DO RELIGIOSITY AND SPIRITUALITY HELP COUPLES FACE STRESS: THE LONGITUDINAL IMPACT OF LIFE STRESS ON AFRICAN AMERICAN HUSBANDS AND WIVES

by

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(Under the Direction of Steven R.H. Beach)

ABSTRACT

Previous research suggests that life stress is linked to the occurrence of depressive symptoms. Furthermore, depressive symptoms have been linked to changes in marital satisfaction among married couples. For African Americans, engaging in religious and spiritual activities is often utilized as a coping mechanism when faced with various types of life stressors. Therefore, the current study examined the potential buffering effects of religiosity and spirituality for couples facing life stress. Path analysis was implemented to explore the longitudinal predictive relationships and cross-spouse effects among negative life events, religiosity and spirituality, depressive symptomatology, and marital satisfaction among a sample of 358 African American married couples. Results revealed significant longitudinal within-spouse and cross-spouse relationships between marital satisfaction, depressive symptoms, and life stress. Results also indicated that husbands' own religious participation at Time 1 inversely predicted depressive symptoms 12 months later. Furthermore, husbands' own religious participation at Time 1 positively

predicted husbands' marital satisfaction 12 months later, while wives' religious participation at Time 1 inversely predicted husbands' marital satisfaction 12 months later. These findings support previous studies that highlight the importance of cross-spouse effects between depressive symptomatology and marital satisfaction. Furthermore, these findings highlight important gender differences related to the impact of religious and spiritual activity, while indicating potential protective factors of religious participation for married African American men.

INDEX WORDS: African Americans, Religiosity, Spirituality, Negative life events, Marital satisfaction, Depression

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DEDICATION

I dedicate this work to my loving family and friends who have supported me in so many ways. I would like to especially acknowledge my mother, Pamela Franklin, for instilling in me the value of education and for showing me a living example of strength and hard work. I will always cherish the sacrifices, seen and unseen, that she has made for me to follow my dreams. I would like to thank my remaining family members, each one special but too numerous to name, for cheering me along the way. I also dedicate this work to my husband, Antwawn Sheats, for his unwavering love and partnership, and to my daughter who is a constant reminder that God is sovereign. I am so grateful to have finished this part of my race with both of you and I look forward to our lives together. Finally, I would like to thank God for His many blessings and abundance of mercy and grace throughout my life and along this journey. I dedicate my future work as a psychologist to fulfilling His perfect will for my life and career.

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CHAPTER 1

INTRODUCTION

Affiliation, love, and attachment are fundamental human needs (see Baumeister & Leary, 1995 for a review) and pursuing healthy romantic relationships and marriages is one of the means by which people seek to fulfill these needs. Research suggests several benefits of marriages for children and adults. For example, children in two-parent families often experience better outcomes than children in single-parent families, as children in single-parent and cohabitating families have an increased risk for living in poverty and exhibiting behavioral problems (Acs & Nelson, 2002). Married adults have been found to have better physical and psychological health, and longer life expectancies than single adults (Lillard & Waite, 1995). Mental health benefits associated with marriage include lower rates of depression, substance abuse, and alcoholism (Frech & Williams, 2007). Marital status has been linked to physical health outcomes in that spouses' tend to promote healthy behaviors, discourage unhealthy and risky behaviors, and serve as a social support outlet when their partners are dealing with illness (Rook & Zettel, 2005).

Despite the benefits of marriage, 21% of men and 23% of women over the age of twenty-five have been divorced at least once according to 2001 U.S. Bureau of Census data. These divorce rates, although steadily declining (Cherlin, 1999), have been attributed, in part, to a variety of societal changes and interpersonal stressors that couples may face. Among these factors are increased individualistic and materialistic societal

values (Chambers & Lebow, 2008), a shift in values and beliefs about marriage and divorce (Pinderhughes, 2002), and problems such as communication difficulties, domestic violence, sexual dysfunction, extra-marital affairs, substance abuse, and depression (Chambers & Lebow, 2008). Another line of research has addressed the impact of external negative life events and stressors upon marriages (e.g., Christian-Herman, O'Leary, & Avery-Leaf, 2001; Cohan & Bradbury, 1997). This research has asserted that negative life events may contribute to poorer communication between partners and lower levels of marital satisfaction (Cohan & Bradbury, 1997), which may subsequently contribute to increased probability of divorce. For African American couples, the decline in the number of marriages and the rise in divorce rates have been especially salient over the past three decades (Tucker & Mitchell-Kernan, 1998). One important function of marriage is to buffer the effects of life stress. However, the decline in the stability of marriage may increase the importance of other methods of dealing with stress.

For African Americans, religiosity and spirituality have emerged as particularly salient factors that contribute to coping with life stress. However, previous literature has generally addressed the impact of religiosity and spirituality for individuals, leaving a void in the literature regarding the impact of religiosity and spirituality for African American couples dealing with life stress. The purpose of this study is to address this void by exploring the longitudinal impact of life stress on African American husbands and wives. Specifically, this study will explore the ways in which religious and spiritual factors impact mental health and marital quality for couples dealing with negative life events.

Contextual Factors in African American Marriages

Previous research has supported the idea that African American marriages encompass unique challenges and sources of resiliency when compared to marriages among other racial and ethnic groups in the United States (Marks, Nesteruk, Hopkins-Williams, Swanson, & Davis, 2006). Quantitatively, it is clear that trends in African American marriages are different from marriages among other groups. Rates of marriage among African Americans have been steadily declining since the 1960's. For example, in 1960, 78% of African American households included a married couple (Pinderhughes, 2002). By year 2004, only 34% of African Americans were married compared to 57% of White Americans (U.S. Census Bureau American Community Survey Report). Not only do African Americans have lower rates of marriage in general, they tend to have higher rates of marital instability as indicated by higher divorce rates. Although half of all marriages in the U.S. end in divorce, the rates of separation and divorce among African Americans is double the rate of the general population (LaTaillade, 2006).

In exploring quantitative differences, researchers have examined the unique qualitative attributes of African American marriages that contribute to marital attrition and longevity. Declines in marriage and increases in marital instability among African Americans have been linked to various societal and cultural influences. Influences such as increased lifespan, changes in gender roles, and a shift in beliefs and values about marriage and divorce have been cited as contributing to divorce rates for many couples in the United States (Pinderhughes, 2002). However, above and beyond these factors, African American couples are disproportionately exposed to circumstances such as economic instability, unemployment, exposure to poverty and violence, and experiences

of racism and discrimination (LaTaillade, 2006). These contextual stressors, in turn, put African American couples at increased risk for vulnerability to other stressors internal and external to the marriage, and further contribute to increased marital distress and a decline in marital quality (Bradbury & Karney, 2004).

Life Stress in Marriage

According to Karney and Bradbury's (1995) vulnerability-stress-adaptation (VSA) model of marital development, marital quality is function of stable characteristics that each partner brings to the marriage (e.g., personality traits, education level), normative and nonnormative stressful events that the couple encounters, and adaptive processes such as communication and conflict resolution skills (Cohan & Bradbury, 1997). One of these domains, stressful events, has been given much attention in research literature on marital functioning. Events related to various stressors such as experiencing natural disasters (Moore & Moore, 1996), death of a family member (Hoekstra-Weebers, Jaspers, Kamps, & Klip, 1998), chronic illness (Gritz, Wellisch, Siau, and Wang, 1990), and economic stress (Conger, Rueter, & Elder, 1999) have been explored in the context of couples' coping and adaptation (Bradbury, Fincham, & Beach, 2000). Longitudinal examinations of life stress in marriage have found that the presence of stress predicts lower marital stability and less marital satisfaction over time (Karney & Bradbury, 1995b). Negative life events and stressors have been linked directly to increased marital distress (Whiffen & Gotlib, 1998) and indirectly to marital distress due to the impact of these events upon interpersonal conflict (Lavee, McCubbin, & Olson, 1987) and communication between spouses (Krokoff, Gottman, & Roy, 1988). For example, the occurrence of negative life events has been associated with poorer communication which

could result in diminished implementation of problem-solving skills and cognitive processing efforts. Deficits in communication could, in turn, lead to increased expression of anger and hostility, resulting in decreased marital satisfaction (Cohan & Bradbury, 1997).

For African American couples, it is especially important to examine the impact of stressful events that they encounter given their disproportionate exposure to stressful events and contexts. A prominent stressor in the lives of many African American couples involves disparities in economic resources. Compared to White Americans, African Americans are overrepresented in lower socioeconomic categories (Kposowa, 1998). Furthermore, research has shown that African Americans in the middle class may experience more economic pressure in the form of community disadvantage than do White Americans in the middle class. The median household income for neighborhoods where the average middle class African American resides is $35,306 whereas the median household income for middle class White Americans is $51, 459 (Chambers & Lebow, 2008). Likewise, middle class African Americans may be more likely to experience indirect economic pressure in the form of needy relatives. For example, middle-class African Americans are more than twice as likely to have a poor sibling as middle class White Americans. Therefore, African American couples are more likely to be called upon to share financial resources with extended family members (Chambers & Lebow, 2008). It has been suggested that these economic strains may generate conflict and an increase in dissatisfaction within couples (Kposowa, 1998). In a longitudinal study on couple resilience to economic pressure, Conger and colleagues (1999) found that economic pressure at Time 1 predicted individual distress and marital conflict three years later.

These findings may be especially relevant for African American couples due to increased exposure to economic stressors. Additionally, African Americans in lower socio-economic strata may be more vulnerable to the external stressors of living in low-cost, high-risk neighborhoods (Marks et al., 2005).

Another stressor that is often present in the lives of many African American couples is exposure to experiences of racism and discrimination. Racism has been described as "a perennially piercing needle and thread in African American life" (Marks et al., 2005, p. 211) that creates a unique context for those who experience it. In a qualitative study of stressors in African American marriages, Marks and colleagues (2006) found that racism and discrimination are commonly found within the context workplace stressors, difficulty obtaining employment, and frustration with inadequate inner-city schools. When spouses experience racism and discrimination, they may displace their anger and frustration onto their partner which may increase marital conflict (LaTaillade, 2006). For example, experiences of discrimination among African American couples has been negatively correlated with the use of constructive communication and positively correlated with the presence of verbal and physical aggression within the relationship (LaTaillade, 2006). Furthermore, previous research has found an association between African American couples' internalization of racial stereotypes and marital distress and conflict (Taylor & Zhang, 1990; Kelly & Floyd, 2006).

Previous literature has highlighted the unique impact that systemic racism has upon African American males which, subsequently, impacts couples. For example, it has been suggested that racism can serve as a barrier to African American males' obtainment of educational, occupational, and economic advancement (LaTaillade, 2006). Despite

these disadvantages, African American men are still expected to fulfill traditional gender roles. The discrepancy between these expectations and their ability to fulfill them due to social and economic disparities may serve as a source of distress for African American men. The potential sense of powerlessness outside of the home may lead to increased rates of engagement in maladaptive behaviors within the relationship such as demand-withdrawal interaction patterns, infidelity, or avoidance (LaTaillade, 2006).

A third common stressor for African American couples includes commitments to extended family and community networks. Although the flexibility of the African American family structure has been noted as a source of strength and resilience (Chambers & Lebow, 2008), it also presents a level of responsibility and felt obligation to those outside the nuclear family that can serve as a stressor for the marital relationship (Marks, Hopkins, Chaney, Monroe, Nesteruk, & Sasser, 2008). These responsibilities often include providing structural, financial, and emotional support to aging parents, children of extended family members, and other friends and family members in need (Marks et al., 2006). The conflict between providing for one's nuclear family and extending help to others has been summarized in the saying that, in many African American families, "no one starves," yet "no one gets ahead" (Marks et al., 2006, p. 222). Another issue that is often salient for African American couples with large kinship networks relates to concerns about boundaries and privacy. It has been suggested that conflict with regard to sharing personal information with friends and family members can hinder the formation of solidarity and unity within the couple, hence contributing to marital dissatisfaction (Chambers & Lebow, 2008). Yet another stressor related to having large extended family networks is increased exposure to grief and loss. As the number of

close emotional ties increases, the number of losses increases as well. These experiences are especially relevant for African American couples given the tendency to have large kinship networks coupled with increased exposure to loss through incarceration, illness, and violence (Marks et al., 2006).

Life Stress and Depression

In addition to associations with marital quality and adjustment, life stressors have also been noted as a catalyst for depressive symptoms (Hammen, 2005). This relationship is particularly strong in the context of events that are perceived as severe (Kessler, 1997), and events that are undesirable, uncontrollable, and unpredictable (Jackson & Finney, 2002). According to Abramson and colleagues' (1989) model of hopelessness depression, the perceived occurrence of negative life events serves as vulnerability a factor that may increase an individual's risk for depression. The inferred causal attributions for the event, perceived consequences of the event, and perceptions about what the event means about the self contribute collectively to an individual's risk for becoming depressed when faced with life stressors. Severely stressful negative life events in the absence of social support have been shown to be especially associated with the onset of depressive episodes (Wildes, Harkness, & Simons, 2002). It is important to note that, although the majority of depressed people identify a stressful event precipitating the onset of their depression, only a small number of people exposed to negative life events become depressed (Kessler, 1997). The effects of negative life events upon individuals are related to the coping resources that are available to them (Schnittker, 2001).

There have been several variables proposed as possible mitigating factors against depressive symptoms following a major life stressor. Among these are coping style (Beasley, Thompson, & Davidson, 2003), access to social support, appraisal processes, and intellectual capabilities (Kessler, 1997).

The link between stressful events and depressive symptoms is especially important in the context of marriage because depression has been associated with marital functioning. According to a marital discord model proposed by Beach, Sandeen, & O'Leary (1990), marital stressors have been associated with an increased risk of depressive symptoms. Furthermore, the presence of either marital discord or depression within a marriage serves as a risk factor for the other (Christian-Herman, 2001).

Implications for Religiosity and Spirituality

According to Gottman (1994), it is not necessarily the exposure to life events that determines quality and longevity of a marriage, but rather the ways in which couples handle these circumstances. Similarly, the ways in which people cope with stressful life events has been linked to subsequent levels of depressive symptoms. In considering factors that may help couples cope with life stress, religiosity and spirituality may serve as culturally relevant protective factors that may help couples cope, thus helping to ameliorate the link between life stress, decreased marital satisfaction, and increased depressive symptoms.

