ineffectiveness of that response in the broader context of the individual’s life - that response can be considered rigid or inflexible.
While rigid responding may be temporarily effective in avoiding the aversive private or external event, when the avoidance is maladaptive for an individual’s broader life desires, or when the avoidance actively hinders those aims, the behavior becomes maladaptive.

Problematic Experience Avoidance

Experiential avoidance (EA) refers to a functional class of behaviors that exemplify excessive negative evaluations of private events (i.e., memories, thoughts, feelings, bodily sensations) and the unwillingness to experience them. EA is evidenced by behaviors that serve to control or escape private events and those stimuli which occasion them (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Although EA is not an inherently maladaptive class of behaviors, when it is used excessively and in a rigid manner, the range of possible response behaviors becomes severely restricted (Wilson & Murrell, 2004). A limited range of overt behavioral responses is the readily observable correlate of psychological inflexibility, behavioral inflexibility. This inflexibility develops as the result of relational framing.

According to relational frame theory (RFT; Hayes et al., 1999; see Hayes et al., 2001 for a book-length discussion of RFT) private events take on aversive stimulus functions through a process of relational (indirect) verbal learning. Through this process words, thoughts, feelings, and bodily sensations begin to take on arbitrary functions, rather than concrete or formal ones. Arbitrary functions are the result of indirect learning and they are mediated by the social verbal community, whereas nonarbitrary functions are directly trained and based on tangible formal (sensory) properties of the stimuli involved. As humans develop and become increasingly verbal, arbitrary verbal functions can become so strong (and aversive) that elaborate avoidant behaviors are evoked. These avoidant behaviors often become negatively reinforced over time, as they
allow the individual to escape or avoid discomfort. In the case of anxiety, although internal behaviors like thoughts or a racing heart are less apparently dangerous than a snarling tiger at arm’s length, they can become as influential on behaviors as external stimuli. As a result, unwanted thoughts become enough to send an individual cognitively, emotionally, and behaviorally scrambling as if a tiger were truly present – experientially avoiding.

Conceptually, behaviors that fit within the functional category of experiential avoidance are a form of psychological inflexibility (Bond et al., 2011). The pervasiveness of experiential avoidance as a functional dimension of psychopathological behavior is widely documented in a growing literature (for reviews, see Schmalz & Murrell, 2010; Kashdan et al., 2006; Hayes et al., 2004). Excessive reliance on experientially avoidant behaviors often results in combinations of maladaptive behavioral symptoms reflective of diagnostic labels set forth in the DSM (Schmalz & Murrell, 2010). Experiential avoidance is significantly correlated to various diagnostic and symptomatological clusters. For example, EA is significantly related to symptoms of anxiety and depression, as well as to increased panic and perceived lack of control (Feldner, Zvolensky, Eifert & Spira, 2003).

EA correlates with maladaptive perfectionism and excessive worry (Santanello & Gardner, 2007). A recent review (Himle, Chatters, Taylor, and Nguyen, 2011) addresses the prevalence of religiously oriented obsessive-compulsive disorder (OCD). Researchers are uncertain about how religion factors into the development of religiously oriented OCD, but find mixed results related to Christian denomination, religious intensity, and religious beliefs (Himle et al., 2011). While not investigating OCD, Crosby, Bates, and Twohig (2011) found that EA mediated the relationship between extrinsic religious orientation and a form of perfectionism (a feature related to OCD) in a non-clinical college sample.
Further, EA is associated with specific diagnostic presentations; it correlates with (or predicts) posttraumatic stress disorder symptoms as well as obsessive-compulsive symptoms (Gratz et al., 2007; Gold, Dickstein, Marx & Lexington, 2009; Abramowitz, Lackey, & Wheaton, 2009; Schmalz & Murrell, 2010). In some cases, EA acts as a moderator or mediator of the development or expression of other psychological symptoms and disorders following psychological vulnerabilities or key experiences (see review in Schmalz & Murrell, 2010). Again, related to perfectionism, EA moderates anxiety level (Santanello & Gardner, 2007). In older adults, level of anxiety and depression in relation to perceived health is moderated by EA (Andrew & Dulin, 2007). EA has been found to fully or partially mediate the relationship between traumatic experiences and the development of PTSD and PTSD symptoms (Mannon, Al-Jabari, Larson, & Murrell, 2011; Pepper, 2012; Plumb, Luterek, & Orsillo, 2004; Tull, Gratz, Salters, & Roemer, 2004). Among gay male survivors of sexual assault, EA mediates the relationship between internalized homophobia and PTSD symptoms and depression (Gold, Marx, & Lexington, 2007). While this has not been directly researched, it is reasonable to hypothesize that religion may interact in some way in this relationship.

Furthermore, EA mediates the relationship between anxiety sensitivity and borderline personality disorder (Gratz, Tull, & Gunderson, 2008); EA also partially mediates the relationship between anxiety sensitivity and depression severity and fully mediates the relationship between fear of publicly observable fear reactions and depression severity (Tull & Gratz, 2008).

Individuals lower in EA exhibit heightened pain tolerance and subjectively report less aversive responses to painful experiences (Feldner et al., 2006). Further, lower levels of EA yield better quality of life for individuals with chronic pain (McCracken, 2010). Findings suggest
religiousness provides salutary benefits similar to reduced EA in individuals with chronic pain as well (e.g., Dezutter, Robertson, Luyckx, & Hutsebaut, 2010).

Taken together, these data suggest that the observable symptoms of psychological disorders are regularly related to and, in some case, direct outcomes of EA. EA provides a framework by which to understand the relationships of various life events (e.g., trauma), psychological vulnerabilities (e.g., anxiety sensitivity), and behavioral disorders (e.g., PTSD, borderline personality disorder). Furthermore, these findings implicate the treatment of the symptoms of disorders as equivalent to trimming the tops of weeds rather than pulling them by the root. Due to the theoretical and empirical implication that EA is a core functional component of psychopathology, developed treatments that target it, rather than targeting the reduction of psychological symptoms, have and continue to prove viable and effective.

Acceptance and Commitment Therapy Model of Psychological Flexibility

One third-wave behavioral therapy developed to specifically address EA, acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999), has shown considerable success in decreasing EA as well as psychological symptoms in empirical studies with depression, anxiety, parenting, child externalizing and internalizing behaviors, trichotillomania, behavioral tic disorders, and schizophrenia (see Schmalz & Murrell, 2010; Singh, 2006; Bach & Hayes, 2002; Schmalz, Murrell, LaBorde, Scherbarth, & Mitchell, 2009).

Acceptance and Commitment Therapy

ACT is a treatment model rooted in a functional contextual philosophy of science, built upon the theory of human verbal behavior briefly discussed above, RFT. A limited global
perspective on the relationship of RFT to ACT is that the former effectively aids the clinician working from the latter framework in successful prediction and influence of client behavior.

Broadly speaking, the conceptual goal of ACT interventions is to predict and influence behaviors that increase psychological flexibility (Hayes, Strosahl, & Wilson, 2011). Although psychological inflexibility and EA as an aspect of inflexibility have already been discussed, a full conceptualization of psychological flexibility requires consideration of each of the components of the ACT model, which work together in a flexible, deictic manner. The six components of the ACT model are acceptance, defusion, contact with the present moment, self-as-context, valuing, and committed action. The explanation of the ACT model in the following six sub-sections reflects information in the updated seminal text on ACT (Hayes, Strosahl, and Wilson, 2011).

Acceptance

Acceptance demarcates the opposite extreme of EA on a continuum. Whereas EA refers to an unwillingness to experience unpleasant covert events, acceptance involves embracing them as transient experiences. For those persons with entrenched patterns of avoidant behavior, acceptance is a new form of behavioral responding; it can be an increase in psychological flexibility in and of itself. It is worth noting, that while experiential avoidance is endemically related to various forms of psychopathology, acceptance is related to well-being. Williams and Lynn (2010) comment on the fact that acceptance has been a part of religious and philosophical traditions for thousands of years.
Defusion

When the psychological functions of a stimulus, verbal or formal, become inextricably linked with or fused to another stimulus, often through relational framing processes, in such a way that the former stimulus is only responded to in terms of the functions elicited or evoked by the latter, psychological fusion occurs. Per RFT, the intertwining of the functions of the two stimuli cannot be unlearned, however, new relationships can be formed. In practice, this is typically done through experiential exercises that change up the context in which the verbal representation of the stimulus is enacted. Simultaneously, the strength of the aversive function can be lessened through exercises that induce habituation through exposure. The combination of habituating to the aversive functions of and expanding the relational frames related to the stimulus serve to foster increased levels of psychological flexibility; the individual becomes increasingly able to respond to the stimuli in multiple overt and covert ways.

Contact with the Present Moment

As previously suggested, the six components of the ACT model work together in a flexible and deictic manner. Contact with the present moment is similar to a state of mindfulness, wherein the individual becomes aware of the contingencies operating upon their behavior in the present. Importantly, contact with the present moment involves an awareness of verbal representations of the past and future that may be occurring in the present moment, with an emphasis on noticing them without overly identifying with or avoiding them. Contact with the present moment is an almost ubiquitously necessary skill for fostering success in the previous two aspects of the ACT model. Simultaneously, the skill itself represents an increase in psychological flexibility for those unaccustomed to experiencing the world as it is in the present
moment and less dictated by the constraints of verbal representations of the past, present, and future.

Self-as-Context

A seemingly ethereal component of the ACT model, self-as-context refers to a verbal construction of oneself as separate from the behaviors one engages in, the beliefs one holds, and the interaction (and sometimes struggle) one has with one’s own thoughts, feelings, and memories. Self-as-context occurs as new relational frames are developed involving “I-me,” “here-there,” and “now-then.” As these verbal self-relations develop, so too does psychological flexibility. For example, prior to development of relational frames of self-as-context, when an individual engages in an undesired behavior that event might occasion the verbal response, “I am bad.” With increased access to self-as-context framing, the verbal responses to the same undesired behavior can still include “I am bad,” but may also include, “Me then was bad,” or “my behavior then was bad.” Furthermore, one may verbally experience “the same me that did bad is now recognizing that as bad, and I am neither then, nor now.” The increased number of potential verbal behavioral responses constitutes an aspect of psychological flexibility.

Valuing

Within a functional analysis of behavior, valuing operates upon the consequence following the behavior of interest. Valuing is a form of behavioral augmenting, which refers to the process of altering the intensity of the reinforcing quality of a consequence through verbal behavior. To better understand augmenting, a brief discussion of establishing operations is helpful. Establishing operations, similarly affect the reinforcing nature of a consequence,
typically related to an organism’s physical needs. For example, in experiments with pigeons in an operant chamber, pigeons are often kept below their optimal body weight, thereby increasing the effectiveness of food as a reinforcer. The human equivalent may be how likely one is to take a detour on a time-pressured trip for a stop at a hamburger restaurant depending on hunger level. Similarly, augmenting (augmental is the noun form) increases the likelihood of a target behavior by increasing the reinforcing function of a consequence. The key difference, for the purpose of the present discussion, between establishing operations and augmentals is that the former are related to basic organismic needs and functions, whereas the latter are exclusively verbal in nature. A simple example with pertinence to the present project is the increased likelihood that one will approach a man in a small, darkened room and tell him all of his most secret mistakes, when that occurs as partaking of the rite of confession for a Catholic person. That the confession is in the service of one’s larger religious values makes it reinforcing (i.e., more likely that the confession behavior will occur again), despite the likely aversive discomfort of divulging one’s less flattering actions to another.

Committed Action

The remaining component of the ACT model is committed action. Similar to valuing, this component focuses on consequential control of behavior. In clinical settings, committed action work often focuses on experiential exercises that highlight tolerance for discomfort in the service of client values. The power of public declarations of intended behavior is also harnessed through short-term goals mutually agreed upon by the client and clinician that are in the service of larger values.
Psychological Flexibility

To this point, I have provided a broad perspective of what is meant by psychological flexibility. In sum, psychological flexibility is a functional construct, not a formal one. A formally similar behavior (e.g., church attendance) could be psychologically flexible under one set of circumstances and psychologically inflexible under another. Its occurrence is dependent on various contextual factors. Each of the components of the ACT model, when effectively implemented, constitutes a form of psychological flexibility in its own right. The broader understanding of what it means to behave in a psychologically flexible manner involves the intertwined, deictic relationships that emerge from one or more components interacting at once. More specifically, psychological flexibility is “the ability to fully contact the present moment and the thoughts and feelings it contains without needless defense, and, depending upon what the situation affords, persisting in or changing behavior in the pursuit of goals and values” (Bond et al., 2011, p. 678; Hayes et al., 2006). Thus, components of the ACT model, drawn together, create effective values-oriented behavior in response to specific contextual factors.

Extant Measures of Psychological Flexibility

To date, variations of the Acceptance and Action Questionnaire (AAQ) – the most recent is the AAQ-II (Bond et al., 2011) – are most commonly used to measure general psychological flexibility with adults. Schmalz and Murrell (2010) investigated the efficacy of the Avoidance and Fusion Questionnaire for Youth (AFQ-Y; Greco, Murrell, & Coyne, 2005; Greco, Lambert, & Baer, 2008), initially meant for use with children, with a college sample. Fergus et al., (2012) replicated the findings and extended the validation of the AFQ-Y to an adult clinical sample. The measure holds up to psychometric testing with adults and potentially addresses noted issues of
complexity in AAQ items. The most recent iteration of the AAQ-II, however, refined the items, addressing some of the concerns regarding complexity and psychometric properties of the measure raised by Schmalz and Murrell (2010). The Multidimensional Experiential Avoidance Questionnaire (MEAQ; Gamez, Chmielewski, Kotov, Ruggero, & Watson, 2011) is a longer measure, but provides 6 subscales and addresses some issues observed with the AAQ, including poor discriminant validity in relation to neuroticism. Another measure that captures a slightly different kind of psychological inflexibility, thought suppression, is the White Bear Suppression Inventory (Wegner & Zanakos, 1994). Thought suppression refers to conscious attempts to avoid thinking about specific content. Thought suppression is consistently positively correlated with experiential avoidance (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996).

A number of problem-specific measures of psychological flexibility (and the inverse, EA) also exist in the literature. Specific areas of clinical interest addressed by these measures include: diabetes, auditory hallucinations, tinnitus, and chronic pain, among others. While each of these measures assesses the functional dimension of experiential avoidance/psychological flexibility much like the general measures (i.e., AAQ-II, AFQ-Y, MEAQ), the specific measures tend to show better predictive validity of behaviors relevant to their respective domains (Blackledge & Hayes, 2006). The increased predictive value of the problem specific measures is likely owed to their ability to provide antecedent occurrences that commonly occur prior to relevant avoidant or flexible responses in individuals struggling with those very issues and regularly responding to similar events (Schmalz & Murrell, 2010). For example, an individual with chronic pain is likely to regularly experience times when their pain makes it difficult to engage in physical activities. An item from the Chronic Pain Acceptance Questionnaire (McCracken, Vowles, & Eccleston, 2004) reads, “I avoid putting myself in situations where my pain might increase.” Because the
measure is specific to the population of interest, the wording of items can delineate common circumstances (situations when pain might increase) faced by the respondents, thereby making their responses more exacting qualitatively and increasing validity in subsequent quantitative analysis (Blackledge & Hayes, 2006).

Religious and Spiritual Flexibility

Religious and spiritual flexibility is the application of the construct of psychological flexibility to situations when the sacred is a relevant contingency formally (e.g., in the presence of a religious building or holy person), verbally (e.g., mention of G-d), or relationally (i.e., through relational responding, stimuli carry religious and spiritual functions). This definition is intentionally broad to reflect the possibility that for some individuals, a broad array of experiences occasion responding with relevance to the sacred; colloquially, such persons may experience most aspects of their life through a spiritual or religious lens of the sacred.

The proposed measure of religious and spiritual flexibility in some respects reflects great similarity to the disorder and problem specific versions of the AAQ; to be clear, I am not equating religion and spirituality to disorder or problems. This measure, like those specific versions of the AAQ is concerned with the manifestation of flexibility or inflexibility regarding a particular domain (i.e., religion and spirituality). Furthermore, as religion and spirituality are commonly identified areas of valuing, the measure reflects some of the characteristics of extant measures of valuing.
Religious and Spiritual Flexibility and Extant Spiritual Constructs

Developed from the functional contextual perspective, with an eye towards clinical practice, religious and spiritual flexibility is also expected to capture the underlying functional attributes observed in extant measures of religion and spirituality. What follows is a brief theoretical review of how some of the measures previously discussed may be related to or eventually clarified by the religious and spiritual flexibility construct. The internalized significance of religion accounted for by Ross and Allport’s (1972) intrinsic orientation may be a reflection of deeply experienced valuing that drives religious behavior even in the face of adversity. In keeping with the common value judgment that extrinsic religious motivations are immature, or unhealthy, the extrinsic orientation may reflect a form of experiential avoidance, whereby the individual remains visibly religious to avoid dissent or judgment from religious others. It could also be the case, for some people, in some contexts, that extrinsic orientation is a true reflection of valued behavior, only that the value being pursued has more to do with community and human relationships, and less directly with a pursuit of the sacred. In the latter instance, although the behavior formally appears religious (e.g., attending religious services and functions) it may serve non-religious functions (i.e., pursuit of community). Alternatively, extrinsic motivation could reflect a spiritual worldview wherein other facets of living (e.g., pursuit of community) are experienced as intimately connected to the sacred and the pursuit of them is really the pursuit of the sacred. The religious and spiritual flexibility construct may provide a tool for ensuing research to better determine the nature of these behaviors with relation to intrinsic and extrinsic religious orientation.

