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Exploring Mediators of Religiosity and Depressive Symptoms in Married Couples

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Substantial research has established that increases in religiosity can serve as a protective factor against depression. However, almost no research has focused on this relationship within a couple relational framework. Theory and previous research provide evidence that there may be several indirect or mediational pathways whereby this relationship is manifest. Three longitudinal Actor-Partner Interdependence Models were used to test the relationships between religiosity at Time 1, forgiveness at Time 3, marital satisfaction at Time 4 and depressive symptoms at Time 5. Data came from a longitudinal sample of 315 married couples who were studied over a five year period. Religiosity was used as a predictor in the first analysis with both self-reported and perception of partner measures of forgiveness as mediators with marital satisfaction as the outcome. Religiosity was used as a predictor in the second analysis with marital satisfaction as a mediator and depressive symptoms as the outcome. Finally, all of the variables were analyzed simultaneously with the measures of forgiveness serving as the first mediator, and marital satisfaction serving as a second mediator in the relationship between religiosity and depressive symptoms. General findings indicated that husbands' religiosity was more impactful on the relationships of interest when compared to wives' religiosity. However, in the first analysis, wives' religiosity had a negative impact on wives' perceptions of partner forgiveness which led to decreases in both partners' marital satisfaction. In the second analysis, wives' religiosity had a negative impact on marital satisfaction for both partners which led to increases in husbands' depressive symptoms. Alternatively, husbands' religiosity did not have an impact on any of the measures of forgiveness. However, husbands' religiosity had a direct positive impact on both

wives' and husbands' marital satisfaction which led to decreases in depressive symptoms for both partners through an array of indirect actor and partner effects. No significant direct effects were found between religiosity and depressive symptoms. However, in the final analysis when all of the variables were estimated simultaneously, there was only one significant indirect effect wherein husbands' marital satisfaction served as a significant partial mediator between husbands' religiosity and husband's depressive symptoms.

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Exploring Mediators of Religiosity and Depressive Symptoms in Married Couples

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Introduction

Depression has been cited as one of the most prevalent ailments in society. The National Survey on Drug Use and Health (2004) found that of adults aged 18 or older, 8% (17.1 million adults) had experienced at least one major depressive episode in the past year and 14.8% (31.6 million adults) have experienced at least one major depressive episode in their lifetime. Depression has been found to be the second most prevalent disability in the world, and like most chronic diseases, has led to significant losses in functioning. It is estimated to cost more than $51 billion a year in absenteeism and decreased productivity in employment (Miranda, et al., 2008).

Additionally, religion has been found to be an integral part of many American's lives. This is evidenced by the 2012 Gallup Poll which found that roughly 70% of Americans reported being very or moderately religious (Newport, 2012). Multiple studies and reviews of the literature display a theme of finding an inverse relationship between increased religiosity and the prevalence of depression disorders and symptoms (Bonelli, Dew, Koenig, Rosmarin, & Vasegh, 2012; Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; Power & McKinney, 2013).

Despite the previous work in the area of religiosity and depression, little has been done to understand the relationship between religiosity and depression within couple relationships. Most of the couple relational literature about associations between religiosity, spirituality and depression has been focused on health or disease (Hasson-Ohayon, Goldzweig, Braun, & Galinsky, 2010; Milbury, et al., 2015) and bereavement (Broderick, Birbilis, & Steger, 2008; Swanson, Kane, Pearsall-Jones, Swanson, & Croft, 2009; Wijngaards-de Meij, et al., 2005). Little is known about the effect of religion on depression within couple relationships in either general or mental health clinical populations. Most preliminary work done to this point has been in the form of case studies (Hoffman, 2010).

While direct connections between religiosity and depression in married couples have not yet been established, research has shown that there are other empirical pathways whereby this relationship may be manifest. Forgiveness and marital satisfaction have been found in previous couple relational research to be related to both religiosity and depression. As such the relationship between religiosity and depression in couple relationships may be manifest through the indirect or mediational pathways of forgiveness and marital satisfaction. Within the marital relationship, religiosity has been shown to be a protective factor as it has consistently been found to have a positive relationship with forgiveness (Batson & Shwalb, 2006; Jose & Alfons, 2007) as well as marital satisfaction and commitment (Ahmadi, & Hossein-abadi, 2009). Researchers have also found that higher levels of forgiveness were associated with higher levels of marital satisfaction and stability (Fenell, 1993; Fincham, 2000; Paleari, Regalia, & Fincham, 2005). Additionally, associations have been found between higher levels of forgiveness and decreases in depression in couples (Baskin, Rhody, Schoolmeesters, & Ellingson, 2011). This relationship, however, is much more established among individuals (Hirsch, Webb, & Jeglic, 2011; Toussaint & Webb, 2005; Toussaint, Williams, Musick, & Everson-Rose, 2008a; Toussaint, Williams, Musick, & Everson-Rose, 2008b).

Not only have studies consistently found positive correlations between religiosity and marital satisfaction and commitment, (Ahmadi, & Hossein-abadi, 2009; Craddock, 1991; Fiese & Tomcho, 2001; Mahoney, Pargament, Tarakeshwar, & Swank, 2001) several studies have also found marital satisfaction to be a protective factor against depression (Beach, Katz, Kim & Brody, 2003; Whisman & Baucom, 2012; Whitton, et al., 2008). The previous research in these areas suggests that the pathways by which religiosity influences depression is through the indirect or mediational effects of forgiveness and marital satisfaction.

Therefore, the overarching goal of this dissertation was to examine both direct and indirect pathways to provide more understanding about the relationship between religiosity and depression within a couple relational framework. This was accomplished by conducting several mediational analyses that all built up to a final analysis that included all of the variables of interest. All of these analyses were examined by utilizing the Actor Partner Interdependence Model (APIM). The first analysis focused on the role of forgiveness as a mediator of the relationship between religiosity and marital satisfaction. The second analysis examined the role of marital satisfaction as a mediator of the relationship between religiosity and depressive symptoms. The final analysis was a combination of the two previously mentioned analyses and examined both forgiveness and marital satisfaction as mediators in the relationship between religiosity and depressive symptoms.

The format for the dissertation will be as follows. There will be a brief review of the literature about religiosity versus spirituality as well as a review of the long studied relationship between religiosity and depression in individuals. This will be followed by an examination of theories about the relationships between religiosity, depression and possible mediators. Next, there will be a brief discussion surrounding the controls and the longitudinal design used in the analyses. Each of the three models will then be introduced separately. Each model will be accompanied by a review of the literature, a discussion on methods, an analysis, and a discussion section specific to the relationships of interest. Finally, clinical implications, limitations and significance of the dissertation will be discussed.

Religiosity and Spirituality

Scholars have long debated how to define religiosity and spirituality (Hill et al., 2000; Schlehofer, Omoto, & Adelman, 2008; Zinnbauer et al., 1997; Zinnbauer, Pargament, & Scott,

1999). Some scholars have conceptualized the measurement of religion as extrinsic, or behaviors, while spirituality has been deemed intrinsic, or experiential/emotional (Johnstone, et al., 2009). Yet, other recent scholars consider religiosity to be composed of both intrinsic and extrinsic constructs (Power & McKinney, 2013). There is not an established consensus about these varying definitions. Given the lack of consensus this study will follow Power and McKinny (2013) in using the term religiosity to denote both the extrinsic and intrinsic components of religiosity.

Religiosity and Depression

Despite the lack of dyadic relational research examining religiosity's impact on depression, there is a large body of literature examining the relationships between individuals' religiosity and depression. In an extensive review of the literature, Koenig, King, and Carson (2012) identified 443 quantitative studies focused on the relationship between religiosity and depression. Their review indicated that 61% of studies found that greater religiosity was associated with less depression, predicted faster recovery times from depression, or that religious interventions reduced depression symptoms faster than secular treatments or controls for religiously oriented people. Roughly 22% of studies found no association between religiosity and depression and roughly 6% of the studies found associations between increased religious involvement and increased depression.

Koenig et al., (2012) offered several theoretical reasons to aid in understanding the incongruences about the relationship between religiosity and depression. First, most of the positive effects of religiosity have been found in studies wherein people are experiencing social, psychological or physical stressors. Religious beliefs and behaviors can be stress buffering and comforting for those experiencing difficulties (Koenig, et al., 2012), which is congruent with the

stress coping model of religion presented by Pargament (1997), which proposed that religiosity can buffer the impact of stress on functioning. These effects may not be as prominently displayed in well-off or healthy general populations. Second, if individuals do not feel their religious beliefs are accepted by the culture and society surrounding them, they may feel persecuted in their religious practices and beliefs. Third, individuals who may not be living up to their personal religious values but still have a desire to engage in religious practices may feel conflicted or dissonant about their behaviors and beliefs, which in turn could lead to increases in depressive symptoms (Koenig, et al., 2012).

Theory: Religious Couples and Depression

In exploring theoretical explanations about the relationship between religiosity and depression in couples, it is first important to understand the theory about these processes in individuals. The stress coping model of religion presented by Pargament (1997) has been able to provide understanding about improved health outcomes and their relationship with protective factors of religiosity including forgiveness. This model proposes that religiosity, as an orienting or belief system, can buffer the impact of stress on functioning in individuals. As the magnitude of stressful life events increase it challenges the vulnerability and strengths of the individual's orienting or belief system. The strength of the orienting system will determine how the individual copes with stressful life experiences. However, little is known about its application in marital relationships of either general or mental health clinical populations.

Some relational research has been done to test this model with depression and caregiving, though most of this has been conducted in non-familial relationships (Blieszner & Roberto, 2010; Pearlin, Mullan, Semple, & Skaff, 1990; Sun & Hodge, 2014). Initial testing of the stress coping model in caregiving found lower perceived importance of religion was one factor that led

caregivers of older adults with mild cognitive impairments to have increases in depressive symptoms (Blieszner & Roberto, 2010). This preliminary work with caretakers led other researchers to test the stress coping model with a focus on religiosity. Sun and Hodge (2014) were able to find religiosity to be a protective factor as it had both moderation and mediation effects in examining the relationship between stress and depression in caretakers of older adults with Alzheimer 's disease. Additionally, Kim, Hayward, and Reed (2014) examined the relationship between familial caregivers and found that increased religiosity and spirituality led to increased purpose in life. Familial caretakers' increased purpose in life led to increases in elders' purpose in life which led to decreases in depressive symptoms. This work, though conducted mostly in non-familial relationships, could be a guide in examining further relational connections between religiosity and depression such as in the couple relationship.

The theory that does exist about religiosity in marital relationships is rooted in couple transformational processes. In recent years, scholars have proposed a shift in the marriage literature and argued that marital research should no longer focus solely on marital conflict as a relational process. Instead it has been proposed that there should be a focus on other strength based transformational processes (Fincham, Stanley, & Beach 2007). Salient reasons for this shift are rooted in marital conflict not accounting for the entirety of the marriage relationship. Longitudinal studies have revealed that conflict by itself only accounts for a limited amount of variability in later marital outcomes. Additionally, other change processes in marriage such as forgiveness, commitment, sacrifice and sanctification have not been given much attention because of the general focus on the role of conflict in marriage (Fincham, et al., 2007). To address the void in the literature about these processes and their connection to religiosity,

research with highly religious married couples was conducted to broaden theory in understanding these processes (Goodman, Dollahite, Marks, & Layton, 2013).

Goodman et al. (2013) examined qualitative themes surrounding religious faith and transformational processes in marital commitment/satisfaction and coping using a national sample of 184 highly religious married couples. Couples reported several core beliefs that influenced their commitment and satisfaction. These included feeling that God was a part of their relationship, that marriage was a unique relationship, and the need for couples to have a long-term perspective. Couples also reported several core beliefs about the role of coping. These included that challenges are needed in life, challenges bring couples closer to God, and that these couples chose to have a long-term perspective (Goodman et al., 2013). Goodman et al. (2013) proposed that these beliefs provide additional theory in understanding the role of religiosity within the marriage relationship.

These themes provide a theoretical backdrop to understand the relationship between religiosity and depression by providing a clearer understanding that religious married couples are able to cope as they view challenges from a long-term perspective, which bolsters the ideas previously proposed in the stress-coping model. Kimball (2001) captured this perspective well when he said:

> "If we looked at mortality as the whole of existence, then pain, sorrow, failure, and short life would be calamity. But if we look upon life as an eternal thing stretching far into the premortal past and on into the eternal post-death future, then all happenings may be put in proper perspective" (p. 97)

The belief of having a long-term perspective is also a tenant in theories about the role of forgiveness in interpersonal relationships. In their work to further understand the theoretical

underpinnings of forgiveness, McCullough, et al. (1998) explained that healthy couples who have a long-term perspective about their marital relationship may be more willing to forgive and overlook hurts. The core belief of keeping a long-term perspective appears to be important in understanding the relationships between religiosity and depression. Additionally, this theoretical lens suggests forgiveness as well as marital satisfaction may serve as mediators or indirect pathways by which religiosity may impact depression in married couples.

Controls

In examining the relationships between religiosity, forgiveness, marital satisfaction and depression, it is also important to consider potential covariates. Income, length of marital relationships and number of children have all been linked with marital satisfaction and depression. Increases in income have been linked with increases in marital satisfaction (Rogers & DeBoer, 2001) and decreases in depression (Gorn, Sainz, & Icaza, 2005; Malik et al., 2007). Additionally, the length of the marital relationship has been found to have a negative impact on both marital satisfaction and depression (Kouros, Papp, & Cummings, 2008). Previous researchers have found that the number of children negatively impacts marital satisfaction (Wendorf, Lucas, Imamoğlu, Weisfeld, & Weisfeld, 2011). Finally, number of children has been used in previous research as a couple level covariate in examining couple depression (Gerstorf, Hoppmann, Kadlec, & McArdle, 2009; Hoppmann, Gerstorf, & Hibbert, 2011). Given the associations between income, length of marital relationships, and number of children, these variables were used as controls in each of the following analyses. Additionally, each of the following longitudinal analyses used the appropriate initial reports of the measures of forgiveness, marital satisfaction, and depressive symptoms as controls. Both actor and partner effects were used to control for later measures of the same construct. Actor effects were used as

stability paths and partner effects were used as influence or responsiveness effects (Cook & Kenny, 2005; See Figure 1 for an example).

Model One: Religion, Forgiveness, and Marital Satisfaction

Several studies have found positive connections between religiosity and marital satisfaction (Ahmadi, & Hossein-abadi, 2009; Craddock, 1991; Fiese & Tomcho, 2001). In their meta-analytic review of the literature from 1980 to 2000, Mahoney, Pargament, Tarakeshwar, and Swank (2001) found that marital satisfaction and commitment consistently covaried with spouses' general religiousness. However, little theory exists that explains the relationship between religiosity and marital satisfaction (Amato, 2010). Mahoney, Pargament, Murray-Swank, and Murray-Swank (2003) challenged researchers to focus on more than simple associations such as church attendance or religious affiliation in examining the relationship between religiosity and marital satisfaction. They encouraged researchers to try to measure components of religiosity that would be more meaningful by showing phenomena that are considered sacred (Mahoney, et al., 2003; Pargament & Mahoney, 2005; Stafford, David, & McPherson, 2014).

Recently theory has emerged about religious transformative processes and marital commitment and satisfaction (Goodman et al., 2013). Findings suggest that beliefs that God was a part of the marriage relationship, that marriage was a unique relationship, and the need for couples to have a long-term perspective were all salient themes held by highly religious couples. These beliefs provide a theoretical foundation that connects the variables of religiosity and marital commitment and satisfaction.

Additionally, several studies and meta-analytic reviews of the literature have found a positive relationship between increases in religiosity and increases in forgiveness (Davis,

Worthington, Hook, & Hill, 2013; Fehr, Gelfand, & Nag, 2010; Sandage & Crabtree, 2012).