Religion can be defined as a system of beliefs associated with a god or gods, and religiosity can be described as an individual's degree of adherence to the beliefs and practices of a religion (Mattis & Jagers, 2001). Religious involvement may contribute to positive mental health outcomes due to the higher levels of self-esteem and mastery that

have been attributed to religious activity. Religious participation has also been linked to feelings of hopefulness, peace, optimism, and a means by which to release negative emotions (Ellison, et al., 2001). It has been asserted that religious participation provides a frame of reference for moral behavior, acts as a social network, and is a factor in spiritual support (Brody et al., 1994). Possible sources of these coping methods include religious rituals, support from the religious community, and a sense of support from God or higher powers (Mahoney et al., 2001). The benefits of religious activity have also been shown to have positive implications for family life (Brody et al., 1994). Not only does participation in religious activities facilitate prosocial attitudes toward positive family interactions, it also serves as a base for similar values that increase family integration. Among married couples, 95% report having a religious affiliation, and 72% of the general population consider religious faith as the most important influence in their lives (Mahoney et al., 2001).

The prevalence of these attitudes is significant in that religious beliefs and activities may provide benefits such as emotional support when coping with various adverse situations (Brody, Stoneman, Flor, & McCrary, 1994). Coping can be described as the cognitive and behavioral efforts that are implemented in order to confront stressful person-environment relationships and the emotions that result from these relationships (Fowler & Hill, 2004). Religious coping is multidimensional and often involves the belief in a just and loving God, and the pursuit of spiritual support (Ano & Vasconcelles, 2005). Examples of religious coping include seeking a sense of connectedness with a higher power and seeking support from clergy members (Pargament et al., 1998). Positive outcomes such as mental health benefits and spiritual growth have been attributed to

religious coping (Ano & Vasconcelles, 2005). Although religiosity is different from the construct of religious coping, it is likely that religious activity facilitates religious coping.

In addition to religiosity, spirituality is also an important factor in the lives of many Americans. Conner and Eller (2004) have described spirituality as "the propensity to make meaning though interpersonal and transpersonal relationships that empower the individual" (p. 625). Global attributes of spirituality include transcendence, discovering hope and purpose in life, and an interconnectedness with the self, others, or a supreme being (Newlin, Knafl, & Melkus, 2002). Spirituality encompasses a relationship with God or a higher power that extends beyond religious participation. This relationship can be manifested through an individual's engagement in private prayer and meditation, or seeking spiritual guidance in daily decision making (Upchurch & Mueller, 2005).

Religiosity and Spirituality among African Americans

Among African Americans, religion is particularly salient. After reviewing previous research, Hunt and Hunt (2001) concluded that African Americans generally attend worship services, participate in religious activities, read religious texts, and pray more frequently than the general American population. In a large national sample, Chatters and colleagues (1999) found that 80% of African Americans feel that religion is important, and approximately 44% "almost always" (p. 136) seek spiritual comfort through religious outlets. According to the U.S. Religious Landscape Survey sponsored by The Pew Forum on Religion and Public Life (2008), African Americans are the most likely of all racial and ethnic groups in the U.S. to report a religious affiliation, and only 1% report being agnostic or atheist. Furthermore, 30% of those attending historically

African American churches participated in religious services more than once per week compared to the national average of 15%.

The strong ties between African Americans and religious participation are rooted in a variety of historical and social factors. Although religiosity among African Americans is not limited to Christianity, research has recognized the central role of the Christian church within many African American communities (Mattis & Jagers, 2001). Traditionally, the church has been a support system that has facilitated social, emotional, political, and intellectual well-being for African Americans (Taylor, Mattis, & Chatters, 1999). Through religious involvement, African Americans often cope with hardship and express happiness and gratification. According to Brody and colleagues (1994), religious involvement serves as a buffer against attacks on self-esteem and encourages feelings of personal efficacy for African Americans. Additionally, religiosity has been found to be positively associated with communication in the marital interactions of African American families (Mahoney et al., 2001).

Research has also supported the idea that religious organizations' ability to benefit African Americans is in part due to its role in providing formal and informal spiritual and social support through prayer, psychological support, and ministerial counseling and guidance (Wallace & Bergeman, 2002). These religious support systems have been particularly noted in the rural south (Brody et al., 1994). African Americans who reside in southern states have been cited as attending religious services more frequently than people of any other region in the U.S. (Chatters, Taylor, & Lincoln, 1999). Overall, older African Americans are more likely to attend religious services (Johnson, Matre, & Armbrecht, 1991) and African American women are more likely than

men to participate in religious activities and services earlier in life (Mattis & Jagers, 2001). Despite the gender difference in religious participation, African American men and women report similar levels of the importance of religion in their lives (Mattis & Jagers, 2001).

Spirituality also tends to be a pervasive factor in daily life among many African Americans (Conner & Eller, 2004). In this population, spirituality has been associated with feelings of peace, guidance, and efforts to manage adversity (Newlin, Knafl, & Melkus, 2002). It has been shown that African Americans are likely to rate their levels of spirituality higher than their White peers (Conner & Eller, 2004). Consistent with the role of religiosity, the prominence of spirituality among African Americans has been linked to the historical role of spirituality as a source of hope and meaning in the face of social, political and economic oppression (Newlin, Knafl, & Melkus, 2002). Exploring spirituality within this population is important because spirituality and the perception of being in a relationship with a loving divine figure are linked to optimism for African Americans (Mattis et al., 2003). In turn, a higher level of optimism is a potentially valuable coping resource in the context of life stressors.

Links between Religiosity, Spirituality, and Life Stress

In the context of negative life events, religiosity and spirituality have been linked to coping and adaptation to life's changes (Wallace & Bergeman, 2002). Crises such as bereavement, accidents, and illnesses are especially likely to elicit religious and spiritual coping responses such as prayer and religious activity (Ellison, et al., 2001). Religiosity may encourage well-being by providing strategies for affronting adversity and buffering the effects of negative life events by enhancing feelings of self-worth and personal

control (Wallace & Bergeman, 2002). For example, religious cognitions may enhance confidence in one's ability to cope with stressful events over the long term (Ellison et al., 2001). It has also been found that forms of religious involvement such as religious salience and help-seeking are useful in coping with stress that is particularly due to multiple negative life events (Ellison, et al., 2001). This is consistent with the stress-buffering perspective of religiosity which proposes that religious involvement has stronger positive effects for those who face high levels of stress and weaker effects among those experiencing lower levels of stress. Furthermore, religious involvement may help to cope with life stress by serving as a resource for social capital and support by providing enhanced networking experiences that link people to opportunities to create trusting relationships, and access to information and resources (Jang and Johnson, 2004; Mattis & Jagers, 2001).

Spirituality has also been linked to coping with negative life events. Spiritual factors may help people to reappraise negative events as opportunities for personal growth that may be attributable to divine purposes rather than functions of personal characteristics or flaws (Eliassen, Taylor, & Lloyd, 2005). Spiritual help-seeking may aid individuals in finding guidance and support (Schnittker, 2001). Prayer, a form of spiritual help-seeking, has been noted to aid in the regulation of negative emotions stemming from specific circumstances by distracting people from problems or by helping them to attribute meaning to unfavorable circumstances (Ellison & Taylor, 1996).

Among African Americans, social support and spirituality are particularly relevant coping mechanisms and are often preferred ways of dealing with adversity compared to seeking formal support services (Fowler & Hill, 2004). For example, the act

of praying and asking for intercessory prayer by others is widely used among African Americans when confronting personal difficulties (Ellison & Taylor, 1996). Jang and Johnson (2004) found a link between social support and religious involvement in that religious African Americans reported higher levels of social support from family and friends than their less religious counterparts. In a study examining the coping experiences of African American women, Mattis (2002) found that women use religious and spiritual resources (e.g., formal religious involvement, private devotional prayer) to cope with a variety of stressors related to racial, class, and gender-based oppression, financial stress, illness, family and parenting concerns, illness, psychological distress, and daily hassles. The women in this study tended to use spiritual resources reappraise negative life events as challenges and opportunities for growth. Among African men and women, spirituality has been shown to buffer the negative impact of perceived racial stress (Bowen-Reid & Harrell, 2002).

Religiosity, Spirituality, and Marital Outcomes

In addition to fulfilling important roles in the lives of individuals, religion and spirituality are prominent factors in many African American marriages. Previous research has found that married African Americans score higher on measures of religiosity and spiritual support seeking behaviors than unmarried African Americans (Kelly & Floyd, 2006; Taylor et al., 1999). Religious participation has been cited as having positive implications for African American couples and families in regard to promoting family bonding and contributing to positive self-ratings of one's role within the family (Ellison, 1997; LaTaillade, 2006). Furthermore, spouses who viewed their marriages as being sacred have been identified as having stronger marriages (Mahoney, Pargament, Murray-

Swank & Murray-Swank, 2003). In a qualitative study of happy, enduring African American marriages, Marks and colleagues (2008) found that the vast majority of the couples mentioned that turning to God through prayer was an important part of their marriage. Not only did couples report the importance of maintaining spiritual connections with God, they also noted that congregational religious participation was important to them. In a study of African American women seeking marital partners, 65% of the sample (N=315) characterized their ideal mate as religious, spiritual, and a member of a religious organization or group (King & Allen, 2009), thus highlighting the salience of religion and spirituality for many couples.

The prominence of religious and spiritual involvement among African American couples is especially important given the variety of ways in which these factors may influence marital interactions. For example, Sullivan (2001) proposed that aspects of religiosity may influence marital functioning by helping couples to cope with stressors, and by impacting other areas of the relationship such as commitment and fidelity, which may contribute to relationship satisfaction and stability (Baucom, 2001; LaTaillade, 2006). Additionally, joint religious activities such as praying together and perceptions of the sacred nature of marriage have been shown to predict aspects of marital functioning such as marital satisfaction, verbal aggression, and conflict frequency (Mahoney et al. 1999; Bradbury et al., 2000). Previous research examining characteristics of stability within the early years of marriage found that involvement in a faith community was an important social resource for African American couples and that marital stability was predicted, in part, by, the husband's religious involvement, and religious compatibility within the marriage (Veroff, Douvan, & Hatchett, 1995). Furthermore, research has

suggested that religious involvement may provide couples with opportunities to interact with each other and with the broader community, in addition to serving as a resource for individual empowerment (LaTaillade, 2006). Given these findings, religion and spirituality may serve as an individual, interpersonal, and social resource for African American couples (Marks et al., 2008). Subsequently, these resources may help couples to face life stress.

Religiosity, Spirituality, and Depression

Religiosity and spirituality also have implications for depression. Previous research has provided evidence for an association between frequent participation in worship service and decreased levels of depression in national and international samples (Baetz, Griffin, Bowen, Koeing, & Marcoux, 2004). Additionally, positive religious reappraisals and collaborative religious coping has been linked to well-being in terms of spiritual growth, stress-related growth, and positive affect (Ano & Vasconcelles, 2005). It has been asserted that religious beliefs may decrease the occurrence of depressive symptoms because certain beliefs may provide existential security and a sense of purpose. The role of religion in buffering depression is important because depression has been linked to negative health outcomes, decreased well-being, and decreased life expectancy (Baetz, et al., 2004). However, some studies have suggested a negative relationship between religiosity and well-being. For example, it has been proposed that religiosity may decrease individuals' sense of control and increase feelings of guilt (Schnittker, 2001), while also increasing distress, anxiety, and negative mood when dealing with a negative life event (Ano & Vasconcelles, 2005). These potential negative outcomes may result from feelings of being punished by God, and feeling frustrated or

dissatisfied with one's religious community. Because religiosity and spirituality are particularly salient in the African American community, it is important to closely examine the contexts in which components of religiosity and spirituality may buffer or exacerbate depression among this population.

Like religious participation, spirituality is often utilized as a coping mechanism when dealing with depression. Spirituality has been described as a component of self-transcendence in the face of vulnerability (Upchurch & Mueller, 2005). Although the idea of self-transcendence is generally applied in the context of aging, many components of the theory seem relevant to individuals facing adversity regardless of age. According to Reed (2003), self-transcendence involves the transformation of vulnerability into well-being by helping individuals come to terms with the inevitable suffering that is part of the human condition, and to secure a sense of meaning and peace with oneself (as cited in Upchurch & Mueller, 2005). Spirituality relates to self-transcendence in that it involves the expansion of personal boundaries to connect to a higher power or purpose greater than the self (Ellerman & Reed, 2001). In a study looking at the role of spirituality in depression care, African Americans rated aspects of spirituality such as prayer and having faith in God as especially important in coping with their depression (Cooper, Brown, Thi Vu, Ford, & Powe, 2001). The findings of this study supported the idea that spirituality is a particularly salient resource for African Americans dealing with depression. It is important that protective factors against depression be identified for African Americans in the rural south because this population is at particular risk for stressful circumstances related to challenges such as financial hardship and low educational obtainment (Brody et al., 1994).

Methodological Rationale

The significant role of religiosity and spirituality for many African American couples, combined with the links between religiosity, spirituality, and life stress makes the present study particularly relevant. This is especially the case in the context of African Americans' disproportionate exposure to factors related to decreased marital quality and increased depressive symptoms. A unique aspect of the present study is its longitudinal design and its examination of cross-spouse effects.

Karney and Bradbury (1995) have noted that much of the research related to marriage is cross-sectional in nature. They argue that cross-sectional designs limit our knowledge about marital processes because they fail to address the mechanisms by which marriages became more or less stable and satisfying over time. It is important to investigate longitudinal data in the context of marriage because change within marriages has been characterized as a constant process (Karney & Bradbury, 1995). Karney and Bradbury assert that, in order to develop a more contextualized understanding of marital processes, marital research should address a full range of marital outcomes. Furthermore, they suggest that longitudinal designs may help to elucidate how marriages change and develop over time, and how different couples achieve different outcomes at various time points in the marriage (Karney & Bradbury, 1995b). The present study seeks to address limitations of cross-sectional designs and provide a contextual understanding of factors that contribute to marital and mental health outcomes by employing a longitudinal design.

The present study also seeks to add to the current literature by examining cross-spouse effects. Structural Equation Modeling (SEM) will be used to specify and estimate

models of linear relationships between the variables of interest. SEM lends itself to exploring measured variables through path analysis. SEM is a particularly relevant analytic tool in exploring multilevel data structures where one level of analysis is nested in another (MacCallum & Austin, 2000). Examining cross-spouse effects is important within the realm of marital research because they take into account the embedded nature of each partner within a social context and the ways in which partners influence each other (Kashy & Kenny, 2000). For this reason, cross-spouse effects will be explored in the present study.