The quest orientation, while appearing to represent a fluid and open approach to religion, has shown a direct relationship to personal distress and inverse relationships to spiritual well-
being and general life satisfaction (Genia, 1996; Steger et al., 2010). Other research suggests that findings using the quest construct are inconsistent. In contrast, psychological flexibility consistently exhibits inverse relationships with measures of psychological distress and direct relationships with well-being, psychological health, and increased functioning (Twohig, 2012). The present project aspires to offer a medium for addressing the uncertainty left by the quest construct. Perhaps the fluid and seemingly flexible pursuit of the sacred captured by the quest construct may, for some people, represent an earnest openness to exploration. However, for others and in different contexts, quest orientation may represent an unwillingness to maintain a consistent viewpoint when things get difficult. Much like a person who moves from one romantic relationship to the next anytime conflict arises, for some, the quest orientation may represent an avoidant bouncing from one faith to another.

Fundamentalism has long been a target of the psychological community (Ellis, 1992) as a form of “bad” religion. Correlational studies do suggest that fundamentalism keeps bad company in the form of prejudicial ethnic and homophobic attitudes and aggression (Altemeyer & Hunsberger, 2004; Wulff, 1996). Indeed, findings suggest that persons holding fundamentalist religious views tend towards rigid and unoriginal thinking (Wulff, 1997). But, while fundamentalism – orthodoxy in particular – represents a rigid way of interpreting religion, it is not necessarily psychologically unhealthy: it depends on the context. On most days, the fundamentalist perspective probably provides meaning and access to a supportive community. Indeed, Green and Elliott (2009) report that fundamentalists are happier (though less healthy) than individuals with more liberal religious beliefs. However, when a loved one’s homosexuality confronts the fundamentalist and she finds herself unwilling to incorporate her loved one’s identity because it goes against the religious text, then the fundamentalism may represent a
problem. It likely creates struggle and conflict and leads to pain for the fundamentalist and the family member alike. Researchers point out that rigidity in the content of beliefs (i.e. orthodoxy) is inversely related to such unsavory outcomes as prejudice and aggression (Laythe, Finkel, Bringle, & Kirkpatrick, 2002; Rowatt & Franklin, 2004).

Religious and Spiritual Flexibility and Psychological Outcomes

Religious and spiritual flexibility is not a “good” thing so much as it is an effective one. In keeping with the ACT approach, effectiveness is determined by idiosyncratically defined success in the religious domain as well as – and not at the expense of – other valued domains (Hayes, Strosahl, & Wilson, 2012). There is no assumption in the development of the construct that religious and spiritual flexibility are always effective, just as there is no assumption that inflexibility of the same domains is necessarily harmful. Just as with general psychological flexibility, there are perhaps times when religious and spiritual inflexibility is protective and adaptive. Following the successful development of a reliable and valid measure, research can be done that explores the contextual variables commonly surrounding benefits from religious and spiritual flexibility as well as inflexibility.

To explore one such set of common contextual factors – those surrounding a reaction to trauma – I return to the survivor of trauma, mentioned in the introduction, struggling to reconcile his experiences with his image of G-d. Issues of faith often occur following an experienced trauma. Traumatic events, by their common definition, are outside of the norm of human experience and significantly jarring. As an individual struggles to incorporate the traumatic event(s) into their larger experience, pieces of faith and religiosity that may have once been cherished no longer “fit.” The reaction of needing answers (to make it “fit”) is common and
appropriate. Yet, for some time, he became consumed with the struggle and lost contact with related valued behavior. Through our work together, he recognized the importance of religion in his life (though he was still uncertain of exactly how it “fit”) and he also recognized the importance to him of parenting and of being a parent who shares religion with his child. Although he continued to struggle with the “fit” by the time our work ended, he was actively engaging in both his religious and parenting values in a way he had not done since his trauma. He achieved this through a loosening of his attention to his uncertainty (acceptance) and attending to his current experiences (contact with the present moment), which allowed him to see how his pre-trauma, trauma, and post-trauma experiences and related religious and spiritual experiences all occurred with him in the same perspective (self-as-context). In combination, these elements increased his awareness of how his religious and parenting values interacted, and thus he was ultimately able to choose to take his child to church services (committed action).

At present, no measure allows for the purposeful examination of religious and spiritual psychological flexibility. The measures of religious and spiritual behavior that do exist address many formal aspects of the religious experience as well as some of the psychological concomitants that might be related to various forms of religious expression. In the case of the trauma survivor just discussed, none of the extant measures would accurately capture the shift in his relationship with his own religious and spiritual values – his own pursuit of the sacred – that allowed him to make clinically meaningful change.

The Present Project and Rationale: A Measure of Religious and Spiritual Flexibility

Religion and spirituality are vital aspects of many people’s lives both in the United States and across the globe. Religion and religious values are often relevant to psychotherapy and client
perceptions of their problems (Bergin, 1991; Worthington & Sandage, 2001). Research into the psychology of religion can largely be categorized as descriptive or explanatory. Although many constructs and measures exist by which to conceptualize and measure the human experience of pursuing the sacred, little consensus exists of what aspects are most important. The nature of religious and spiritual behavior is undoubtedly multi-faceted and complex (Bergin, 1983), making research in the sub-field very difficult. As evidence of the complexity of religious behaving, various means of assessing religious behavior provide varying and conflicting results of well-being and psychopathological traits; nevertheless, spirituality and religious behavior are, in sum, related to positive outcomes (Bergin, 1983; Hackney & Sanders, 2008). Over the course of nearly 30 years the need for more refined and useful approaches to the study of religious and spiritual behavior has been repeatedly acknowledged (Bergin, 1983; Hackney & Sanders, 2008; Hill & Pargament, 2008) and only adequately addressed occasionally (e.g., Pargament, Feuille, & Burdzy; Davis, Hook, Van Tongeren, & Worthington, 2012). Although Hill and Hood (1999) wisely caution development of further measures without due cause, extant constructs and measures do not provide clear and consistent results that are appropriate to understanding the influence that religion and spirituality have on the broader behaviors of clinical interest of those who seek the sacred. Furthermore, no measure, to my knowledge, adequately addresses the reactive behaviors of those who may show rigidity with regard to their disavowal of the sacred. The present project intends to address these needs and to do so in a way that is useful to researchers and clinicians alike.
Just Another Value-Laden Measure?

In recognition that the scientist inevitably influences the science (Skinner, 1945), the present author has hypotheses about which constructs may or may not be related to more positive psychological and quality of life outcomes than others. However, this project is steeped in a functional contextual tradition, which by its very underpinnings fully abstains from value judgments because it cannot make them. Recall that functional contextualism does not presume an a priori state of order or rightness. The trueness or accuracy of an action is determined by the degree to which the action achieves it pre-determined goal(s). Furthermore the present attempt to measure religious and spiritual behavior in a scientific manner along the lines of the promising framework of psychological flexibility is not intended to prove religion’s goodness or badness, or that one faith tradition is better or worse than any other. Should later research show one end of the spectrum to be “better” in relation to psychological outcomes than the other, the author would simply be inclined to default to the old axiom suggesting that the rat is always right; the data do not lie.

Another important matter to address is the issue of values and potential values imposition in the therapeutic context. To date, measures of religious behavior are essentially descriptive, even those that tap into how a person is religious in the manner called for by Bergin (1983) and Hackney and Sanders (2003). That is, they address the how by developing formally and topographically descriptive categories of how one is religious. These topographical features may include the types of things someone believes, the way they feel about religious texts, how committed their behavior is to their faith, or the factors that motivate their religious behavior. With possible exception of the latter domain, these topographical features are rarely the domain of the practicing clinician. Encouraging clients towards a less fundamentalist or extrinsically
dominated religious focus because those things are sometimes linked to poorer psychological health infringes upon the client’s values and should be avoided (Miller & Thoresen, 2012). One theoretical strength of the proposed emphasis on flexibility in religious and spiritual behavior is its values-neutral approach (unless one considers the support of a client’s values a values declaration of relevance). The focus of a clinical intervention related to a client’s spiritual functioning in terms of flexibility is about how they relate to and navigate their beliefs and religious values as they are, not as the therapist thinks they should be.

This kind of respect for client’s worldview is nothing new to the psychotherapeutic endeavor. Values conflicts between therapist and client are not uncommon (Ali, Allmon, & Cornick, 2011). As an example of effective intervention when worldviews of client and clinician do not align, consider the following hypothetical case. A clinician working with a male client who holds strong opinions about the appropriateness of female submissiveness in the household, may feel a strong disinclination towards the client’s worldview. If the client seeks treatment related to domestic strife, the appropriate intervention – one that is respectful of a client’s worldview – will likely not focus on changing the nature of the client’s opinion on male and female relations. The focus of the intervention, if it is to be successful, will likely be on specific domestic interactions and patterns of behavior that seem to contribute to the problem. The client’s misogynistic tendencies will escape rebuke, most likely. In a similar vein, just because a therapist may be concerned about psychological problems that appear related to certain religious beliefs, the focus of intervention – if it is to be successful and respectful – is likely to be on specific behaviors, rather than the client’s religious worldview.

Although researchers and clinicians alike can never remain entirely neutral in their interactions with anything, as a field, we do best to limit the extent to which we impose our
values upon our work and to recognize and account for the inescapable influence we do have. Because of the functional contextual framework from which psychological flexibility was built, psychological flexibility is not a value-laden construct. Psychological flexibility is only good when it works; it does not claim absolute goodness. Religious and spiritual flexibility stands on the same theoretical footing and bears the same theoretical neutrality. The responsibility of maintaining that stance as much as possible rests on the shoulders of scientists and practitioners who utilize it, not on the construct itself.

Hypotheses

In the investigation of the Measure of Religious and Spiritual Flexibility’s (MRSF) adequacy, the following were hypothesized:

1. Items of the MRSF would load onto a single factor and demonstrate very good internal reliability (i.e., $\alpha = .80-.90$, as per DeVellis, 2003) and items of the single factor MRSF would not be significantly correlated with social desirability.

2. The MRSF would demonstrate adequate construct validity as a measure of religious and spiritual flexibility:
   a. Religious and spiritual flexibility as measured by the MRSF would positively correlate with mindfulness, life satisfaction, daily spiritual experience (among theists), religious commitment (among theists), valuing, intrinsic religious orientation (among theists), quest religious orientation, spiritual well-being (among theists), and consistent valued living within the religious/spiritual domain.
b. Religious and spiritual flexibility as measured by the MRSF would negatively correlate with experiential avoidance, thought suppression, psychological symptomatology, and orthodoxy.

3. The MRSF would demonstrate incremental validity. Religious and spiritual flexibility would predict daily spiritual experience, religious commitment, symbolic interpretation, spiritual well-being, and religious/spiritual valued living consistency above and beyond general psychological flexibility.

4. The MRSF would predict decision-making on hypothetical situations.

5. The MRSF would demonstrate adequate test-retest reliability.
CHAPTER 2
METHOD

Participants

Undergraduate participants were recruited using the University of North Texas Sona systems. Participants were compensated with 4 extra credit points for their participation. All participants were required to be at least 18 years of age and provided with an informed consent notice approved by the UNT internal review board. Before removal of any participants, more than enough participant data (N = 712) was collected to fulfill suggestions by DeVellis (2003), of a sample size of 5 to 10 participants per item for the scale in development.

Measures

Demographics Questionnaire

All participants completed a demographics form (see Appendix A) that assessed gender, income, education level, religious practices, and history of mental health treatment. Specifically, the religious background component of the form asked detailed questions related to religious group self-identification, parental religious status, conversion experience, meditation and prayer experience, regularity of religious service attendance, and a question which subjectively asked participants how important they consider religion/spirituality to be in their lives.

The Acceptance and Action Questionnaire (AAQ-II; Bond et al., 2011)

The AAQ-II is a 7-item measure of experiential avoidance and psychological flexibility with items such as, “I’m afraid of my feelings” and “My painful experiences and memories make it difficult for me to live a life that I would value.” All items are on a 7-point scale from 1-never
true to 7-always true. High total scores suggest higher levels of experiential avoidance, and low scores suggest more acceptance/psychological flexibility.

The AAQ-II was originally conceived and utilized with 10 items. However, the 7-item version is more psychometrically sound (Bond et al., 2011). Across six validation samples, including university students, persons seeking treatment for substance abuse, and financial services workers studied by Bond and colleagues (2011), the mean Cronbach’s alpha was .84 (.78-.88). Three- and 12-month test-retest reliability was .81 and .79, respectively, among two samples (Bond et al., 2011).

Bond and colleagues (2011) found that the AAQ-II evidenced a significant, direct correlation with a measure of thought suppression (the White Bear Suppression Inventory, WBSI; Wegner & Zanakos, 1994). Furthermore, scores on the AAQ-II have shown significant, direct correlations with various measures of psychological symptomatology including the SCL-90-R, Global Symptom Index (Derogatis, 1993; \( r = .70, p < .01 \)) and the BDI-II (Beck, Steer, & Brown, 1996; \( r = .71, p < .01 \)), suggesting strong convergent validity. Discriminant validity for the AAQ-II also appears to be strong. In the validation study, the AAQ-II was not correlated with age, gender, race, or social desirability (Bond et al., 2011). For the present study, only the second randomly determined split half (Sample 2) is used for analyses for measures other than the proposed measure. Thus, for the AAQ-II and subsequent measures, only the Cronbach’s alpha for the second half are reported. Observed internal consistency of the AAQ-II in Sample 2 was .89.

Valued Living Questionnaire (VLQ; Wilson & Groom, 2002)

The VLQ is a measure of valued living across ten broad domains: 1) family (other than
parenting and intimate relations), 2) marriage/couples/intimate relations, 3) parenting, 4) friendship, 5) work, 6) education, 7) recreation, 8) spirituality, 9) citizenship, and 10) physical self-care. This self-report measure consists of 20 items. The first 10 items assess the amount from “not at all important” to “extremely important” that an individual values each of the 10 domains. The second set of 10 questions assesses to what extent (from “not at all consistent with my value” to “completely consistent with my value”) the respondent feels they have been consistent with living within each of the 10 valued domains in the past week. The VLQ provides a Total Importance score, a Total Consistency score, and a Valued Living composite (Wilson, Sandoz, Kitchens, & Roberts, 2010). The Valued Living composite score embodies the spirit of the ACT conceptualization of valuing and is the suggested metric for research and clinical use (Wilson, Sandoz, Kitchens, & Roberts, 2010).

In clinical settings, the VLQ is often used to discuss with clients the domains they value highly, but struggle to live with congruently (Wilson & Murrell, 2004). For the purposes of the present study, the composite score was used for general analyses. Furthermore, the importance score of the religion/spirituality domain was examined to check for consistency with self-reported importance of religion as assessed by the demographic questionnaire.

The psychometric properties of the VLQ have been heretofore adequate, though not particularly strong. In an undergraduate sample, Wilson and colleagues (2010) found internal consistency reliability coefficients for the composite score of $\alpha = .65$ ($N = 57$) and $\alpha = .74$ ($N = 57$) at two separate testing intervals; test-retest reliability for the composite score was .75. In a separate and larger sample ($N = 338$) of undergraduate students internal consistency for the composite score was .77 (Wilson et al., 2010). Internal consistencies in this range are acceptable, though not optimal for research (Devellis, 2003). Analyses of the larger sample suggested
convergent validity as the VLQ correlated significantly with measures of social functioning \( (r = .13) \), vitality \( (r = .27) \), and mental health \( (r = .23) \); the VLQ significantly correlated inversely with experiential avoidance \( (r = -.13) \) and depression \( (r = -.26) \), among other variables (Wilson, et al., 2010). The VLQ has evidenced significant inverse correlations with measures of psychological distress (Adcock, Murrell, & Woods, 2007; Wilson et al., 2010). Observed Cronbach’s alpha for Sample 2 was .79.

**Depression, Anxiety, and Stress Scales (DASS; Lovibond & Lovibond, 1995)**

The DASS is a 42-item measure with 3 subscales: depression, anxiety, and stress. Each of the subscales is appropriate for use individually. Respondents respond to questions using a 4-point scale (0 – *did not apply to me at all*, 1 – *applied to me to some degree, or some of the time*, 2 – *applied to me to a considerable degree, or a good part of the time*, and 3 – *applied to me very much, or most of the time*). The three subscales of the DASS regularly evidence strong reliability. Across 5 samples (nonclinical, panic disorder, obsessive-compulsive disorder, social phobia, specific phobia, and major depressive disorder; \( N = 290 \)) Cronbach’s alphas for the depression, anxiety, and stress subscales were .97, .92, and .95, respectively (Antony et al., 1998). Observed Chronbach’s alphas in the second sample of this study for the depression, anxiety, and stress subscales were .95, .89, and .92, respectively.