While some have found the effect size to be small (Fehr, et al., 2010), others have found that the

effect size depends on how religiosity and forgiveness are measured (Davis, et al., 2013). For

example, correlations between religiosity and trait forgiveness or forgiving across situations,

time and relationships yielded a larger correlation than correlations between religiosity and state

forgiveness or forgiveness of a specific event. Additionally, contextual measures of religiosity

that are more proximal to forgiveness have been shown to have a larger correlational relationship

when compared to dispositional measures, such as religious commitment (Davis, et al., 2013). To

further examine the impact of religious factors within couple relationships, Lambert, Fincham,

Stillman, Graham, and Beach (2010) tested the impact of praying for one's partner on partner

forgiveness. They found that when participants sincerely prayed for the well-being of their

romantic partner, it significantly increased ratings of forgiveness when compared to a control

group who were asked to describe characteristics of the partner to an imagined parent.

Forgiveness has been shown to be a powerful protective component in marital

relationships (Fincham, 2000; Gordon & Baucom, 1998; Orathinkal & Vansteenwegen, 2006).

Researchers have found evidence that increased forgiveness is associated with increased marital

satisfaction (Orathinkal & Vansteenwegen, 2006; Paleari, Regalia, & Fincham, 2005). Theory

behind these associations is that the more forgiving partners are, the more positive assumptions

they will make about their marriage, thus there will be more equality in marital power, and

partners will feel more invested in a close and adjusted marriage (Gordon & Baucom, 1998).

Additionally, Fincham's work (Fincham, 2000; Fincham & Beach, 2002; Paleari, et al., 2005)

explained that forgiveness in marriage is tied to more constructive communication, less

ineffective arguing, and decreases in psychological aggression leading to increased marital satisfaction.

Researchers have also found that when couples are asked about forgiveness, women tend to focus on specific events and men tend to focus on more global assessments of the relationship (Sanford, 2005; Miller & Worthington, 2010). Limited research has been conducted about couples' perceived forgiveness of their partner. Miller and Worthington (2010) examined sex differences in partners' own marital forgiveness and partner perceptions of spousal forgiveness. They found that men were typically more forgiving when compared to women and that when asked about their perception of their partner's forgiveness, women typically perceived their husbands to be more forgiving than husbands perceived their wives to be. However, no previous studies have examined the relationship between religiosity and partner perceptions of spousal forgiveness.

Previous researchers that have used perceptions of partner's forgiveness as a predictor found that increases in perceptions of partner's forgiveness positively impacted individual levels of trust. Increases in individual levels of trust led to increases in individual commitment levels as mediated through increases in levels of relationship satisfaction (Wieselquist, 2009). However, perceptions of partner forgiveness have not been studied in relation to religiosity, therefore making it difficult to make inferences about this relationship.

Connecting Religiosity, Forgiveness, and Marital Satisfaction

The established relationships between religiosity, forgiveness, and marital satisfaction provide merit for examining these interactions within a couple relational framework. These associations in addition to the theoretical framework afore mentioned suggest that the connection between religiosity and marital satisfaction may be mediated through forgiveness. Only a limited

number of studies have examined the interconnected nature of all of these variables, and they have had mixed findings based on the different aspects of religiosity that have been used in the analysis. Stafford, et al. (2014) tested a mediation model by examining the simultaneous mediation effects of sacrifice, forgiveness, and lack of forgiveness in the relationship between sanctification of marriage (or feeling that God was a part of your marriage) and marital satisfaction and marital dissatisfaction. They found that while sacrifice significantly mediated the relationship between sanctification of marriage and marital satisfaction, forgiveness did not. Additionally, in their preliminary analysis they found significant actor effects between forgiveness and marital quality whilst accounting for religious factors. However, no significant partner effects were found.

David and Stafford (2015) tested several hypotheses about the relationships between religion, forgiveness, and marital satisfaction. First, they hypothesized that increases in the individual's relationship with God would lead to increases in both individual's (actor effects) and partner's (partner effects) marital satisfaction. Second, they proposed that couple's joint religious communication (JRC; or couple's joint spirituality and religious activities) would be positively associated with one's own marital satisfaction and the marital satisfaction of their partner. Third, individual's forgiveness would be associated with increases in both individual ratings of marital satisfaction and partner ratings of marital satisfaction. Fourth, individual's lack of forgiveness would be associated with decreases in both individual ratings of marital satisfaction and partner ratings of marital satisfaction. Finally, they hypothesized that three mediation pathways would be significant: first, that forgiveness would mediate the relationship between the individual's relationship with God and marital satisfaction; second, that forgiveness would mediate the

relationship between JRC and marital satisfaction; third, that JRC would mediate the relationship between the individual's relationship with God and marital satisfaction.

David and Stafford (2015) used the theoretical reasoning that if previous research had found associations between individual religious factors leading to increases in both forgiveness and marital satisfaction, then a relationally based construct of religion would yield more dyadic results, or partner effects. They did not describe in much depth other theoretical reasons why they expected to find partner effects in these relationships. However, if religiosity leads to increases in forgiveness and subsequently increases in marital satisfaction, it would seem logical for these processes to also have a relational impact on one's partner. David and Stafford (2015) found partial support for their first and second hypotheses. The individual actor effects for the separate predictors of individuals' relationship with God and JRC were significantly positively associated with the outcome of marital satisfaction. However, there were no significant partner effects found in either of these relationships. The third and fourth hypotheses were validated. After accounting for individuals' relationship to God and JRC, significant actor and partner effects were found between forgiveness and marital satisfaction (as a positive relationship) as well as lack of forgiveness and marital satisfaction (as a negative relationship).

David and Stafford (2015) used partner ratings as covariates in the mediational analyses and as such inferences about partner effects were not made and results reflect only actor effects. David and Stafford (2015) found that the indirect pathway from JRC and marital satisfaction through forgiveness was significant. However, the inclusion of forgiveness as a mediator did not impact the effect size or the significance of the relationship between joint religious communication and marital satisfaction. This relationship was also explored with the individual's relationship to God as the predictor, however with JRC as a covariate the relationships were not

significant. Additionally, lack of forgiveness was not found to be a significant mediator between JRC and marital satisfaction. Finally, JRC was a significant mediator in the relationship between the individual's relationship with God and marital satisfaction.

The two afore-mentioned studies were important additions to the literature as they both examined the relationship between religiosity and marital satisfaction by using more descriptive measures of religiosity. They also both used the Actor Partner Interdependence Model (APIM) to examine both actor and partner effects of dyadic data (David & Stafford, 2015; Stafford, et al., 2014). However, the design used in both of these APIM analyses was a mixed models group approach using SPSS. It appears that both of these analyses did not treat husbands and wives as indistinguishable dyads. Instead, it appears that the actor and partner effects were treated to be equal across dyad members and given one value that represents the overall actor or partner effect of both husbands and wives. The challenge with this approach is that it does not account for potential gender differences that may be important when analyzing distinguishable dyads (Kenny, Kashy, & Cook, 2006). A limited amount of research has been conducted on the interaction (or partner effects) between husbands' and wives' religiosity and forgiveness. In reviewing the literature, most studies analyzed either husbands or wives separately or simultaneously as individuals. These approaches make it difficult to make relational inferences about partner effects. Additionally, like previous studies in this area, a longitudinal design was not used to test this relationship.

Hypotheses for Religion, Forgiveness, and Marital Satisfaction

As such, the purpose of this analytical model is to explore the longitudinal impact of introducing forgiveness as a mediator in the relationship between religiosity and marital satisfaction by exploring both actor and partner effects of husbands and wives. Previous testing

of this model found significant actor effects for both spouses in the relationships between

religiosity and marital satisfaction as well as religiosity and forgiveness, but no significant

partner effects were found in these relationships (David & Stafford, 2015). However, in

examining the relationships between forgiveness and marital satisfaction, both the actor and the

partner effects were significant (David & Stafford, 2015). Finally, forgiveness was found to be a

partial mediator in the relationship between religiosity and marital satisfaction for each spouse.

Consequently, the following hypotheses were tested:

> H1. Higher levels of religiosity will predict increases in one's own marital satisfaction
>
> three years later (actor effects).
>
> H2. Higher individual levels of religiosity will not predict increases in partners' marital
>
> satisfaction three years later (partner effect).
>
> H3. Increases in forgiveness will serve as a partial mediator between one's own increases
>
> in religiosity and one's own subsequent increases in marital satisfaction (actor effects).
>
> H4. Increases in forgiveness will predict increases in both one's own, as well as partner's
>
> marital satisfaction for both husbands and wives, two years later (actor and partner
>
> effects).

Methods for Religion, Forgiveness, and Marital Satisfaction

  Sample. The participants for this study were taken from the Flourishing Families Project

(FFP), a longitudinal study of family life. Every 12 months, data were gathered from each of the

eligible families. At enrollment in the study, Time 1, each of the families had a child between the

ages of 10 and 14. The study included 500 families, 337 two parent families and 163 single

parent families. Because the focus of this study was on the heterosexual marital relationship,

only cases that included a heterosexual married couple were included in the analysis, leaving a

working sample of 315 families. Participants were most commonly European American, with 82.2% of the wives and 87.9% of the husbands self-reporting as being European Americans. An additional 4.8% and 5.1% of the wives and husbands, respectively, reporting that they were African American with 2.5% and .6% of the wives and husbands, respectively, reporting that they were Hispanic and 4.8% and 1.6% of wives and husbands, respectively, reporting that they were Asian American. Those who identify as another race or multi-ethnic characterize 5.7% of the wives and 4.4% of the husbands.

Protestant was the most commonly reported religious affiliation with 45.4% of wives and 41% of husbands reporting such. Additionally, 18.4% of wives and 17.5% of husbands reported that their religious affiliation was Catholic. Participants who were affiliated with The Church of Jesus Christ of Latter-Day Saints comprised of 8.3% of wives and 7.9% of husbands. Additionally, 4.1% of wives and 3.8% of husbands reported their religious affiliation as Jewish. Participants who affiliated with an Eastern Religion such as being Buddhist, Hindu, or Confucian comprised of 2.2% of wives and 2.5% of husbands. Additionally, 3.5% of wives and 6% of husbands reported that they were Agnostic or Atheistic and 11.7% of wives and 15.2% of husbands reported none or unaffiliated. Finally, the percentage of participants who selected other as a religious affiliation that was not listed was 4.1% of wives and 3.5% of husbands. Couples who shared the same religious affiliation were 51.4% of the sample, while 20.6% of the couples sampled had different religious affiliations. Couples where one partner had a religious affiliation and the other did not comprise of 14.6% of the sample, and 9.5% of couples reported that both partners were non-religious.

Procedure. Participant families for the FFP were randomly sampled from a large northwestern city and were interviewed during the first eight months of 2007 for a Time 1 data

sample. Families were primarily recruited using a purchased national telephone survey database (Polk Directories/InfoUSA). This database consisted of 82 million households across the United States and had detailed information about each household, including presence and age of children. Families identified using the Polk Directory were randomly selected from targeted census tracts that mirrored the socio-economic and racial stratification reported by local school districts. Because a central focus of the overall research project was to examine parent-adolescent relationships, all families with a child between the ages of 10 and 14 living within target census tracts were deemed eligible to participate in the study. Of the 692 eligible families contacted, 423 agreed to participate, resulting in a 61% response rate. However, the Polk Directory national database was generated using telephone, magazine, and internet subscription reports; so families of lower socio-economic status were under-represented. Therefore, in an attempt to more closely mirror the demographics of the local area, a limited number of families were recruited into the study through other means (e.g., referrals, fliers; $n = 77$, 15%). By broadening the approach, the social-economic and ethnic diversity of the sample was increased.

All families were contacted directly using a multi-stage recruitment protocol. First, a letter of introduction was sent to potentially eligible families; (this step was skipped for the 15% of families who responded to fliers). Second, interviewers made home visits and phone calls to confirm eligibility and willingness to participate in the study. Once eligibility and consent were established, interviewers made an appointment to come to the family's home to conduct an assessment interview that included video-taped interactions, as well as questionnaires that were completed in the home. Subsequently, families were interviewed at yearly intervals for a second (2008), third (2009), fourth (2010), and fifth time (2011). The retention rate of families in the study from Time 1 to Time 5 was 93%.

Measures for Religion, Forgiveness, and Marital Satisfaction

   Religiosity scale. Religiosity at Time 1 was analyzed by using 4 items from the 10 item

Santa Clara Strength of Religious Faith Questionnaire (SCSORF; Lewis, Shevlin, McGucklin, &

Navrtil, 2001). Previous studies have found that higher scores on the SCSORF were significantly

associated with higher scores on the Intrinsic Motivation Scale (Hoge, 1972; Lewis, et al., 2001).

Items were measured by utilizing a 4-point Likert scale: 1 (*strongly disagree*), 2 (*disagree*), 3

(*agree*), 4 (*strongly agree*). Responses from four questions were used to create a latent variable

to measure the religiosity of husbands and wives. The questions include "I pray daily," "I look to

my faith as providing meaning and purpose in my life," "My faith is an important part of who I

am as a person," "My faith impacts many of my decisions." The combined items at Time 1 had a

Cronbach's Alpha of .96 for wives and .96 for husbands. The confirmatory factor analysis (CFA)

in the measurement model had good model fit and all factor loadings were above .70.

   Forgiveness. To measure forgiveness in the couple relationship, participants responded

to 6 questions based on McCullough et al. (1998). The forgiveness measure was not included in

the FFP data collection at Time-2 as such longitudinal data from Time 3 was utilized to measure

forgiveness. Three items assessed the respondent's ability to forgive their partner and three items

were asked about their perceptions of their partners' ability to forgive the respondent. The 7-

point Likert response categories ranged from 1 (*not at all true for me*) to 7 (*very true*). The first

three questions were focused on individuals' forgiveness responses toward their partner. Based

on the stem of "when my partner angers me or hurts my feelings": I can forgive him/her pretty

easily; I can still move forward and have a good relationship; I give up the hurt and resentment

toward him/her. The final three questions were focused on perceptions of partners' forgiveness

toward the respondent. Based on the stem of "when I am angry or when I hurt my partner's

feelings": he/she can forgive me pretty easily; he/she can still move forward and have a good relationship; or he/she gives up the hurt and resentment toward me. These items were used to create four latent variables, two for each individual. These latent variables will reflect first, the measures of husbands and wives own forgiveness of their partner and second, both husbands and wives perceptions of their partners forgiveness of them. The three items measuring individuals' forgiveness responses toward their partner at Time 1 had a Cronbach's Alpha of .83 for wives and .82 for husbands. The three items measuring perceptions of partners' forgiveness toward the individual at Time 1 had a Cronbach's Alpha of .92 for wives and .89 for husbands. The three items measuring individuals' forgiveness responses toward their partner at Time 3 had a Cronbach's Alpha of .89 for wives and .95 for husbands. The three items measuring perceptions of partners' forgiveness toward the individual at Time 3 had a Cronbach's Alpha of .86 for wives and .92 for husbands. In the CFA all factor loadings were above .70 with good model fit.

Marital satisfaction scale. Marital satisfaction at Time 4 was analyzed by using a modified version of the Norton Quality Marriage Index, wherein the term marriage was replaced with the word relationship within two of the scale items (Berg, Trost, Schneider, & Allison, 2001; Norton, 1983). Items were measured using a 6-point Likert scale: 1 (*very strongly disagree),* 2 (*strongly disagree*), 3 (*disagree*), 4 (*agree*), 5 (*strongly agree*), and 6 *(very strongly agree).* The questions included: "My relationship with my partner makes me happy," "My relationship with my partner is very stable," "Our relationship is strong," "We have a good relationship," and "I really feel like part of a team with my partner". These five items used a 6-point Likert scale: 1 (very strongly disagree), 2 (strongly disagree), 3 (disagree), 4 (agree), 5 (strongly agree), and 6 (very strongly agree). For the final item, respondents were told to rate the degree of happiness in their relationship. Responses were based on a 10-point Likert scale

ranging from 1 (very unhappy) to 10 (perfectly happy). The middle point, "happy," represents the degree of happiness which most people get from relationships and is represented numerically as falling between 5 and 6. The scale gradually increases on the right side for those few who experience extreme joy in their relationships and decreases on the left side for those who are extremely unhappy. These six items were used to create a latent variable to measure marital satisfaction. The full scale at Time 1 had a Cronbach's Alpha of .94 for wives and .94 for husbands. The full scale at Time 4 had a Cronbach's Alpha of .95 for wives and .95 for husbands. In the CFA all factor loadings were above .70 with good model fit.