Purpose and Hypotheses

The primary purpose of this study is to examine the impact of religiosity and spirituality upon the relationships between life stress, marital satisfaction, and depressive symptoms for African American couples. The following hypotheses will be examined:

1. Consistent with previous research, it is hypothesized that there will be a direct and positive correlation between life stress and depressive symptoms concurrently and longitudinally. Furthermore, it is predicted that there will be negative correlations between life stress and marital quality as well as depressive symptoms and marital quality.
2. Given previous findings on the role of religiosity and spirituality in coping, it is hypothesized that higher levels of religiosity and spirituality will be associated with lower levels of depressive symptoms and higher levels of marital quality.
3. It is hypothesized that the relationship between negative life events and depressive symptoms will be weaker among those partners with greater religiosity

and spirituality. Similarly, couples with higher levels of religiosity and spirituality will have a weaker relationship between negative life events and marital quality.

4. It is hypothesized that there will be significant cross-spouse effects, with each partner's religiosity, spirituality, depressive symptoms, and marital quality predictive of the other partner's outcomes.

CHAPTER 2

METHOD

Participants

Participants included 358 African American couples from urban and rural areas in Georgia. The participants were recruited for a larger study called the Program for Strong African American Marriages (ProSAAM), which examined the impact of a skill-based marital intervention and a prayer-based intervention on African American marriages. Recruitment avenues included faith-based and community organizations, radio and newspaper announcements, recruitment efforts within local businesses and community events, and participant referrals of friends and family members. In order to enroll in ProSAAM, participants had to be at least twenty-one years of age, African American or partnered with an African American mate, and either married or engaged to be married within one year of the recruitment date. For the purposes of this study, only data from married couples will be analyzed.

Demographics for the sample are listed in Table 1. The women in this sample ranged in age from 20 years to 59 years (M= 39.98, SD= 9.04). 57.5% (n= 206) had obtained a college level education. The men in the sample ranged in age from 21 years to 77 years (M= 40.68, SD=9.77). 40% of the men had obtained a college level education (n=143).

Procedure

Each participant was compensated with $25 for completing the ProSAAM battery of measures at pre-test and $50 for completing the 12-month interview. Data was obtained during in-home interviews facilitated by trained field interviewers with each interviewer and participant being gender matched. For cohabitating couples, interviews for the men and women took place simultaneously and in separate rooms with separate interviewers. Before collecting data, interviewers read and reviewed the project statement and consent procedures with each participant. Participants were informed that their involvement in the program was voluntary and they could withdraw their participation at any time. Once consent was obtained, the measures were given on laptop computers with all items being read to the participants by the interviewers. Participants were given the option to keep all responses anonymous by entering their own responses on a keypad that was separate from the laptop.

Measures

Data from this study came from a large battery of measures that covered topics ranging from assessments of health to marital satisfaction. For this particular study, the variables of interest were: depression, marital satisfaction, negative life events, religiosity, and spirituality. Demographic measures were also collected.

Demographics. A demographic questionnaire was given to obtain information about each participant such as age, ethnicity, and level of education.

Depressive Symptomatology. Depressive symptoms were measured using the Beck Depression Inventory –Second Edition (BDI-II; Beck, Steer, & Brown, 1996). This is a 21-item questionnaire with items on a rating scale from 0 to 3 corresponding with

various symptoms. Possible scores range from 0 to 63, 0 representing the absence of depressive symptoms by this measure's standards, and 63 representing severe depressive symptoms. The content validity of the BDI-II is well established and convergent validity for outpatients ranged from .84 to .93 when correlations between the BDI-II and Beck Depression Inventory-Amended First Edition (BDI-IA) were calculated. A test-retest reliability coefficient of .93 has been reported (Beck, Steer, & Brown, 1996). In the current sample, data for the men produced a Chronbach's alpha of .80 and data from the women produced an alpha of .87.

Quality of Marriage Index. The Quality of Marriage Index (QMI; Norton, 1983) is a 6-item evaluative index of marital quality and individual's global sentiments about his or her marriage. Participants rated items on a scale from 1-5, with higher scores indicating a more positive relationship. Possible total scores for the measure range from 5 to 30. The QMI has excellent reliability ($\alpha = .97$) as well as convergent and discriminate validity (Heyman, Sayers, & Bellack, 1994).

Life Stress. Life Stress measured using the List of Threatening Experiences Questionnaire (LTE-Q; Brugha & Cragg, 1990). This is a 12-item questionnaire that rates the occurrence of various negative life events over a time period of the previous three months. An example item of this measure is "You had a major financial crisis." This measure also assessed the impact of each event. Because the impact scores and the sum scores of negative life events were so highly correlated for this sample, the sum of negative life events was used in data analysis. These items were coded such that possible scores range from 0, indicating the absence of negative life events, to 12, indicating the occurrence of all 12 events listed in the measure.

Religiosity. Religiosity was measured using a 14 item scale. Participants rated the frequency of religious activity on a scale from 1 to 5 (1 being "almost never" and 5 being "daily"). These items, collectively known as the BSRF, were assembled by Markman & Stanley (unpublished), and have been used in a number of other prevention trials. However, the items have yet to be subjected to a scaling analysis.

Factor analysis was performed to create scales for religiosity. The full ProSAAM sample was use to determine the factor structure of the measures and all factors were analyzed using principal component analysis with Varimax (orthogonal) rotation. The steps for the analysis were based upon the recommendations outlined by Field (2005).

Factor analysis for the men in the sample yielded two factors explaining a total of 67.87% of the variance of for the entire set of religiosity variables. Factor 1 was labeled religious participation due to high loadings by the following items: attending worship services; participating in social activities at a place of worship; attending a class or discussion group on religion. This first factor explained 35% of the variance and an alpha of .77 was obtained for this sample. Possible scores for religious participation ranged from 3 to 12, with 12 indicating the most participation. The second factor, labeled religious centrality, explained 33% of the variance and an alpha of .74 was obtained. This factor was labeled as such due to high loadings on the following items: importance of religious beliefs in daily life; frequency of spiritual support seeking; belief that one's life is guided by God or a higher power. Possible scores for religious centrality ranged from 3 to 12, with 12 indicating the most centrality. Factor analysis for the women in the sample produced similar results, with Factor 1 (religious participation) accounting for 33.94% of

the variance and Factor 2 (religious centrality) accounting for 29.94% of the variance. The alphas for these factors were .78 and .67 respectively.

Spirituality. Spirituality was measured using the Daily Spiritual Experience Scale (Underwood & Teresi, 2002). The Daily Spiritual Experience Scale (DSE) is a 16-item questionnaire that rates the frequency of spiritual experiences on a scale from 1 to 6 (1 being "many times a day" and 6 being "almost never"). Possible scores ranged from 16 to 96. The items in this measure were reverse scored, such that higher scores indicated higher levels of spirituality. The internal consistency for this measure is cited at .93 (Underwood & Teresi, 2002). An example item from this scale is "I ask for God's help in the midst of daily activities."

Plan of Analysis

To examine whether negative life events play a role in own or partner marital quality and depression beyond the effect of own and partner religiosity and spirituality, model fitting will be undertaken using the MPlus statistical program, Version 5.2 (Muthén & Muthén, 2004). Initially, analyses will be performed separately for husbands and wives to examine whether the mechanisms of interest impact men and women differently. First, models including within-spouse effects of marital satisfaction and depression will be examined. These theoretical models are presented in Figures 1 & 2. Paths will be constrained to test our key theoretical hypotheses. The fit of the hypothesized model using the overall chi-square test will be examined in comparison to deterioration of overall model-data fit in terms of chi-square change statistics in the constrained model. The change in fit associated with the introduction of the constrained model will indicate the significance of the role of religiosity and spirituality in the full

model. After within-spouse effects are examined, full models including within-spouse and cross spouse effects of negative life events, religiosity, and spirituality will be examined.

CHAPTER 3

RESULTS

Results for Wives

Time 1 Descriptive Statistics. For women, the mean level of depressive symptomatology (BDI-II) at Time 1 was 6.70 (SD= 6.67, range 0-39), and the mean level of life stress (LTE-Q) was 1.31 (SD= 1.53 range 0-7). These scores indicate that women endorsed sub-clinical levels of depressive symptomatology and low levels of negative life events. For example, someone endorsing the following BDI-II items: I feel sad, I feel discouraged about the future, I feel I have failed more than the average person, I don't enjoy things the way I used to, and I am disappointed in myself, would obtain a score of 7 on the BDI-II. To obtain a score of 1on the LTE-Q, a participant would have to endorse the occurrence within the previous twelve months of at least one event such as getting fired from a job, having an item lost or stolen, experiencing legal difficulties, or the death or illness of a family member. The mean level of marital satisfaction (QMI) was 23.83 (SD=5.56, range 6-30). These scores indicate that the sample is in the satisfied range. To obtain a score of 24, participants with have to endorse at least moderate agreement with 6 positive statements about the relationship such as: My relationship with my mate is happy, and our relationship is strong.

The average religious participation (BSRF Factor 1) score was 7.11 (SD= 2.23, range 3-12), and the average religious centrality (BSRF Factor 2) score was 11.72 (SD= .874, range 5-12). Higher scores on the BSRF indicate higher participation and centrality.

The average spirituality (DSE) score for women was 78.22 (SD= 12.15, range 16-92). Before the DSE scores were included in analyses, they were reverse-coded to ensure consistency with the direction of the other measures, thus higher scores indicate higher levels of spirituality. These scores indicate that women's religious participation was moderate, and their levels of religious centrality and spirituality were high. Descriptive statistics for these items are listed in Table 2.

Time 4 Descriptive Statistics. For women, the mean level of depressive symptomatology (BDI-II) at Time 4 was 4.45 (SD= 5.37, range 0-29), and the mean level of life stress (LTE-Q) was .83 (SD= 1.13 range 0-6). The mean level of marital satisfaction (QMI) was 24.19 (SD=5.77, range 6-30). The average religious participation (BSRF Factor 1) score was 7.01 (SD= 2.26, range 3-12), and the average religious centrality (BSRF Factor 2) score was 11.64 (SD= .877, range 5.65-12). The average spirituality (DSE) score was 72.14 (SD= 11.92, range 16-90.12). Descriptive statistics for these items are listed in Table 2.

Comparisons between Time 1 and Time 4 Variable Means. A pair-wise t test was performed to examine differences in means for Time 1 and Time 4 variables and the results are listed in Table 4. For wives, means for depressive symptoms ($t=6.84$, $p<.01$) life stress ($t=6.08$, $p<.01$), religious centrality ($t=2.24$, $p<.05$), and spirituality ($t=11.73$, $p<.01$) were significantly greater at Time 1 than at Time 4. There was no significant change in marital satisfaction or religious participation across time points. These results indicate that reports of depressive symptoms showed more change over time than did reports of marital satisfaction.

Time 1 Correlational Analyses. Zero-order correlations among life stress, religious participation, religious centrality, spirituality, depressive symptomatology, and marital satisfaction were calculated (Table 5). As expected, life stress was positively correlated with depressive symptomatology (r=.292, p<.05) and negatively correlated with religious centrality (r=-.120, p<.05) and marital satisfaction (r=-.131, p<.05). Spirituality and religious participation were not significantly correlated with life stress. Depressive symptoms were negatively correlated with spirituality (r=-.343, p<.01), religious centrality (r=-.296, p<.01) and religious participation (r= -.161, p<.01) as hypothesized, indicating that across all indices of religiosity and spirituality, higher scores were associated with fewer depressive symptoms on average. Marital satisfaction was negatively associated with depressive symptoms (r=-.477, p<.01) and was positively correlated with religious centrality (r= .249, p<.01), religious participation (r=.192, p<.01), and spirituality (r=.292, p<.01) indicating that higher levels of centrality and spirituality were associated with higher levels of marital satisfaction.

Time 4 Correlational Analyses. Zero-order correlations among life stress, religious participation, religious centrality, spirituality, depressive symptomatology, and marital satisfaction at Time 4 were calculated (Table 5). Life stress was positively correlated with depressive symptomatology (r=.240, p<.01), and negatively correlated with religious centrality (r=-.128, p<.05), and marital satisfaction (r=-.231, p<.01). Consistent with Time 1 data, spirituality and religious participation were not significantly correlated with life stress. Depressive symptoms were negatively correlated with spirituality (r=-.316, p<.01) and religious centrality (r=-.136, p<.01) but not significantly correlated with religious participation. Marital satisfaction was negatively associated with

depressive symptoms (r=-.435, p<.01) and positively correlated with religious centrality (r= .105, p<.05) and spirituality (r=.226, p<.01).

Longitudinal Correlational Analyses. Correlational analyses were conducted between religiosity and spirituality variables at Time 1 and marital satisfaction, depressive symptoms, and life stress at Time 4 (Table 7). Time 4 life stress was not significantly correlated with any Time 1 variables. However, Time 4 depressive symptomatology was negatively correlated with Time 1 spirituality (r=-240, p<.01) and Time 1 religious centrality (-1.72, p<.01). Time 4 marital satisfaction was positively correlated with Time 1 spirituality (r=.125, p<.05) and Time 1 religious centrality (r=.160, p<.01).

MPLUS Path Analyses. Model fitting was conducted using MPlus version 4 (Muthén & Muthén, 2006) with manifest indicators to test the predictive relationships between model variables. The fit function used was maximum likelihood. Analyses were conducted separately for depression and marital satisfaction as well as for husbands and wives. To test relevant hypotheses, all paths in the hypothesized models were initially freely estimated. Then, non-significant paths were constrained to be zero and the fit of the resulting model was examined using the overall chi-square test. Finally, significant paths of interest were constrained to be zero and the deterioration of the overall model data fit was examined in terms of chi-square statistics. A significant change in the model fit indicates that the path of interest accounts for a significant amount of variance in the overall model and cannot be constrained without reducing the model fit. Thus, a non-significant test indicates that the data fits the model well. Furthermore, the comparative fit index (CFI) and Root Mean Square Error of Approximation Error (RMSEA) values

were also used to determine model fit. A CFI value close to 1 represents a very good fit and a value above .90 represents and acceptable fit (Bentler, 1990). RMSEA values less than .05 represent a good fit (Steiger, 1990).To account for the potential impact of the ProSAAM intervention, treatment effects were included in each model. However, these effects accounted for little variance in each model and were therefore constrained to be zero. Theoretical models predicting depressive symptomatology and marital satisfaction for each spouse are presented in Figures 1 and 2.