**White Bear Suppression Inventory (WBSI; Wegner & Zanakos, 1994)**

The WBSI is a 15-item self-report measure of thought suppression. The WBSI uses a 5-point scale (1 – *strongly disagree* to 5 – *strongly agree*). Total scores are obtained by summing responses provided; scores can range from 15-75. Higher scores indicate greater thought
suppression. The WBSI evidences adequate internal consistency with Cronbach’s alpha ranging from .87 to .89 (Wegner & Zanakos, 1994). Furthermore, the measure shows good stability with a 1 week test-retest correlation of \( r = .92 \) and a 3 week to 3 month correlation of \( r = .69 \) (Wegner & Zanakos, 1994). The WBSI exhibits significant correlations in theorized directions with measures of depression, obsessive-compulsive traits, and anxiety, suggesting strong convergent validity (Wegner Zanakos, 1994). Observed Chronbach’s alpha in the second sample of this study for the WBSI was .94.

*The Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003)*

The MAAS is a 15-item measure of an individual’s tendency to be mindful of their moment-to-moment experiences. The measure uses a 6-point Likert-like scale (1 – *almost always* to 6 – *almost never*). A summed total score indicates a person’s level of mindful awareness, with higher scores reflecting greater mindfulness. The MAAS evidences adequate internal consistency, with Cronbach’s alphas of .82 to .87 in student and adult samples (Brown & Ryan, 2003). The MAAS exhibits significant correlations in theoretically appropriate directions with measures of personality, other mindfulness scales, depression, self-esteem, and anxiety, suggesting strong construct validity (Brown & Ryan, 2003). Observed Chronbach’s alpha in the second sample of this study for the MAAS was .92.

*Marlowe-Crowne Social Desirability Scale – Short Form (MCSDS-SF; Strahan & Gerbasi, 1972)*

The MCSDS-SF was developed as a shorter version of the original MCSDS, which was developed by Marlowe and Crowne in 1960. The short form developed by Strahan and Gerbasi (1972) utilizes selected items from the original scale to create a condensed form, because prior
analyses suggested that several of the items of the long form added little to the scale’s psychometric value. The short form consists of 20 true/false items that measure socially desirable responding. DeVellis (2003) suggests the use of a social desirability measure in scale development to ensure that socially desirable responding does not bias responses, and subsequently the measure in development. The MCSDS-SF is specifically suggested for use by DeVellis (2003). In the validation study, the MCSDS-SF evidenced adequate internal consistency Cronbach’s alphas of .78, .83, .73, and .77 across four samples of university males (\(N = 64\)), university females (\(N = 34\)), college females (\(N = 130\)), and British males (\(N = 44\)), respectively. These reliability coefficients were comparable to those of the Marlowe-Crowne full length measure (Strahan & Gerbasi, 1972). Observed Cronbach’s alpha in the second sample of this study for the MCSDS-SF was .68.

**Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985)**

The SWLS is a 5-item measure of life satisfaction with responses on a 7-point Likert-like scale (1 – strongly disagree to 7 – strongly agree). The possible range of summed total scores is from 5 to 35. Higher scores indicate greater life satisfaction. The psychometric properties of the SWLS consistently evidence internal consistency reliabilities greater than .80 (Pavot & Diener, 1993). In the original validation study of the measure Diener and colleagues (1985) found a two-month test-retest correlation coefficient of \(r = .82\) among 76 students. Researchers have found that the SWLS has strong convergent validity with other measures of well-being and life satisfaction (Pavot & Diener, 1993). Furthermore, the measure exhibits inverse relationships with depression, anxiety, and general distress (see Pavot & Diener, 1993). Pavot and Diener (1993)
also indicate that the SWLS demonstrates adequate discriminant validity. Observed Chronbach’s alpha in the second sample of this study for the SWLS was .90.

*The Spiritual Well-Being Scale (SWBS; Paloutzian & Ellison, 1982)*

The Spiritual Well-Being Scale measures psychological dimensions of well-being in relation to spiritual experience; it is not a measure of spiritual health (Hill & Hood, 1999). It attempts to measure psychological well-being in relation to spirituality, rather than theological well-being (Hill & Hood, 1999). The measure consists of 20 items (10 items are reverse-scored), which yield two subscales and a total scale score. The sub-scales are religious well-being (RWB) and existential well-being (EWB). Responses are given on a 6-point Likert-like scale (1 – *strongly agree* to 6 – *strongly disagree*). RWB and EWB scale scores can range from 10 to 60 and total spiritual well-being scores can range from 20 to 120. Higher scores denote greater well-being. The internal consistency reliability coefficients for the measure across seven samples (N = 900) ranged from .82 to .94 for RWB, .78 to .86 for EWB, and .89 to .94 for SWB. The SWBS evidences significant correlations in the appropriate theoretical directions with constructs such as loneliness, self-confidence, and a sense of purpose in life (Paloutzian & Ellison, 1982). Observed Chronbach’s alpha in the second sample of this study for the composite score was .90.

*The Religious Orientation Scale (Allport & Ross, 1967)*

As discussed previously, the ROS is a measure of intrinsic vs. extrinsic religious orientation. Although it is one of the most commonly used measures in psychology of religion research, it has also received dissent for poor and sometimes inconsistent psychometric properties (Leong & Zachar, 1990). The measure consists of 21 items assessing intrinsic and
extrinsic religious orientation. Responses are given on a 5-point Likert-like scale (1 – strongly disagree to 5 – strongly agree).

The ROS renders two subscales: intrinsic and extrinsic religious orientations. Hill and Hood (1999) report that internal consistency reliability Cronbach’s alphas for the Intrinsic scale generally fall in the mid .80s. The Extrinsic scale almost always evidences lower reliability, with average Cronbach’ alphas in the low .70’s. As for construct validity, Trimble (1997) found that the Intrinsic subscale tends to be related to desired variables such as mental health and altruism whereas the Extrinsic subscale tends to be related to undesirable variables like prejudice. Test-retest reliability over a two-week period was observed at .84 and .78 for the Intrinsic and Extrinsic scales, respectively (Hill & Hood, 1999). Observed Chronbach’s alphas in the second sample of this study for the intrinsic and extrinsic subscales were .63 and .86, respectively.

**Quest Scale (Batson & Schoenrade, 1991)**

The Quest Scale is a 12-item measure of perception of religion as a quest. The measure is an extension of the Allport and Ross (1967) ROS and related constructs. Batson and Schoenrade (1991) posit quest as a third religious orientation. The scale can be interpreted at the full-scale level or broken down into three subscales: Readiness to Face Existential Questions without Reducing their Complexity, Self-Criticism and Perception of Religious Doubt as Positive, and Openness to Change.

Questions are answered on a 9-point Likert-like scale from 1 (strongly disagree) to 9 (strongly agree). Two items are reverse-scored and responses are summed. High scores indicate a stronger quest orientation. The 12-item scale has evidenced adequate Chronbach’s alphas between .75 (N = 210) and .81 (N = 214; Batson & Schoenrade, 1991). In the same study, Batson
and Schoenrade found that the 12-item version consistently correlated highly with a previously validated (though psychometrically weaker) 6-item version ($r = .85$ to $.87$). The Quest Scale evidenced an adequate Chronbach’s alpha of .83 in Sample 2 of the present study.

**The Religious Commitment Inventory – 10 (RCI-10; Worthington et al., 2003)**

The RCI-10 is a measure of religious commitment in two domains, intrapersonal and interpersonal. The measure utilizes a 5-point Likert-like scale (1 – *not at all true of me* to 5 – *totally true of me*). Six items load onto the intrapersonal factor and 4 items on the interpersonal factor. Worthington and colleagues (2003) found the RCI-10 to have adequate internal consistency reliability alphas of .93 for the full scale, .92 for intrapersonal, and .87 for interpersonal. Worthington and colleagues in the same validation study found three-week test-retest reliability coefficients of .87, .86, .83 for each of the three scales, respectively. The RCI-10 was also found to significantly correlate with other measures of religiosity and to significantly differ from measures of morality, suggesting that the measure has adequate construct and discriminant validity (Worthington et al., 2003). Observed Chronbach’s alphas in the second sample of this study for the total, intrapersonal, and interpersonal scales were .95, .93, and .89, respectively.

**The Daily Spiritual Experience Scale (DSES; Underwood, 2001)**

The DSES is a measure of how much a person experiences a sense of divinity in their lives on a daily basis. The DSES consists of 15 questions, responded to on a 6-point Likert-like scale (1 – *many times a day* to 6 – *never or almost never*). The measure also includes a final question that asks, “In general, how close do you feel to God?” with 4 response options. The first
15 questions are summed, with lower scores representing greater daily spiritual experience. In
the validation study of the measure, across a number of samples, Underwood and Teresi (2002)
found internal consistency reliability alphas consistently greater than .90. Preliminary evidence
also suggests that the DSES is related to decreased alcohol consumption, improved quality of
life, and positive psychosocial attributes (Underwood & Teresi, 2002). Observed Chronbach’s
alpha of the DSES in the second sample of this study was .96.

The Post-Critical Belief Scale (PCBS; Hutsebaut, 1996, 1997)

The PCBS measures where a Christian individual’s spiritual beliefs fall on a plane of the
two bi-polar dimensions of exclusion vs. inclusion of transcendence and literal vs. symbolic
interpretation of text, by measuring 4 scales: Orthodoxy, External Critique, Relativism, and
Second Naiveté. The measure consists of 33 items, responded to on a 7-point Likert scale (1 –
strongly disagree to 7 – strongly agree). The PCBS has undergone psychometric testing of the
stability of its dimensional modeling and has shown to be strong and reliable across 16 samples
(\(N = 4648\); Fontaine, Duriez, Luyten, & Hutsebaut, 2003). For this study, due to researcher error
(only 21 items of the PCBS were administered), seven of the eight items from the Orthodoxy
scale are used to measure orthodox beliefs. While only these seven items have not been
previously evaluated, in the present sample they evidenced a Chronbach’s alpha of .72 (\(n = 194\))
and are deemed adequate as a measure of religious orthodoxy.

Measure of Religious and Spiritual Flexibility (MRSF; Schmalz & Murrell, 2012)

The MSRF item pool was administered to participants in order to examine the factor
structure and validate this new measure of religious and spiritual flexibility. Higher scores
represent greater flexibility. A number of items of the MRSF 53-item and 50-item pools (see appendices B and C) were reverse scored; all items of the final 6-item measure (see appendix D) are reverse-scored. The item pool for the MRSF was generated through a review of extant measures of psychological flexibility, a review of extant religion and spirituality measures, a review of the literature related to the former two constructs, and clinical experience. For an explanation of further refinement of the item pool, see Procedures section below.

Responses to the MRSF use a 7 point Likert-like scale where 1 = strongly disagree, 4 = neither agree nor disagree, and 7 = strongly agree. By providing numerous response options, the scale may be effectively shortened without a loss of variability (DeVellis, 2003). It was the intention to develop a shorter scale from the initial item pool following analysis of the items, so that the scale may be more practical (and thereby useful) in clinical settings.

The MRSF items are believed to assess levels of psychological flexibility with regard to stimuli carrying religious or spiritual functions. This flexibility is thought to reflect various and sometimes multiple aspects of the six core processes of the ACT model. For example, high endorsement of the item, “I cannot be a good friend when I am feeling conflicted about my views” indicates avoidance related to spiritual conflict that impedes valued behavior with relation to friendships or vocational activities. Endorsement of the item, “My views limit my day-to-day life,” indicates cognitive fusion with one’s religious/spiritual perspective that limits a more enjoyable or fulfilling day-to-day experience.

*Decision-Making Hypotheticals*

The last tasks (see Appendix E) presented to participants were hypothetical scenarios. The scenarios were intended to check the validity and accuracy of the MRSF in predicting
behavior, albeit hypothetical and imagined behavior. Scenarios were targeted at theists and non-theists separately, by a series of initial true/false questions. These questions either lead participants to a specific scenario, or determined that they were not the right fit for that particular scenario. Subsequently, they were asked the true/false questions associated with the next scenario. The scenarios, which were intended to test participants’ responses to possible “real-world” situations, asked them to imagine a circumstance that might be uncomfortable for them due to their religious or non-religious beliefs. Simultaneously, the scenarios pulled for participants to provide a response that is aligned with another valued domain. The psychologically flexible response is the one that would allow for the person to engage with the other value, even if it means experiencing discomfort.

Procedure

An initial item pool of 53 items was developed to assess for religious and spiritual flexibility as discussed and outlined previously (see Appendix B for example items). The item pool was created by myself and research colleagues at the University of North Texas. Items were developed using suggestions by Devellis (2003) regarding conceptualization of items for a new scale.

The 53 items were sent to four experts in the psychology sub-fields of religion and contextual behavioral science for review, two from each sub-field. Reviewers were provided a brief explanation of the construct of religious and spiritual flexibility and asked to rate each item on a five-point scale regarding perceived relevance to the proposed construct. Reviewers were also asked to evaluate the items for their conciseness and clarity and asked to offer suggested revisions, if desired. Reviewers were also asked for their thoughts regarding the utility of
developing the construct and measure of religious and spiritual flexibility. Lastly, reviewers were invited to provide general written feedback to any item, the measure, or the construct as a whole. Following expert review and suggestions from the reviewers, items were amended as deemed appropriate by myself and my research colleagues. Items with an average relevance rating less than 3.5 were discussed and amended, if possible. Otherwise, those items were removed from the item pool. Primary feedback from reviewers included suggestions that the items be re-worded to decrease complexity. In large part, this feedback reflected the difficulty of identifying language that could feel appropriate and applicable to the entire spectrum of atheistic, theistic, and spiritual beliefs that the measure was intended to capture. After consideration and conversation with research colleagues, we determined to use the term “views” as shorthand to capture relevant experiences; additionally, we developed a definition for the word “views” and included it in the directions of the measure. For the measure, “views” were defined as “Your perspective of, feelings about, and understanding of religion and spirituality.” After this process, 50 items remained in the item pool.

The next phase of the scale evaluation for the study was conducted online through the UNT Department of Psychology Research Participation Sona system. Undergraduate students enrolled in psychology courses may access this system and sign up to complete the survey. All data was collected using a password-protected online, electronic format of each measure. Participants electronically signed an IRB-approved informed consent notice form and contact information of the principal investigator was made available should a participant have a question or concern. The survey was administered in the following order: demographics, MRSF item-pool, AAQ-II, VLQ, DASS, WBSI, MAAS, MCSDS-SF, SWLS, SWBS, ROS, RCI, DSES, PCBS, Quest Scale, and finally the decision-making tasks. Each participant was awarded 4 extra
credit points through the UNT Sona System for their participation. Four weeks after completion of the initial survey, participants were contacted by email and invited to complete Part 2 of the study, consisting solely of the MRSF item pool. Participants were provided with an access code for the study and given 1.5 weeks to complete Part 2. Therefore, the test-retest timeframe for the study was 4 weeks to 5.5 weeks. For the test-retest component of the study, participants were given 1 extra credit point through Sona.
CHAPTER 3
RESULTS

Descriptive Statistics

Demographic information regarding gender, undergraduate classification, ethnicity, and marital status can be found in Table 1. The demographic makeup of the sample was an adequate representation of the ethnic/racial makeup of the University of North Texas (UNT) undergraduate population (See Table 1). Women, however, were over-represented (Sample 1 = 69.9%; Sample 2 = 73.0%) compared to the overall university gender breakdown. As the sample was drawn from students enrolled in a psychology course, psychology majors (who are disproportionately women) are also over-represented (Sample 1 = 50.5%; Sample 2 = 46.6%).

As might be expected for a large, public university in North Texas, the majority of respondents identified as Christian (Sample 1 = 64.3%; Sample 2 = 61.6%). The second largest religious/spiritual identifier was agnostic (Sample 1 = 14.7%; Sample 2 = 14.9%), followed by no identification and atheist. A small number of participants identifying as Buddhist, Muslim, and Jewish were present in each sample; however, no participants in Sample 2 identified as Hindu. More than two thirds of the participants identified religion and/or spirituality as at least somewhat important in their lives and more than half reported praying or meditating at least once per week.