Controls for Religion, Forgiveness, and Marital Satisfaction

As previously discussed, four variables were used as controls. Family monthly income was assessed as the monthly earnings of both of the adults in the home ($M = \$7,026$, SD = $\$5,350$, median = $\$6,050$). In all analyses, family monthly income was divided by 1,000 to make the scale more similar to the other variables being measured. The number of years in the relationship was assessed by asking each of the participants the following question: "If you are in a relationship/marriage currently, how many years have you been together?" (females M = 18.01, SD = 4.99; males M = 17.86, SD = 4.90). Finally, couples were asked to report the number of children in the family (M = 2.45, SD = 1.03, median = 2.00).

Analysis for Religion, Forgiveness, and Marital Satisfaction

The analytical model is illustrated in Figure 1. The longitudinal nature of the data allowed for a temporal analysis of religiosity, marital satisfaction, and depressive symptoms. Therefore, Time 1 (2007) religiosity, Time 3 (2009) forgiveness, Time 4 (2010) marital satisfaction were included in the analysis. In addition, the dyadic data was fully utilized by analyzing the Actor-Partner Interdependence Model (APIM) to test actor and partner effects

Figure 1

Conceptual APIM SEM Model: Religiosity, Forgiveness, and Marital Satisfaction
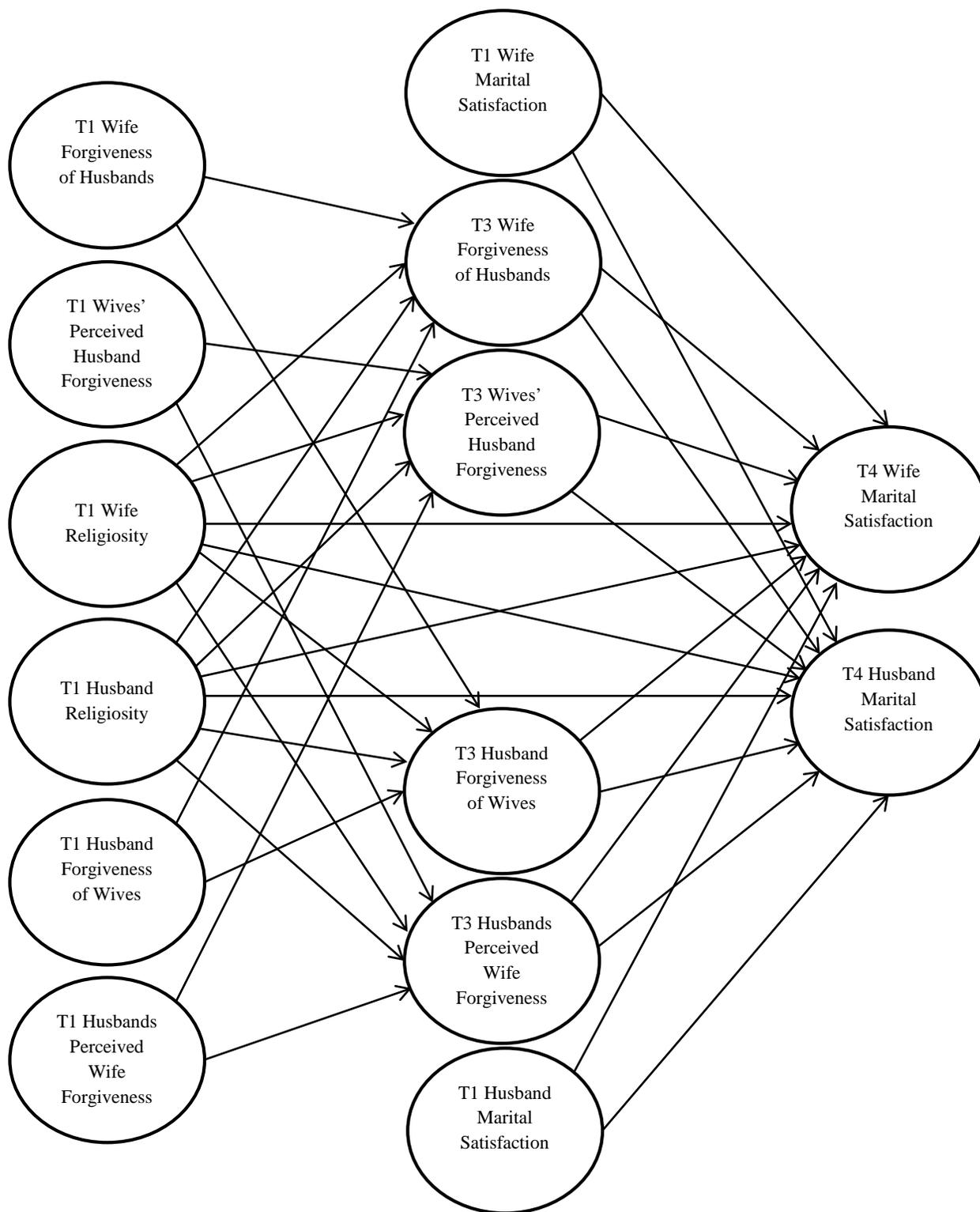
(Kenny, Kashy, & Cook, 2006). Mplus 7 was used to estimate the longitudinal structural

equation model (SEM), and full information maximum likelihood (FIML) was used to address

issues of missing data (Muthén & Muthén, 1998-2014). The method of bootstrapping was

utilized to test for mediation as it has been shown to provide more accurate confidence intervals

and statistical power when compared to other methods (Pituch & Stapleton, 2008).

Results

Measurement Invariance Testing

Each of the three APIM mediational models were estimated using structural equation

modeling (SEM). Each of the primary variables of interest in the three models were represented

as latent constructs with multiple indicators (see the methods section of each model for a more

detailed description of each measure). As all of the following studies were conducted by utilizing

an APIM framework and a longitudinal design, earlier time points of each measure were used as

stability controls in the models. Measurement invariance testing was used to examine the

measurement stability of each of the measures across both sex and time.

One problem was encountered at the onset of measurement testing. The scale that was

used to measure depressive symptoms was changed at Time 5 of the study. All of the earlier

survey administrations of the 11 item depressive symptoms scale (Time 1 through Time 4) used

a 3-point Likert scale: 1 (*never*), 2 (*some of the time*), and 3 (*most of the time*). However, during

data collection at Time 5 the study investigators opted to replace the 3-point Likert scale with a

5-point Likert scale: 1 (*strongly disagree*), 2 (*moderately disagree*), 3 (*neither agree nor

disagree*) 4 (*moderately agree*), and 5 (*strongly agree*). None of the actual questions themselves

were altered. However, in order to test measurement invariance, the scales needed to be on the

same metric. As such, the individual item scores for depression at Time 5 were rescaled to match

the scaling used at previous time points. The value of 1 remained unchanged, the value of 2 was rescaled to 1.5, the value of 3 was rescaled to 2, the value of 4 was rescaled to 2.5, and the value of 5 was rescaled to 3. All of the other longitudinal variables were administered using the same scales and questions. However, the measures of religiosity and the measures of forgiveness were not collected at Time 2 in an effort to shorten the length of the survey.

Configural, weak, and strong factorial invariance were all tested in each of the measures of interest across sex and time (Little, 2013). Configural invariance was tested by first constraining the variances of all of the latent constructs to be 1. This allowed all of the indicators to freely estimate around the variance of the latent construct. Additionally, all residual error terms from the individual items were allowed to co-vary across both time and sex. Weak measurement invariance was tested by constraining the loadings from the like indictors to be equal across both sex and time. Finally, strong measurement invariance was tested by constraining all of the parameters to be equal across both sex and time (Little, 2013). As suggested by Cheung and Rensvold (2002), if the model CFI decreases by more than .01, then the change in constraining the parameter is not warranted. However, if the CFI does not decrease by more than .01, then the set of constrained parameters are fundamentally the same across groups and/or time (Little, 2013). Strong measurement invariance was established for all variables across both sex and time except for the measure of depressive symptoms. However, weak measurement invariance was established for the measure of depressive symptoms. Much of this can be attributed to the measure of depression being changed for the administration of the scale at Time 5. This needs to be acknowledged as a weakness as it may have had an impact on the way that depressive symptoms at Time 1 controlled for depressive symptoms at Time 5.

Preliminary Results for Religion, Forgiveness, and Marital Satisfaction

As displayed in Table 1 (See end of document), the mean of the sum scores for the combined four religiosity items at Time 1 were 11.39 ($SD = 4.1$) as reported by wives and 10.14 ($SD = 4.3$) as reported by husbands, with a possible range of 4 to 16. The mean of the sum scores for personal forgiveness of partner at Time 3 were 16.43 ($SD = 3.5$) for wives and 17.01 ($SD = 3.2$) for husbands, with a possible range of 3 to 21. The mean of the sum scores for perceptions of partner's forgiveness toward the individual at Time 3 were 16.74 ($SD = 3.9$) for wives and 15.44 ($SD = 4.2$) for husbands, with a possible range of 3 to 21. The mean of the sum scores for wives' and husbands' marital satisfaction at Time 4 were 31.44 ($SD = 6.9$) and 32.03 ($SD = 6.4$), respectively, with a possible range of 6 to 40.

The results of the correlation analysis indicated that wives' religiosity at Time 1 was significantly correlated with husbands' religiosity at Time 1 ($r = .71$, $p < .01$) and with husbands' reported personal forgiveness of partner at Time 3 ($r = .13$, $p < .05$). Wives' religiosity Time 1 also approached significance when correlated with wives' reported perception of partners' forgiveness at Time 3 ($r = -.11$, $p = .07$). However, wives' religiosity was not significantly correlated with any of the other primary variables in the analysis. Husbands' religiosity was significantly correlated with husbands' reported personal forgiveness of partner at Time 3 ($r = .20$, $p < .01$), husbands' reported perception of partners' forgiveness at Time 3 ($r = .15$, $p < .05$), their own marital satisfaction at Time 4 ($r = .15$, $p < .05$) and wives' marital satisfaction at Time 4 ($r = .14$, $p < .05$). Husbands' religiosity approached significance with wives' reported personal forgiveness of partner at Time 3 ($r = .11$, $p = .08$), but was not significantly associated with any of the other primary variables in the analysis. Finally, all of the other primary variables in the analysis were significantly positively correlated (See Table 1).

Model Results for Religion, Forgiveness, and Marital Satisfaction

The structural equation model (SEM) fit the data well. The chi-square was 2413.540 with 1563 ($p < .001$) degrees of freedom, which is an acceptable ratio ($\chi2/df = 1.54$). In regards to power, studies wherein the degrees of freedom exceed 1,000 have been shown to be better able to reject the null hypothesis (Little, 2013; MacCallum, Browne, & Sugawara, 1996). The Root Mean Square Error of Approximation (RMSEA) indicated a good fit with a score of .042, 90% CI = (.038, .045). The Comparative Fit Index (CFI) indicated a good fit with a score of .958. The Tucker Lewis Index (TLI) indicated a good fit with a score of .952. Finally, the Standardized Root Mean Square Residual (SRMR) indicated a good fit with a score of .065.

Results indicated that there were three significant actor effects for wives: first, between wives' religiosity at Time 1 and wives' reported perception of partners' forgiveness at Time 3 ($\beta = -.18$, $p < .01$); second, between wives' reported personal forgiveness of partner at Time 3 and wives' marital satisfaction at Time 4 ($\beta = .14$, $p < .05$); third, between wives' reported perception of partners' forgiveness at Time 3 and wives' marital satisfaction at Time 4 ($\beta = .22$, $p < .01$). There were a total of two significant actor effects for husbands: first, between husbands' religiosity at Time 1 and husbands' marital satisfaction at Time 4 ($\beta = .15$, $p < .05$); and second, between husbands' reported personal forgiveness of partner at Time 3 and husbands' marital satisfaction at Time 4 ($\beta = .20$, $p < .01$). No other actor effects were significant (See Table 2).

Results indicated that there were a total of three significant partner effects: first, between husbands' religiosity at Time 1 and wives' marital satisfaction at Time 4 ($\beta = .16$, $p < .05$); second, between husbands' reported personal forgiveness of partner at Time 3 and wives' marital satisfaction at Time 4 ($\beta = -.14$, $p < .05$); third, between wives' reported perception of partners' forgiveness at Time 3 and husbands' marital satisfaction at Time 4 ($\beta = .15$, $p < .05$). No other

partner effects were significant (See Table 2). These results held constant while controlling for earlier longitudinal measures at Time 1 in addition to monthly family income, the number of years in the relationship, and the number of children in the family.

Figure 2

Results of the APIM: Religiosity, Forgiveness, and Marital Satisfaction
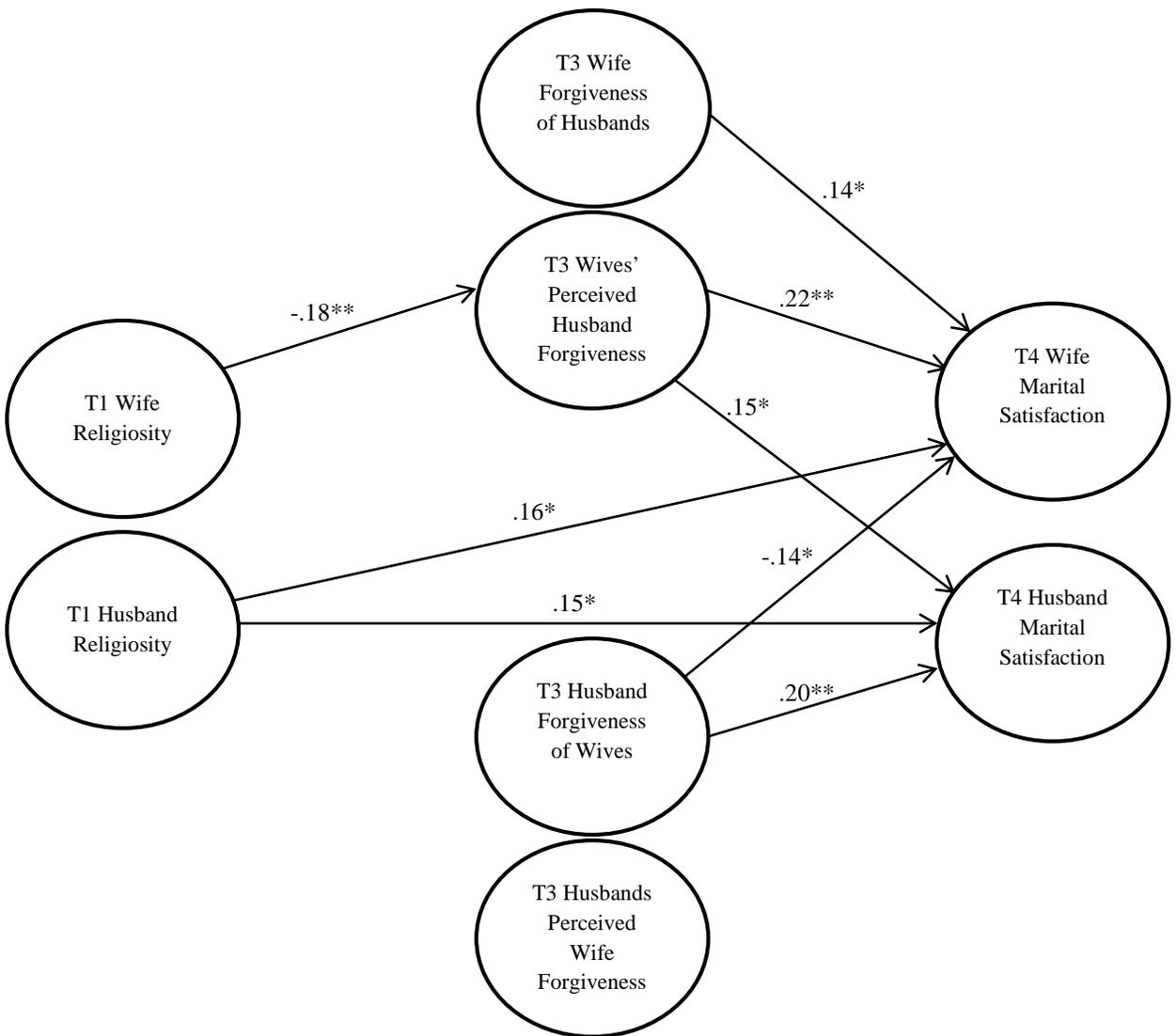
Only significant standardized regression paths are shown above.
All variables at Time 1 were used as controls, though they are not pictured above (See Figure 1).
*p<.05 **p<.01 ***p<.001