Path Analyses for Depression. After all paths were freely estimated, religious centrality, religious participation, spirituality, and treatment effects were constrained to be zero, resulting in four degrees of freedom in the baseline model. Standardized structural path coefficients and one-tailed *p* values are presented in Figure 3. As predicted, there were positive associations between depressive symptoms at Time 4 and depressive symptoms at Time 1 (β=.449, p<.01), as well as life stress at Time 4 (β=.173, p<.01). Depressive symptoms at Time 4 were negatively associated with marital satisfaction at Time 1 (β=-.109, p<.05). Fit of the baseline model was good (χ^2 = 4.765, *ns,* df=4, CFI=.99, RMSEA=.02). When each of these paths was constrained to be zero, there was significant deterioration in the model fit. Contrary to initial hypotheses, religious and spiritual variables at Time 1 did not significantly predict depressive symptoms at Time 4 for wives. Thus, only Time 1 depressive symptoms, Time 1 marital satisfaction, and Time 4 life stress predicted depressive symptoms at Time 4 for women.

Path Analyses for Marital Satisfaction. Time 1 depressive symptoms, religious centrality, and religious participation, spirituality, and treatment effects were constrained to be zero resulting in a baseline model with 5 degrees of freedom and a good model fit

(χ^2 = 4.21, *ns*, df=5, CFI=1, RMSEA=0). Marital satisfaction at Time 1 (β=.609, p<.01) was positively associated with marital satisfaction at Time 4. Life stress reported at Time 4 was negatively associated with marital satisfaction at Time 4 (β=-.182 p<.01). Figure 4 illustrates these associations. As with depressive symptomatology, religion and spirituality variables at Time 1 did not significantly predict marital satisfaction at Time 4.

Interaction Effects for Depressive Symptoms and Marital Satisfaction. To examine whether the effects of religiosity and spirituality variables upon depressive symptoms and marital satisfaction were dependent upon life stress, interaction terms were created and tested in baseline models. However, these interaction terms did not yield significant results, indicating that the interaction of religious and spiritual variables with life stress did not significantly predict depressive symptoms or marital satisfaction for wives.

Results for Husbands

Time 1 Descriptive Statistics. For men, the mean level of depressive symptomatology (BDI-II) at Time 1 was 5.15 (SD= 5.47, range 0-32), and the mean level of life stress (LTE-Q) was 1.24 (SD= 1.36, range 0-10). These scores indicate that men endorsed sub-clinical levels of depressive symptomatology and low levels of negative life events. The mean level of marital satisfaction (QMI) was 24.41 (SD= 5.03, range 7-30) indicating high levels of satisfaction.

The average religious participation score was 7.07 (SD= 2.41, range 3-12), and the average religious centrality score was 11.42 (SD= 1.30, range 3-12). The average spirituality score for men was 74.08 (SD= 12.04, range 22.96-88.96). As previously noted, DSE scores were reverse coded before they were included in data analyses so that

higher scores indicate greater spirituality. These scores indicated that men's religious participation was moderate, and their levels of religious centrality and spirituality were high. Descriptive statistics for these items are listed in Table 3.

Time 4 Descriptive Statistics. The mean level of depressive symptomatology (BDI-II) for men at Time 4 was 4.19 (SD= 5.27, range 0-37), and the mean level of life stress (LTE-Q) was .738 (SD= 1.14, range 0-8). These scores indicate that men endorsed sub-clinical levels of depressive symptomatology and low levels of negative life events. The mean level of marital satisfaction (QMI) was 24.91 (SD= 5.16, range 6-30) indicting high levels of satisfaction.

The average religious participation score was 7.01 (SD= 2.46, range 3-12), and the average religious centrality score was 11.27 (SD= 1.36, range 3-12). The average spirituality score for men was 79.88 (SD= 12.73, range 16.08-109.92). Consistent with Time 1 data, these scores indicated that men's religious participation was moderate, and their levels of religious centrality and spirituality were high. Descriptive statistics for these items are listed in Table 3.

Comparisons between Time 1 and Time 4 Variable Means. A pair-wise t test was performed to examine differences in means for Time 1 and Time 4 variables and the results are listed in Table 4. For husbands, means for depressive symptoms ($t=3.23$, $p<.01$), life stress ($t=4.89$, $p<.01$), and religious centrality ($t=2.46$, $p<.01$) were significantly greater at Time 1 than at Time 4. Means for marital satisfaction ($t= -2.01$, $p<.05$) and spirituality ($t=-10.18$, $p<.01$) were higher at Time 4 than at Time 1. There was no significant change in religious participation across time points.

Time 1 Correlational Analyses. Zero-order correlations among negative life events, religious participation, religious centrality, spirituality, marital satisfaction, and depressive symptomatology were calculated for men at Time 1 (Table 6). As expected, life stress was positively correlated with depressive symptomatology (r=.319, p<.01). Correlations between life stress and religious centrality (r=-.136, p<.05) and spirituality (r= -122, p<.05) were negative. Depressive symptoms were also negatively correlated with spirituality (r=-.427, p<.01) and religious centrality (r=-.147, p<.01) as predicted.

Marital satisfaction was negatively associated with depressive symptomatology (r=-.434, p<.01) and positively correlated with religious participation (r= .210, p<.01) and spirituality (r=.342, p<.01) indicating that higher levels of religious participation and spirituality were associated with higher levels of marital satisfaction.

Time 4 Correlational Analyses. Zero-order correlations among negative life events, religious participation, religious centrality, spirituality, marital satisfaction, and depressive symptomatology were calculated for men at Time 4 (Table 6). Life stress was positively correlated with depressive symptomatology (r=.255, p<.01) and uncorrelated with all other variables. Depressive symptoms were negatively correlated with spirituality (r=-.235, p<.01) and religious centrality (r=-.208, p<.01).

Marital satisfaction was negatively associated with depressive symptomatology (r=-.334, p<.01) and positively correlated with religious participation (r= .181, p<.01), religious centrality (r= .193, p<.05) and spirituality (r=.245, p<.01) indicating that higher levels of all religious and spiritual indices were associated with higher levels of marital satisfaction.

Longitudinal Correlational Analyses. Religion and spirituality variables at Time 1 were correlated with marital satisfaction, depressive symptoms, and life stress at Time 4 (Table 7). Time 4 life stress was not significantly correlated with any Time 1 variables. However, Time 4 depressive symptomatology was negatively correlated with Time 1 spirituality (r=-244, p<.01), Time 1 religious centrality (r=-.145, p<.01), and Time 1 religious participation (r=-.164, p<.01). Time 4 marital satisfaction was positively correlated with Time 1 spirituality (r=.265, p<.01), Time 1 religious centrality (r=.128, p<.05), and religious participation (r=.256, p<.01).

Path Analyses for Depressive Symptoms. After freely estimating all paths, religious centrality, spirituality, marital satisfaction, and treatment effects were shown to be non-significant and constrained to be zero. This resulted in a baseline model with 4 degrees of freedom and a good model fit (χ^2 = 4.754, *ns*, df=5, CFI=.98, RMSEA=.02). Time 1 depressive symptoms (β=.306, p<.01) and life stress reported at Time 4 (β=.189, p<.01) were positively associated with Time 4 depressive symptoms. Religious participation at Time 1 (β=-.134, p<.01) was negatively associated with Time 4 depressive symptoms. These associations are illustrated in Figure 5.

Path Analyses for Marital Satisfaction. Figure 6 illustrates the results for marital satisfaction. After freely estimating all paths, life stress, depressive symptoms, spirituality, religious centrality, and treatment effects were shown to be non-significant and constrained to be zero. The resulting baseline model had 5 degrees of freedom and a good fit to the data (χ^2 = 7.109, *ns*, df=5, CFI=.99, RMSEA=.03). Constraining the remaining significant paths, marital satisfaction at Time 1 (β=.608, p<.01) and religious participation at Time 1 (β=.126, p<.01), resulted in a significant deterioration in model

fit. Thus, Time 1 marital satisfaction and religious participation were both positively associated with marital satisfaction at Time 4.

Interaction Effects for Depressive Symptoms and Marital Satisfaction. As with analyses for wives, interaction terms were created between religiosity and spirituality variables and life stress to determine the impact of these interactions upon depressive symptoms and marital satisfaction. Similarly, these interaction terms did not yield significant results, indicating that the interaction of religious and spiritual variables with life stress did not significantly predict depressive symptoms or marital satisfaction for husbands.

Cross-Spouse Effects

To examine cross-spouse effects, significant paths for husbands and wives were examined simultaneously. This resulted in four models that explicated the impact of each spouse's outcomes upon the other spouse's outcomes for depressive symptoms and marital satisfaction. The initial models for each set of cross-spouse analyses were composed of the significant paths from each of the within-spouse analyses described above.

Cross-spouse analyses predicting wives' depressive symptoms and marital satisfaction were run separately. There was no significant impact of husbands' outcomes on wives depressive symptoms. For marital satisfaction, husbands' satisfaction at Time 1 predicted wives' satisfaction at Time 4 (β=.18, p<.01) (Figure 7). The resulting model had 7 degrees of freedom and a good fit to the data (χ^2=10.62, ns, df=7, CFI=.98, RMSEA=.04).

The impact of wives' outcomes on husbands' outcomes are presented in Figures 8 and 9 for depressive symptoms and marital satisfaction respectively. Wives' depressive symptoms (β=.155, p<.01) and marital satisfaction (β=-.27, p<.01) at Time 1 predicted husbands' depressive symptoms at Time 4. The model fit was good (χ^2 = 9.17, df=6, CFI=.97, RMSEA=.04). Wives' life stress reported at Time 4 (β=-.15, p<.01) and religious participation at Time 1 (β=-.12, p<.01) significantly predicted husbands' marital satisfaction at Time 4. The model fit was good (χ^2 = 10.94, df=7, CFI=.98, RMSEA=.04).

CHAPTER 4

DISCUSSION

This study examined the impact of religiosity and spirituality upon depressive symptomatology and marital satisfaction for married African American couples experiencing negative life events. It adds to the research literature because it explores religious and spiritual variables as potential protective factors in the context of life stress. Previous research has investigated the impact of religious participation in the context of life stressors for African Americans (Ellison et al., 2001; Ellison and Taylor, 1996). However, no prior research has examined both religiosity and spirituality in relation to negative life events, depression, and marital satisfaction among African American couples over time.

Links between Life Stress, Depressive Symptoms, and Marital Quality

Hypothesis 1 stated that there would be significant concurrent and longitudinal correlations between life stress, depressive symptoms, and marital quality. The data supported this finding for wives at Time 1, Time 4, and across the two time points. As predicted, life stress was positively correlated with depressive symptoms and negatively correlated with marital satisfaction. Depressive symptoms were also negatively correlated with marital satisfaction. Path analyses revealed that depressive symptoms and marital satisfaction at Time 1, and life stress reported at Time 4 predicted depressive symptoms at Time 4. Marital satisfaction at Time 1 and life stress reported at Time 4 predicted marital satisfaction at Time 4. Correlational trends at Time 1, Time 4, and across time

points were similar for husbands, with the exception of a non-significant association between life stress and marital satisfaction. Path analyses for husbands indicated that depressive symptoms at Time 1 and life stress reported at Time 4 predicted depressive symptoms at Time 4. Marital satisfaction at Time 1 predicted satisfaction at Time 4.

These results indicate a somewhat different longitudinal relationship between marital satisfaction, depressive symptoms, and life stress for wives relative to husbands. The links between depressive symptoms and marital satisfaction have been well-established in prior research (Beach, Smith, & Fincham, 1994). Concurrent and longitudinal correlations have been found for husbands and wives, with correlations marginally stronger for wives (Fincham, Beach, Harold, and Osborne, 1997). The association between marital satisfaction and depressive symptoms is thought to be influenced by the consequences of marital discord. Discordant relationships are associated with depressive symptoms such as sadness, irritability, and a diminished interest in sex. Thus, studies have found that marital dissatisfaction is linked to co-variation in depressive symptoms as well as the prediction of future depressive symptoms (Beach, Katz, Kim, & Brody, 2003). The present study highlights gender differences in the relationships between depressive symptoms and marital satisfaction. The current results revealed a predictive relationship between marital satisfaction and depressive symptoms for wives, but not for husbands. Explanations for this gender difference have been provided in previous research. It has been suggested that, as a result of internalized gender roles, women may sacrifice more for the relationship, make take more responsibility when something goes wrong in the relationship, and may believe that others will blame them for the failure of the relationship (Fincham, Beach, Harold, &

Osborne, 1997). Given this constellation of marital discord and self-blame, it is plausible that women would incur more depressive symptoms than men in relation to marital problems. Men, on the other hand, have been seen as more likely to withdraw from marital conflict, avoid personal blame, and to minimize their partner's concerns, thus incurring fewer depressive symptoms than women (Fincham, Beach, Harold, & Osborne, 1997). While these tendencies have been thought to influence a predictive relationship between depressive symptoms and marital quality for men, this finding was not supported in the present data. However, as we note below, the cross-spouse analyses shed additional light on these relationships.

Influences of Religiosity and Spirituality

Hypothesis 2 stated that there would be significant inverse correlations between religiosity and spirituality variables and depressive symptoms, and positive correlations between religiosity and spirituality variables and marital satisfaction. This hypothesis was supported for wives at Time 1. However, the associations between religious participation and depressive symptoms, and religious participation and marital satisfaction were non-significant at Time 4. When examining correlations over time, Time 1 religious centrality and spirituality were negatively correlated with depressive symptoms and positively correlated with marital satisfaction. Despite these correlational relationships, path analyses revealed no longitudinal predictive relationships between religious and spiritual variables and depressive symptoms and marital satisfaction for wives. For husbands, depressive symptoms were negatively correlated with religious centrality and spirituality at Time 1 and Time 4. Marital satisfaction was positively correlated with religious participation and spirituality at Time 1, and positively correlated with all three religiosity

and spirituality variables at Time 4. Path analyses for husbands indicated that religious participation at Time 1 predicted lower levels of depressive symptoms and higher levels of marital satisfaction at Time 4.