Initial Data Analysis

In total, 712 surveys were collected. Following the removal of 42 duplicate responders who submitted their survey more than once or re-started the survey, 670 unique participants were identified. Of those 670 participants, 16 participants began, but never completed, the survey. No
significant differences were found between completers and attriters based on income of self ($t = -0.70, p > 0.05$) or parents ($t = -0.31, p > 0.05$). No significant chi-square differences were identified between completers and attriters for any other demographic variable, except for race/ethnicity $X^2(7, n = 670) = 23.00, p < 0.01$; however, there were less than 5 members of each group other than white/Caucasian, making the chi-square invalid. It was determined to remove the 16 attriters from the dataset, leaving 654 participants. Participants were randomly assigned to two groups (327 in each group) for purposes of data analysis, forming Sample 1 and Sample 2. In Sample 1, 8 participants were removed from analyses for apparent random responding (marking the highest, lowest or middle response on every item of every measure). Similarly, 4 random responders were identified and removed from Sample 2.

Sample 2 was utilized for confirmatory factor analysis and for all subsequent validation and reliability analyses. No data screening or assessment of normality or linearity was necessary for Sample 1, as only the raw item responses to the 50 items of the MRSF item pool were analyzed.

Linearity and normality of the data in Sample 2 were assessed by means of graphical inspection of histograms and scatter plots as well as by means of assessing the skew and kurtosis values as outlined by Tabachnick and Fidell (2007). In terms of linearity, three participants were identified as both univariate and multivariate outliers. Five further cases were identified as either univariate or multivariate outliers. In each case, the participant was removed from further analyses. Following these removals, 315 participants remained in Sample 2.

In terms of normality, each of the subscales of the Depression, Anxiety, and Stress Scales (DASS) evidenced substantial skew; the anxiety subscale also evidence notable kurtosis. Utilizing transformations, only the stress subscale could be adequately normalized using a square
root function. The skewness of these variables suggests that the sample is largely psychologically healthy, which is not unexpected for a sample of undergraduate students. As the proposed analyses involving the DASS scales only involve comparing them with the Measure of Religious and Spiritual Flexibility (MRSF), it was determined to use non-parametric tests, rather than transformations for each of the DASS scales. The total scores of two other scales, the White Bear Suppression Inventory (WBSI) and Satisfaction with Life Scale (SWLS), evidenced a moderate negative skew. Each of these scales was adequately normalized using a square root transformation.

Analysis of Hypothesis 1

The analysis of Hypothesis 1, that the MRSF would show a single-factor structure, was examined by using the first of the randomly split-halves (Sample 1) of the collected data. This first statistical step allowed for development and refinement of an empirically determined scale for use in the remainder of analyses with Sample 2.

Exploratory Factor Analysis and Scale Refinement

The hypothesis that the MRSF would show a single-factor structure was examined by first conducting an oblique exploratory factor analysis (EFA) on Sample 1, following recommendations by DeVellis (2003). The analysis provided 11 factors with eigenvalues above 1. However, the scree plot indicated a notable “elbow” between factors 4 and 5. The factor matrix for the first four factors that resulted from the EFA can be found in Table 2. In the interest of creating a shorter, more parsimonious and thus more clinically useful measure, a factor loading cutoff of 0.60 was used. Floyd and Widaman (1995) indicate that 0.30 is a generally
agreed upon minimum, with 0.40 being more common; Tinsley and Brown (2000), however, indicate that the cutoff point is up to the researcher. The factor matrix revealed that only the first 2 factors were composed of more than one item with factor loadings greater than 0.60.

Qualitative inspection of the 2 items with factor loadings above 0.60 comprising Factor 2 revealed that the items reflected a construct related to, but not equivalent with the proposed construct of religious and spiritual flexibility. The two items meeting the 0.60 factor loading cutoff were: “My views are open to revision” and “I am comfortable questioning my views.” These items reflect a fluidity and openness to exploration of the contents of one’s beliefs more akin to a quest religious orientation, rather than religious and spiritual flexibility as explicated in this document. Items in Factor 2 with loadings above 0.50 also embodied the quest ideal (e.g., “I typically become curious when I read things that are counter to my views”). In other words, these items were inconsistent with the theory associated with religious and spiritual flexibility. As examples, consider the items, “The inconsistent actions of others who hold religious or spiritual beliefs drive me away from believing in a higher power” and, “Despite personal experiences that tell me my views are right, I need proof of their accuracy.” Both of these reverse-scored items loaded inversely with the other items of Factor 2, inconsistent with their posited relationships to religious and spiritual flexibility. That is, the items of Factor 2 suggested that individuals who endorse openness to revision of their views are more likely to also endorse two items which are indicative of inflexibility. This combination of items suggests that Factor 2 may actually be tapping into a cynical and/or empirically-oriented openness to changing one’s views of the sacred, rather than flexibility.

The aforementioned procedures produced a one factor scale with 11 items. The process of reducing the number of items that emerges from EFA should balance the need to create an
internally reliable measure with the need for validity. Clark and Watson (1995) suggest that efforts be taken to reduce redundancy that might increase reliability, but add nothing to validity. Worthington and Whittaker (2006) suggest controlling for high levels of relatedness following the factor rotation to identify potential items for removal. While these kinds of methods can lead to a lower internal reliability coefficient, they allow for a reduction in item redundancy and increase the generalizability of the scale (John & Soto, 2007). Therefore, following methods used by Funk and Rogge (2007), partial correlations of the remaining 11 items, controlling for the total score of the 11 items, were examined. Items with high correlations (i.e., $r > 0.30$) were considered for removal. Eight items in the resulting correlation matrix were excessively correlated with at least one other item. In considering each pairing of items correlated above 0.30, the item with the lower factor loading was removed. This resulted in a 6-item scale (Appendix D).

Following suggestions by DeVellis (2003), the six items under consideration were put to correlational analyses to assess for social desirability as a motivator in responding. Item 2 (see Appendix D), $r_s(317) = .15$, $p = .01$, and Item 6, $r_s(317) = .22$, $p < .01$, exhibited statistically significant correlations with social desirability. Qualitative inspection of the content of these two items suggests that each of them asks respondents to confirm aversive emotional experiences (i.e., anger and irritation). In the case of item 6, respondents are asked to identify whether they experience their irritation towards others. Socially desirable responses would downplay the level of anger or irritation that one experiences. However, these kinds of affective experiences, rather than ones embodying acceptance and defusion, are considered important indicators in assessing flexibility. Sound theoretical reasons for leaving the items in the scale exist, despite a statistically significant relationship to social desirability, and consequently may be left in the final scale.
Confirmatory Factor Analysis

The remaining six items were evaluated for fit and confirmation using a confirmatory factor analysis in Sample 2. In interpreting and reporting the results of a confirmatory factor analysis, Brown (2006) recommends consideration be given to absolute fit, parsimony correction, and comparative fit. Chi square is one means of assessing absolute fit, though it is not uncommon for the null hypothesis to be inappropriately rejected using large sample sizes (Gatignon, 2010); in the present sample, the chi square did indicate poor absolute fit (chi square = 31.63, \( p < .001 \)). However, utilizing standardized root mean square residual (SRMR), the 6-item MRSF scale exhibited adequate absolute fit (SRMR = .05), in keeping with the ≤.08 convention established by Hu and Bentler (1999). The model did not conform to the Hu and Bentler’s recommendation of ≤.06 for parsimony correction (RMSEA = .10). Lastly, the 6-item scale approached, but did not fulfill suggestions by Thompson (2004) for a normed fit index (NFI) ≥.95 (NFI = .91). While the measure does not fully meet established norms in terms of fit, for the purpose of providing preliminary data on reliability and the relationships of religious and spiritual flexibility to extant constructs, the determined 6-item scale was used for remaining analyses.

The internal consistency reliability of the 6-item MRSF scale appears adequate. However, at Time 1 in Sample 2 \( (n = 315) \), observed Chronbach’s alpha (.75) was below the hypothesized value of .80. At Time 2 \( (n = 101) \) observed alpha was .80. For those participants in Sample 2 identifying as non-theistic, alphas at Time 1 \( (\alpha = .82, \ n = 58) \) and Time 2 \( (\alpha = .78, \ n = \)
19) were adequate. For those participants who identified as theistic, alphas at Time 1 \((\alpha = .73, n = 257)\) and Time 2 \((\alpha = .80, n = 82)\) were adequate. The means and standard deviations of the six items comprising the final scale and the total score can be found in Table 3.

Analysis of Hypothesis 2

The hypothesis that the MRSF would demonstrate adequate construct validity as a measure of religious and spiritual flexibility was assessed following Nunnally and Bernstein’s (1994) suggested use of correlational analyses. As a first step, all measures were evaluated for their internal consistency reliability alpha coefficients with the present sample, as reported in the Measures section above. The 6-item MRSF evidenced some meaningful relationships with extant constructs as predicted, though not all. The correlations between the MRSF and all measures discussed below are represented in Tables 4, 5, and 6.

It was hypothesized that religious and spiritual flexibility as measured by the MRSF would positively correlate with mindfulness, life satisfaction, daily spiritual experience (among those identifying as theistic), religious commitment (among theists), valuing, intrinsic religious orientation (among theists), quest religious orientation, spiritual well-being (among theists), and consistent valued living within the religious/spiritual domain. As hypothesized, religious and spiritual flexibility evidenced statistically significant direct relationships with mindfulness, \(r(313) = .16, p = .004\), and life satisfaction, \(r(313) = .11, p = .042\), both of which are small effects using Cohen’s (1992) conventions. A statistically non-significant relationship was observed among theists between religious and spiritual flexibility and daily spiritual experience, \(r(255) = .01, p = .896\). Contrary to the hypothesis, religious and spiritual flexibility evidenced an inverse relationship with a small effect in relation to religious commitment among theists, \(r(255)\).
The MRSF was also unrelated to valuing as measured by the Valued Living Questionnaire (VLQ), \( r(313) = -.05, p = .367 \) and values consistency within the spiritual/religious domain, \( r(313) = .08, p = .168 \). The MRSF also failed to evidence a significant relationship with intrinsic religious orientation among theists, \( r(255) = -.03, p = .683 \), or a quest orientation among all respondents, \( r(317) = -.01, p = .836 \). However, the MRSF evidenced a relationship with a small effect size to spiritual well-being among theists, \( r(255) = .18, p = .006 \).

The MRSF was expected to negatively correlate with experiential avoidance, thought suppression, psychological symptomatology, and orthodoxy (among Christians). The MRSF exhibited expected significant inverse relationships with experiential avoidance, \( r(313) = -.31, p < .001 \), and thought suppression, \( r(313) = -.17, p = .002 \); using Cohen’s (1992) conventions the effect sizes of these relationships are medium and small, respectively. As the scales of the DASS were not normally distributed, a non-parametric test (Spearman’s Rho) of correlation was used; the MRSF showed small inverse relationships to depression \( r_s(313) = -.19, p < .01 \), anxiety \( r_s(313) = -.20, p < .001 \), and stress \( r_s(313) = -.22, p < .001 \). Religious and spiritual flexibility also exhibited a significant inverse, with a small to medium effect size, relationship to orthodoxy \( r(192) = -.24, p = .013 \), among those participants identifying as Christian.

Analysis of Hypothesis 3

To assess the MRSF’s utility in issues of religion and spirituality, and to verify that it is not only measuring general psychological flexibility, hierarchical regressions were utilized to determine if the MRSF exhibits incremental validity above and beyond what is measured by the Acceptance and Action Questionnaire (AAQ-II). Of specific interest was the incremental validity of the MRSF in relation to daily spiritual experience, religious commitment, orthodoxy, spiritual
well-being, and religious/spiritual valued living consistency. As analysis of Hypothesis 2 revealed, the MRSF did not exhibit the expected significant relationships to daily spiritual experience, religious commitment, or religious/spiritual valued living consistency. Furthermore, the AAQ-II was not significantly related to orthodoxy amongst Christian participants, \( r(192) = -0.06, p = .408 \). Therefore, these variables were excluded from analysis in Hypothesis 3. A hierarchical regression was run among participants who identified as theistic, with spiritual well-being entered as the dependent variable. The AAQ-II was entered into the first block of the regression as a predictor and the MRSF was entered into the second block. Tests for multicollinearity indicated that a very low level of multicollinearity was present (\( VIF = 1.0 \) for the AAQ-II and 1.12 for the MRSF). Beta coefficients for the two predictors were AAQ-II, \( \beta = -0.45, t = -8.1, p < .001 \) and MRSF, \( \beta = .03, t = .48, p = .631 \). Therefore, the hypothesis was not confirmed; the MRSF did not provide incremental validity above and beyond the AAQ-II in predicting level of spiritual well-being among theists.

Analysis of Hypothesis 4

The hypothesis that the MRSF would predict decision-making (see Appendix E) on hypothetical decisions was investigated using logistic regressions, also utilizing Sample 2. In each logistic regression, the MRSF score was entered as a continuous predictor variable and the yes/no response was entered as the dependent variable.

Same-Sex Marriage

The first scenario was presented to those who identify that family relationships are important to them and that their religious or spiritual beliefs indicate marriage between members
of the same sex is inappropriate or sinful. Importantly, this is not a distinction between theistic and non-theistic. It is a distinction between those whose beliefs are seemingly in conflict with an espoused valuing of family relationships. One hundred thirty-five participants’ responses made them eligible to determine, hypothetically, whether they would attend a family member’s same-sex marriage. One hundred four participants reported that they would and 31 reported that they would not attend the wedding ceremony. Scores on the MRSF were not a significant predictor of whether a participant would attend or not attend the wedding (chi square = .74, \( p = .389 \)). Nagelkerke’s R^2 of .01 indicated no relationship between prediction and grouping. The Wald criterion (.74) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

In the second part of this scenario, participants were asked whether their feelings have changed about the family member. For the purposes of creating a dichotomous outcome variable, responses indicating that the participant’s feelings had not changed or had changed for the better were grouped together. Therefore, the two possible outcomes tested by logistic regression were that the person’s feelings were either unchanged or changed for the better, or that they had changed for the worse. Again, 135 participants’ responses were included in the analysis. Of that group, 117 participants indicated that their feelings were unchanged or changed for the better and 18 indicated that they had changed for the worse. The MRSF did not significantly predict group membership (chi square = .04, \( p = .852 \)). Nagelkerke’s R^2 of .00 indicated no relationship between prediction and grouping and the Wald criterion (.04) further demonstrated that MRSF scores did not provide meaningful prediction of responses.
An Atheist Among Theists

The second decision-making scenario hypothetically places someone who identifies as non-theistic and non-spiritual in a hypothetical situation of choosing whether or not to engage in religious rituals in the service of family relationships, which the person has espoused that they value. Fifty-four participants identified as non-theistic and non-spiritual and endorsed valuing family relationships.

Fifty-one of these participants indicated they would attend a religious wedding ceremony, and 3 indicated they would not. Results of the logistic regression indicated that the MRSF was not a significant predictor of group membership; chi-square results cannot be interpreted as less than 5 participants responded “No.” However, the model failed to accurately predict any of those participants who indicated “No,” and the Wald criterion (3.62) failed to demonstrate statistical significance ($p = .057$), even with significantly uneven group distribution.

The second question asked of these 54 participants is whether they would read a holy text at the wedding ceremony, if asked by their family member. 46 participants indicated that they would and 8 indicated they would not. The MRSF failed to accurately predict any of the “No” responses (chi square = 2.03, $p = .154$). Nagelkerke’s $R^2$ of .07 indicated no relationship between prediction and grouping and the Wald criterion (2.10, $p = .148$) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

The third question put to this sub-grouping of participants asked whether or not they would lead the wedding party in a prayer, if asked by their family member. 27 participants indicated that they would and 27 indicated they would not. The MRSF accurately predicted responses 59% of the time; however, the level of prediction was not statistically significant (chi
square = 1.59, \( p = .207 \)). Nagelkerke’s \( R^2 \) of .04 and the Wald criterion (1.50, \( p = .220 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

**Theist’s Response to Abortion**

Similarly to the same-sex marriage scenario, the respondent was provided a hypothetical circumstance wherein his/her religious beliefs/values were in apparent conflict with their value of family relationships. 146 participants indicated both that their religious/spiritual beliefs indicate that abortion for reason other than the welfare of the child or mother is inappropriate or sinful, and that they value family relationships.