Table 2

Regression Weights: Religiosity T1, Forgiveness T3, and Marital Satisfaction T4

	B	β	P
Actor Effects			
Wife Religiosity T1 → Wife Marital Satisfaction T4	-.07	-.06	.32
Husband Religiosity T1 → Husband Marital Satisfaction T4	**.14**	**.15**	**.03**
Wife Religiosity T1 → Wife Forgiveness of Husbands T3	-.10	-.11	.16
Husband Religiosity T1 → Husband Forgiveness of Wives T3	.08	.09	.22
Wife Religiosity T1 → Wife Perceived Husband Forgiveness T3	**-.17**	**-.18**	**.01**
Husband Religiosity T1 → Husband Perceived Wife Forgiveness T3	.07	.07	.33
Wife Forgiveness of Husbands T3 → Wife Marital Satisfaction T4	**.15**	**.14**	**.05**
Husband Forgiveness of Wives T3 → Husband Marital Satisfaction T4	**.21**	**.20**	**.006**
Wife Perceived Husband Forgiveness T3 → Wife Marital Satisfaction T4	**.25**	**.22**	**.002**
Husband Perceived Wife Forgiveness T3 → Husband Marital Satisfaction T4	.05	.05	.450
Partner Effects			
Wife Religiosity T1 → Husband Marital Satisfaction T4	-.09	-.09	.16
Husband Religiosity T1 → Wife Marital Satisfaction T4	**.16**	**.16**	**.014**
Wife Religiosity T1 → Husband Forgiveness of Wives T3	.06	.06	.39
Husband Religiosity T1 → Wife Forgiveness of Husbands T3	.07	.08	.30
Wife Religiosity T1 → Husband Perceived Wife Forgiveness T3	.03	.03	.73
Husband Religiosity T1 → Wife Perceived Husband Forgiveness T3	.06	.07	.32
Wife Forgiveness of Husbands T3 → Husband Marital Satisfaction T4	.00	.00	.97
Husband Forgiveness of Wives T3 → Wife Marital Satisfaction T4	**-.16**	**-.14**	**.05**
Wife Perceived Husband Forgiveness T3 → Husband Marital Satisfaction T4	**.17**	**.15**	**.03**
Husband Perceived Wife Forgiveness T3 → Wife Marital Satisfaction T4	.11	.10	.11

Model Fit: Chi-square = 2413.540 (*df* = 1563); RMSEA 90% CI = (.038, .045); CFI = .958; TLI = .952; SRMR .065
Note: Significant Coefficients are shown in **bold**.

Table 3

10,000 Parametric Bootstrap Iterations, Indirect Effects and Confidence Intervals: Religiosity T1, Forgiveness T3, and Marital Satisfaction T4

	B	CI
Sum of Indirect Effects		
Wife Religiosity T1 to Wife Marital Satisfaction T4	**-.06**	**[-.138, -.011]**
Specific Indirect Effects		
Wife Religiosity T1 to Wife Marital Satisfaction T4 Through		
Wife Forgiveness of Husbands T3	-.02	[-.071, .002]
Wife Perceived Husband Forgiveness T3	**-.04**	**[-.100, -.009]**
Husband Forgiveness of Wives T3	-.01	[-.067, .010]
Husband Perceived Wife Forgiveness T3	.00	[-.013, .034]
Sum of Indirect Effects		
Husband Religiosity T1 to Husband Marital Satisfaction T4	.03	[-.018, .095]
Specific Indirect Effects		
Husband Religiosity T1 to Husband Marital Satisfaction T4 Through		
Husband Forgiveness of Wives T3	.00	[-.016, .021]
Husband Perceived Wife Forgiveness T3	.01	[-.009, .052]
Wife Forgiveness of Husbands T3	.02	[-.014, .077]
Wife Perceived Husband Forgiveness T3	.00	[-.006, .041]
Sum of Indirect Effects		
Wife Religiosity T1 to Husband Marital Satisfaction T4	-.01	[-.077, .049]
Specific Indirect Effects		
Wife Religiosity T1 to Husband Marital Satisfaction T4 Through		
Wife Forgiveness of Husbands T3	.00	[-.025, .020]
Wife Perceived Husband Forgiveness T3	**-.03**	**[-.082, -.003]**
Husband Forgiveness of Wives T3	.01	[-.020, .076]
Husband Perceived Wife Forgiveness T3	.00	[-.008, .027]
Sum of Indirect Effects		
Husband Religiosity T1 to Wife Marital Satisfaction T4	.02	[-.034, .078]
Specific Indirect Effects		
Husband Religiosity T1 to Wife Marital Satisfaction T4 Through		
Husband Forgiveness of Husbands T3	.01	[-.005, .057]
Husband Perceived Wife Forgiveness T3	.02	[-.016, .063]
Wife Forgiveness of Husbands T3	-.01	[-.067, .007]
Wife Perceived Husband Forgiveness T3	.01	[-.007, .042]

Note: Significant indirect effects are shown in **bold**.

Mediation Analysis for Religion, Forgiveness, and Marital Satisfaction

Bias-corrected bootstrap analysis was used to test mediation or indirect pathways. To find

the significance of the indirect effects, 95% confidence intervals with 10,000 bootstrap samples

were tested. If the value of zero was not included in the confidence interval, then the specific

effect was considered significant (Ledermann, Macho, & Kenny, 2011; MacKinnon, 2008). Additionally, Padilla & Divers (2013) have shown that this method is appropriate when dealing with non-normal distributions or skewness with sample sizes over 300. As indicated by the unstandardized indirect actor effects, wives' reported perception of partners' forgiveness at Time 3 was a significant partial mediator in the relationship between wives' religiosity at Time 1 and wives' marital satisfaction at Time 4, -.04 (95% CI [-.100, -.009]; See Table 3). Additionally, the sum of the indirect effects from wives' religiosity at Time 1 and wives' marital satisfaction at Time 4 as mediated by wives' and husbands' reported personal forgiveness of partner at Time 3 and wives' and husbands' reported perception of partners' forgiveness at Time 3 was significant, -.06 (95% CI [-.138, -.011]). The unstandardized indirect partner effects indicated wives' reported perception of partners' forgiveness at Time 3 was a significant partial mediator in the relationship between wives' religiosity at Time 1 and husbands' marital satisfaction at Time 4, -.04 (95% CI [-.100, -.009]). No other significant indirect effects were found (See Table 3).

Overall, the model accounted for 50.4% of the variance in wives' reported personal forgiveness of partner and 51.1% of the variance of wives' reported perception of partners' forgiveness. The model explained 61.6% of the variance in husbands' reported personal forgiveness of partner and 48.7% of the variance in husbands' reported perception of partners' forgiveness. Finally, the model accounted for 57.3% of the variance in marital satisfaction for wives and 55.6% of the variance in marital satisfaction for husbands.

Discussion for Religion, Forgiveness, and Marital Satisfaction

The results of the first longitudinal analysis provide partial support for H1, that higher levels of religiosity would predict increases in one's own marital satisfaction three years later (actor effects). There was a significant direct relationship wherein higher levels of husbands'

religiosity led to increases in husbands' marital satisfaction. However, there was not a significant direct relationship between wives' religiosity and wives' marital satisfaction. These findings can be explained in several ways. First, there did not appear to be significant relationships between wives' religiosity and either husbands' or wives' marital satisfaction in this sample (See Table 1). These findings are in line with more recent research that husbands' religiosity is more impactful than wives' in predicting marital satisfaction (Wilcox & Wolfinger, 2008). Previous work has also examined both across-sex and within-sex comparisons between men's and women's religiosity (Marks, 2005). Findings were that typically women are more religious than men (Koenig, McCullough, & Larson, 2001) and that the differences between religious and non-religious men were typically more pronounced when compared to differences between religious and non-religious women (Marks, 2005; Snarey & Dollahite, 2001). These differences were also present in testing H2, that higher individual levels of religiosity would not predict increases in partners' marital satisfaction three years later (partner effect). H2 was partially supported as there was not a significant direct relationship between wives' religiosity and husbands' marital satisfaction. However, there was a significant relationship wherein higher levels of husbands' religiosity led to increases in wives' marital satisfaction.

There was no support for H3, that increases in forgiveness would serve as a partial mediator between one's own increases in religiosity and one's own subsequent increases in marital satisfaction (actor effects) or H4, that increases in forgiveness would predict increases in both one's own, as well as partners' marital satisfaction for both husbands and wives, two years later (actor and partner effects). Husbands' religiosity was not significantly associated with any of the measures of forgiveness for either wives or husbands. Some of this may be due to the fact that the majority of the sample were in long-term stable relationships which may have limited the

variability of forgiveness over time. However, this finding is similar to the work of Stafford, et al. (2014) that did not find evidence that forgiveness served as a mediator between their measure of religiosity in marriage and marital satisfaction. However, they did find that sacrifice was a significant mediator. More research should be conducted to examine the impact of forgiveness in more distressed or less stable populations. Future work should also be done to explore other potential mediators in the relationship of religiosity and marital satisfaction.

One surprising finding that was not hypothesized was the significant relationship between higher initial levels of wives' religiosity leading to decreases in wives' perceptions of their partners' forgiveness. The indirect effects of this relationship resulted in higher initial levels of wives' religiosity leading to decreases in both husbands' and wives' marital satisfaction as mediated through wives' perceptions of their partners' forgiveness. Previous researchers have found that typically wives are more religious than husbands (Gupta & Gupta, 2014; Koenig et al., 2001; Penny, Francis, & Robbins, 2015) which is also true when comparing the means of wives' religiosity to husbands' religiosity within this sample ($t(313) = 6.67$, $p = 0.000$). Prior researchers have examined the role of religiosity in couples who vary in their religious affiliations, religious beliefs and/or religious practices. The positive relationships between religiosity and marital satisfaction that had been found in prior research were not found in these studies. In fact differences in religious beliefs and practices have been shown to have negative impacts in couple relationships (Curtis & Ellison, 2002).

In the present sample, roughly 35% of the couples varied in their religious beliefs and/or affiliations. This in addition to wives being significantly more religious than husbands helps to frame the finding that increases in wives' religiosity led to decreases in wives' perceptions of their husbands' forgiveness. Marital satisfaction is influenced by individuals' and their partners'

beliefs and behaviors. If more religious wives don't believe that their less religious husbands forgive them, then it may negatively impact their relationship and lead to decreases in both husbands' and wives' marital satisfaction. This study adds to the literature as this relationship had not previously been tested longitudinally, nor has previous research included a measure of perception of partner forgiveness. Additionally, by testing the actor and partner effects independently with distinguishable dyads, more information was able to be obtained about differences between husbands and wives and the interactional processes of the variables of interest.

Model Two: Religion, Marital Satisfaction and Depression

The associations between religiosity and depression as well as the relationship between religiosity and marital satisfaction have previously been discussed. Several researchers have also found that marital satisfaction can serve as a protective factor for depression (Beach, Katz, Kim & Brody, 2003; Whisman & Baucom, 2012; Whitton, Stanley, Markman, & Baucom, 2008). The Marital Discord Model of Depression (Beach, Sandeen, & O'Leary, 1990) proposed that decreases in social support and increases in hostile interactions result from marital discord, thereby creating increased risk for depression among spouses.

Previous work has demonstrated the interconnected nature of these variables. However, studies that have simultaneously examined the connection between religiosity, marital satisfaction and depression are almost non-existent. One study used correlational analyses to examine the relationship between attachment to God, marital satisfaction and general mental health by assessing psychiatric symptoms in families with disabled children (Sarabandi & Shirazi, 2012). Findings suggest that secure attachment to God was positively associated with increases in both marital satisfaction and increases in general mental health. There was also a

significant positive relationship between increases in marital satisfaction and increases in general mental health. Those who were either avoidant or anxiously attached to God were both associated with decreased mental health and decreased marital satisfaction (Sarabandi & Shirazi, 2012).

These findings suggest that there are links between religiosity, marital satisfaction and mental health. However, the generalizability of the study is limited to families who have a child with a disability. Additionally, data were analyzed by combining husbands and wives, thus limiting knowledge about sex differences and the validity of the analyses by violating the assumption of independence. Finally, the study was cross-sectional and correlational making it difficult to make directional inferences. Furthermore, reviews of the literature about the relationship between religiosity and depression have challenged future research to focus on longitudinal studies and more advanced statistical analyses since the number of cross-sectional studies examining this relationship are extensive (Koenig, et al., 2012).

Previous research that has tested the relationship between religion and marital satisfaction using the APIM found significant actor effects for both spouses; however no significant partner effects were found (David & Stafford, 2015). Additionally, no previous studies have tested the relationship between religiosity and depressive symptoms within a couple relational framework thereby making these partner effects difficult to predict. Previous work about religiosity and depression with individuals (Koenig et al., 2012) would suggest that actor effects would be significant. The effects between religiosity and depression may be more prevalent for wives as a higher prevalence of depression has been found traditionally in women (Fincham, Beach, Harold, & Osborne, 1997; Weissman, 1987). If increased depressive symptoms interact with religion according to the stress coping model (Paragment, 1997), then religion may prove to be a

more significant protective factor for wives. Finally, husbands' marital satisfaction has been found to be significantly associated with decreases in wives' depressive symptoms in several studies (Dehle & Weiss, 1998; Fincham, et al., 1997; Katz et al., 2000; Wang, Wang, Li, & Miller, 2014). However, increases in wives' marital satisfaction being significantly associated with decreases in husbands' depressive symptoms is not as typical (Wang, Wang, Li, & Miller, 2014).

Hypotheses for Religion, Marital Satisfaction and Depression

The established relationships between religiosity, marital satisfaction, and depression provide merit for examining these interactions within a couple relational framework. These associations in addition to the theoretical framework afore mentioned suggest that the connection between religiosity and depression may be mediated through marital satisfaction. However, there is currently no research wherein this relationship has been tested. As such, the purpose of this analytical model is to explore the longitudinal impact of introducing marital satisfaction as a mediator in the relationship between religiosity and depression by exploring both actor and partner effects of husbands and wives. Consequently, the following hypotheses will be tested:

H4. Higher levels of religiosity will result in decreases in depressive symptoms for each spouse four years later, with the relationship being more impactful for wives (Actor effect).

H5. Increases in marital satisfaction will serve as a mediator between higher religiosity and lower subsequent depressive symptoms for each spouse (Actor effects).

H6. Husbands' marital satisfaction will be predictive of wives' depressive symptoms (Partner effect).

H7. Husbands' religiosity will have an indirect effect on wives' depressive symptoms

through husbands' marital satisfaction (Partner effect).

Methods for Religion, Marital Satisfaction and Depression

Sample. The sample used in the first analysis is the same sample that was used in the

second analysis.

Procedure. The procedures used in the first analysis were the same procedures that were

used in the second analysis.