Correlational associations between religiosity, spirituality, depressive symptoms, and marital satisfaction have been observed in previous research. Religious and spiritual involvement has been thought to help couples deal with stress (Ellison & Levin, 1998), provide couples with access to formal and informal resources (Brown, Orbuch, & Bauermeister, 2008), and promote psychological well-being and social support among couples (Wolfinger & Wilcox, 2008). Given these previous findings, it is not surprising that there would be significant correlations between religiosity and spirituality variables and the outcome variables in the present study. However, predictive influences of religiosity and spirituality were not found for wives.

Perhaps the most notable finding from the current data is the impact of religious participation specifically upon husbands' depressive symptoms and marital satisfaction. The non-significant predictive impact of religious participation for women was unexpected given that, compared to men, women tend to place more emphasis on religion and are more likely to be involved in a religious congregation (Simpson, Cloud, Newman, & Fuqua, 2008). Furthermore, religious participation has been thought to be antithetical to traditional American ideals of masculinity (Thompson & Remmes, 2002). However, this claim has been challenged as less applicable to African American men who tend to include spirituality in their conceptions of manhood and tend to be less stereotyped in their conceptions of masculinity (Hunter & Davis, 1992).

Previous research revealing similar findings to the present study, particularly regarding marital satisfaction, have offered explanations for the stronger impact of religious participation for men compared to women. It has been suggested that men's relationship behavior is influenced more by institutional contexts that women's (Stanley, Whitton, & Markman, 2004; Wolfinger & Wilcox, 2008). While men tend to associate marriage with enhanced status, maturity, and accountability, there are few institutional contexts that actually encourage men to focus on family life (Wolfinger & Wilcox, 2008). Participation in religious activity serves as one such context that facilitates family involvement among men. In a study examining religion, marital status, gender, and relationship quality among urban families, Wolfinger and Wilcox (2008) found that fathers' religious attendance, but not mothers' predicted happier relationships for both partners. Religious participation may support men's family involvement by providing men with family-related norms to guide their behavior such as honesty, respect, temperance, and lawful behavior, and by rewarding them with positions of status, such as serving as deacons, for being good husbands and fathers. The same study also revealed that, for African American men, religious participation facilitated norms and behaviors that encouraged relationship-specific factors such as lower levels of domestic violence and hurtful behaviors, and higher levels of supportive behavior. Furthermore, the relationship between religiosity and relationship quality for men was partly accounted for by the impact of religious participation upon negative behaviors such as drug and alcohol use (Wilcox & Wolfinger, 2008). Yet another finding in the study indicated that men who attended church more frequently were more inclined to have favorable views of their relationships, even after controlling for their partners' behaviors. Thus, the authors

asserted that religious participation may encourage men to view their marriages as sanctified, leading to positive assessments of the relationship.

In a qualitative examination of African American men's conceptualizations on manhood, important themes that emerged included responsibility for family, fulfilling the expectations of being a husband and father, providing leadership, and making decisions for the family (Hunter & Davis, 1992). Many mainstream religious organizations in America promote gender ideologies that are consistent with these conceptualizations of masculinity (Petts, 2007; Edgell & Docka, 2007). It is plausible that the sample of men in the current study participate in religious organizations that espouse these values, thus facilitating men's sense of connectedness to family and supporting self-efficacy. If this is the case, religious participation would be expected to have a significant impact on both marital quality and depressive symptoms for men. Another possible explanation for the impact of religious participation upon depressive symptoms is that religiosity has been linked to conceptualizations of success for African American men (Franklin & Mizell, 1995). Although little research has examined this topic, it may be the case that religious participation is especially important for African American men because religious organizations may be among the few environments where they are entrusted with leadership roles, are viewed as respected members of a community, and where they may have to affront less racism and discrimination. If this is indeed the case, it would be expected that having more leadership positions and exposure to social and emotional support resources and role-models would predict fewer depressive symptoms among men who participate in religious activities.

Interactions between Religiosity, Spirituality, & Life Stress

Hypothesis 3 predicted that there would be interactive effects between life stress and religiosity and spirituality variables, such that couples with higher levels of religiosity and spirituality would experience lower levels of depressive symptoms and higher levels of marital satisfaction when facing life stress, compared to their less religious and spiritual counterparts. This hypothesis was not supported by the current data, thus indicating that, while religiosity and spirituality are associated with lower levels of depressive symptoms and higher levels of marital satisfaction, they do not moderate or buffer these levels in the context of life stress.

Cross Spouse Effects

The final hypotheses stated that there would be cross-spouse effects with each spouse's outcomes predicting the other spouse's outcomes. For wives, no cross-spouse effects emerged predicting depressive symptoms. However, husbands' marital satisfaction at Time 1 predicted Wives' marital satisfaction at Time 4. Wives' marital satisfaction and depressive symptoms at Time 1 predicted husbands' depressive symptoms at Time 4. Previous studies have found similar longitudinal cross-spouse effects. Beach and colleagues (2003) found that spouses' own marital quality at Time 1 predicted their partner's Time 2 depressive symptoms. Although this was not the case for wives in the present study, this finding was supported for husbands. Interestingly, wives' Time 1 depressive symptoms and marital satisfaction influenced husbands' Time 4 depressive symptoms. One explanation for this finding that has been asserted in previous research is that partners who view themselves as a support to their spouse may be more prone to depressive symptoms when their spouse is unhappy in the relationship (Beach,

Katz, Kim, & Brody, 2003). Another possibility offered that speaks to gender differences is that wives who are dissatisfied in the relationship may be more likely to engage their partners in marital issues (Christensen & Heavey, 1999; Beach, Katz, Kim, & Brody, 2003), thus creating a dynamic that is potentially aversive for husbands and subsequently facilitating husbands' depressive symptoms. That is, wives' marital satisfaction may be more predictive of overall relationship outcomes and climate over time for both spouses than is husbands'.

There may be other culture-specific explanations for the impact of wives' marital satisfaction upon husbands' depressive symptoms in this sample. If African American men's conceptualization of manhood is indeed linked to having a successful family life as noted above (Hunter & Davis, 1992), wives' dissatisfaction may be a threat to husbands' manhood and self-esteem. Furthermore, if husbands are embedded in a religious context where they have been socialized with a high level of accountability for family success and have been rewarded for family success through status in the church, it makes sense that wives dissatisfaction might facilitate feelings of failure which might bring about depressive symptoms.

An interesting finding that emerged in the present study was the predictive impact of wives' life stress and religious participation upon husbands' marital satisfaction. Similar to links between wives' marital satisfaction and husbands' depressive symptoms, the impact of wives' life stress might be related to the emphasis that men in the sample may place upon taking responsibility for the leadership of the family. As stated earlier, in a social context, African American men are likely to view marriage as linked to maturity and accountability (Wolfinger & Wilcox, 2008). Furthermore, in a religious context,

African American men are likely to see their marriage in a favorable light (Wilcox & Wolfinger, 2008). When wives face life stress, it is possible that men may feel helpless due to their high level of accountability for family life, and subsequently view the marriage in a less favorable light due to the extra level of responsibility and strain that often comes along with life stressors.

The link between wives' religious participation and decreased marital satisfaction among husbands is more difficult to explain. A possible explanation that has yet to be examined in research literature involves the concept of the influential power of clergy and its impact upon marital relationships. Again, if husbands highly value their leadership role within the family, having wives with high levels of religious participation, which tends to be under the direction of an influential male clergy member, may lead to husbands feeling less important in their leadership role. The more wives seek spiritual support, guidance, and knowledge from an influential male figure in the church or from other church members regardless of gender, the less valued husbands may feel. Although there is limited research regarding this topic specifically in regard to involvement religious organizations, it is notable that extended kin networks have been cited as a potential point of contention in marital relationships among African Americans. According to Chambers & Lebow (2008), marital conflict with regard to sharing personal information with friends and family members can hinder the formation of solidarity and unity within the couple, hence contributing to marital dissatisfaction. Furthermore, involvement in religious organizations might facilitate the provision of a spouse's time commitment, financial, and emotional support, which might be perceived by the other

partner as depleting resources from the marital relationship (Marks et al., 2008). Further research is needed to replicate and elucidate this interesting and unexpected finding.

Limitations, Implications, & Directions for Future Research

While there are several significant findings presented in the current study, there are limitations that warrant discussion. The current study examined data at two time points. The results might be more robust if data at multiple time points were explored. This might offer insight into the longitudinal nuances of the relationships between the variables of interest. Another limitation is that several potentially important contextual factors were not examined in the study. For example factors such as the length of marriage and number of children within the family may have an impact upon outcomes, particularly marital satisfaction.

Despite these limitations, these results add to the research literature in several ways. First, it is one of few studies that examines longitudinal and cross-spouse relationships between marital satisfaction and depression for African American couples. Furthermore, it highlights the roles of religiosity and spirituality for African American couples and illustrates gender differences amongst African Americans in regard to religious variables. Specifically, these results call attention to the role of religious participation in the lives of African American men, as well as interesting cross-spouse relationships between religious participation and marital satisfaction. Given the positive outcomes associated with marriage for spouses and children (Wilcox & Wolfinger, 2006), the present study provides insight into the ways that marriages can be strengthened, thereby supporting healthy family relationships among African Americans.

Future research exploring the relationships between negative life events, religiosity, spirituality, marital satisfaction, and depression over time, and the nuances of gender differences among these relationships would be a valuable contribution to the research literature. The present results provide the rationale for continued research regarding the intersection of family ideals and gender in the context of religious organizations as posited by Edgell and Docka, (2007). On a practical level, the outcomes of this study suggest that incorporating clients' religious and spiritual beliefs into treatment may be particularly helpful in facilitating coping with depressive symptoms and marital problems. However, the findings caution practitioners to consider contextual factors related to clients' religious participation such as family and gender ideals. Additionally, these results suggest potential benefits of liaisons between mental health care providers and religious and spiritual leaders for assisting African American communities. Lastly, the cross-spouse results offer further support for utilizing a couple's format for intervention and prevention efforts targeted at depressive symptoms.

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TABLES & FIGURES

Table 1

Demographic Characteristics of the Sample

	Wives n = 358	Husbands n = 358
	N(%)	N(%)
Ethnicity		
African American	333 (93.0)	337(94.1)
Caucasian	7 (2.0)	4 (1.1)
Hispanic	9 (2.5)	6 (1.7)
Other	9 (2.5)	11 (3.01)
Religious Affiliation		
Baptist	44 (12.3)	37 (10.4)
Catholic	22 (6.1)	23 (6.4)
Protestant	26 (7.3)	23 (6.4)
Islamic	51 (14.2)	64 (17.9)
Other	215 (60.1)	210 (58.8)
Education		
High School Education	152 (42.5)	215 (60.0)
College Degree or Above	206 (57.5)	143 (40.0)
Age	39.98 (SD=9.04)	40.68 (SD=9.77)

Table 2

Descriptive Statistics for Depressive Symptomatology, Marital Satisfaction, Life Stress, Religiosity, and Spirituality for Wives at Time 1 and Time 4

	M	SD	MIN	MAX
Time 1				
Depressive Symptomatology[a]	6.70	6.67	0	39
Life Stress[b]	1.31	1.53	0	7
Marital Satisfaction[c]	23.83	5.56	6	30
Religiosity[d]				
Participation	7.11	2.23	3	12
Centrality	11.72	.874	5	12
Spirituality[e]	78.22	12.15	16	92
Time 4				
Depressive Symptomatology[a]	4.45	5.37	0	29
Life Stress[b]	.83	1.13	0	6
Marital Satisfaction[c]	24.19	5.77	6	30
Religiosity[d]				
Participation	7.01	2.26	3	12
Centrality	11.64	.877	5.65	12
Spirituality[e]	72.14	11.92	16	90.12

Note. [a]Depressive Symptomatology score from the BDI-II (Beck, et. al., 1996). [b]Sum of Life Stress from the LTE-Q (Cloninger et al., 1994). [c]Marital Satisfaction Score from the Quality of Marriage Index (Norton, 1983) [d]Religiosity Score from the BSRF (Stanley & Markman, Unpublished). [e]Spirituality score from the DSE (Underwood & Teresi, 2002).

Table 3

Descriptive Statistics for Depressive Symptomatology, Marital Satisfaction, Life Stress, Religiosity, and Spirituality for Husbands at Time 1 and Time 4

	M	SD	MIN	MAX
Time 1				
Depressive Symptomatology[a]	5.15	5.47	0	32
Life Stress[b]	1.24	1.36	0	10
Marital Satisfaction[c]	24.41	5.03	7	30
Religiosity[d]				
Participation	7.07	2.41	3	12
Centrality	11.42	1.30	3	12
Spirituality[e]	74.08	12.04	22.96	88.96
Time 4				
Depressive Symptomatology[a]	4.19	5.27	0	37
Life Stress[b]	.738	1.14	0	8
Marital Satisfaction[c]	24.91	5.16	6	30
Religiosity[d]				
Participation	7.01	2.46	3	12
Centrality	11.27	1.36	3	12
Spirituality[e]	79.88	12.73	16.08	109.92

Note. [a]Depressive Symptomatology score from the BDI-II (Beck, et. al., 1996). [b] Sum of Life Stress from the LTE-Q (Cloninger et al., 1994). [c] Marital Satisfaction Score from the Quality of Marriage Index (Norton, 1983) [d]Religiosity Score from the BSRF (Stanley & Markman, Unpublished). [e]Spirituality score from the DSE (Underwood & Teresi, 2002).

Table 4

t Values Comparing Time 1 and Time 4 Variable Means for Wives and Husbands

	Wives	Husbands
Depressive Symptoms	6.84**	3.23**
Marital Satisfaction	-1.35	-2.01*
Life Stress	6.08**	4.89**
Spirituality	11.73**	-10.18**
Religious Centrality	2.24*	2.46*
Religious Participation	.95	.36

** Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the 0.05 level (2-tailed)

Table 5

Intercorrelations among Life Stress, Religiosity, Spirituality, Depressive Symptomatology, and Marital Satisfaction for Wives at Time 1 and Time 4

	Life Stress	Religious Participation	Religious Centrality	Spirituality	Depressive Symptomatology	Marital Satisfaction
Life Stress	--	-.046	-.120*	-.021	.292*	-.131*
Religious Participation	-.033	--	.279**	.328**	-.161**	.192**
Religious Centrality	-.128*	.202**	--	.562**	-.296**	.249**
Spirituality	-.015	.238**	.580**	--	-.343**	.292**
Depressive Symptomatology	.240**	-.077	-.136**	-.316**	--	-.477**
Marital Satisfaction	-.231**	.089	.105*	.226**	-.435**	--

Time 1 scores presented above the diagonal, Time 4 scores presented below the diagonal.