Of the 146 identified participants, 135 indicated that they would comfort a loved one who was upset following an abortion and 11 indicated that they would not. The MRSF failed to accurately predict any of the “No” responses (chi square = .001, \( p = .973 \)). Nagelkerke’s \( R^2 \) of .00 indicated no relationship between prediction and grouping, and the Wald criterion (.001, \( p = .973 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

The same 146 participants then responded to whether or not their relationship with the family member would be negatively impacted. Thirty-six participants indicated that the relationship would be negatively impacted, 110 indicated it would not. The MRSF failed to predict any of the “Yes” responses and was not statistically significant in determining group status (chi square = 2.69, \( p = .101 \)). Nagelkerke’s \( R^2 \) of .03 indicated no meaningful relationship between prediction and grouping, and the Wald criterion (2.65, \( p = .103 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.
One-hundred thirteen participants indicated that they would be able to remain as close to the family member as they had been prior to the abortion, 33 indicated they would not. The MRSF failed to predict any of the “No” responses and was not statistically significant in determining group status (chi square = .87, \( p = .352 \)). Nagelkerke’s R\(^2\) of .01 indicated no meaningful relationship between prediction and grouping, and the Wald criterion (.85, \( p = .356 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

Seventy-five participants indicated that they would share their beliefs, in that moment, about abortion with the family member, while 71 indicated that they would not. The MRSF accurately predicted responses 48% of the time; however, the level of prediction was not statistically significant (chi square = .16, \( p = .691 \)). Nagelkerke’s R\(^2\) of .001 and the Wald criterion (.16, \( p = .691 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

Ninety-four participants indicated that they would not or were unsure whether they would at some point lecture the family member about their beliefs on abortion, 52 participants indicated that they would. The MRSF failed to predict any of the “Yes” responses and was not statistically significant in determining group status (chi square = .16, \( p = .693 \)). Nagelkerke’s R\(^2\) of .001 indicated no meaningful relationship between prediction and grouping, and the Wald criterion (.16, \( p = .693 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

_Atheist’s Response to Abortion_

The last scenario utilized a sub-grouping of participants who identified as non-theistic and endorsed both valuing family relationships and believing that abortion for reasons other than
the welfare of mother or child is ethical. These participants \((n = 83)\) were hypothetically confronted with how to respond to a family member who just ended a relationship with someone because that other person had an abortion of choice, rather than of medical necessity.

Of the 83 identified participants, 64 indicated that they would comfort the family member and 19 indicated that they would not. The MRSF was a statistically significant predictor of group status \((\text{chi square} = 5.01, p = .024)\). The model \((B = -.08, SE = .04)\) correctly classified 98% of those who would comfort the friend and 11% of those who would not, for an overall success rate of 78%. Nagelkerke’s \(R^2\) of .09 indicated a small, but statistically meaningful relationship between prediction and grouping. Wald criterion \((4.70, p = .030)\) and an odds ratio of .92 further demonstrated that MRSF scores did provide meaningful prediction of responses.

The same 83 participants then responded to whether or not their relationship with the family member would be negatively impacted. Twenty-one participants indicated that the relationship would be negatively impacted, 62 indicated it would not. The MRSF failed to predict group membership for any of the 21 “Yes” responses and was not statistically significant in determining group status \((\text{chi square} = 1.47, p = .226)\). Nagelkerke’s \(R^2\) of .03 indicated no meaningful relationship between prediction and grouping, and the Wald criterion \((1.48, p = .223)\) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

Sixty-two participants indicated that they would be able to remain as close to the family member, 21 indicated they would not. The MRSF was statistically significant in determining group status \((\text{chi square} = 4.89, p = .027)\). The model \((B = -.08, SE = .04)\) was able to correctly classify 98% of those who would remain close to the friend and 14% of those who would not, for an overall success rate of 77%. Nagelkerke’s \(R^2\) of .08 indicated a small, but statistically significant relationship between prediction and grouping. Wald criterion \((4.51, p = .034)\) and an
odds ratio of .92 further demonstrated that MRSF scores did provide meaningful prediction of responses.

The same 83 participants then responded to whether or not they would share their beliefs about abortion with the family member. Forty-five participants indicated that they would, 38 indicated they would not. The MRSF failed to predict group membership for any of the 38 “No” responses and was not statistically significant in determining group status (chi square = .03, \( p = .868 \)). Nagelkerke’s \( R^2 \) of .00 indicated no relationship between prediction and grouping, and the Wald criterion (.03, \( p = .868 \)) further demonstrated that MRSF scores did not provide meaningful prediction of responses.

Analysis of Hypothesis 5

The hypothesis that the MRSF would evidence adequate test-retest reliability was tested using the Pearson’s correlation coefficient between the initial completion of the MRSF and the 1-month follow-up. Because test-retest reliability can be affected by various factors other than issues of test construction and temporal stability (DeVellis, 2003), a moderate and statistically significant correlation coefficient can be considered adequate evidence of the MRSF’s temporal stability. Of the 315 participants in Sample 2, 101 completed the Time 2 administration of the MRSF item pool. The hypothesis that the MRSF would demonstrate adequate test-retest reliability was supported, \( r(99) = .50, p < .001 \). Test-retest reliability in Sample 1 was also statistically significant, \( r(100) = .73, p < .001 \).
CHAPTER 4

DISCUSSION

Findings

Experts from the fields of psychology of religion and contextual psychology reviewed 53 potential items for a scale to measure religious and spiritual psychological flexibility. Feedback from these reviewers and further re-consideration and re-conceptualization led to a significantly altered 50-item pool of potential items. Following administration of these 50 items, exploratory factor analysis revealed that a single factor scale, as predicted, best represented the relationships among items. Following further reduction of items a 6-item scale was evaluated in a confirmatory factor analysis to assess fit. Results of the confirmatory factor analysis were not entirely supportive of the 6-item solution. However, they warranted further consideration of the reliability and validity of the measure. The 6-item measure evidenced adequate internal consistency at two time points. Across those two time points (4 – 5.5 weeks), the Measure of Religious and Spiritual Flexibility (MRSF) exhibited adequate test-retest reliability.

Religious and spiritual psychological flexibility, as measured by the 6-item MRSF, evidenced the hypothesized direct relationships with mindfulness and life satisfaction. It also evidenced the expected direct relationship to spiritual well-being among theists. Among Christian participants, religious and spiritual flexibility was inversely related to orthodox Christian ideology. In relation to measures of psychopathology and other variables of clinical interest, the MRSF evidenced the expected inverse relationships with experiential avoidance, thought suppression, depression, anxiety, and stress.

The MRSF failed to exhibit a meaningful relationship with daily spiritual experiences or intrinsic religious orientation among theists in the present sample. Furthermore, no relationship
was found between MRSF scores and overall valuing consistency, valuing consistency specifically in the religious/spiritual domain, or quest orientation. The MRSF was significantly inversely related to religious commitment among theists, counter to the hypothesized direct relationship.

The MRSF exhibited a statistically meaningful and expected inverse relationship with orthodoxy among Christian respondents, while a measure of general psychological flexibility did not. However, the MRSF did not evidence incremental validity beyond the impact of the Acceptance and Action Questionnaire (AAQ-II) in the prediction of levels of spiritual well-being among theists.

The real-world utility of the MRSF as a predictor of decision-making in situations wherein one’s religious/spiritual values are in potential conflict with the value of family relationships was not supported. The MRSF consistently failed to accurately predict self-reported decision-making to hypothetical situations. It did evidence some predictive validity among non-theists in making a decision about maintaining a family relationship; however, the situation presented in those scenarios did not explicitly include any reference to religion or spirituality, only to perspectives on abortion commonly understood to be held by individuals with religious or spiritual beliefs. Furthermore, the effect sizes of these findings were insubstantial.

Implications

The results of the present study are best appreciated as a significant first step in the development of a measure of religious and spiritual psychological flexibility. The version of the measure developed here bears further exploration and psychometric refinement in terms of confirmatory fit as a one-factor scale. Consideration of the measure developed, however, did
indicate adequate internal reliability and test-retest stability. At a broad level, the measure might be most germane to issues of clinical significance (e.g., well-being, psychopathology, mindfulness), rather than some other previously considered areas of religious and spiritual psychology. Fundamentally, this suggests that the measure developed herein lives up to the basic and pragmatic intention: a means of measuring how one’s approach to the sacred impacts questions and concerns addressed in psychotherapy. The measure’s utility and conceptual congruence within the academic discipline of the psychology of religion and spirituality is circumspect, but merits further exploration.

Adherence to the Acceptance and Commitment Therapy (ACT) Model

The purpose of the present study was to develop a measure of the human experience of the sacred in broad terms using the ACT framework of psychological flexibility. In the interest of developing a concise measure, multiple steps were taken during the exploratory factor analysis phase to limit the number of items, while still capturing the idea of religious and spiritual psychological flexibility. Considering the statistically-derived six items that comprise the MRSF, it does appear that the ACT model is adequately reflected. Recalling that the model of psychological flexibility calls upon six core components, acceptance, defusion, contact with the present moment, self-as-context, valuing, and committed action, which are conceptualized as deictic in their interrelatedness, let us explore the conceptual adherence of each of the six items of the MRSF.
Item 1 – My views limit my day-to-day life.

The first item of the measure addresses several aspects of psychological flexibility. Affirmative responses to this item imply higher levels of fusion between possible daily activities or a sense of fulfillment and the rules, expectations, and other contents of one’s views that results in inhibited life satisfaction. That is, the way that one approaches religion and spirituality effectively constricts the fullness of one’s day-to-day experience. In some cases, this may reflect beliefs about pre-marital sex or alcohol consumption. Indeed, such beliefs that encourage abstinence from such behaviors place limits on what one may do and remain congruent with her beliefs. Adherence to those convictions, however, does not necessarily imply that one’s life is limited. A religiously and spiritually flexible individual would be hypothesized to find fulfillment and breadth in her day-to-day experience in spite of – more likely enhanced by – her belief in abstinence from pre-marital sex and alcohol.

Item 1, and a couple of the other items discussed below conceptually represent the deictic nature of the model of psychological flexibility, however often in ways that are not immediately apparent or face-valid. As a result, I discuss below how the items might also capture broader aspects of the model, while acknowledging that whether the concept is actually being assessed is unclear. In a less face-valid manner, Item 1 further taps into contact with the present moment, committed action, and valuing. To miss out on day-to-day possibilities due to one’s views suggests that one sidelines oneself in the moment due to the fusion described above. The individual endorsing greater flexibility is likely able to respond in the moment in such ways that facilitate a sense of fulfillment and action. Indeed, returning to the belief in abstinence from pre-marital sex and alcohol, the more religiously and spiritually flexible person experiences his refusal of an alcoholic drink at a party as a committed action in the service of his values. The
very action of declining the beverage, by the process of behavioral augmenting becomes a positive and reinforcing experience.

Item 2 – I become angry when I read things that are counter to my views.

This item most clearly reflects the acceptance and defusion components of the psychological flexibility framework. While acknowledging that anger is not inherently bad and that one can certainly be accepting of the experience of anger, the intention of the item is to capture persisting anger that likely comes to the mind of a respondent. A history of brief flashes of anger followed by mindful acceptance of the experience likely does not contribute to higher levels of endorsement for this item. Moreover, the experience of anger in response to contradictory views suggests elements of fusion and/or self-as-content likely influence one’s experience. If one’s own views are fused to “safe” and “comfortable”, it is possible for contradictory statements to be immediately experienced as “unsafe” and “unpleasant.” If an individual holds views that are strongly fused to “good” or “me”, information that disconfirms or counters those views may be experienced as dangerous and worthy of one’s anger, irritation, or desire to quiet the perceived attack. In theory, the type of fusion assessed by this item is related to hostile prejudicial attitudes. The experience of different beliefs as threatening, combined with an inability to accept related unpleasant affective experiences, hypothetically implicates extreme defense of one’s views. In stark contrast, the more religiously and spiritually flexible individual approaches contradictory perspectives in a defused way that allows for potential inconsistency or inaccuracy about one’s own views to not feel like an affront to one’s self.
Item 3 – My views are the only thing I feel good about.

Responses affirming this statement indicate that an individual experiences both himself and what he cares about in a limited and rigid manner. Whether the individual only feels good about his views because he feels he has failed at every other domain of his life (e.g., family, work), or because he truly does not care about any other valued domain, both reflect potential inflexibility. The former example implies a paucity of committed action towards other valued domains; alternatively, if the individual does exhibit great effort towards other valued domains, but consistently appears to “fail” in his pursuit of family relationships or work success, this too suggests problematic fusion between “success” and “good.” Greater psychological flexibility involves the ability to accept the discomfort of perceived failure, coupled with appreciation for values-consistent behavior regardless of outcome. A limited range of valued domains reflects a potentially rigid constriction of valuing and meaning-making. While it is not necessarily problematic, for most people, caring only about one valued domain can lead to an unfulfilling and narrow behavioral repertoire.

Item 4 – Conflicts between day-to-day events and my views mess up my life.

Much of the discussion about fusion, contact with the present moment, committed action, and valuing applied to Item 1 is appropriate for this item as well. However, while Item 1 assesses for the experience of being limited or constricted, Item 4 appears to tap into general distress arising from the conflicts between one’s views and daily experiences. This item more explicitly captures the presence or absence of feeling successful in life pursuits. It also implies that the individual affirming the statement feels patently dissatisfied with her experience because of her views. Conceptually, as with Item 1, the more flexible respondent may perhaps find or make
meaning out of the conflict, perhaps by re-evaluating what the conflict between her views and
daily life does or does not mean about herself; alternatively, the more flexible respondent may be
more adept at accepting the conflicts and holding them from a self-as-context perspective, such
that while the conflict exists, it does not negatively impact her ability to live a values consistent
life.

Item 5 – I cannot be a good friend when I am feeling conflicted about my views.

This item appears to tap into the interactions between acceptance, contact with the
present moment, valuing, and committed action. The item occasions the value of relationships
along with possible internal discomfort associated with uncertainty about one’s views. Higher
levels of agreement with this item indicate an inability to take action towards one value (i.e.,
relationships), in the present moment related to a lack of acceptance of internal conflict.

Indeed, one’s relationship to the sacred is often accompanied by doubt and uncertainty.
Previous constructs and measures have addressed existential uncertainty associated with religion
and spirituality. For example, the quest orientation, as posited by Batson, Schoenrade, and Ventis
(1993) is intended to capture one’s willingness to wrestle with uncertainty and to do so without
over-simplification. The MRSF is intended to capture openness to experiencing doubt, but goes a
slightly different direction by assessing whether one can live consistently with multiple values
while wrestling with uncertainty. Item 5 does exhibit some features of a double-barreled item in
that it captures both having internal conflict and living out a second value. However, the
intention is for the item to create a context (internal conflict) for the targeted behavior (being a
good friend). While the item assumes that the respondent experiences conflict in his views, given
the perspective that uncertainty is endemic to the religious and spiritual experience, it is deemed
an appropriate contextual set-up for the item. The item also assumes that the respondent values friendships, which is not exclusively true for all people; however, the fundamental importance of relational connectedness is reflected by the multitude of psychotherapies premised upon relational healing (e.g., psychodynamic therapies, person-centered therapy, relational cultural therapy), and the consistent recognition that humans need relationships (e.g., Maslow, 1943).

Item 6 – Other’s opinions about religion and spirituality annoy me.

Much of the discussion related to Item 2 regarding acceptance and defusion applies for Item 6 as well. Additionally Item 6 contributes a generality to the measure not provided by the other five items. It is the only of the six items to not include “my views.” Rather, it gauges reactivity to stimuli of religious and spiritual relevance without an explicit referent to one’s own opinions or perspective. Responses affirming the statement suggest the presence of fusion between religious and spiritual ideas – regardless of whether the individual agrees with those statements – and negativity, or some semblance of “bad.” Furthermore, affirmative responses suggest an increased likelihood of a pattern of avoidance related to religion and spirituality. Annoyance can be acknowledged mindfully and accepted, however if one has such a relationship with annoyance, it is probably not the way they will identify themselves as feeling more generally.

Six-Item MRSF Scale

Conceptually, each of the six items comprising the MRSF determined in this study taps into more than one aspect of the ACT model of psychological flexibility in relation to how one interacts with religion and spirituality. The items seem to adequately assess the deictic nature of
the model of psychological flexibility. No one item assesses for all six components as that could easily require excessive double, triple, or quadruple barreling, which DeVellis (2003) clearly warns against. While most of the items included in the 6-item scale do not fall prey to double barreling, they were developed to conceptually implicate various components of the psychological flexibility model, as explicated above. Indeed, much of the feedback received from the expert reviewers cautioned about the substantial number of double-barreled items in the original 53-item pool. In the revision process, extant measures of psychological flexibility were again reviewed for modeling of items that capture multiple elements of the model without unnecessary double-barreling or excess verbiage. As discussed, item 5 is somewhat double-barreled, but the commonality of the presumed experience theoretically serves as a contextual cue, rather than a secondary question stem. The resulting 50-item pool administered to participants was notably sleeker and the six items identified by factor analysis strongly reflect a succinct, yet adequate approach to measuring religious and spiritual psychological flexibility.

*Use with the Religious, Spiritual, Non-religious and Non-spiritual Alike*

One of the more demanding tasks confronted in this study was developing a measure equally applicable to theists and non-theists alike. The present project attempted to develop a measure of how one interacts with the sacred, regardless of the content of one’s beliefs or non-beliefs. Prior to the administration of items to participants, the most significant alteration we made to address this preference was to incorporate the term “views” into the items of the MRSF and provide a definition for the word so that all participants have a similar foundation for approaching and understanding the measure’s items. Initially, in the effort to make the measure accessible and applicable to anyone who might take it, items became convoluted by multiple
terms intended to capture the religious, spiritual, atheistic, agnostic, etc. experience. Certainly each respondent still has a unique experience with the word “views” and the words comprising the offered definition. Nevertheless, we believe that this approach offers both a commonality for approaching a varied and complex human experience, as well as a means of simplifying the length and language of the items.