Measures for Religion, Marital Satisfaction and Depression

Religiosity scale. The same Time 1 religiosity sum score that was used in the first

analysis was also used in second analysis.

Marital satisfaction scale. The same Time 4 marital satisfaction sum score that was used

in first analysis was also used in second analysis.

Depressive symptoms scale. A shortened version of the CES-D scale (Radloff, 1977)

was used to measure depressive symptoms by utilizing data from Time 5. Participants responded

to 11 questions of the 20 item original scale using a validated shortened version of the CES-D

(Kohout, Berkman, Evans, & Cononi-Huntley, 1993; See the section on Measurement Invariance

Testing for details on scoring). The 11 item scale consisted of four factors: depressed mood,

positive mood, somaticized symptoms, and interpersonal symptoms. Parceling was used to create

four manifest variables representing the four factors afore mentioned (Little, Cunningham,

Shahar, & Widaman, 2002). These four variables were then used to create a latent variable to

measure depressive symptoms for both husbands and wives. The scale at Time 1 had a

Cronbach's Alpha of .80 for wives and .77 for husbands. The scale at Time 5 had a Cronbach's

Alpha of .81 for wives and .81 for husbands. In the CFA the model fit was excellent, however

not all of the loadings were above .70. Some of this may be attributed to the fact that a sum score

was created for each of the four parcels as opposed to a mean score.

     Controls. The controls used in the first analysis were the same controls used in second

analysis, in addition to the appropriate longitudinal controls.

Figure 3

Conceptual APIM SEM Analysis: Religiosity, Marital Satisfaction and Depression
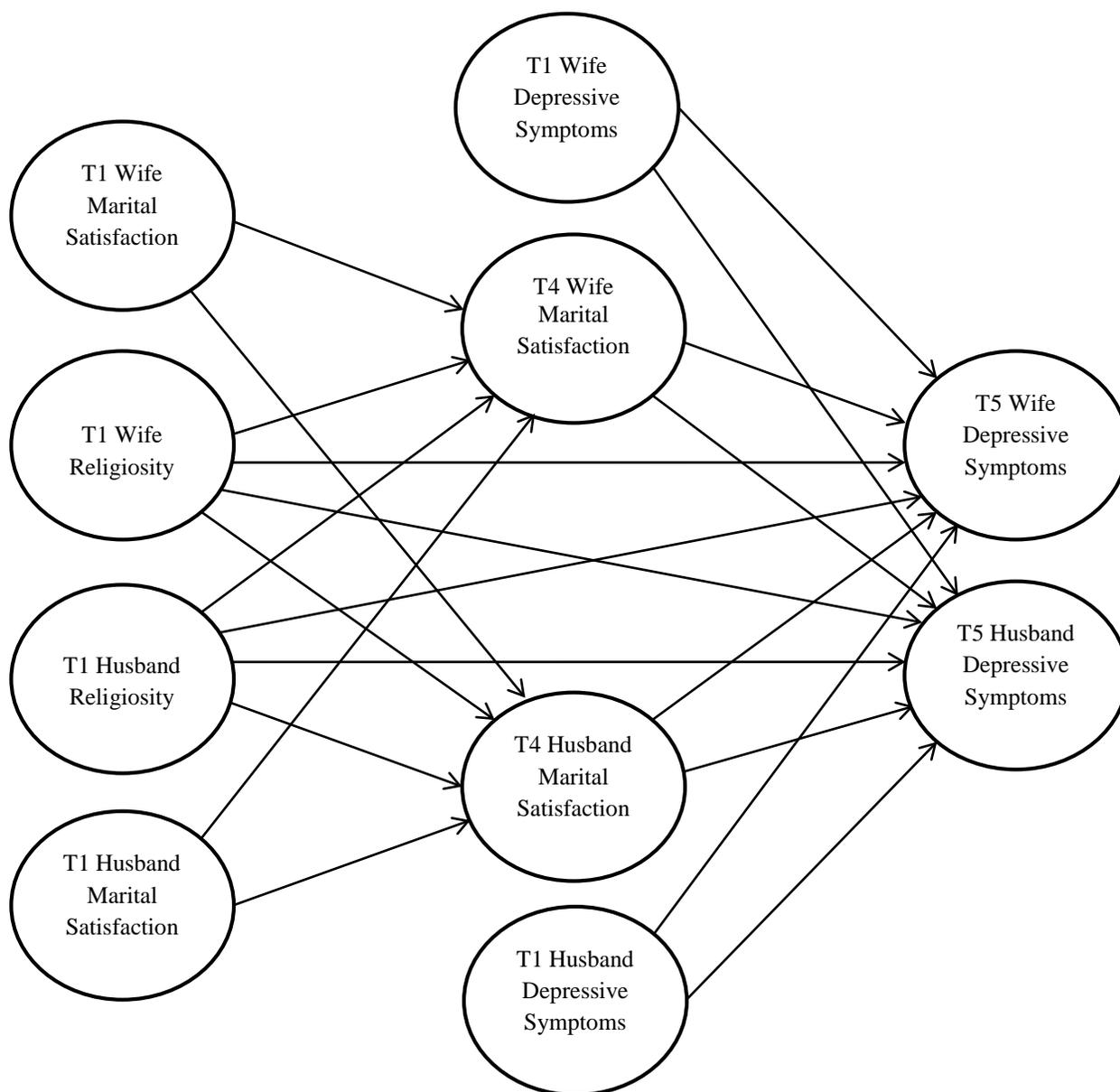
Analysis for Religion, Marital Satisfaction and Depression

The analytical APIM analysis is illustrated in Figure 3. The longitudinal nature of the data allowed for a temporal analysis of religiosity, marital satisfaction, and depressive symptoms. Therefore, Time 1 (2007) religiosity, Time 4 (2010) marital satisfaction, Time 5 (2011) depressive symptoms were included in the model. The other analytic procedures will reflect those that were previously discussed in analysis one to test the APIM and mediation effects.

Results

Preliminary Results for Religion, Marital Satisfaction and Depression

As displayed in Table 3 (See end of document), the mean of the sum scores for the combined four religiosity items at Time 1 were 11.39 ($SD = 4.1$) as reported by wives and 10.14 ($SD = 4.3$) as reported by husbands, with a possible range of 4 to 16. The mean of the sum scores for wives' and husbands' marital satisfaction at Time 4 were 31.44 ($SD = 6.9$) and 32.03 ($SD = 6.4$) respectively, with a possible range of 6 to 40. The mean of the sum scores for wives' and husbands' depressive symptoms at Time 5 were 19.30 ($SD = 3.3$) and 18.90 ($SD = 3.2$) respectively, with a possible range of 11 to 55.

The results of the correlation analysis indicated that wives' religiosity at Time 1 was significantly correlated with husbands' religiosity at Time 1 ($r = .71$, $p < .01$), however, it was not significantly correlated with any of the other primary variables in the analysis (See Table 4). Husbands' religiosity at Time 1 was significantly correlated their own marital satisfaction at Time 4 ($r = .15$, $p < .05$) and wives marital satisfaction at Time 4 ($r = .13$, $p < .05$), but not with any other primary variables in the model. All other primary variables in the model were correlated (See Table 4).

Model Results for Religion, Marital Satisfaction and Depression

The structural equation model (SEM) fit the data well. The chi-square was 1583.405 with 1170 ($p < .001$) degrees of freedom, which is an acceptable ratio ($\chi 2/df = 1.35$). The Root Mean Square Error of Approximation (RMSEA) indicated a good fit with a score of .033, 90% CI = (.029, .038). The Comparative Fit Index (CFI) indicated a good fit with a score of .972. The Tucker Lewis Index (TLI) indicated a good fit with a score of .969. Finally, the Standardized Root Mean Square Residual (SRMR) indicated a good fit with a score of .061.

Figure 4

Results of the APIM SEM Analysis: Religiosity, Marital Satisfaction and Depression
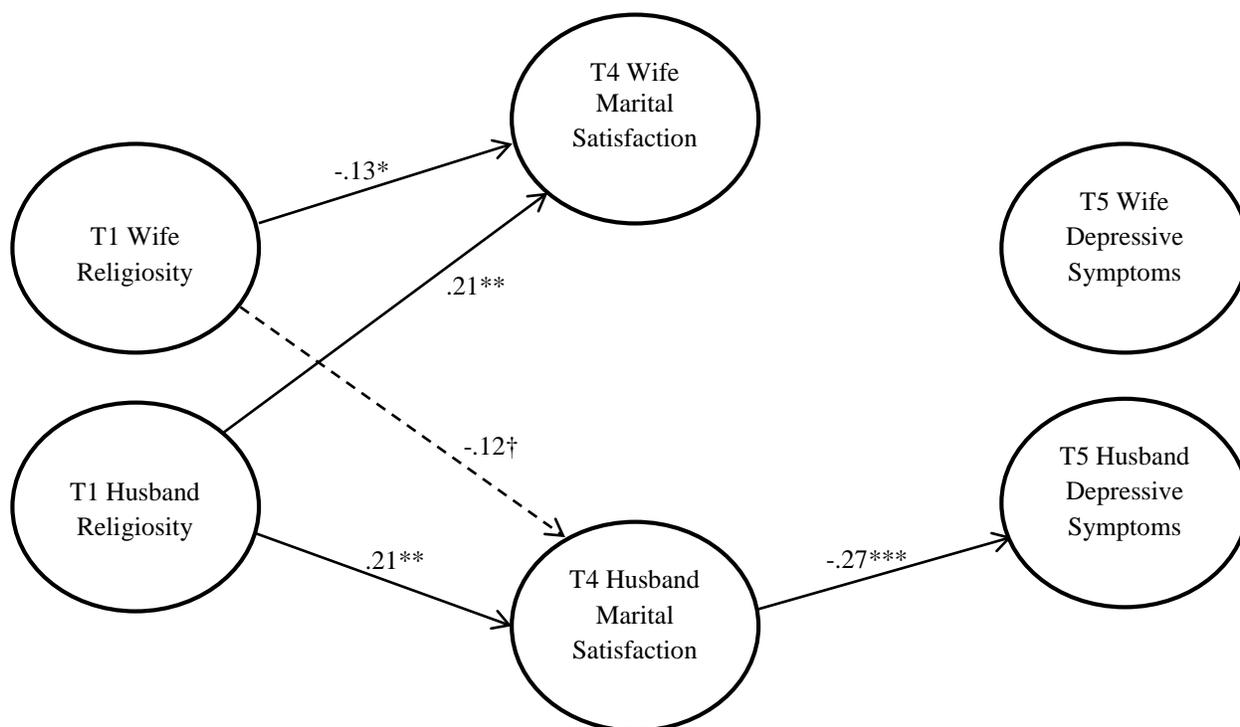
Only significant standardized regression paths are shown above.
All variables at Time 1 were used as controls, though they are not pictured above (See Figure 3).
Dotted paths neared significance.
† p < .10 *p<.05 **p<.01 ***p<.001

Results indicated that the direct actor effect between religiosity at Time 1 and depressive symptoms at Time 5 was not significant for wives ($\beta = .04$, $p = .68$) or for husbands ($\beta = .05$, $p = .60$; See Table 5). However, the actor effect between religiosity at Time 1 and marital satisfaction at Time 4 was significant for wives ($\beta = -.13$, $p < .05$), and husbands ($\beta = .21$, $p < .01$). The actor effect between marital satisfaction at Time 4 and depressive symptoms at Time 5 was not significant for wives ($\beta = -.11$, $p = .15$), but it was for husbands ($\beta = -.27$, $p < .001$). Results indicated that there was only one significant partner effect and it was between husbands' religiosity at Time 1 and wives' marital satisfaction at Time 4 ($\beta = .21$, $p < .01$). Finally, one partner effect neared significance and it was between wives' religiosity at Time 1 and husbands' marital satisfaction at Time 4 ($\beta = -.12$, $p = .80$). These results held constant while controlling for earlier longitudinal measures at Time 1 in addition to monthly family income, the number of years in the relationship, and the number of children in the family.

Table 5

Regression Weights: Religiosity, Marital Satisfaction and Depression

	B	β	p
Actor Effects			
Wife Religiosity T1 → Wife Depressive Symptoms T5	.02	.04	.68
Husband Religiosity T1 → Husband Depressive Symptoms T5	.02	.05	.60
Wife Religiosity T1 → Wife Marital Satisfaction T4	**-.14**	**-.13**	**.05**
Husband Religiosity T1 → Husband Marital Satisfaction T4	**.20**	**.21**	**.003**
Wife Marital Satisfaction T4 → Wife Depressive Symptoms T5	-.05	-.11	.15
Husband Marital Satisfaction T4 → Husband Depressive Symptoms T5	**-.13**	**-.27**	**<.001**
Partner Effects			
Wife Religiosity T1 → Husband Depressive Symptoms T5	-.01	-.02	.86
Husband Religiosity T1 → Wife Depressive Symptoms T5	-.02	-.04	.63
Wife Religiosity T1 → Husband Marital Satisfaction T4	-.12	-.12	.08
Husband Religiosity T1 → Wife Marital Satisfaction T4	**.21**	**.21**	**.003**
Wife Marital Satisfaction T4 → Husband Depressive Symptoms T5	-.01	-.03	.71
Husband Marital Satisfaction T4 → Wife Depressive Symptoms T5	-.03	-.07	.42

Model Fit: Chi-square = 1583.405 ($df = 1170$); RMSEA 90% CI = (.029, .038); CFI = .972; TLI = .969; SRMR .061
Note: Significant Coefficients are shown in **bold**.

Table 6

10,000 Parametric Bootstrap Iterations, Indirect Effects and Confidence Intervals: Religiosity T1, Marital Satisfaction T4, and Depressive Symptoms T5

	B	CI
Sum of Indirect Effects		
Wife Religiosity T1 to Wife Depressive Symptoms T5	.01	[-.002, .038]
Specific Indirect Effects		
Wife Religiosity T1 to Wife Depressive Symptoms T5 Through		
Wife Marital Satisfaction T4	.01	[-.002, .044]
Husband Marital Satisfaction T4	.00	[-.005, .025]
Sum of Indirect Effects		
Husband Religiosity T1 to Husband Depressive Symptoms T5	**-.03**	**[-.059, -.009]**
Specific Indirect Effects		
Husband Religiosity T1 to Husband Depressive Symptoms T5 Through		
Wife Marital Satisfaction T4	.00	[-.021, .009]
Husband Marital Satisfaction T4	**-.03**	**[-.056, -.010]**
Sum of Indirect Effects		
Wife Religiosity T1 to Husband Depressive Symptoms T5	**.02**	**[.001, .044]**
Specific Indirect Effects		
Wife Religiosity T1 to Husband Depressive Symptoms T5 Through		
Wife Marital Satisfaction T4	.00	[-.006, .020]
Husband Marital Satisfaction T4	**.02**	**[.002, .042]**
Sum of Indirect Effects		
Husband Religiosity T1 to Wife Depressive Symptoms T5	**-.02**	**[-.046, -.002]**
Specific Indirect Effects		
Husband Religiosity T1 to Wife Depressive Symptoms T5 Through		
Wife Marital Satisfaction T4	-.01	[-.045, .002]
Husband Marital Satisfaction T4	-.01	[-.032, .008]

Note: Significant indirect effects are shown in **bold**.

Mediation Analysis for Religion, Marital Satisfaction and Depression

Bias-corrected bootstrap analysis was used to test mediation or indirect pathways. To find

the significance of the indirect effects, 95% confidence intervals with 10,000 bootstrap samples

were tested. If the value of zero was not included in the confidence interval, then the specific

effect was considered significant (Ledermann, Macho, & Kenny, 2011; MacKinnon, 2008). As

indicated by the unstandardized indirect actor effects, husbands' marital satisfaction at Time 4

was a significant partial mediator in the relationship between husbands' religiosity at Time 1 and

husbands' depressive symptoms at Time 5, -.03 (95% CI [-.056, -.010]). Additionally, the sum of

the indirect effects from husbands' religiosity at Time 1 and husbands' depressive symptoms at Time 5 as mediated by wives' and husbands' marital satisfaction at Time 4 was significant, -.03 (95% CI [-.059, -.009]).