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

*Correlation is significant at the 0.05 level (2-tailed)

Table 6

Intercorrelations among Life Stress, Religiosity, Spirituality, Depressive Symptomatology, and Marital Satisfaction for Husbands at Time 1 and Time 4

	Life Stress	Religious Participation	Religious Centrality	Spirituality	Depressive Symptomatology	Marital Satisfaction
Life Stress	--	-.015	-.136*	-.122*	.319**	-.101
Religious Participation	-.049	--	.264**	.248**	-.076	.210**
Religious Centrality	-.072	.274**	--	.457**	-.147**	.096
Spirituality	-.042	.266**	.428**	--	-.427**	.342**
Depressive Symptomatology	.255**	-.096	-.208**	-.235**	--	-.434**
Marital Satisfaction	-.091	.181**	.193**	.245**	-.334**	--

Time 1 scores presented above the diagonal, Time 4 scores presented below the diagonal.

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

*Correlation is significant at the 0.05 level (2-tailed)

Table 7

Intercorrelations among Time 1 Religiosity, Spirituality, and Time 4 Marital Satisfaction, Depressive Symptomatology, and Life Stress for Wives and Husbands

	T4 Life Stress	T1 Religious Participation	T1 Religious Centrality	T1 Spirituality	T4 Depressive Symptomatology	T4 Marital Satisfaction
T4 Life Stress	--	.042	.014	.027	.240**	-.231**
T1 Religious Participation	-.044	--	.279**	.328**	-.038	.067
T1 Religious Centrality	-.002	.264**	--	.562**	-.172**	.160**
T1 Spirituality	-.107	.248**	.457**	--	-.240**	.125*
T4 Depressive Symptomatology	.255**	-.164**	-.145**	-.244**	--	-.231**
T4 Marital Satisfaction	-.091	.256**	.128*	.265**	-.334**	--

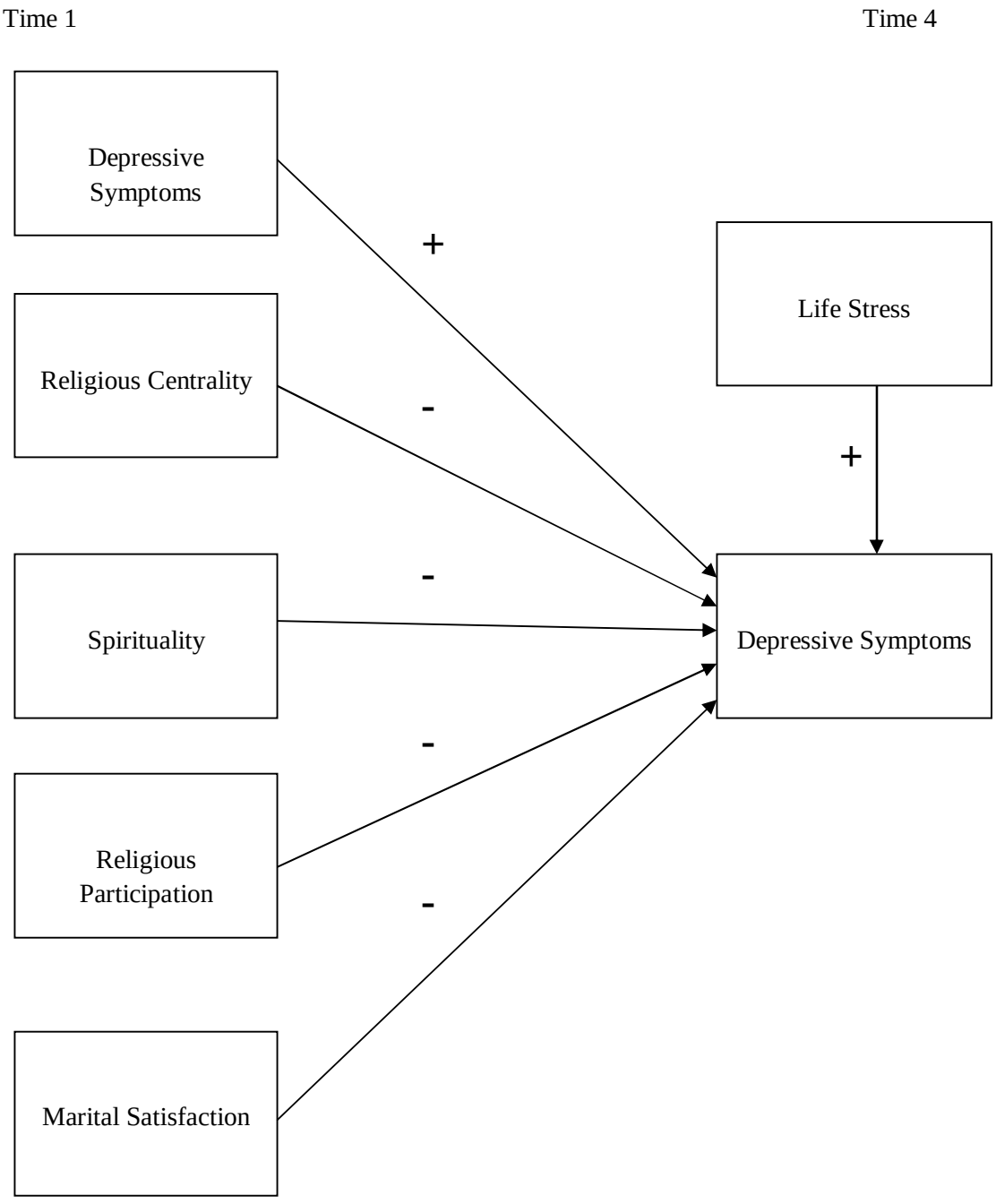
Wives' scores presented above the diagonal, Husbands' scores presented below the diagonal.

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

*Correlation is significant at the 0.05 level (2-tailed)

Figure 1

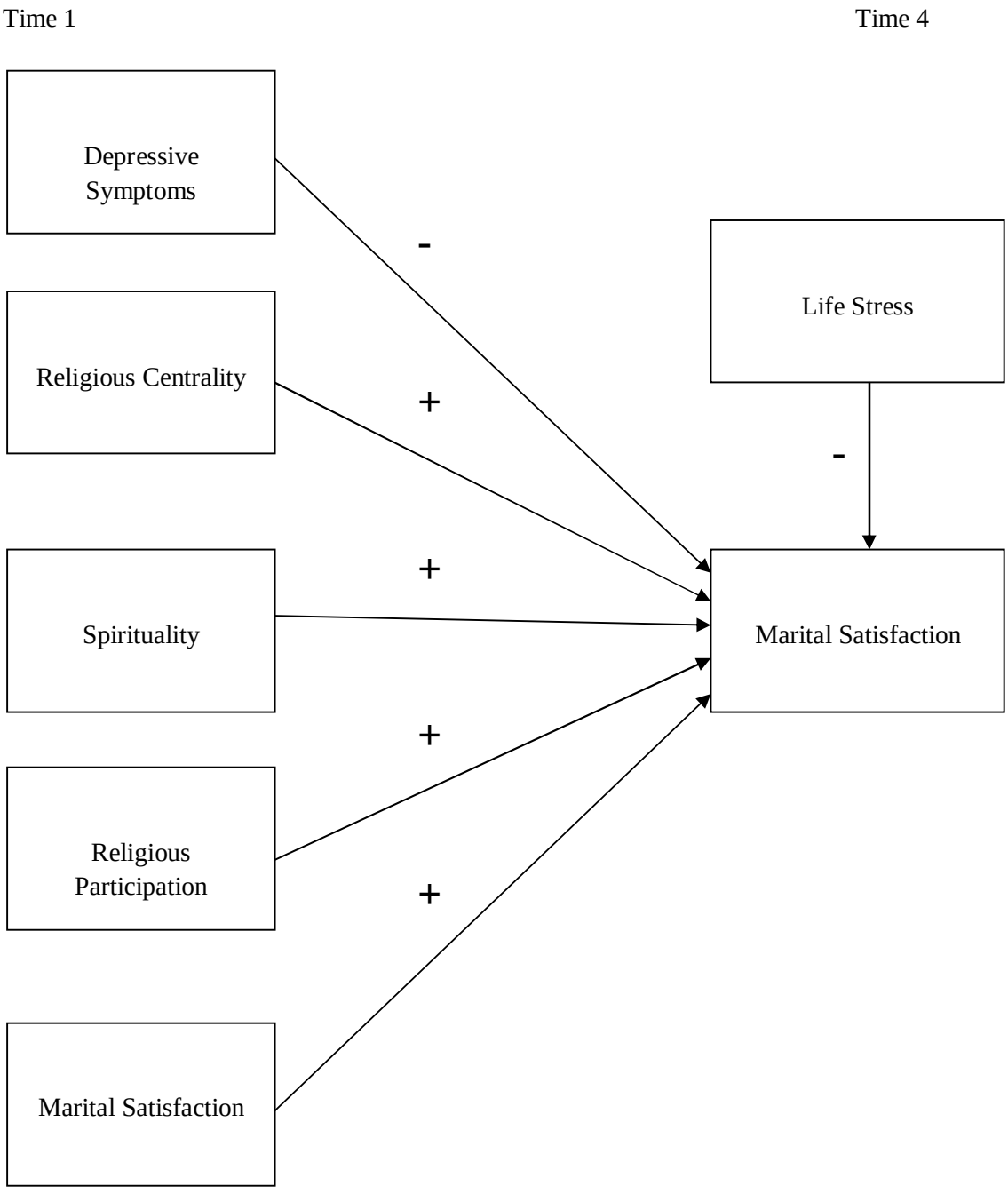
Hypothesized Model for Path Analysis Predicting Time 4 Depressive Symptoms



Note. Time 1 depressive symptoms, marital satisfaction, and religiosity and spirituality, and Time 4 life stress predicting Time 4 depressive symptoms for husbands and wives.

Figure 2

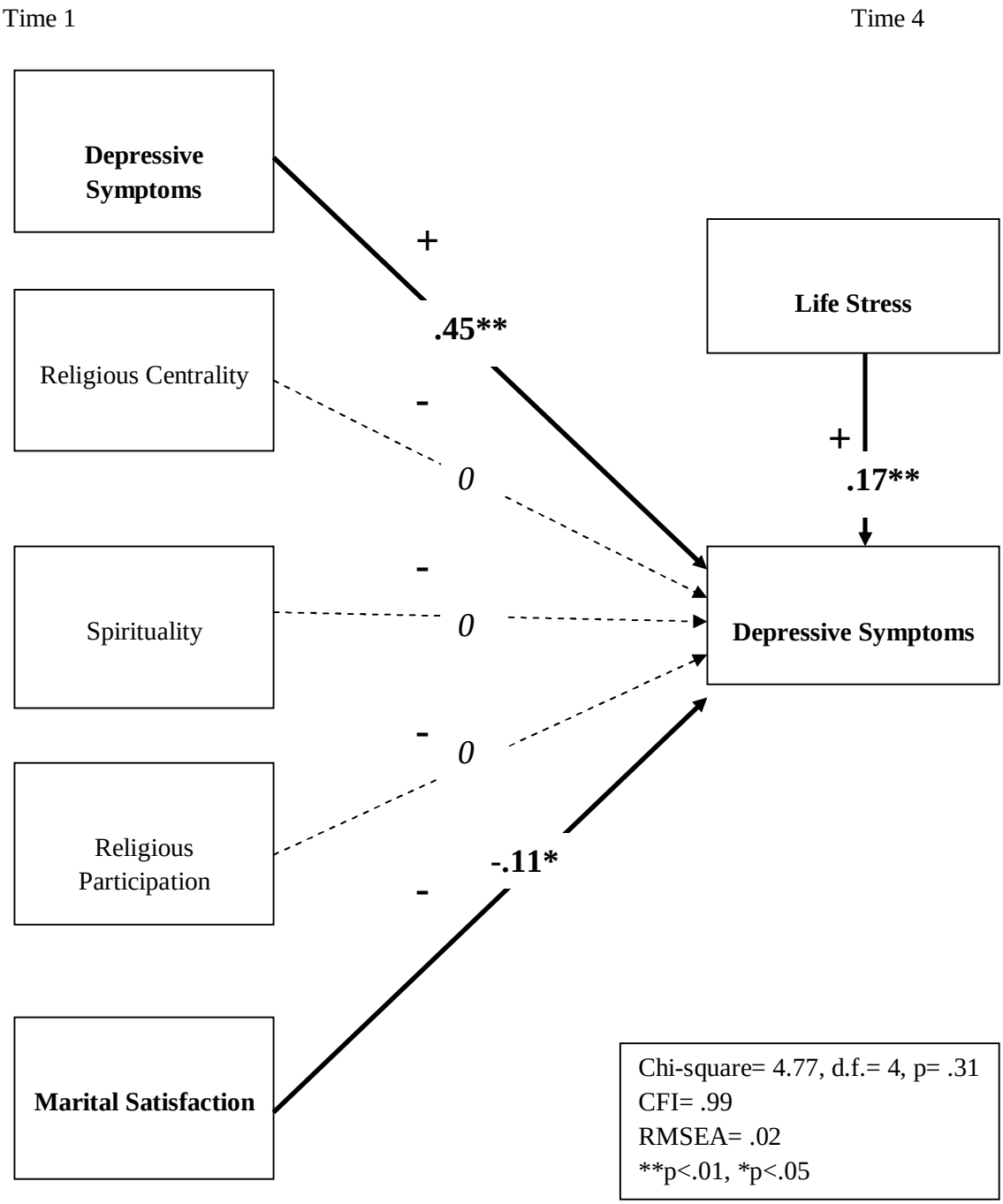
Hypothesized Model for Path Analysis Predicting Time 4 Marital Satisfaction



Note. Time 1 depressive symptoms, marital satisfaction, and religiosity and spirituality, and Time 4 life stress predicting Time 4 marital satisfaction for husbands and wives.