While the confirmatory factor analysis did not indicate the six items of the MRSF fully meet established norms, the results were encouraging. The observed internal consistency was adequate in the present sample that includes individuals identifying with multiple faiths, spiritual orientations, and non-faiths. At a simple, pragmatic level, it is preferable to have a single measure that can be used for persons from various faith perspectives, rather than needing to stock one’s office with multiple versions. More importantly, how flexibly one relates to the sacred is a novel and potentially useful way for approaching the psychology of religion and work with psychotherapy clients. If one is interested in understanding and empirically exploring the relationship to the sacred, regardless of faith or non-faith, it is useful to have a theoretical framework and related measure that fairly addresses all persons of all creeds and non-creeds. Psychotherapy clients come from all backgrounds and at all stages of faith exploration. Thus, the development of a psychometrically adequate and validated trans-theological measure is a task worth undertaking and deserving of further refinement.

*Adequacy as a Clinical Measure*

The MRSF consistently evidenced stronger and more theoretically consistent relationships with measures of variables of clinical importance than with measures more specific to the psychology of religion. The discrepancy of these findings makes sense as many of the
items in the item-pool and at least two items in the determined 6-item measure are derived from extant measures of psychological flexibility. Consequently, the measure is strongly reflective of the approaches to measuring general psychological flexibility that are consistently found to have strong correlations with mindfulness, thought suppression, and psychological symptomatology.

Moreover the approach to developing the measure was fundamentally steeped in and reflective of the ACT model for understanding psychopathology and issues of clinical interest. As items were developed with colleagues, many of the conversations included consideration of past clinical experiences with clients struggling in some manner with the sacred. The religiously and spiritually flexible person is posited as one who has the ability to simultaneously tolerate discomforts occasioned by various reminders of the sacred and live consistently with her values, of which religion and spirituality are one example. The ability to live in such a manner suggests a decreased level of distress and an increased quality of life, two suppositions supported in the present study. However, the MRSF did not evidence statistically meaningful relationships with consistency in valued living. Of note, in the present sample, Valued Living Questionnaire (VLQ) scores did not evidence a statistically significant relationship to experiential avoidance either ($r(313) = -.09, p = .116$). This finding is incongruent with prior research that found a significant relationship between scores on the VLQ and measures of experiential avoidance (Wilson, Sandoz, Kitchens, & Roberts, 2010; Michelson, Lee, Orsillo, & Roemer, 2011). The authors also note that the VLQ has some issues with validity and warrants further examination, which may impact the findings in this study.

The developed MRSF could be a useful tool for clinicians to use with clients presenting with symptoms of depression, anxiety, or stress and concurrent psycho-spiritual concerns. At one level, it could be useful in teasing out whether, or to what extent, psychological inflexibility in
approaching the sacred might contribute to the individual’s reported psychological symptoms. The items also serve as a potential point of discussion between therapist and client and may assist in aiding a client in accessing how their way of interacting with the sacred may influence their well-being. Repeated administration of the measure could also provide ongoing assessment of growth and change in therapy.

The MRSF did not meet the expectation of effectively predicting imagined decision-making. It could be the case that religious and spiritual flexibility – at least as measured here – does not have an impact on how individuals decide to support a friend. It may be that the construct only applies to circumstances in which a person has perhaps turned away a friend because of a non-/religious/spiritual sentiment and subsequently actually experiences regret or a sense of dissonance about that action. That is, in reference to one of the decision-making tasks presented in this study, if not attending the same-sex wedding feels congruent with one’s religious sentiments, then perhaps losing that relationship also seems congruent. However, without actual experience of relational loss, one may not be adequately confronted with the potential consequence.

Alternatively, the situations, as presented in this study, did not always indicate that a relational rupture or disconnection actually results from the chosen action. The possibility that not attending the wedding or not reading the scripture as requested by the family member leads to the loss of fulfillment in the relationship was only implied and not specified. Indeed, many persons may not have considered the potential loss or difficulties that could result from what were intended to be clear indications of not fulfilling or living in accordance with one’s value of family relationships.
While this line of reasoning potentially explains the lack of desired predictive validity of the measure, it does not rectify the MRSF’s inability to predict how individuals might foresee the impact of their own future behavior. Such prediction was an intended aim in developing the measure. Whether it is too lofty a goal, or one meriting further exploration can only be determined by future experimentation.

*Adequacy as a Psychology of Religion Measure*

The nature of the MRSF’s fit within the extant literature and expansive collection of constructs and measures in the psychology of religion is not entirely clear. The measure developed here evidenced some of the relationships that would be expected, but also failed to show significant relatedness and in some instances showed significant relationships counter to theoretical directions.

Theoretically Consistent Relationships

The MRSF was theoretically congruent in its observed relationships with spiritual well-being and Christian orthodoxy. The measure of spiritual well-being used for the present study was selected for its emphasis on psychological well-being in relation to one’s spirituality. The MRSF is intended to measure the flexibility thought necessary to lead a vital and meaningful life in relation to the sacred. It is therefore theoretically consistent that spiritual well-being among theists is directly related to religious and spiritual flexibility. This is a promising finding for the measure.

The MRSF’s inverse relationship to orthodoxy indicates a level of rigidity in the experience of the sacred for those also endorsing higher levels of orthodox Christian beliefs.
Orthodoxy – an aspect of religious fundamentalism – emphasizes the literal meaning of sacred texts and strict adherence to theology (Laythe, Finkel, Bringle, & Kirkpatrick, 2002). Religious and spiritual flexibility emphasizes flexibility in psychological interaction with those aspects of faith. The observed inverse relationship indicates a tendency for those with greater flexibility to hold less orthodox beliefs. Interestingly, Christian individuals with greater orthodox beliefs also express greater levels of spiritual well-being, $r(192) = .30, p < .001$ but not necessarily greater general life satisfaction, $r(192) = .03, p = .688$. Moreover, as shown in the Results section above, while religious and spiritual flexibility is inversely related to orthodoxy, both religious and spiritual flexibility and orthodoxy are positively correlated to spiritual well-being. These findings suggest that the MRSF not only exhibits some theoretically predicted relationships with extant constructs, it may also provide a level of specificity or distinction worthy of further investigation.

As an example, the MRSF may someday provide meaningful insight to the distinction between orthodoxy and right-wing authoritarianism as sub-components of fundamentalism (Laythe, Finkel, Bringle, & Kirkpatrick, 2002). As seen in this study, religious and spiritual flexibility is inversely related to orthodoxy. Theoretically, it would also be inversely related to right-wing authoritarianism. The latter construct directly relates to prejudicial attitudes and behaviors, while orthodoxy relates inversely (Rowatt & Franklin, 2004). Levels of religious and spiritual flexibility may provide a means for understanding how some individuals develop orthodox beliefs, without developing a right-wing authoritarian way of holding those beliefs through a statistically moderating relationship. That is, while the directionality of the relationships of orthodoxy and right-wing authoritarianism with religious and spiritual flexibility may be the same, the intensity may differ. It would be worth investigating whether those who are
orthodox and not right-wing authoritarian might have greater religious and spiritual flexibility than those who are both orthodox and right-wing authoritarian.

Theoretically Inconsistent Relationships

The MRSF also exhibited a number of relationships or non-relationships theoretically inconsistent with extant measures in the psychology of religion. Religious and spiritual flexibility did not exhibit a meaningful relationship with daily spiritual experiences or intrinsic religious orientation among theists in the sample. Daily spiritual experiences include a sense of awareness and connection with the divine. The elements of contact with the present moment that are accounted for in the model of religious and spiritual flexibility – which were observed in the relationship between the MRSF and a measure of general mindful awareness – did not yield a significant relationship between the two constructs. In retrospect, the measure of daily spiritual experiences emphasizes attention to connection to the divine, in particular, and also refers to particular theological assumptions (e.g., an interventionist G-d). In contrast, the MRSF is intended to be trans-theological. Perhaps the average individual experiences connectedness with the divine and general mindful awareness as two different experiences. Anecdotally, some individuals who practice mindfulness and express devotedness to their faith, describe connectedness with the divine as a mindful experience. This may be a learned connection, rather than an inherent one. Some religious sects emphasize mindful awareness and/or spiritual connectedness as a component of the religious experience more than others. For example, Sufism places a greater emphasis on transcendental experience than some other Islamic sects. Zen Buddhism, in a manner of speaking, is about living mindfully, while Theravada and Mahayana
Buddhist traditions, though incorporative of what psychologists think of as mindfulness, may also emphasize prayer and transcendent meditation.

The MRSF failed to exhibit a statistically significant relationship with intrinsic orientation among theists in the sample. It is a surprising non-finding as intrinsic orientation refers to the experience of religion as an internally satisfying and meaningful process and aspect of life (Allport, 1954). The MRSF is intended to capture one’s freely chosen valuing of religion and spirituality. Methodologically, both the measure of intrinsic religious orientation and the MRSF evidenced adequate, but not particularly strong internal reliabilities, which decreases the ability to observe a relationship, even if one actually exists. Conceptually, the MRSF may not be as strong of a measure of religious and spiritual valuing as was expected. As noted above, the measure failed to relate to valuing as measured by the VLQ. In any case, based on the present findings there is no evidence to suggest that religious and spiritual psychological flexibility is related to an intrinsic religious orientation. While the MRSF was expected to show a slight correlation with intrinsic orientation, it was also intended to be distinguishable from the heavily criticized construct and avoid its value-laden undertones (Kirkpatrick & Hood, 1990). In some manner, the lack of relationship may not indicate an actual problem in validity.

The lack of a relationship between the MRSF and a measure of quest religious orientation was also surprising. The quest orientation embodies openness to exploration and to uncertainty about religion and spirituality. Conceptually, one aspect of religious and spiritual psychological flexibility is the ability to tolerate uncertainty and remain open to other’s opinions and perspectives. At least a couple of the items of the MRSF seemingly capture openness to difference. The quest orientation is generally inversely related to fundamentalism and directly related to openness to revision (McCleary, Quillivan, Foster, & Williams, 2011). The MRSF
evidenced a strong inverse relationship with Christian orthodoxy; no relationship between quest orientation and religious and spiritual flexibility emerged. The combination of these relationships and non-relationships might actually reflect an important distinction. The quest orientation commonly relates directly to distress and inversely to general life satisfaction (Genia, 1996; Steger et al., 2010) which presents concerns about the benefits of a quest orientation. The MRSF, to the contrary, evidenced inverse relationships with distress and a direct relationship to life satisfaction. These findings may actually reflect a theoretically appropriate finding. While religious and spiritual flexibility may indicate openness to revision, it need not by necessity. Rather, it suggests an ability to tolerate contradiction, not a tendency towards pursuing it.

Also counter to expectation, the MRSF evidenced a significant inverse relationship with religious commitment amongst theists, suggesting that greater religious and spiritual flexibility is associated with a lower level of religious commitment. Perhaps related to the other findings in this sample that the MRSF does not relate meaningfully to valuing, this finding suggests that religious and spiritual flexibility does not relate to religious and spiritual valued actions in the expected direction. If future investigation replicates this finding, religious and spiritual flexibility, as measured here, might inadvertently capture a laissez-faire kind of approach to religion and spirituality. One wherein the individual who is religiously and spiritually flexible, though she may hold beliefs of one form or another, does not actively live up to the expected actions associated with her faith. Another methodological consideration worth mentioning: as this was an undergraduate sample, there is reason to speculate that the participants of this study might be pre-occupied with other life-tasks and in a less active phase of their faith development. This is mere speculation and with age inadvertently not collected in this study, it is impossible to explore the hypothesis by post-hoc analysis.
Construct Validity Summary

While the MRSF did exhibit some expected meaningful relationships with variables commonly considered in the psychology of religion, it also evidenced a large number of non-significant ones and one unexpectedly inverse relationship. Consideration of the items comprising the 6-item scale does suggest that the outcome of interest is not apparently religious or spiritual in nature. In fact, the MRSF was intended to capture an approach to the topic, rather than beliefs, preferences, or behaviors associated with religion and spirituality. The lack of accuracy in hypothesized relatedness of religious and spiritual flexibility to many of the constructs assessed herein is a reason to be cautious about the construct validity of the MRSF in its present form; simultaneously, the relationships that were observed may also suggest that the MRSF can offer a new perspective in the consideration of psychology of religion and spirituality. Further investigation of potential statistically moderating or mediating relationships between variables like religious and spiritual flexibility, orthodoxy, and spiritual well-being may be fruitful.

Limitations

In the interest of accurate conceptualization and extrapolation of the above implications of the present findings, a number of limitations must be acknowledged and taken into account. Endemic to the design and manner of data collection in the present study are factors limiting the applicability and generalizability of findings. Experimenter errors also impacted some areas of analysis. Lastly, there are limitations to the generalizability of findings in relation to a low level of diversity in demographic variables observed among the sample’s participants.
Single-Sample Data Collection

The use of randomly split halves for this project, met the intentions and goals set forth of developing, refining, and beginning to collect data for the validation of a new measure. However, that approach is not ideal for more thorough analyses for several reasons. The use of randomization in determining the two halves, while statistically adequate, introduces an experimenter introduced impact on the data that does not truly reflect the nature of the collected data. That is, there is no strong a priori reason for determining a given participant’s assignment to the exploratory analysis rather than the confirmatory and validation analyses.

The greater limitation that emerges from the one-time data collection procedure used here is that the participants in the confirmatory and validation analyses still responded to all 50 of the item-pool items, rather than solely to the six items determined as comprising the scale. Inevitably responses to those six items are impacted by the other items deemed extraneous by the exploratory analysis. The number of items could significantly impact attention and understanding of items. Moreover, the content of items responded to in the 50-item pool that are not present in the six item version, potentially change the way in which are participants are primed to understand and respond to subsequent items.

Survey Design

While appropriate to the present research questions, this study relied solely upon self-report. Primarily, participants responded to measures that assess for one or a few constructs. Inevitably, issues of accuracy in self-awareness and biased responding impact observed results. However, as social science researchers, we typically accept and acknowledge that limitation with the simultaneous appreciation that imperfect methods of data collections can still yield
meaningful and impactful results. Even non-survey measures taken in the present study (i.e.,
decision-making tasks) rely on hypothetical futures, self-report of hypothetical future behavior,
and are correlational in nature. The present study cannot make any claims about causality of any
of the observed relationships, given that the design was not experimental in nature.

*Online Data Collection*

Online data collection poses a peculiar dilemma to the contemporary researcher. Whilst it
allows one to efficiently gather data, it also poses inherent challenges to notions of experimental
control. Although all participants see the same stimuli on screen, one cannot account for the
variety of external stimuli that may impact participants’ attention. One need only briefly imagine
a participant simultaneously watching television, tending to a baby, and cooking dinner while
completing the measure from his or her laptop at home to grasp the potentiality for extreme
environmental inconsistency.

Certainly, for some research questions and some research designs the impact of such
uncertainty is entirely unacceptable. However, at different stages of the research process, and
with different research questions, the experimental inconsistency accompanying online data
collection is acceptable in the service of moving forward in developing and refining research
ideas. In the present circumstance, a priori considerations of the above outlined trade-offs
indicated that the opportunity to efficiently collect a sample large enough to conduct exploratory
factor analysis on a large item-pool and also have a second half large enough to conduct
confirmatory and validation analyses was appropriate for this initial development of a new
measure. Therefore, while the design is appropriate to this project’s intentions, readers are
advised to remain mindful that participant responses are likely impacted by unintended experimental variables unaccounted for as a result of a low level of experimental control.

*Experimenter Error*

In the preparation for data collection, I made three notable errors. First of all, participants’ ages were not collected as proposed. While this does not significantly impact the meaning of reported results, it does adversely affect the ability to ascertain the sample’s mean age and investigate possible differences in responding based on age. Of note, participants less than the age of 18 were already excluded from participation through the Sona advertisement. Secondly, for the PCBS, as noted in the Measures section, the measure was not presented in its entirety. This did affect the ability to explore the relationship of the MRSF to orthodoxy. The observed Chronbach’s alpha was adequate, but lower than might have been expected had the full measure been collected. Thirdly, due to another experimental oversight, the study was initiated without randomizing the order of the measures as had been intended. Therefore, findings could be adversely impacted by order effects.

*Generalizability of Sample*

The generalizability of the results herein is limited by several issues related to diversity. Geographically, the sample is limited to persons living in the Dallas/Fort Worth and Denton areas. Furthermore, the sample was collected only from undergraduate students enrolled in psychology courses at UNT. Ethnic, racial, and – perhaps of most relevance to this study – religious/spiritual diversity are also quite constricted. Respondents were most commonly white, female, and Christian. Ideally the MRSF can be shown applicable and meaningful among a broad
array of ethnic/racial identities, with any religious or spiritual group, and with equal efficacy among men and women. For now, the results of the present study must be understood and interpreted within the relatively constricted range of diversity represented in this study.