The unstandardized indirect partner effects indicated husbands' marital satisfaction at Time 4 was a significant partial mediator in the relationship between wives' religiosity at Time 1 and husbands' depressive symptoms at Time 5, .02 (95% CI [.002, .042]). Additionally, the sum of the indirect effects from wives' religiosity at Time 1 and husbands' depressive symptoms at Time 5 as mediated by wives' and husbands' marital satisfaction at Time 4 was significant, .02 (95% CI [.001, .044]). Finally, the sum of the indirect effects from husbands' religiosity at Time 1 and wives' depressive symptoms at Time 5 as mediated by wives' and husbands' marital satisfaction at Time 4 was significant, -.02 (95% CI [-.046, -.002]). No other significant indirect effects were found (See Table 6).

Overall, the model accounted for 50.5% of the variance in wives' marital satisfaction and 50.4% of the variance in husbands' marital satisfaction. The model explained 38.5% of the variance in wives' depressive symptoms and 47.5% of the variance in husbands' depressive symptoms.

Discussion for Religion, Marital Satisfaction and Depression

The results of the second longitudinal analysis did not support H5, that higher levels of religiosity would result in decreases in depressive symptoms for each spouse four years later, with the relationship being more impactful for wives (Actor effect). As displayed in both the correlation matrix (See Table 4) and in the model (See Table 4), there was not a significant direct relationship between religiosity and depressive symptoms for either husbands or wives. These effects may not have been prominent within this sample because participants were in more

established long-term relationships and were financially stable. Additionally, both husbands and wives generally reported relatively low levels of depressive symptoms resulting in less variability and therefore making it more difficult to examine this relationship. This would concur with the theories presented by Koenig, et al., (2012) and Pargament (1997) that this effect may be more prominent when stress or duress are present. Despite there being no direct effect Hayes, (2009) has argued that mediation or indirect effects could still be present even when there does not appear to be a significant relationship between a predictor variable and an outcome variable. In the current study significant indirect pathways were found and will be discussed in more detail.

There was partial support for H6, that increases in marital satisfaction would serve as a mediator between higher religiosity and lower subsequent depressive symptoms for each spouse (Actor effects). Higher initial levels of husbands' religiosity led to increases in husbands' marital satisfaction and subsequent decreases in husbands' depressive symptoms. However, wives' religiosity actually led to decreases in wives' marital satisfaction. Despite this negative relationship, wives' marital satisfaction was not a significant mediator in the relationship between wives' religiosity and wives' depressive symptoms.

There was partial support for H7, that husbands' marital satisfaction would be predictive of wives' depressive symptoms (Partner effect). The initial model did not find a significant relationship between these two variables. However in the mediational analysis there was a significant total indirect effect between husbands' religiosity and wives' depressive symptoms through the mediators of both husbands' and wives' marital satisfaction. This relationship may have been more pronounced if there was more variability in the sample with higher levels of depressive symptoms present.

There was support for H8, that husbands' religiosity would have an indirect effect on wives' depressive symptoms through husbands' marital satisfaction (Partner effect). Higher initial levels of religiosity in husbands was predictive of decreases in depressive symptoms for both husbands and wives when mediated through both husbands' and wives' marital satisfaction. However, initial levels of religiosity for wives was predictive of increases in husbands' depressive symptoms when mediated through both husbands' and wives' marital satisfaction.

This finding was not typical based on the 20 year meta-analytic review of the literature from 1980 to 2000 conducted by Mahoney, et al., (2001). However, more recent studies have found mixed findings (Mahoney, 2010; Wilcox & Wolfinger, 2008; Wolfinger & Wilcox, 2008). Wolfinger and Wilcox (2008) found that increases in men's church attendance significantly positively impacted both men's and women's relationship quality whereas women's church attendance did not. Men's relationship behavior may be influenced more by institutional contexts when compared to women (Stanley, Whitton, & Markman, 2004). Women may tend to be more committed to their relationships despite institutional connecting factors such as marriage or religion; part of this may be tied to the socialization of women to be more relationally focused (Stanley, et al., 2004; Wolfinger & Wilcox, 2008). Finally, increases in men's church attendance were associated with increases in reports of partner supportiveness for both men and women (Wolfinger & Wilcox, 2008).

Some of these discrepancies may also be explained by examining differences between concordant and discordant religious couples. Previous research has found that when couples vary in religious affiliation and/or religious practice, it can have a negative impact on their relationship (Curtis & Ellison, 2002). Within this sample, wives reported significantly higher levels of religiosity when compared to husbands ($t(313) = 6.67$, $p = 0.000$). Additionally, roughly

35% of couples in the current sample reported that they either had different religious affiliations or that one partner was religious and that the other partner was not. Future research should consider incorporating moderation into mediational analyses wherein concordant and discordant couples could be analyzed as separate groups.

These findings are also in line with The Marital Discord Model of Depression (Beach, Sandeen, & O'Leary, 1990). Increases in marital satisfaction led to decreases in depressive symptoms, and decreases in marital satisfaction led to increases in depressive symptoms. In the path analysis, this was manifest as actor effects for both husbands and wives and no significant partner effects were found despite the correlation matrix (See Table 4) displaying that both husbands' and wives' marital satisfaction were significantly correlated with both their own and their partners' depressive symptoms. Some of this may be due to the relatively low levels of depressive symptoms reported and the relatively high levels of marital satisfaction reported. However, this may also be due to the multivariate dyadic nature of the APIM analysis. As such, H7, that husbands' marital satisfaction will be predictive of wives' depressive symptoms (Partner effect), was not validated as there were no significant partners effects between marital satisfaction and depressive symptoms. Additionally, H8, that husbands' religiosity will have an indirect effect on wives' depressive symptoms through husbands' marital satisfaction (Partner effect), was not validated because there were no significant partner effects.

The results of the study provide longitudinal evidence that higher initial levels of religiosity for husbands were predictive of decreases in depressive symptoms for both husbands and wives when mediated through both husbands' and wives' marital satisfaction. However, initial levels of religiosity for wives were predictive of increases in husbands' depressive symptoms when mediated through both husbands' and wives' marital satisfaction. This study

adds to the literature as this relationship had not previously been tested. Husbands who are more religious may have a positive impact on the outcome of both their own and their partners' marital satisfaction and depressive symptoms. However, more religious wives may have a negative impact on husbands' marital satisfaction and depressive symptoms. In comparing these results to those of the first analysis, it is apparent that much of this negative relationship may be attributed to more religious wives not perceiving their partners as being very forgiving. More about the impact of this relationship will be explored in the final analysis.

Model Three: Religion, Forgiveness, Marital Satisfaction and Depression

To this point, a great deal of literature has been used to show the relationships between religiosity and depression, religiosity and forgiveness, religiosity and marital satisfaction, forgiveness and marital satisfaction, and marital satisfaction and depressive symptoms. However, the relationship between forgiveness and depression has not yet been discussed. An examination of the interactions between forgiveness and depression revealed that there are fewer couple relational studies (Baskin et al., 2011) that have been conducted when compared to samples exploring this interaction among individuals (Hirsch, et al., 2011; Toussaint & Webb, 2005; Toussaint, et al., 2008a; Toussaint, et al., 2008b). Most relational studies are focused on the role of forgiveness in the pain and frustration associated with divorce and post-divorce adjustment (Krumrei, Mahoney & Pargament, 2008; Rohde-Brown & Rudestam, 2011; Rye, Folck, Heim, Olszewski, & Traina, 2004). However, among both couples and individuals, findings suggest that increases in forgiveness are associated with decreases in depressive symptoms (Baskin et al., 2011; Hirsch, et al., 2011; Toussaint & Webb, 2005; Toussaint, et al., 2008a; Toussaint, et al., 2008b). Additionally, in reviewing the current literature no research to date has been focused on partner perceptions of forgiveness in relation to depression.

Previous researchers found that levels of forgiveness superseded the impact of general religiosity on depression (Toussaint, et al., 2008a). This has implications that forgiveness may serve as a mediator in the relationship between religiosity and depression. Toussaint, et al. (2008a), using an individual sample of adults, found that when compared to men, women on average were more religious and displayed higher levels of forgiveness of self and others, both of which served as protective factors against depression. For men, forgiveness of self was more impactful than forgiveness of others for their own depression. Finally, there was no significant gender interaction for forgiveness of self. Findings also suggest that if women don't forgive others it may be associated with higher levels of depressive symptoms (Toussaint, et al., 2008a).

Worthington, Berry, and Parrott (2001) have suggested several paths by which forgiveness may impact mental health. First, forgiveness may have a connection to improved levels of social support which could serve as a buffer to mental health problems. Second, interpersonal functioning may improve generally as forgiveness is employed. Third, improved health behaviors may also be tied to forgiveness. Toussaint et al. (2008b) acknowledged these theoretical tenants but also explained that they were not exhaustive and added that understanding the relationship between forgiveness and depression also involves the role of hope to connect them.

In regard to studies that have addressed the interdependent nature of husbands and wives, with forgiveness interacting with either husbands' or wives' depression (partner effects), none were found. However, Fincham's work (Fincham, 2000; Fincham & Beach, 2002; Paleari, et al., 2005) explained that forgiveness in marriage is tied to less ineffective arguing, more constructive communication, and decreases in psychological aggression. Though Fincham's work was focused specifically on the interaction between forgiveness and marital satisfaction, decreases in

psychological aggression could also have an impact on decreases in depressive symptoms. As is prominent in the The Marital Discord Model of Depression (Beach, Sandeen, & O'Leary, 1990), increases in hostile interactions and decreases in social support as a result of marital discord create an increased risk for depression among spouses. Based on this theory, it is reasonable to hypothesize that increased forgiveness in one's partner would lead to decreases in subsequent depressive symptoms for both spouses.

Hypotheses for Religion, Forgiveness, Marital Satisfaction and Depression

The established relationships between religiosity, forgiveness, marital satisfaction and depression provide merit for examining these interactions within a couple relational framework. These associations in addition to the theoretical framework afore mentioned about religious transformative processes (Goodman, et al., 2013) suggest that the connection between religiosity and depression may be mediated through both forgiveness and marital satisfaction. However, there is currently no research wherein this relationship has been tested. As such, this model will explore the longitudinal impact of introducing forgiveness and marital satisfaction as mediators in the relationship between religiosity and depression by exploring both actor and partner effects of husbands and wives.

Previously tested models have used most of the present variables of interest to explore similarly proposed relationships. By testing the relationships between religiosity, forgiveness, marital satisfaction and depressive symptoms simultaneously it will test the relationship of the mediators more rigorously by examining the interaction of all of the variables of interest. The only relationship that has not been examined with the other model variables to this point is the interaction of forgiveness and depressive symptoms. As such, the assumptions about the third

model were that all prior hypotheses would remain, in addition to hypotheses specifically related to the relationship between forgiveness and depressive symptoms.

Consequently, the following hypotheses will be tested:

> H9. Increased forgiveness will predict decreases in one's own depressive symptoms two years later (actor effects).

> H10. Increased forgiveness will serve as a partial mediator between increased religiosity and subsequent decreased depressive symptoms for each spouse two years later (actor effects).

> H11. Increased forgiveness will lead to increases in marital satisfaction across spouses (partner effects), which will lead to subsequent decreases in depressive symptoms across spouses (partner effects).

Methods for Religion, Forgiveness, Marital Satisfaction and Depression

> **Sample.** The previously used sample was also used in the third analysis.

> **Procedure.** The previously used procedures were also used in third analysis.

Measures for Religion, Forgiveness, Marital Satisfaction and Depression

> **Religiosity scale.** The same Time 1 religiosity sum score that was used in the previous analyses was also used in the third analysis.

> **Forgiveness.** The same Time 3 forgiveness sum score that was used in the first analysis was also used in the third analysis.

> **Marital satisfaction scale.** The same Time 4 marital satisfaction sum score that was used in previous analyses was also used in the third analysis.

> **Depressive symptoms scale.** The same Time 5 depressive symptoms scale that was used in the second analysis was also used in the third analysis.

Controls. The controls used in the first analysis were the same controls used in second analysis, in addition to the appropriate longitudinal controls.

Figure 5

Conceptual APIM: Religiosity, Forgiveness, Marital Satisfaction and Depression
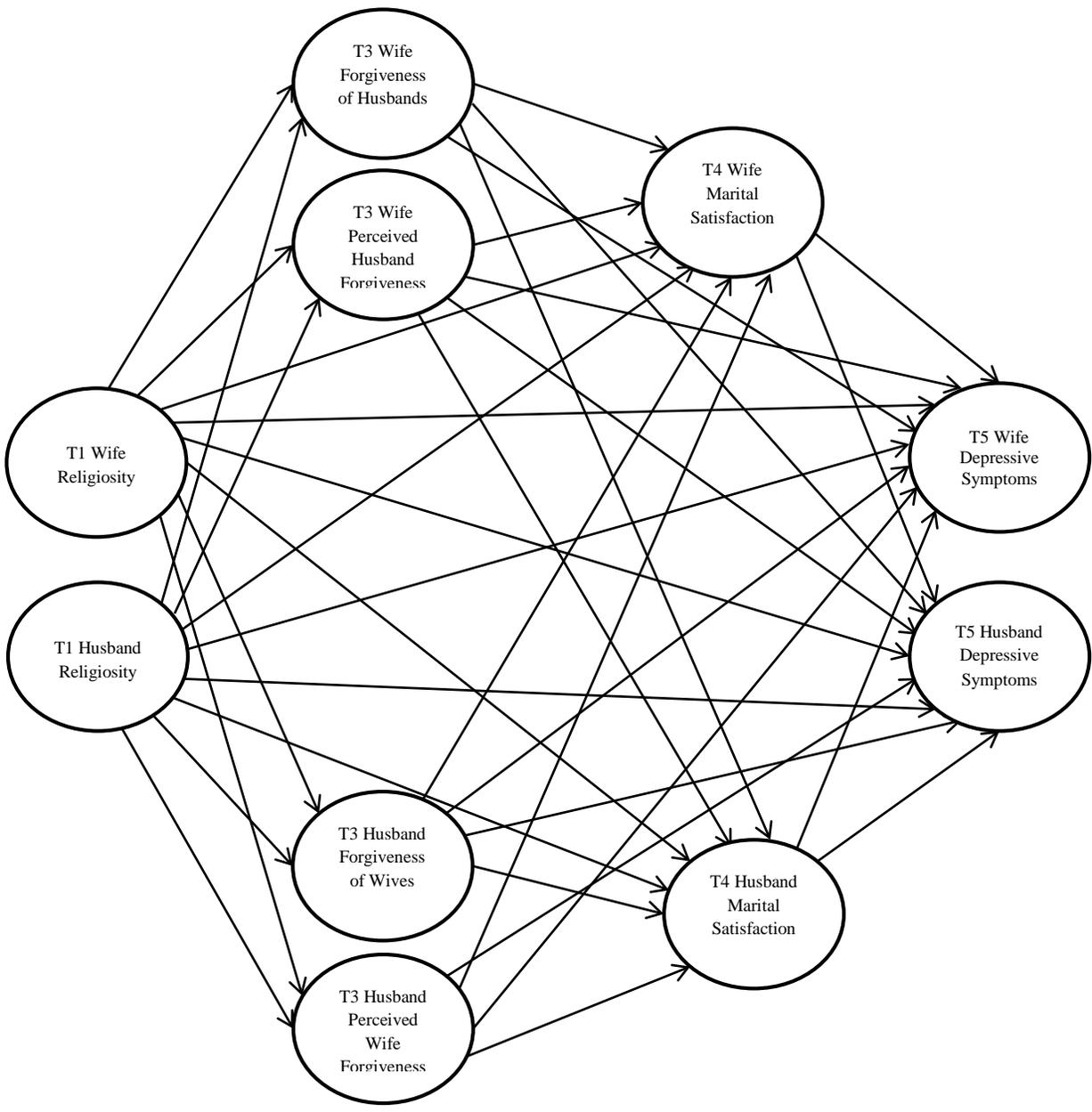
Note: The longitudinal controls for the model variables were also a part of the analysis. However, for simplicity none of these variables or their associated pathways are pictured above.