Figure 3

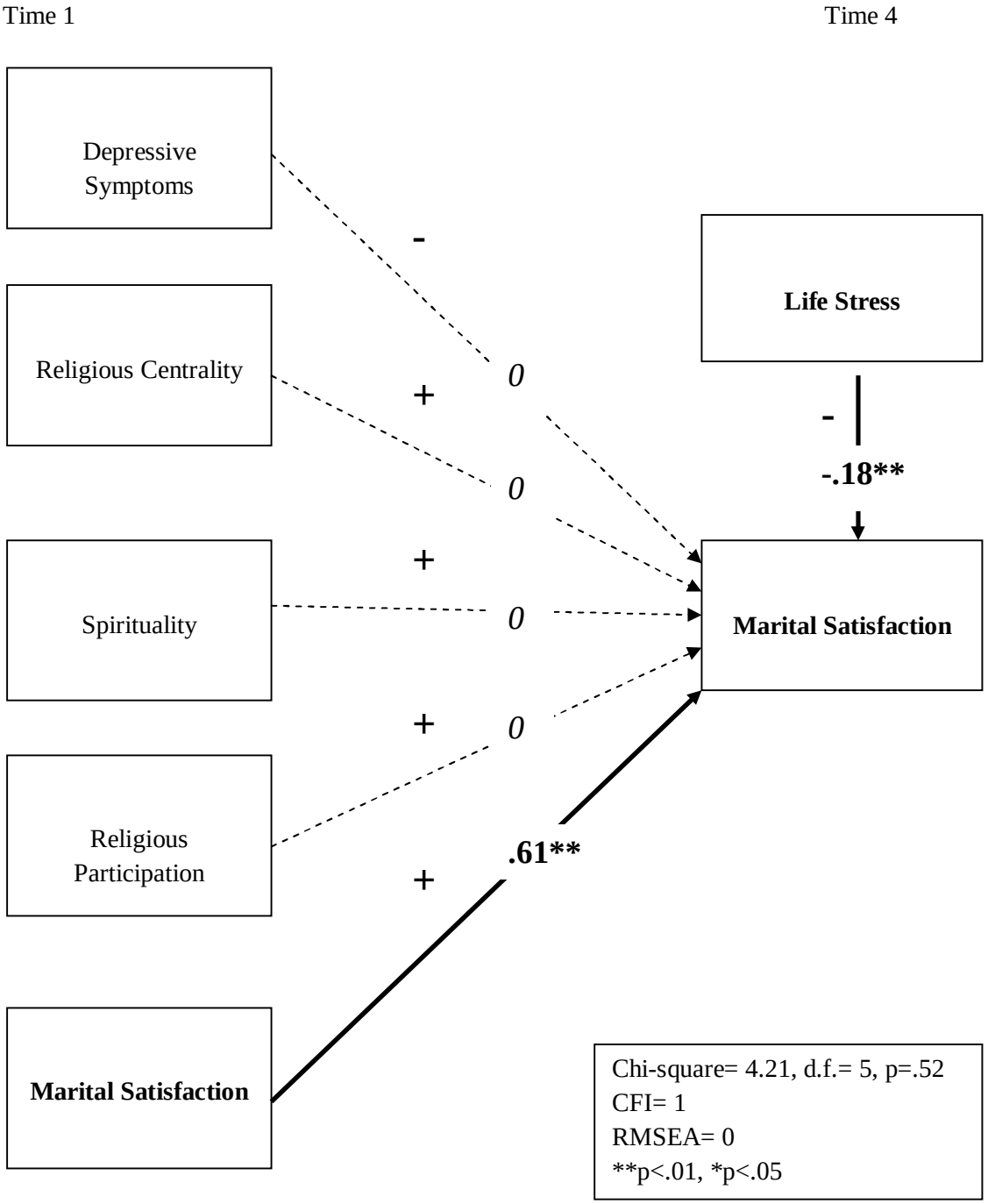
Model Predicting Wives' Depressive Symptoms



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Figure 4

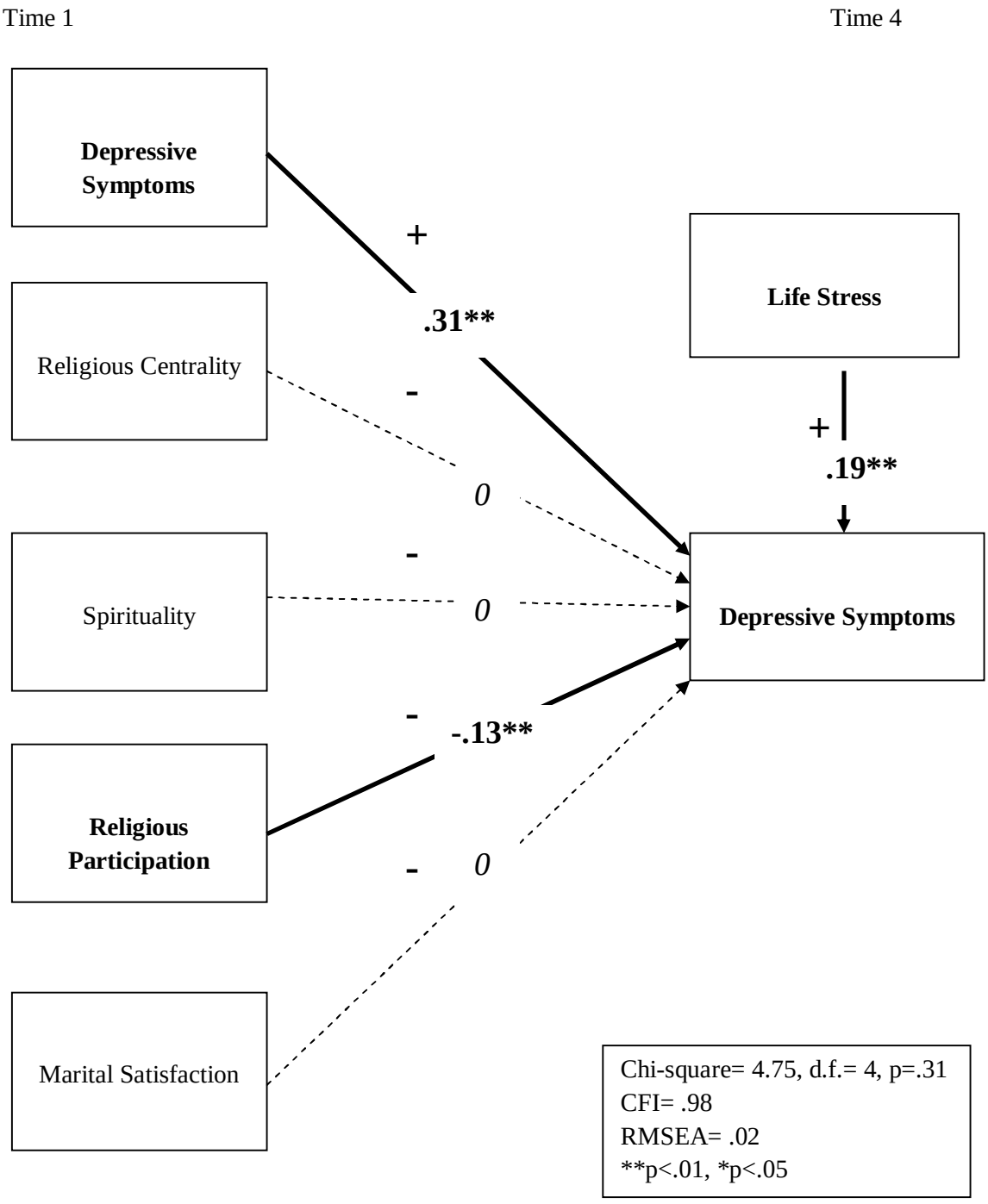
Model Predicting Wives' Marital Satisfaction



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Figure 5

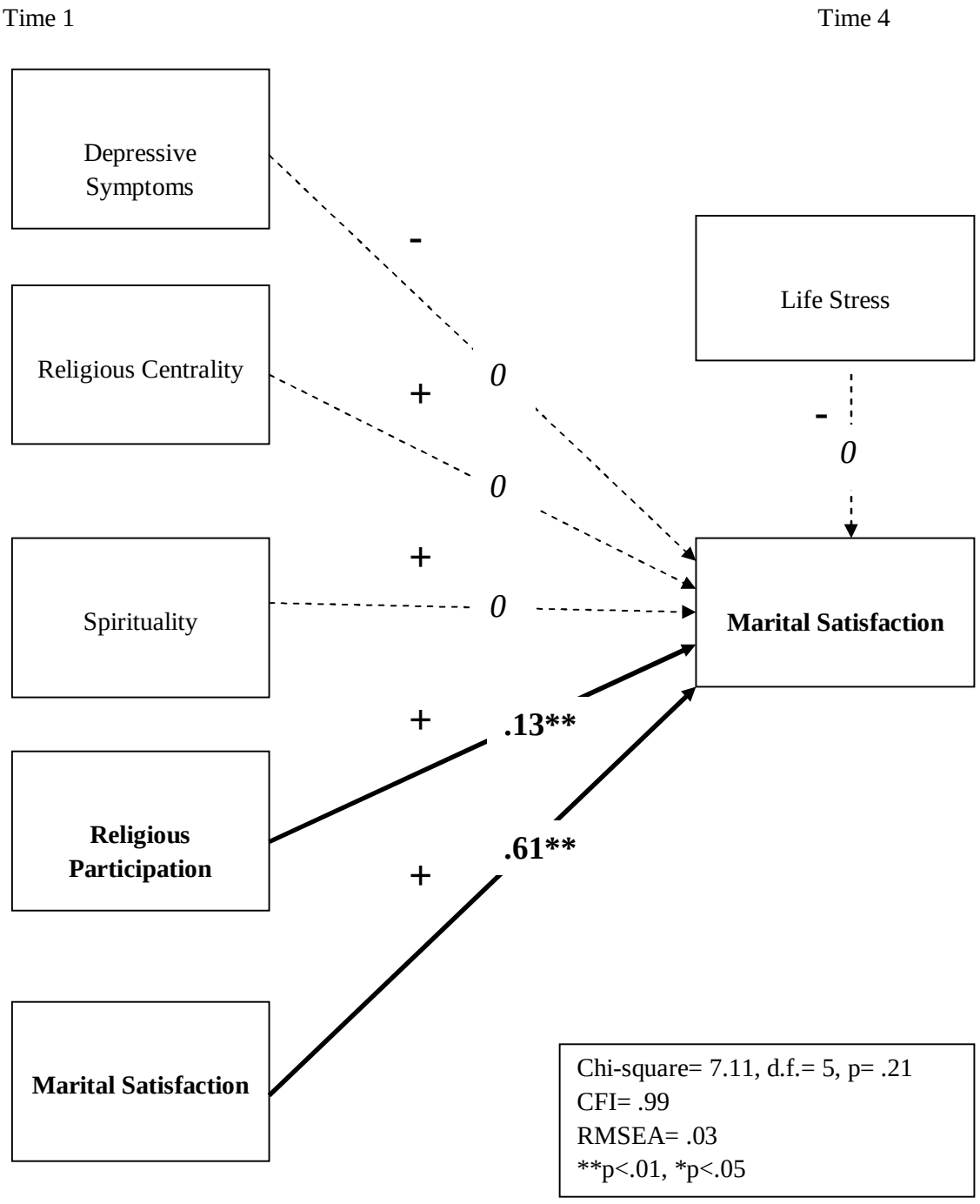
Model Predicting Husbands' Depressive Symptoms



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Figure 6

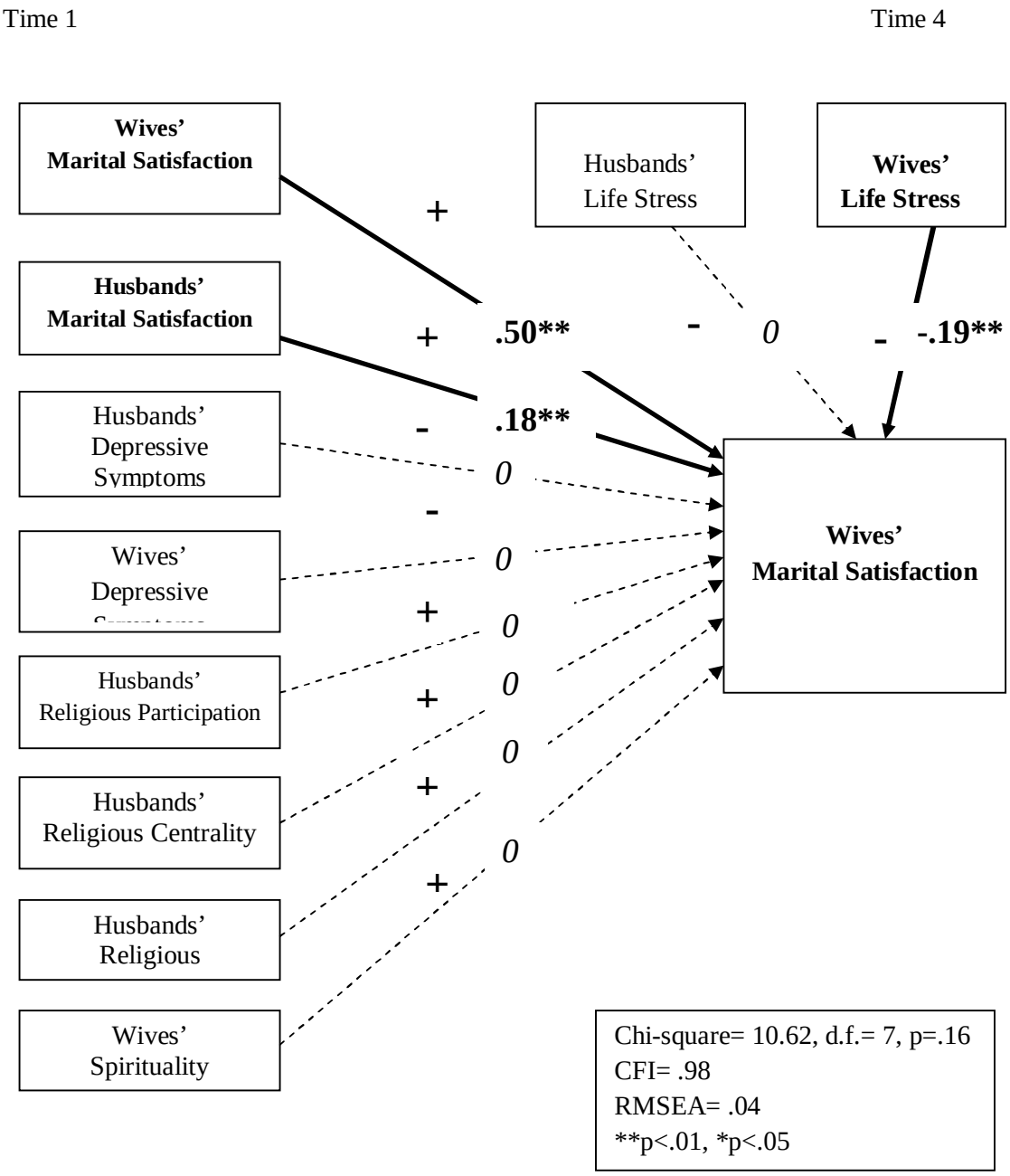
Model Predicting Husbands' Marital Satisfaction