Future Directions

Summarily, the measure developed here is not adequately validated or vetted for general use. It requires further examination and refinement. Psychometrically, the 6-item scale is close, only failing to fully conform to common standards for a confirmatory factor analysis. The MRSF, in its present state, appears a relatively good fit for clinical applications; however its utility within the psychology of religion is not so clear. Below are a number of recommendations for addressing concerns raised about the present study and considering the next steps for assessing the measure’s adherence to theory and practical utility in clinical work and future research.

Address Acknowledged Limitations

As noted, the present study took a number of empirical shortcuts as this was merely an initial attempt to develop a measure for a new idea. In the interest of accuracy and replication a number of steps should be taken in future research.

Evaluate 6-Item Scale Independently

The developed 6-item scale should be administered to a novel sample in the absence of the extraneous items from the item-pool and be put to confirmatory factor analysis of the single factor structure. Furthermore, internal consistency should be re-evaluated in that sample.
Chronbach’s alpha will potentially improve significantly without excess noise contributed by the 44 excluded items.

Additionally, qualitative exploration of the six items (or any other items considered for future iterations) could provide clarity on how individuals actually understand and respond to items. Researchers could interview individuals from various faith traditions and discuss how the individuals regard the items and how their response reflects their approach to the sacred. In doing this, a different and perhaps more exacting manner of assessing whether the MRSF captures the functional nature of religious and spiritual flexibility can be assessed.

_Evaluate Impact of Changes in Religious and Spiritual Flexibility_

Behavioral means of evaluating the construct validity of the MRSF would be useful to avoid the strictly correlational, survey methodology. While the present study attempted to do this through hypothetical decision-making scenarios, future research could develop real-world scenarios to test whether the MRSF predicts behavior in theoretically consistent ways.

_Evaluate 6-Item Scale with Diverse Samples_

The MRSF should be evaluated with a broader range of ages, professional statuses, and ethnic/racial identities. Furthermore, given the nature of the measure and the supposition of it holding trans-theological importance, it should be administered to participants representing a broader array of religious and spiritual perspectives. While the MRSF is supposed to be trans-theological, only future empirical testing can confirm that MRSF scores are not consistently significantly affected by specific beliefs or traditions.
**Eventual Uses**

Following further exploration, refinement, and validation of the MRSF there are a number of potential uses for a measure of religious and psychological flexibility that motivated the present study. In both clinical and research applications a means of assessing how one relates to the sacred from a functional, ACT-informed perspective opens the door to a number of possibilities. Personal experience in working with psychotherapy clients suggests that sometimes the most effective and meaningful ways of relating to one’s faith are the most flexible. As with the client discussed in the introduction, while one’s struggle or uncertainty may not always be resolved, the ability to gently accept its presence and continue choosing valued actions is a powerful form of change. Patterns of avoidance of internal conflict or of unpleasant external circumstances often contribute to a sense that one is without choice or without the opportunity for change: so often the goals of psychotherapy include assisting the client to get out of a sense of being stuck that they feel. The move towards psychological flexibility allows the individual to disengage the struggle and re-engage with their values.

The MRSF developed here holds clear relevance to assessing clinical needs. Despite some inconsistency in its relationships with extant constructs of religious and spiritual significance it holds some relevance with issues of orthodoxy and spiritual well-being. Religious and spiritual flexibility may well also provide a clearer lens through which to explore how the way one interacts with the beliefs and traditions of her faith are related to her general well-being as a person of faith.

Ultimately, a measure of religious and spiritual flexibility might provide some benefit in understanding how people, theistic and non-theistic alike, respond to the world of religion and spirituality around them. While American society is moving somewhat more towards secularism,
that too requires adjustment and change. How well people will adapt to that change and how effectively they will manage a religious and spiritual perspective or non-perspective along with the various other values they hold dearly may speak volumes to the spiritual and general well-being of the population.
### Table 1

*Characteristics of Sample*

<table>
<thead>
<tr>
<th></th>
<th>Sample 1</th>
<th></th>
<th>Sample 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>91</td>
<td>28.5</td>
<td>83</td>
<td>26.3</td>
</tr>
<tr>
<td>Female</td>
<td>223</td>
<td>69.9</td>
<td>230</td>
<td>73.0</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1.6</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>154</td>
<td>48.3</td>
<td>166</td>
<td>52.7</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>62</td>
<td>19.4</td>
<td>66</td>
<td>21.0</td>
</tr>
<tr>
<td>Black/African American</td>
<td>50</td>
<td>15.7</td>
<td>38</td>
<td>12.1</td>
</tr>
<tr>
<td>Biracial</td>
<td>31</td>
<td>9.7</td>
<td>23</td>
<td>7.3</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>16</td>
<td>5.0</td>
<td>15</td>
<td>4.8</td>
</tr>
<tr>
<td>Native American</td>
<td>3</td>
<td>0.9</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Middle Eastern/Arab</td>
<td>1</td>
<td>0.3</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.6</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>281</td>
<td>88.1</td>
<td>274</td>
<td>87.0</td>
</tr>
<tr>
<td>Cohabitating</td>
<td>23</td>
<td>7.2</td>
<td>31</td>
<td>9.8</td>
</tr>
<tr>
<td>Married</td>
<td>15</td>
<td>4.7</td>
<td>8</td>
<td>2.5</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>College Classification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>105</td>
<td>32.9</td>
<td>111</td>
<td>35.2</td>
</tr>
<tr>
<td>Sophomore</td>
<td>64</td>
<td>20.1</td>
<td>61</td>
<td>19.4</td>
</tr>
<tr>
<td>Junior</td>
<td>80</td>
<td>25.1</td>
<td>71</td>
<td>22.5</td>
</tr>
<tr>
<td>Senior</td>
<td>70</td>
<td>21.9</td>
<td>72</td>
<td>22.9</td>
</tr>
<tr>
<td>Religious/Spiritual Preference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agnostic</td>
<td>47</td>
<td>14.7</td>
<td>47</td>
<td>14.9</td>
</tr>
<tr>
<td>Positive Atheism</td>
<td>17</td>
<td>5.3</td>
<td>16</td>
<td>5.1</td>
</tr>
<tr>
<td>Negative Atheism</td>
<td>7</td>
<td>2.2</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>Buddhism</td>
<td>2</td>
<td>0.6</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>Christianity</td>
<td>205</td>
<td>64.3</td>
<td>194</td>
<td>61.6</td>
</tr>
<tr>
<td>Hinduism</td>
<td>3</td>
<td>0.9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Islam</td>
<td>4</td>
<td>1.3</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td>Judaism</td>
<td>1</td>
<td>0.3</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>None</td>
<td>22</td>
<td>6.9</td>
<td>26</td>
<td>8.3</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>3.4</td>
<td>18</td>
<td>5.7</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 1 (continued).

<table>
<thead>
<tr>
<th>Sample 1</th>
<th></th>
<th>Sample 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Religious Service Attendance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than once per week</td>
<td>29</td>
<td>9.1</td>
<td>25</td>
</tr>
<tr>
<td>About once per week</td>
<td>63</td>
<td>19.7</td>
<td>66</td>
</tr>
<tr>
<td>About once per month</td>
<td>55</td>
<td>17.2</td>
<td>47</td>
</tr>
<tr>
<td>About once or twice yearly</td>
<td>64</td>
<td>20.1</td>
<td>65</td>
</tr>
<tr>
<td>Less than once yearly</td>
<td>37</td>
<td>11.6</td>
<td>54</td>
</tr>
<tr>
<td>Never</td>
<td>71</td>
<td>22.3</td>
<td>58</td>
</tr>
<tr>
<td>Prayer/Meditation Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than once per week</td>
<td>139</td>
<td>43.6</td>
<td>138</td>
</tr>
<tr>
<td>About once per week</td>
<td>50</td>
<td>15.7</td>
<td>40</td>
</tr>
<tr>
<td>About once per month</td>
<td>41</td>
<td>12.9</td>
<td>41</td>
</tr>
<tr>
<td>About once or twice yearly</td>
<td>21</td>
<td>6.6</td>
<td>21</td>
</tr>
<tr>
<td>Less than once yearly</td>
<td>19</td>
<td>6.0</td>
<td>31</td>
</tr>
<tr>
<td>Never</td>
<td>49</td>
<td>15.4</td>
<td>44</td>
</tr>
<tr>
<td>Importance of spirituality/religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Important</td>
<td>131</td>
<td>41.1</td>
<td>116</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>101</td>
<td>31.7</td>
<td>96</td>
</tr>
<tr>
<td>Neither important or unimportant</td>
<td>29</td>
<td>9.1</td>
<td>30</td>
</tr>
<tr>
<td>Somewhat unimportant</td>
<td>18</td>
<td>5.6</td>
<td>27</td>
</tr>
<tr>
<td>Not at all important</td>
<td>40</td>
<td>12.5</td>
<td>46</td>
</tr>
</tbody>
</table>
Table 2

*Exploratory Factor Analysis Factor Matrix*

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.260</td>
<td>-.255</td>
<td>.268</td>
<td>-.075</td>
</tr>
<tr>
<td>2</td>
<td>.317</td>
<td>-.053</td>
<td>-.156</td>
<td>.125</td>
</tr>
<tr>
<td>3</td>
<td>.195</td>
<td>.516</td>
<td>-.109</td>
<td>.127</td>
</tr>
<tr>
<td>4</td>
<td>.507</td>
<td>.060</td>
<td>-.152</td>
<td>.088</td>
</tr>
<tr>
<td>5</td>
<td>.539</td>
<td>-.018</td>
<td>-.013</td>
<td>.348</td>
</tr>
<tr>
<td>6</td>
<td>.611</td>
<td>-.001</td>
<td>-.088</td>
<td>.354</td>
</tr>
<tr>
<td>7</td>
<td>.029</td>
<td>.423</td>
<td>.157</td>
<td>-.065</td>
</tr>
<tr>
<td>8</td>
<td>.509</td>
<td>-.297</td>
<td>.100</td>
<td>-.003</td>
</tr>
<tr>
<td>9</td>
<td>.016</td>
<td>.469</td>
<td>.144</td>
<td>.087</td>
</tr>
<tr>
<td>10</td>
<td>.591</td>
<td>-.147</td>
<td>.069</td>
<td>-.231</td>
</tr>
<tr>
<td>11</td>
<td>.138</td>
<td>.131</td>
<td>.572</td>
<td>-.205</td>
</tr>
<tr>
<td>12</td>
<td>.528</td>
<td>-.183</td>
<td>.094</td>
<td>-.065</td>
</tr>
<tr>
<td>13</td>
<td>.640</td>
<td>-.010</td>
<td>.079</td>
<td>-.397</td>
</tr>
<tr>
<td>14</td>
<td>.615</td>
<td>.007</td>
<td>-.145</td>
<td>.228</td>
</tr>
<tr>
<td>15</td>
<td>.611</td>
<td>.090</td>
<td>-.158</td>
<td>-.130</td>
</tr>
<tr>
<td>16</td>
<td>.600</td>
<td>.027</td>
<td>-.052</td>
<td>-.393</td>
</tr>
<tr>
<td>17</td>
<td>.523</td>
<td>.055</td>
<td>-.333</td>
<td>-.188</td>
</tr>
<tr>
<td>18</td>
<td>.709</td>
<td>-.001</td>
<td>-.010</td>
<td>-.364</td>
</tr>
<tr>
<td>19</td>
<td>-.160</td>
<td>.388</td>
<td>.196</td>
<td>-.063</td>
</tr>
<tr>
<td>20</td>
<td>.089</td>
<td>.390</td>
<td>.402</td>
<td>-.151</td>
</tr>
<tr>
<td>21</td>
<td>.547</td>
<td>.177</td>
<td>-.251</td>
<td>.045</td>
</tr>
<tr>
<td>22</td>
<td>.606</td>
<td>.074</td>
<td>-.137</td>
<td>.287</td>
</tr>
<tr>
<td>23</td>
<td>.665</td>
<td>.022</td>
<td>.046</td>
<td>-.175</td>
</tr>
<tr>
<td>24</td>
<td>.560</td>
<td>-.043</td>
<td>-.120</td>
<td>.052</td>
</tr>
<tr>
<td>25</td>
<td>.053</td>
<td>.519</td>
<td>.198</td>
<td>.044</td>
</tr>
<tr>
<td>26</td>
<td>.102</td>
<td>.712</td>
<td>.000</td>
<td>.149</td>
</tr>
<tr>
<td>27</td>
<td>.141</td>
<td>.514</td>
<td>.245</td>
<td>-.086</td>
</tr>
<tr>
<td>28</td>
<td>.359</td>
<td>.019</td>
<td>-.102</td>
<td>-.099</td>
</tr>
<tr>
<td>29</td>
<td>.237</td>
<td>-.254</td>
<td>.079</td>
<td>.180</td>
</tr>
<tr>
<td>30</td>
<td>.614</td>
<td>-.028</td>
<td>.005</td>
<td>.265</td>
</tr>
<tr>
<td>31</td>
<td>.551</td>
<td>.151</td>
<td>-.131</td>
<td>-.094</td>
</tr>
<tr>
<td>32</td>
<td>.419</td>
<td>.153</td>
<td>-.321</td>
<td>-.021</td>
</tr>
<tr>
<td>33</td>
<td>-.130</td>
<td>.207</td>
<td>.498</td>
<td>-.097</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 2 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 34&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.234</td>
<td>-.569</td>
<td>.300</td>
<td>.135</td>
</tr>
<tr>
<td>Item 35&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.280</td>
<td>-.262</td>
<td>-.036</td>
<td>.234</td>
</tr>
<tr>
<td>Item 36&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.345</td>
<td>-.424</td>
<td>.160</td>
<td>.191</td>
</tr>
<tr>
<td>Item 37&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.235</td>
<td>.324</td>
<td>-.461</td>
<td>-.291</td>
</tr>
<tr>
<td>Item 38</td>
<td>.331</td>
<td>.561</td>
<td>.163</td>
<td>.258</td>
</tr>
<tr>
<td>Item 39</td>
<td>.314</td>
<td>.652</td>
<td>.051</td>
<td>.242</td>
</tr>
<tr>
<td>Item 40&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.197</td>
<td>-.537</td>
<td>.130</td>
<td>-.060</td>
</tr>
<tr>
<td>Item 41&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.305</td>
<td>-.289</td>
<td>.323</td>
<td>-.061</td>
</tr>
<tr>
<td>Item 42&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.466</td>
<td>-.235</td>
<td>.440</td>
<td>.046</td>
</tr>
<tr>
<td>Item 43&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.244</td>
<td>.087</td>
<td>-.509</td>
<td>.130</td>
</tr>
<tr>
<td>Item 44</td>
<td>.267</td>
<td>.308</td>
<td>.392</td>
<td>-.119</td>
</tr>
<tr>
<td>Item 45&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.531</td>
<td>-.133</td>
<td>.105</td>
<td>-.366</td>
</tr>
<tr>
<td>Item 46</td>
<td>.207</td>
<td>.387</td>
<td>.398</td>
<td>.091</td>
</tr>
<tr>
<td>Item 47&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.605</td>
<td>-.178</td>
<td>.300</td>
<td>.204</td>
</tr>
<tr>
<td>Item 48&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.140</td>
<td>.184</td>
<td>-.675</td>
<td>-.163</td>
</tr>
<tr>
<td>Item 49&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.376</td>
<td>-.410</td>
<td>.187</td>
<td>.180</td>
</tr>
<tr>
<td>Item 50</td>
<td>.273</td>
<td>.546</td>
<td>.258</td>
<td>.069</td>
</tr>
</tbody>
</table>

<sup>a</sup>Reverse-scored item

Table 3

Means and SD of MRSF Items and Total Score

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>315</td>
<td>6.03</td>
<td>1.36</td>
</tr>
<tr>
<td>Item 2</td>
<td>315</td>
<td>5.47</td>
<td>1.60</td>
</tr>
<tr>
<td>Item 3</td>
<td>315</td>
<td>5.80</td>
<td>1.36</td>
</tr>
<tr>
<td>Item 4</td>
<td>315</td>
<td>5.97</td>
<td>1.34</td>
</tr>
<tr>
<td>Item 5</td>
<td>315</td>
<td>5.82</td>
<td>1.37</td>
</tr>
<tr>
<td>Item 6</td>
<td>315</td>
<td>5.27</td>
<td>1.57</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
<td>34.36</td>
<td>5.77</td>
</tr>
</tbody>
</table>
Table 4

*Correlations (Pearson’s r) Between MRSF and Other Measures*

<table>
<thead>
<tr>
<th></th>
<th>MRSF</th>
<th>AAQ-</th>
<th>MAAS</th>
<th>WBSI</th>
<th>VLQ</th>
<th>SWLS</th>
<th>Quest</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRSF</td>
<td>-</td>
<td>-0.31**</td>
<td>0.16**</td>
<td>0.17**</td>
<td>-0.05</td>
<td>0.12*</td>
<td>-0.01</td>
</tr>
<tr>
<td>AAQ-II</td>
<td>-</td>
<td>-0.42**</td>
<td>-0.59**</td>
<td>-0.09</td>
<td>-0.46**</td>
<td>0.17**</td>
<td></td>
</tr>
<tr>
<td>MAAS</td>
<td>-</td>
<td>0.33**</td>
<td>0.15**</td>
<td>0.33**</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBSI</td>
<td>-</td>
<td>0.16**</td>
<td>0.37**</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VLQ</td>
<td>-</td>
<td>0.14*</td>
<td>-0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWLS</td>
<td>-</td>
<td>-</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quest</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < 0.01 level  
*p < 0.05 level