Analysis for Religion, Forgiveness, Marital Satisfaction and Depression

The analytical model is illustrated in Figure 5. The longitudinal nature of the data allowed for a temporal analysis of religiosity, forgiveness, marital satisfaction and depressive symptoms. Therefore, Time 1 (2007) religiosity, Time 3 (2009) forgiveness, Time 4 (2010) marital satisfaction and Time 5 (2011) depressive symptoms were included in the model. The other analytic procedures will reflect those that were previously discussed in analysis one and analysis two to test the APIM and mediation effects.

<div align="center">

Results

</div>

Preliminary Results for Religion, Forgiveness, Marital Satisfaction and Depression

The means and standard deviations of all of the variables included in the analysis are displayed in Table 7 (See end of document). The results of the correlation analysis indicated that wives' religiosity at Time 1 was significantly correlated with husbands' religiosity at Time 1 ($r = .71$, $p < .01$) and husbands' reported personal forgiveness of partner at Time 3 ($r = .13$, $p < .05$). Wives' religiosity also approached significance when correlated with wives' reported perception of partners' forgiveness at Time 3 ($r = -.11$, $p = .07$). However, wives' religiosity was not significantly correlated with any of the other primary variables in the analysis.

Husbands' religiosity was significantly correlated with husbands' reported personal forgiveness of partner at Time 3 ($r = .21$, $p < .01$), husbands' reported perception of partners' forgiveness at Time 3 ($r = .15$, $p < .05$), their own marital satisfaction at Time 4 ($r = .15$, $p < .05$) and wives' marital satisfaction at Time 4 ($r = .13$, $p < .05$). Husbands' religiosity approached significance with wives' reported personal forgiveness of partner at Time 3 ($r = .11$, $p = .08$), but was not significantly associated with any of the other primary variables in the analysis. Finally,

Figure 6

Results of the APIM: Religiosity, Forgiveness, Marital Satisfaction and Depression
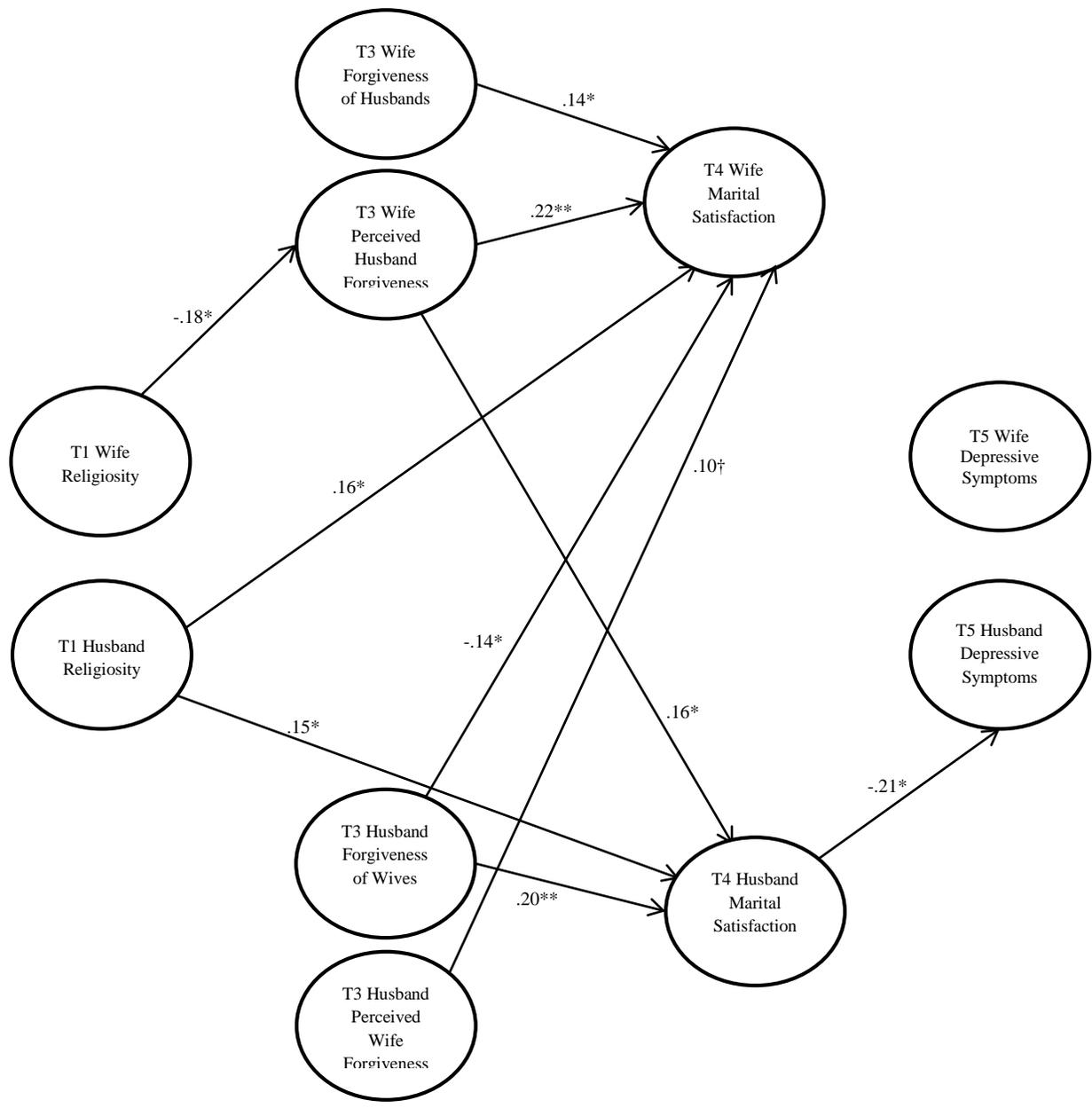
Only significant standardized regression paths are shown above.
† p < .10 *p<.05 **p<.01 ***p<.001
Note: The longitudinal controls for the model variables were also a part of the analysis.
However, none of these variables or their associated pathways are pictured above.

Table 8

Regression Weights: Religiosity T1, Forgiveness T3, Marital Satisfaction T4 and Depression T5

	B	*B*	*p*
Actor Effects			
Wife Religiosity T1 → Wife Depressive Symptoms T5	.03	.05	.53
Husband Religiosity T1 → Husband Depressive Symptoms T5	.03	.05	.55
Wife Religiosity T1 → Wife Forgiveness of Husbands T3	-.10	-.11	.16
Husband Religiosity T1 → Husband Forgiveness of Wives T3	.09	.10	.19
Wife Religiosity T1 → Wife Perceived Husband Forgiveness T3	**-.17**	**-.18**	**.01**
Husband Religiosity T1 → Husband Perceived Wife Forgiveness T3	.07	.08	.32
Wife Religiosity T1 → Wife Marital Satisfaction T4	-.07	-.07	.31
Husband Religiosity T1 → Husband Marital Satisfaction T4	**.14**	**.15**	**.03**
Wife Forgiveness of Husbands T3 → Wife Depressive Symptoms T5	-.01	-.02	.81
Husband Forgiveness of Wives T3 → Husband Depressive Symptoms T5	-.08	-.15	.13
Wife Forgiveness of Husbands T3 → Wife Marital Satisfaction T4	**.15**	**.14**	**.05**
Husband Forgiveness of Wives T3 → Husband Marital Satisfaction T4	**.21**	**.20**	**.007**
Wife Perceived Husband Forgiveness T3 → Wife Dep. Symptoms T5	.05	.08	.41
Husband Perceived Wife Forgiveness T3 → Husband Dep. Symptoms T5	.00	.00	1.0
Wife Perceived Husband Forgiveness T3 → Wife Marital Satisfaction T4	**.25**	**.22**	**.002**
Husband Perceived Wife Forgiveness T3 → Husband Marital Satisfaction T4	.05	.05	.42
Wife Marital Satisfaction T4 → Wife Dep. Symptoms T5	-.06	-.12	.16
Husband Marital Satisfaction T4 → Husband Dep. Symptoms T5	**-.10**	**-.21**	**.02**
Partner Effects			
Wife Religiosity T1 → Husband Depressive Symptoms T5	.00	.01	.93
Husband Religiosity T1 → Wife Depressive Symptoms T5	-.02	-.04	.66
Wife Religiosity T1 → Husband Forgiveness of Wives T3	.06	.06	.41
Husband Religiosity T1 → Wife Forgiveness of Husbands T3	.07	.08	.31
Wife Religiosity T1 → Husband Perceived Wife Forgiveness T3	.03	.03	.73
Husband Religiosity T1 → Wife Perceived Husband Forgiveness T3	.06	.07	.34
Wife Religiosity T1 → Husband Marital Satisfaction T4	-.09	-.09	.16
Husband Religiosity T1 → Wife Marital Satisfaction T4	**.16**	**.16**	**.01**
Wife Forgiveness of Husbands T3 → Husband Depressive Symptoms T5	.01	.02	.83
Husband Forgiveness of Wives T3 → Wife Depressive Symptoms T5	-.04	-.07	.52
Wife Forgiveness of Husbands T3 → Husband Marital Satisfaction T4	.00	.00	.99
Husband Forgiveness of Wives T3 → Wife Marital Satisfaction T4	**-.16**	**-.14**	**.04**
Wife Perceived Husband Forgiveness T3 → Husband Dep. Symptoms T5	.04	.08	.42
Husband Perceived Wife Forgiveness T3 → Wife Dep. Symptoms T5	-.03	-.05	.54
Wife Perceived Husband Forgiveness T3 → Husband Marital Satisfaction T4	**.17**	**.16**	**.03**
Husband Perceived Wife Forgiveness T3 → Wife Marital Satisfaction T4	.11	.10	.10
Wife Marital Satisfaction T4 → Husband Dep. Symptoms T5	-.03	-.06	.45
Husband Marital Satisfaction T4 → Wife Dep. Symptoms T5	-.01	-.03	.77

Model Fit: Chi-square = 3663.610 (*df* = 2558); RMSEA 90% CI = (.034, .040); CFI = .949; TLI = .943; SRMR .063

Note: Significant Coefficients are shown in **bold**.

all of the other primary variables in the analysis were significantly positively correlated (See

Table 7).

Model Results for Religion, Forgiveness, Marital Satisfaction and Depression

The structural equation model (SEM) fit the data well. The chi-square was 2413.540 with

1563 ($p < .001$) degrees of freedom, which is an acceptable ratio ($\chi2/df = 1.54$). In regards to

power, studies wherein the degrees of freedom exceed 1,000 have been shown to be better able

to reject the null hypothesis when compared to models with fewer degrees of freedom (Little,

2013; MacCallum, et al., 1996). Additionally, sample sizes that meet or exceed 120 participants

have been shown to better reflect the mean, variance and standard deviation of the population

when compared to smaller sample sizes (Little, 2013). The Root Mean Square Error of

Approximation (RMSEA) indicated a good fit with a score of .037, 90% CI = (.034, .040). The

Comparative Fit Index (CFI) indicated adequate fit with a score of .949. The Tucker Lewis Index

(TLI) also indicated adequate fit with a score of .943 both of which are acceptable (Little, 2013).

Finally, the Standardized Root Mean Square Residual (SRMR) indicated a good fit with a score

of .063.

Results indicated that the actor effect between religiosity and depressive symptoms was

not significant for wives ($\beta =.03$, $p = .53$) or for husbands ($\beta = .03$, $p = .55$; See Table 8).

However, there were a total of three significant actor effects for wives: first, between wives'

religiosity at Time 1 and wives' reported perception of partners' forgiveness at Time 3 ($\beta = -.17$,

$p < .05$); second, between wives' reported personal forgiveness of partner at Time 3 and wives'

marital satisfaction at Time 4 ($\beta = .14$, $p < .05$); third, between wives' reported perception of

partners' forgiveness at Time 3 and wives' marital satisfaction at Time 4 ($\beta = .22$, $p < .01$). There

were a total of three significant actor effects for husbands: first, between husbands' religiosity at

Time 1 and husbands' marital satisfaction at Time 4 (β = .15, p < .05); second, between

husbands' reported personal forgiveness of partner at Time 3 and husbands' marital satisfaction

at Time 4 (β = .20, p < .01); third, between husbands' marital satisfaction at Time 4 and

husbands' depressive symptoms at Time 5 (β = -.21, p < .05). No other actor effects were

significant (See Table 8).

Results indicated that there were a total of three significant partner effects: first, between

husbands' religiosity at Time 1 and wives' marital satisfaction at Time 4 (β = .16, p < .05);

second, between husbands' reported personal forgiveness of partner at Time 3 and wives' marital

satisfaction at Time 4 (β = -.14, p < .05); third, between wives' reported perception of partners'

forgiveness at Time 3 and husbands' marital satisfaction at Time 4 (β = .16, p < .05). No other

partner effects were significant (See Table 8). These results held constant while controlling for

earlier longitudinal measures at Time 1 in addition to monthly family income, the number of

years in the relationship, and the number of children in the family.

Mediation Analysis for Religion, Forgiveness, Marital Satisfaction and Depression

Bias-corrected bootstrap analysis was used to test mediation or indirect pathways. To find

the significance of the indirect effects, 95% confidence intervals with 5,000 bootstrap samples

were tested. If the value of zero was not included in the confidence interval, then the specific

effect was considered significant (Ledermann, Macho, & Kenny, 2011; MacKinnon, 2008). As

indicated by the unstandardized indirect effects, husbands' marital satisfaction at Time 4 was a

significant partial mediator in the relationship between husbands' religiosity at Time 1 and

husbands' depressive symptoms at Time 5, -.03 (95% CI [-.056, -.010]). No other significant

indirect effects were found (See Tables 9 & 10).

Table 9

Indirect Effects between Wives' Religion at Time 1 and Wives' Depression at Time 5 as well as Husbands' Religion at Time 1 and Husbands' Depression at Time 5
5,000 Parametric Bootstrap Iterations, Indirect Effects and Confidence Intervals: Religiosity T1, Forgiveness T3, and Marital Satisfaction T4.

	B	CI
Sum of Indirect Effects		
Wife Religiosity T1 to Wife Depressive Symptoms T5	.00	[-.034, .026]
Specific Indirect Effects		
Wife Religiosity T1 to Wife Depressive Symptoms T5 Through		
Wife Forgiveness of Husbands T3 and Wife Marital Satisfaction T4	.00	[.000, .008]
Wife Perceived Husband Forgiveness T3 and Wife Marital Satisfaction T4	.00	[.000, .012]
Wife Forgiveness of Husbands T3 and Husband Marital Satisfaction T4	.00	[-.001, .001]
Wife Perceived Husband Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.002, .005]
Husbands Forgiveness of Wives T3 and Husband Marital Satisfaction T4	.00	[-.006, .001]
Husbands Perceived Wife Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.002, .000]
Husbands Forgiveness of Wives T3 and Wife Marital Satisfaction T4	.00	[.000, .008]
Husbands Perceived Wife Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.004, .001]
Wife Forgiveness of Husbands T3	.00	[-.009, .023]
Wife Perceived Husband Forgiveness T3	-.01	[-.037, .010]
Husband Forgiveness of Wives T3	.00	[-.033, .005]
Husband Perceived Wife Forgiveness T3	.00	[-.016, .005]
Wife Marital Satisfaction T4	.00	[-.003, .035]
Husband Marital Satisfaction T4	.00	[-.007, .021]
Sum of Indirect Effects		
Husband Religiosity T1 to Husband Depressive Symptoms T5	-.03	[-.062, .000]
Specific Indirect Effects		
Husband Religiosity T1 to Husband Depressive Symptoms T5 Through		
Husbands Forgiveness of Wives T3 and Husband Marital Satisfaction T4	.00	[-.011, .001]
Husbands Perceived Wife Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.006, .001]
Husbands Forgiveness of Wives T3 and Wife Marital Satisfaction T4	.00	[.000, .005]
Husbands Perceived Wife Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.003, .000]
Wife Forgiveness of Husbands T3 and Wife Marital Satisfaction T4	.00	[-.004, .000]
Wife Perceived Husband Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.006, .000]
Wife Forgiveness of Husbands T3 and Husband Marital Satisfaction T4	.00	[-.002, .002]
Wife Perceived Husband Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.009, .001]
Husband Forgiveness of Wives T3	-.01	[-.047, .004]
Husband Perceived Wife Forgiveness T3	.00	[-.011, .010]
Wife Forgiveness of Husbands T3	.00	[-.007, .017]
Wife Perceived Husband Forgiveness T3	.00	[-.005, .028]
Husband Marital Satisfaction T4	**-.02**	**[-.040, -.001]**
Wife Marital Satisfaction T4	-.01	[-.023, .004]

Note: Significant indirect effects are shown in **bold**.