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Figure 7

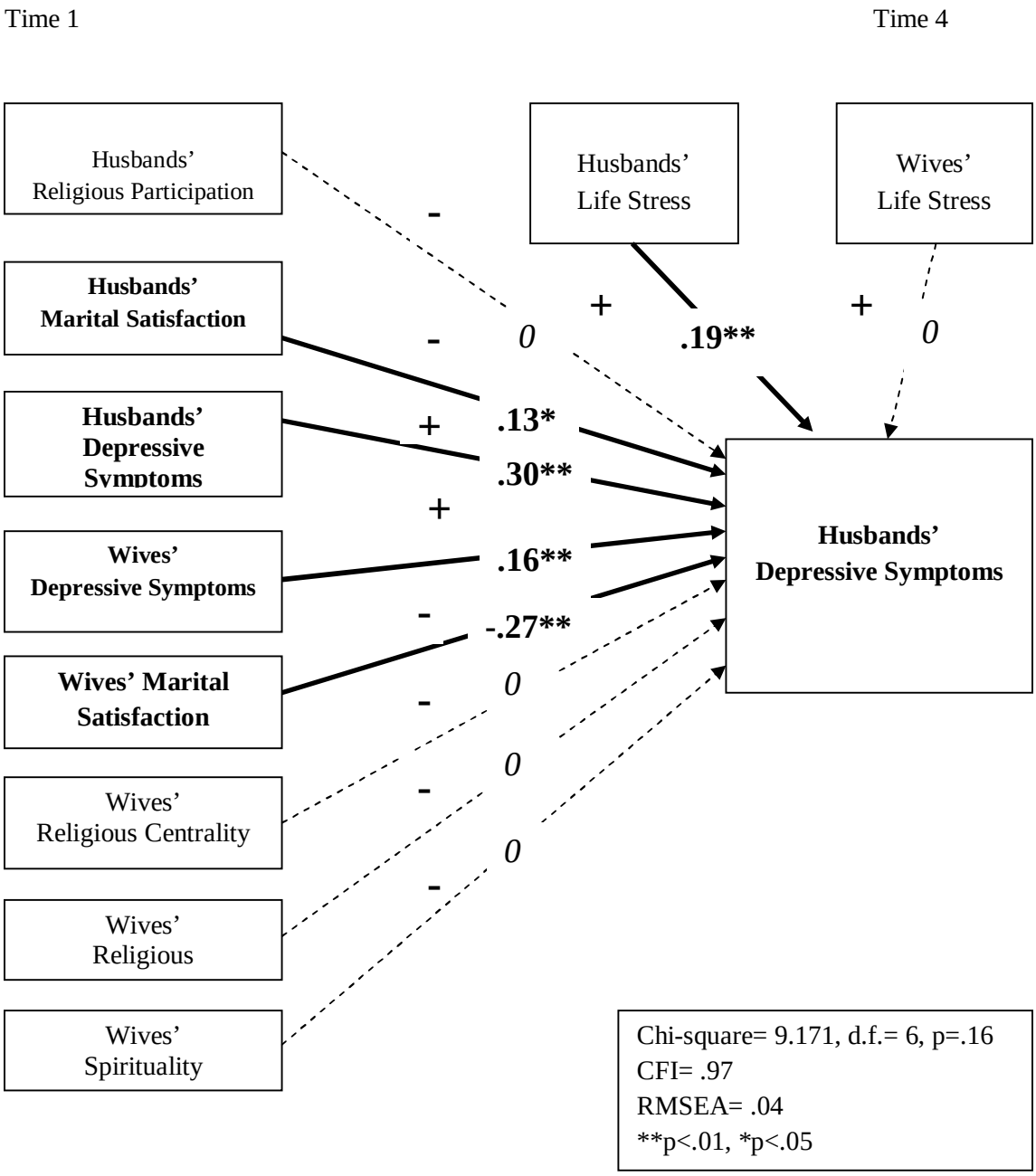
Cross-Spouse Analyses Predicting Wives' Marital Satisfaction



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Figure 8

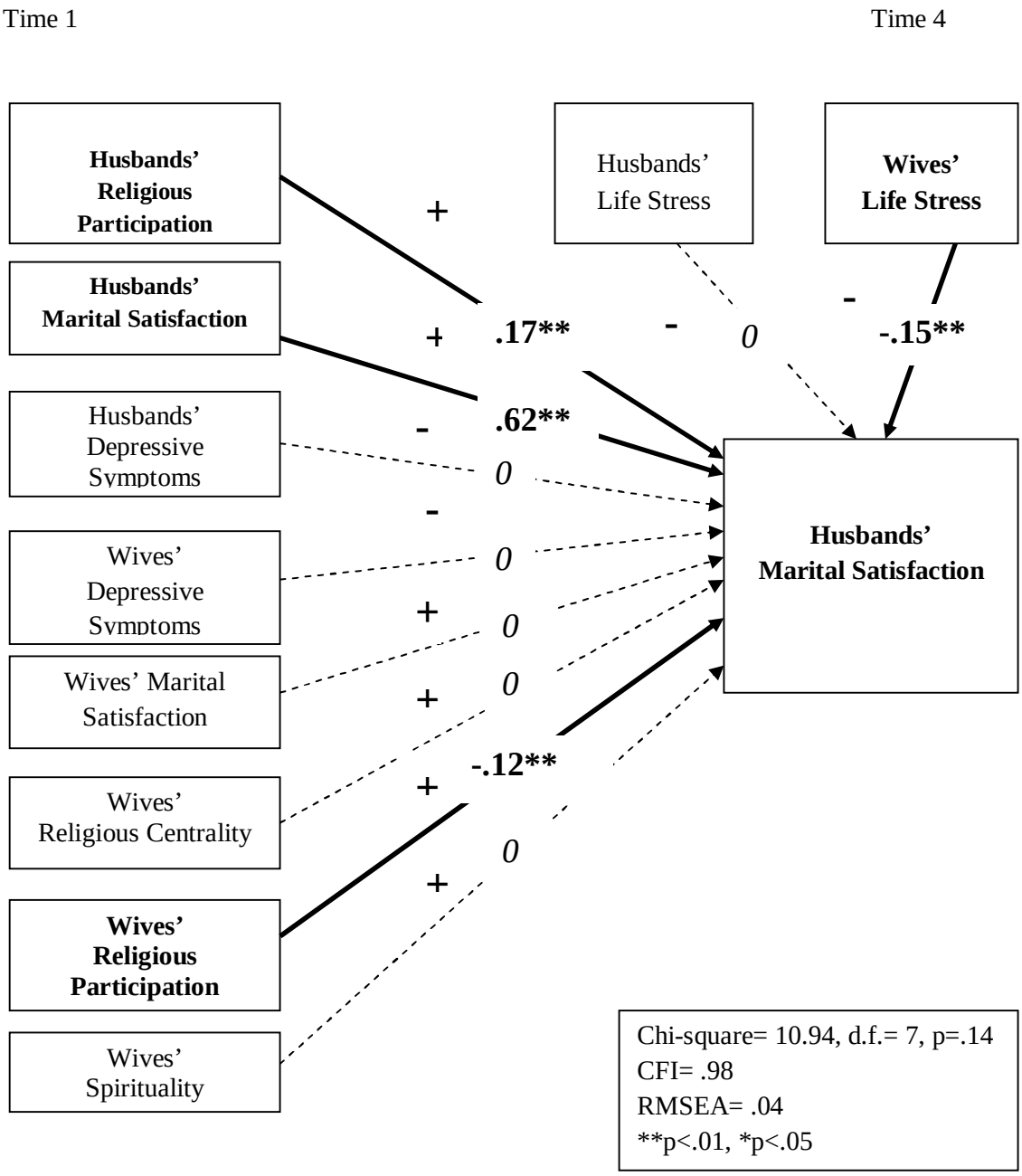
Cross-Spouse Analyses Predicting Husbands' Depressive Symptoms



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Figure 9

Cross-Spouse Analyses Predicting Husbands' Marital Satisfaction



Note. Standardized parameter estimates presented; bold lines indicate paths significant at p≤.05; dashed lines not significant and constrained to zero.

Appendix A: The List of Threatening Experiences (LTE-Q)*

Instructions: Think about approximately the past three months of your life and indicate whether any of these threatening experiences have happened to you. If it did happen to you, indicate the impact on you.

You have suffered a serious illness, injury, or an assault.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

A serious illness, injury or assault happened to a close relative.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

Your parent, child, or mate died.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact

5 = Overwhelming negative impact
Was it related to homicide or suicide?
1 = No
2 = Yes

A close family friend or another relative (aunt, cousin, grandparent) died.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

Was it related to homicide or suicide?
1 = No
2 = Yes

You had a separation due to marital difficulties.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You had a serious problem with a close friend, neighbor, or relative.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact

3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You become unemployed or you were seeking work unsuccessfully for more than one month.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You were fired from your job.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You had a major financial crisis.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You had problems with the police and a court appearance.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

Something you valued was lost or stolen.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You (or your mate) became unexpectedly pregnant.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact
3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact

You were unable to afford essential items such as food.
1 = Did not happen
2 = Happened within the past three months

What was the impact on you?
1 = Little or no negative impact
2 = Some negative impact

3 = Substantial negative impact
4 = Substantial and sustained negative impact
5 = Overwhelming negative impact
* Items were coded such that 0=Did not happen and 1= Did happen

Appendix B: Beck Depression Inventory- Second Edition

Please read each group of statements carefully, then pick out the one statement in each group which best describes the way you have been feeling during the past 2 weeks including today! Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, simply circle the statement which has the largest number.

1. Sadness
   - 0 I do not feel sad.
   - 1 I feel sad much of the time.
   - 2 I am sad all of the time.
   - 3 I am so sad or unhappy that I can't stand it.

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

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

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

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

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

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

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

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

10. Crying
    - 0 I don't cry any more than I used to.
    - 1 I cry more now than I used to.
    - 2 I cry over every little thing.
    - 3 I feel like crying but I can't.

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

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

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

14. Worthlessness
    - 0 I do feel I am worthless.
    - 1 I don't consider myself as worthwhile or useful as I used to.
    - 2 I feel more worthless as compared to other people.
    - 3 I feel utterly worthless.

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

16. Change in Sleeping Pattern *** Do not circle more than one statement. ***
    - 0 I have not experienced any change in my sleeping pattern.
    - 1a I sleep somewhat more than usual.
    - 1b I sleep somewhat less than usual.
    - 2a I sleep a lot more than usual.
    - 2b I sleep a lot less than usual.
    - 3a I sleep most of the day.
    - 3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability
    - 0 I am no more irritable than usual.
    - 1 I am more irritable than usual.
    - 2 I am much more irritable than usual.
    - 3 I am irritable all the time.

18. Change in Appetite *** Do not circle more than one statement. ***
    - 0 I have not experienced any change in my appetite.
    - 1a My appetite is somewhat less than usual.
    - 1b My appetite is somewhat greater than usual.
    - 2a My appetite is much less than before.
    - 2b My appetite is much greater than usual.
    - 3a I have no appetite at all.
    - 3b I crave food all the time.

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

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

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

Appendix C: Daily Spiritual Experience Scale*

1 = Many times a day
2 = Every day
3 =Most days
4 = Some days
5 = Once in a while
6 = Never or almost never

1. I feel God's presence
2. I experience a connection to all life.
3. During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns.
4. I find strength in my religion or spirituality.
5. I find comfort in my religion or spirituality.
6. I feel deep inner peace or harmony.
7. I ask for God's help in the midst of daily activities.
8. I feel guided by God in the midst of daily activities.
9. I feel God's love for me, directly.
10. I feel God's love for me through others.
11. I am spiritually touched by the beauty of creation.
12. I feel thankful for my blessings.
13. I feel a selfless caring for others.
14. I accept others even when they do things I think are wrong.
15. I desire to be closer to God or in union with Him.

*All items were reverse scored

Appendix D: Religiosity Items from the BSRF

Religious Participation

How often in the past month did you attend church services?
1 Never
2 Once or twice
3 Three to four times
4 More than once a week
5 Daily

How often in the past month did you attend social events with other members of your church?
1 Never
2 Once or twice
3 Three to four times
4 More than once a week
5 Daily

How often in the past month did you attend a class or discussion group on religion?
1 Never
2 Once or twice
3 Three to four times
4 More than once a week
5 Daily

Religious Centrality

In general, how important are religious or spiritual beliefs in your day-to-day life? Are they:
1 = Not at all important
2 = Not too important
3 = Fairly important
4 = Very important

How much do you believe that God or someone with a higher power watches over you and guides your life?
1 Definitely do not believe this
2 Somewhat unsure of this
3 Somewhat believe this
4 Strongly believe this

When you have problems or difficulties in your family, work, or personal life, how often do you seek spiritual comfort and support? Is it:
1 = Almost never
2 = Rarely
3 = Sometimes
4 = Often
5 = Almost always

Appendix E: Quality of Marriage Index

Please think about each question and then answer it with your mate in mind.

We have a good relationship.
1 = Strongly disagree
2 = Disagree
3 = Neither disagree nor agree
4 = Agree
5 = Strongly agree

My relationship with my mate is stable.
1 = Strongly disagree
2 = Disagree
3 = Neither disagree nor agree
4 = Agree
5 = Strongly agree

Our relationship is strong.
1 = Strongly disagree
2 = Disagree
3 = Neither disagree nor agree
4 = Agree
5 = Strongly agree

My relationship with my mate is happy.
1 = Strongly disagree
2 = Disagree
3 = Neither disagree nor agree
4 = Agree
5 = Strongly agree

I feel like a part of a team with my mate.
1 = Strongly disagree
2 = Disagree
3 = Neither disagree nor agree

4 = Agree
5 = Strongly agree

Which best describes the degree of happiness, everything considered, in your relationship?

1= Very unhappy
2= Unhappy
3= Happy
4= Very happy
5= Perfectly happy