Table 5

*Correlations (Spearman’s Rho) between MRSF and DASS subscales*

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Anxiety</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>All participants</td>
<td>315</td>
<td>-0.19**</td>
<td>-0.20**</td>
</tr>
</tbody>
</table>

**p < 0.01 level  
*p < 0.05 level
Table 6

_Correlations (Pearson's r) Between MRSF and Other Measures_

<table>
<thead>
<tr>
<th></th>
<th>MRSF</th>
<th>DSES</th>
<th>RCI</th>
<th>ROS</th>
<th>SWBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRSF</td>
<td>-</td>
<td>.01</td>
<td>-.13*</td>
<td>-.03</td>
<td>.17**</td>
</tr>
<tr>
<td>DSES</td>
<td>-</td>
<td></td>
<td>-.73**</td>
<td>-.58**</td>
<td>-.74**</td>
</tr>
<tr>
<td>RCI</td>
<td></td>
<td></td>
<td></td>
<td>.67**</td>
<td>.60**</td>
</tr>
<tr>
<td>ROS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.48**</td>
</tr>
<tr>
<td>SWBS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < 0.01 level
* p < 0.05 level
APPENDIX A

DEMOGRAPHICS FORM
Demographics Form

Major: _______________________________________________________________

Classification (Freshman, Sophomore, Junior, Senior)

Sex:

☐ Male
☐ Female
☐ Other

Last 4 digits of your phone number: __________

Ethnic/racial background:

☐ Asian/Pacific Islander
☐ Black/African American
☐ Hispanic/Latino
☐ Middle Eastern/Arab
☐ Native American
☐ White/Caucasian
☐ Biracial, please specify _________________
☐ Other, please specify _________________

Is English your first language? (1)  ☐ Yes  (2) ☐ No (please specify) ________________

Current Marital Status:

☐ Single
☐ Cohabiting
☐ Married
☐ Divorced
☐ Widowed

Your approximate yearly income:

☐ <20,000
☐ 20,000-50,000
☐ 50,000-100,000
☐ >100,000

Does someone other than you provide most (more than 50%) of your income?

☐ Yes
☐ No

If yes, what is their approximate yearly income?

☐ <20,000
☐ 20,000-50,000
Parent/caregiver’s highest degree earned or highest grade in school completed:
(1) □ 8th grade (2) □ 9th grade (3) □ 10th grade (4) □ 11th grade
(5) □ 12th grade (H.S. diploma or GED) (6) □ technical/trade school diploma (7) □ community college degree (8) □ un
(9) □ advanced degree, specify ____________________________ (10) □ other, please specify ____________________________

Additional parent/caregiver’s highest degree earned or highest grade in school completed:
(1) □ 8th grade (2) □ 9th grade (3) □ 10th grade (4) □ 11th grade
(5) □ 12th grade (H.S. diploma or GED) (6) □ technical/trade school diploma (7) □ community college degree (8) □ un
(9) □ advanced degree, specify ____________________________ (10) □ other, please specify ____________________________
(11) □ no additional parent/caregiver

Have you ever attended mental health counseling/therapy?
□ Yes □ No
If yes, please indicate the type of counselor you saw:
 o educational/guidance counselor
 o social worker
 o couples/marriage counselor
 o clergy member
 o licensed professional counselor
 o psychologist
 o psychiatrist
 o other (please specify____________________)

If yes, for how long did you attend counseling:
 o 1-3 sessions or <1 month
 o 4-12 sessions or 1-3 months
 o 3-6 months
 o 6 months-1 year
 o 1-2 years
 o 2 years or more
Which category best describes your religious/spiritual preference?

Agnostic (1)
Positive Atheism (2)
Negative Atheism (3)
Buddhism (4) Specify
Christianity (5) Specify
Hinduism (6) Specify
Islam (7) Specify
Judaism (8) Specify
Other (9) Specify
None (10)

How often do you attend religious services?

More than once per week (1)
About once per week (2)
About once per month (3)
About once or twice per year (4)
Seldom (less than once per year) (5)
Never (6)

How often do you pray or meditate?

More than once per week (1)
About once per week (2)
About once per month (3)
About once or twice per year (4)
Seldom (less than once per year) (5)
Never (6)

How important is religion and/or spirituality in your life?

Very important (1)
Somewhat important (2)
Neither important or unimportant (3)
Somewhat unimportant (4)
Not at all important (5)
APPENDIX B

MEASURE OF RELIGIOUS AND SPIRITUAL FLEXIBILITY – INITIAL 53-ITEM POOL

(SCHMALZ, 2012)
Measure of Religious and Spiritual Flexibility – Initial 53-Item Pool

We are interested in how you relate to your beliefs and ideas related to religion and spirituality. Whether you identify as religious, spiritual, both, or neither, we believe these items can apply to you in some way. Please indicate to what extent you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Neither agree or disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. When I feel uncertain about my beliefs, it becomes difficult to listen to others talk about religion or spirituality.
2. When I feel others disrespect my beliefs, it makes it difficult for me to concentrate.
3. It is okay to sometimes think that my understanding about religion is incorrect.
4. It is bad when I have experiences that are counter to my religious/spiritual understanding.
5. I would lead a better life if everyone else had my religious/spiritual understanding.
6. The world would be better if we all just believed the same.
7. Whenever I doubt my beliefs about religion or spirituality, I see it as an opportunity to grow.
8. My religious/spiritual understanding creates conflict among the roles I play in my life.
9. It is okay if I sometimes find my religious, spiritual, or non-theistic understanding conflicting with what I want to believe.
10. My perspective of religion/spirituality limits the number of things I can find meaningful.
11. The way I see religion and spirituality makes it easier for me to care about several things at once.
12. I often find that my view of religious, spiritual, or non-theistic beliefs makes it difficult to be in relationships with others.
13. My understanding of religion and spirituality limits my day-to-day life.
14. When I read things that are counter to my beliefs I typically become angry.
15. I often find that my religious, spiritual, or non-theistic understanding is the only thing I feel good about.
16. Sometimes my religious/spiritual/non-theistic beliefs require that I do things I otherwise do not value.
17. Until I have perfect understanding about religion and spirituality, I cannot be fulfilled.
18. Conflicts between day-to-day events and my religious and spiritual understanding mess up my life.
19. Religion and spirituality are complex experiences.
20. Religion and spirituality always lead to bad outcomes.
21. If my religious and spiritual understanding is in conflict with what I want to believe, I can still be a good friend.
22. I can’t stand when I question my beliefs.
23. I can’t stand when others question my beliefs.
24. I cannot be a good friend if I am feeling conflicted about my perspective of faith.
25. It is important that others think I have my religious and spiritual beliefs or non-beliefs all figured out.
26. When I read things that are counter to my beliefs I typically become curious.
27. My understanding of religion and spirituality is open to revision.
28. I can still do many things I care about, even if others who share my religious, spiritual, or non-theistic perspective disapprove of what I am doing.
29. I typically ignore inconsistencies in my religious, spiritual, or non-theistic beliefs.
30. Science and religion are at odds with each other.
31. I would rather that religion and spirituality disappeared.
32. If someone told me that God could be both bad and good, I would have a hard time talking to them again.
33. If I say I believe something, I will always believe it.
34. When I think about or talk about religion or spirituality, I feel connected to the world around me at that moment.
35. The inconsistent actions of others who hold religious or spiritual beliefs drive me away from believing in a higher power.
36. Everything about my religious, spiritual, or non-theistic beliefs should always make sense.
37. Beliefs about the sacred are legitimate insofar as they are logical.
38. Religion is always good.
39. I am comfortable with experiences that disconfirm my religious/spiritual understanding.
40. I am comfortable questioning my view of spiritual matters.
41. Despite private experiences that tell me what I believe is right, I need logical and substantive proof of their accuracy.
42. I avoid conversations about religion and spirituality.
43. I can’t stand listening to people talk about their faith.
44. I am my perspective on religion and spirituality.
45. I can have strong beliefs about religion and spirituality and still relate well with people who have different or opposing beliefs.
46. I often find that my perspective on religion and spirituality leads me to do things that do not feel consistent with the kind of person I want to be.
47. I enjoy discussing differences in opinion on religion and spirituality.
48. People should keep their opinions and beliefs regarding religion and spirituality to themselves.
49. Religion and spirituality always lead to good outcomes.
50. I attempt to educate myself about various faith and philosophical systems.
51. I attempt to learn about other faith and philosophical systems so that I know their flaws.
52. I attempt to learn about other faith and philosophical systems with an open mind.
53. If I am honest, I believe what I believe about religion and spirituality because it makes me different from other people.
APPENDIX C

MEASURE OF RELIGIOUS AND SPIRITUAL FLEXIBILITY – 50-ITEM POOL

(SCHMALZ, 2012)
We are interested in how you relate to your beliefs and ideas related to religion and spirituality. Whether you identify as religious, spiritual, both, or neither, we believe these items can apply to you in some way. For the purpose of this measure, your “views” refer to your perspective of, feelings about, and understanding of religion and spirituality. Please indicate to what extent you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Neither agree or disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I don’t like hearing others talk about religion and spirituality when I am feeling uncertain of my views.

2. When others disrespect my beliefs it is hard to concentrate.

3. It is okay to sometimes think that my views are incorrect.

4. I can’t stand having experiences that contradict my views.

5. I would make my life better if everyone else shared my views.

6. I’d be better if we all had the same views.

7. I see doubts about my views as an opportunity to grow.

8. My views create conflict among the roles I play in my life.

9. It is okay if I sometimes find my views conflict with what I want to believe.

10. My views limit what I can find meaningful.

11. My views help me to care about several things at once.

12. I often find that my views make it difficult to be in relationships with others.

13. My views limit my day-to-day life.

14. I become angry when I read things that are counter to my views.

15. My views are the only thing I feel good about.

16. My views require that I do things I do not otherwise value.
17. I cannot be fulfilled until I have perfect understanding about religion and spirituality.
18. Conflicts between day-to-day events and my views mess up my life.
19. My experiences with my views are complex.
20. If my views are in conflict with what I feel is right, I can still be a good friend.
21. I can’t stand it when I question my views.
22. I can’t stand it when others question my beliefs.
23. I cannot be a good friend when I am feeling conflicted about my views.
24. It is important that others think I have my views all figured out.
25. I typically become curious when I read things that are counter to my views.
26. My views are open to revision.
27. I still do things I care about, even when others who share my views disapprove of what I am doing.
28. I ignore inconsistencies in my views.
29. Science and religion are at odds with each other.
30. My life would be better if differing views just disappeared.
31. If someone I cared about told me that God could be both bad and good, I would have a hard time talking to them again.
32. If I say I believe something, I will always believe it.
33. When I think about or talk about my views, I feel more connected to the world around me at that moment.
34. The inconsistent actions of others who hold religious or spiritual beliefs drive me away from believing in a higher power.
35. My views should always make sense.
36. Religious and spiritual views are legitimate only if they are logical.

37. Religion and spirituality are always good.

38. I am comfortable with experiences that make me question my views.

39. I am comfortable questioning my views.

40. Despite personal experiences that tell me my views are right, I need proof of their accuracy.

41. I avoid conversations about religion and spirituality.

42. I can’t stand listening to people talk about their views.

43. My views define me.

44. I can have strong views about religion and spirituality and still get along well with people who have different or opposing views.

45. I often find that my views lead me to do things that do not match who I want to be.

46. I enjoy discussing differences in opinion on religion and spirituality.

47. Other’s opinions about religion and spirituality annoy me.

48. I know religion and spirituality lead to good outcomes.

49. I look for the flaws in the views of others.

50. I attempt to learn about other faith and philosophical systems with an open mind.
APPENDIX D

MEASURE OF RELIGIOUS AND SPIRITUAL FLEXIBILITY (MRSF; SCHMALZ, 2014)
We are interested in how you relate to your beliefs and ideas related to religion and spirituality. Whether you identify as religious, spiritual, both, or neither, we believe these items can apply to you in some way. For the purpose of this measure, your “views” refer to your perspective of, feelings about, and understanding of religion and spirituality. Please indicate to what extent you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Neither agree or disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1. My views limit my day-to-day life.
2. I become angry when I read things that are counter to my views.
3. My views are the only thing I feel good about.
4. Conflicts between day-to-day events and my views mess up my life.
5. I cannot be a good friend when I am feeling conflicted about my views.
6. Other’s opinions about religion and spirituality annoy me.
APPENDIX E

DECISION MAKING WORKSHEET
Item One
My religious or spiritual beliefs indicate that marriage between members of the same sex is inappropriate or sinful. T/F

If True,
Family relationships are important to me: T/F

If True,
Imagine that someone close to you in your family (mother, father, brother, sister, aunt, uncle, cousin, etc.) shared with you that they have been dating a member of the same-sex for the past year. This family member tells you that they intend to go to New York (where same-sex marriage is legal) and get married. This family member tells you that it is very important to him/her that you are in attendance. Assuming that money and time are not obstacles, will you attend the wedding?
Yes/No

Have your feelings about this person changed?
No
Yes – For the better
Yes – For the worse

Item Two
I do not believe in G-d or any gods: T/F

If True,
I do not consider myself spiritual: T/F

If True or False,
Family relationships are important to me: T/F

If True,
Imagine that someone close to you in your family (mother, father, brother, sister, aunt, uncle, etc.) has decided to get marry. Whether or not it is the case in real life, imagine that this person is very religious and that they have decided to have a religious ceremony. This family member tells you that it is very important to him/her that you take part in the wedding by reading a passage from his/her holy text (e.g., the Bible, Koran, etc.) and lead the wedding party in a scripted prayer. Assuming money and time are not obstacles, will you attend the wedding?
Yes/No

Will you read the holy text?
Yes/No
Will you lead the wedding party in prayer?
Yes/No

**Item 3**
My religious or spiritual beliefs indicate that the termination of a pregnancy for reasons other than the welfare of the mother or child is inappropriate or sinful. T/F

*If True,*
Family relationships are important to me: T/F

*If True,*
Imagine that someone close to you in your family (mother, sister, aunt, cousin, etc.) shared with you that she recently had an abortion because she became pregnant, but did not want to keep the child. If she is upset, will you comfort her?
Yes/No

Will this negatively impact your relationship with her?
Yes/No

Will you be able to remain as close to her as you were before she shared this information with you?
Yes/No

Will you, in that moment, share with her your beliefs about abortion?
Yes/No

Will you at any time, lecture her about your beliefs on abortion?
Definitely will not
Probably will not
Don’t know
Probably will
Definitely will

**Item 4**
I do not believe in G-d or any gods: T/F

*If True,*
I do not consider myself spiritual: T/F
If True or False,
Family relationships are important to me: T/F

If True,
I feel that the termination of a pregnancy for reasons other than the welfare of the mother or child is inappropriate or unethical T/F

If True or False,
Imagine that someone close to you in your family (mother, sister, aunt, cousin, etc.) shared with you that she recently became angered and ended her relationship with a friend or family member who had an abortion because she became pregnant, but did not want to keep the child. If your family member is upset, will you comfort her?
Yes/No

Will this negatively impact your relationship with her?
Yes/No

Will you be able to remain as close to her as you were before she shared this information with you?
Yes/No

Will you, in that moment, share with her your beliefs about abortion?
Yes/No

Will you at any time, lecture her about your beliefs on abortion?
Definitely will not
Probably will not
Don’t know
Probably will
Definitely will
REFERENCES


doi:10.1207/s15327582ijpr0202_5


doi:10.1207/s15327582ijpr1401_4

doi:10.1002/jclp.20049

doi:10.1080/00224545.1957.9921938


*Personality Assessment, 49*(1), 71-75.


properties of the Avoidance and Fusion Questionnaire for Youth in two adult samples.

*Psychological Assessment, 24*(2), 402-408. doi:10.1037/a0025776.


avoidance among inner-city substance users: The role of emotional nonacceptance. 

*Behavior Therapy, 38*(3), 256-268.


doi:10.1177/0022146509050000206


doi:10.1111/1468-5906.00160


research methods in personality psychology (pp. 461-494). New York, NY: Cambridge University Press.


doi:10.1207/S15327965PLI1303_02


Retrieved September 1, 2012, from

http://reformjudaismmag.org/Articles/index.cfm?id=3036


Wilson, K.G. & Groom, J. (2002). The Valued Living Questionnaire. Available from K. G. Wilson at the Department of Psychology, University of Mississippi, Oxford, MS.