Table 10

Indirect Effects between Wives' Religion at Time 1 and Husbands' Depression at Time 5 as well as Husbands' Religion at Time 1 and Wives' Depression at Time 5

5,000 Parametric Bootstrap Iterations, Indirect Effects and Confidence Intervals: Religiosity T1, Forgiveness T3, and Marital Satisfaction T4.

	B	CI
Sum of Indirect Effects		
Wife Religiosity T1 to Husband Depressive Symptoms T5	.00	[-.038, .031]
Specific Indirect Effects		
Wife Religiosity T1 to Husband Depressive Symptoms T5 Through		
Wife Forgiveness of Husbands T3 and Wife Marital Satisfaction T4	.00	[.000, .005]
Wife Perceived Husband Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.001, .007]
Wife Forgiveness of Husbands T3 and Husband Marital Satisfaction T4	.00	[-.003, .002]
Wife Perceived Husband Forgiveness T3 and Husband Marital Satisfaction T4	.00	[.000, .013]
Husbands Forgiveness of Wives T3 and Husband Marital Satisfaction T4	.00	[-.010, .002]
Husbands Perceived Wife Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.004, .001]
Husbands Forgiveness of Wives T3 and Wife Marital Satisfaction T4	.00	[.000, .005]
Husbands Perceived Wife Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.002, .000]
Wife Forgiveness of Husbands T3	.00	[-.020, .010]
Wife Perceived Husband Forgiveness T3	-.01	[-.036, .012]
Husband Forgiveness of Wives T3	-.01	[-.040, .005]
Husband Perceived Wife Forgiveness T3	.00	[-.010, .008]
Wife Marital Satisfaction T4	.00	[-.001, .033]
Husband Marital Satisfaction T4	.01	[-.003, .020]
Sum of Indirect Effects		
Husband Religiosity T1 to Wife Depressive Symptoms T5	-.02	[-.046, .007]
Specific Indirect Effects		
Husband Religiosity T1 to Wife Depressive Symptoms T5 Through		
Husbands Forgiveness of Wives T3 and Husband Marital Satisfaction T4	.00	[-.006, .001]
Husbands Perceived Wife Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.003, .000]
Husbands Forgiveness of Wives T3 and Wife Marital Satisfaction T4	.00	[.000, .008]
Husbands Perceived Wife Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.005, .000]
Wife Forgiveness of Husbands T3 and Wife Marital Satisfaction T4	.00	[-.007, .000]
Wife Perceived Husband Forgiveness T3 and Wife Marital Satisfaction T4	.00	[-.008, .001]
Wife Forgiveness of Husbands T3 and Husband Marital Satisfaction T4	.00	[-.001, .001]
Wife Perceived Husband Forgiveness T3 and Husband Marital Satisfaction T4	.00	[-.004, .001]
Husband Forgiveness of Wives T3	.00	[-.037, .006]
Husband Perceived Wife Forgiveness T3	.00	[-.021, .004]
Wife Forgiveness of Husbands T3	.00	[-.020, .007]
Wife Perceived Husband Forgiveness T3	.00	[-.004, .026]
Husband Marital Satisfaction T4	-.01	[-.038, .002]
Wife Marital Satisfaction T4	.00	[-.023, .011]

Note: Significant indirect effects are shown in **bold**.

Overall, the model accounted for 50.4% of the variance in wives' reported personal forgiveness of partner and 51.0% of the variance of wives' reported perception of partners' forgiveness. The model explained 61.1% of the variance in husbands' reported personal forgiveness of partner and 48.6% of the variance in husbands' reported perception of partners' forgiveness. The model accounted for 57.2% of the variance in wives' marital satisfaction and 55.4% of the variance in husbands' marital satisfaction. Finally, the model explained 40.2% of the variance in wives' depressive symptoms and 47.9% of the variance in husbands' depressive symptoms.

Discussion for Religion, Forgiveness, Marital Satisfaction and Depression

The results of the third analysis provide longitudinal evidence that husbands' religiosity within a couple relational framework is predictive of decreases in husbands' depressive symptoms indirectly, or as mediated, through husbands' marital satisfaction. However, support was not found for H9, that increased forgiveness would predict decreases in one's own depressive symptoms two years later (actor effects). Additionally, support was not found for H10, that increased forgiveness would serve as a partial mediator between increased religiosity and subsequent decreased depressive symptoms for each spouse two years later (actor effects). Finally, support was not found for the final hypothesis H11, that increased forgiveness would lead to increases in marital satisfaction across spouses (partner effects), which would lead to subsequent decreases in depressive symptoms across spouses (partner effects).

Significant effects in the final path analysis were similar to the findings in the previous two analyses. Nearly all of the regressions paths and weights were unchanged (See Tables 2, 5, & 8). However, by including forgiveness and marital satisfaction as mediators in the relationship

between religiosity and depressive symptoms, wives' perceptions of their partners' forgiveness impacted the model results.

As in the first model, wives' perceptions of their partners' forgiveness partially mediated the negative impact of wives' religiosity on husbands' and wives' marital satisfaction. However, there was not a significant relationship between wives' or husbands' marital satisfaction and wives' depressive symptoms. Nevertheless, there was a significant relationship between husbands' marital satisfaction negatively impacting husbands' depressive symptoms. The results of the path analysis provided evidence that there may be an indirect effect between wives' religiosity and husbands' marital satisfaction as mediated through wives' perceptions of their partners' forgiveness and husbands' marital satisfaction. This would support research previously discussed wherein negative impacts can emerge when there is discord about religious importance within couple relationships (Curtis & Ellison, 2002; David & Stafford, 2015). However, the results of the bootstrap analysis did not support this since the relationship was not significant. The inclusion of the measure of wives' perceptions of their partners' forgiveness impacted the significant results that were found in the second analysis. Namely, the mediational relationship between wives' religiosity leading to increases in husbands' depressive symptoms through husbands' marital satisfaction was significant in the second analysis. However, by including wives' perceptions of their partners' forgiveness into the relationship between wives' religiosity, husbands' martial satisfaction and husbands' depressive symptoms, this relationship was no longer significant.

By including all of the variables into the final model, it appears that the only significant indirect effect between religiosity and depressive symptoms was for husbands as the relationship between husbands' religiosity led to decreases in husbands' depressive symptoms as mediated

through husbands' marital satisfaction. As previously discussed, these findings may be tied to differences in the importance, implementation, and practice of religiosity between men and women (Koenig et al., 2001; Marks, 2005; Snarey & Dollahite, 2001; Wilcox & Wolfinger, 2008). The findings of the final analysis displayed that husbands' religiosity was more impactful than wives' religiosity in the relationship with depression when forgiveness and marital satisfaction were both included in the analysis.

This finding partially supports previous research and theory about the impact of religiosity on marital satisfaction (Mahoney, et al., 2001; Wilcox & Wolfinger, 2008) and coping (Koenig et al., 2012; Paragament, 1997), since this relationship was only impactful for husbands. Future work should further test the impact of religious transformative processes (Goodman, et al., 2013) and their relationship to marital satisfaction and depressive symptoms. One connection between the core beliefs of religious transformative processes and marital satisfaction as well as coping was the need for couples to have a long term perspective (Goodman, et al., 2013). Future research could focus on the specific aspect of religiosity that is tied to having a long-term perspective. This may add understanding about the why of the relationship between religiosity leading to decreases in depressive symptoms as mediated through marital satisfaction.

Future research also needs to consider the impact of discord about religious importance within couple relationships. Discrepancies in religious importance amongst couples, such as differences in religious affiliation and beliefs as well as the implementation of religious practice have been associated with increases in marital discord (Curtis & Ellison, 2002; David & Stafford, 2015). Future research could use religious concordance and discordance as a moderator to further test if the negative effects that wives' religiosity had in the present study had the same effect.

Clinical Implications

As couple therapists become aware of their client's religious beliefs and practices, it may help to inform processes within the couple's relationship. As therapists work with more religious husbands, therapists may be able to explore what ways husbands' religion positively impacts marital satisfaction. Answers to these questions may help therapists better know how to help husbands to increase their marital satisfaction which in turn may lead to decreases in husbands' depressive symptoms. As therapists work with more religious wives, they may want to inquire about the couples shared religious affiliation, religious beliefs, and religious practices. Therapists may inquire how more religious wives view their husbands' willingness to forgive them. If a negative association is found, it may have a negative impact on husbands' marital satisfaction. This information may alert therapists to problematic areas of the couple's relationship that need to be addressed. By further exploring these processes, therapists may be better able to effectively help religious wives and husbands in their relationships.

<div align="center">

Limitations of Proposed Dissertation

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The study has several limitations that should be noted. While the sample is representative of the population of the area from which data were gathered, generally it is not very economically or ethnically diverse, as it does not include a large sample of those of a lower socioeconomic status or minorities. Additionally, generalizability is affected by the stage of life of the study couples. Inclusion criteria required that couples have a child between the ages of 10 to 14, and as such, the typical age of couples who participated was late 30's and early 40's. There was no direct effect found between religiosity and depressive symptoms and this may be tied to the stability of the sample experiencing minimal stress or duress. Further research should be conducted with a clinical sample or with couples experiencing duress to further substantiate

the generalizability of these findings and to better inform the clinical implications. Additionally, the measurement problems with the longitudinal measure of depression may have impacted the relationships between the model variables and depressive symptoms. The larger time gap between the measures of religiosity and forgiveness may have also limited the ability to detect a relationship between religiosity and forgiveness. Finally, the religiosity measure, while more descriptive than single item measures like church attendance or religious importance, referred to general religiosity as opposed to couple relational religiosity. Future work in this area should focus on more specific and/or couple relational oriented measures of religiosity, particularly how religiosity is associated with a long-term perspective about couple relationships and coping.

Significance of Proposed Dissertation

Despite these weaknesses, this study offers contributions to the literature. The religiosity items are more robust and meaningful by showing phenomena that are considered sacred when compared to simple religiosity measures such as church attendance or religious affiliation (Mahoney, et al., 2003; Pargament & Mahoney, 2005; Stafford, David, & McPherson, 2014). Additionally, the study examined many relationships that to this point have only been discussed in theory. The large sample size in addition to the longitudinal, dyadic designs add strength to arguments about associations that have previously been established, but tests them within the marriage relationship and in a more robust way. Finally, these relationships had not previously been studied simultaneously. This study adds to the present understanding about the impact of religiosity on depressive symptoms in married couples with the finding that increases in husbands' religiosity led to decreases in husbands' depressive symptoms through husbands' marital satisfaction. This finding is novel as this relationship had not been previously examined

and it further informs the processes by which religiosity impacts depression within marital

relationships.

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Table 1

Correlation Matrix for Religiosity, Forgiveness, Marital Satisfaction, Number of Children, Years in the Relationship, and Income

	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. W-Relig.	11.39 (4.12)	1																	
2. H-Relig.	10.14 (4.26)	.71**	1																
3. W-OFOP T1	16.75 (3.39)	-.01	.11†	1															
4. H-OFOP T1	16.61 (3.23)	.01	.07	.25**	1														
5. W-OFOP T3	16.43 (3.45)	-.03	.11†	.69**	.27**	1													
6. H-OFOP T3	17.01 (3.23)	.13*	.20**	.29**	.76**	.37**	1												
7. W-PPPF T1	16.61 (4.02)	.01	.08	.59**	.48**	.45**	.42**	1											
8. H-PPPF T1	15.74 (3.92)	.02	.06	.37**	.66**	.31**	.52**	.30**	1										
9. W-PPPF T3	16.74 (3.93)	-.11†	.01	.43**	.39**	.65**	.42**	.69**	.30**	1									
10. H-PPPF T3	15.44 (4.17)	.09	.15*	.33**	.49**	.45**	.62**	.33**	.67**	.37**	1								
11. W-MS T1	33.51 (6.13)	-.01	.00	.49**	.43**	.37**	.37**	.53**	.43**	.39**	.35**	1							
12. H-MS T1	33.51 (5.97)	.01	.07	.33**	.63**	.29**	.51**	.49**	.54**	.39**	.42**	.54**	1						
13. W-MS T4	31.44 (6.94)	.01	.140*	.47**	.35**	.50**	.32**	.51**	.38**	.53**	.39**	.66**	.48**	1					
14. H-MS T4	32.03 (6.41)	.02	.15*	.36**	.55**	.39**	.55**	.49**	.46**	.48**	.45**	.51**	.65**	.59**	1				
15. NOC	2.45 (1.03)	.24**	.20**	-.05	.04	.06	.05	.03	.03	.05	.03	.01	.08	.04	.04	1			
16. W-YIR	18.01 (4.99)	-.08	-.15**	-.02	.00	-.08	-.03	-.08	.08†	-.05	-.04*	-.20	-.03	-.12**	-.08	-.01	1		
17. H-YIR	17.86 (4.90)	-.09†	-.12*	.01	.00	-.09†	-.00	-.06	.09	-.04	-.02	.01	-.02	-.10*	-.08†	-.03	.90**	1	
18. MFI	7,026 (5,350)	-.02	-.04	.11†	.06	.08	.12†	.13*	-.02	.10†	.10	.09	.11*	.04	.08	-.01	.11*	.09	1

Note: † $p < .10$; * $p < .05$; ** $p < .01$ All correlations are two-tailed. W = Wives, H = Husbands, Relig. = Religiosity, OFOP = Own Forgiveness of Partner, PPPF = Personal Perception of

Partner's Forgiveness, MS = Marital Satisfaction, NOC = Number of Children, YIR = Years in the Relationship, MFI = Monthly Family Income

Table 4

Correlation Matrix for Religiosity, Marital Satisfaction, Depressive Symptoms, Number of Children, Years in the Relationship and Income

	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. W-Religiosity	11.39 (4.12)	1													
2. H-Religiosity	10.14 (4.26)	.71**	1												
3. W-MS T1	33.51 (6.13)	-.01	.00	1											
4. H-MS T1	33.51 (5.97)	.01	.07	.54**	1										
5. W-MS T4	31.44 (6.94)	.02	.13*	.67**	.49**	1									
6. H-MS T4	32.03 (6.41)	.03	.15*	.54**	.66**	.61**	1								
7. W-Dep. T1	14.79 (3.04)	.07	.08	-.30**	-.27**	-.20**	-.21**	1							
8. H-Dep. T1	14.74 (2.98)	.05	.03	-.29**	-.46**	-.24**	-.31**	.26**	1						
9. W-Dep. T5	15.15 (1.67)	.03	-.01	-.29**	-.28**	-.29**	-.28**	.58**	.26**	1					
10. H-Dep. T5	14.95 (1.62)	.03	.00	-.34**	-.44**	-.33**	-.45**	.26**	.61**	.38**	1				
11. NOC	2.45 (1.03)	.22**	.23**	.01	.08	.06	.08	.10	.07	.00	.03	1			
12. W-YIR	18.01 (4.99)	-.12*	-.11†	-.02	-.02	-.08	-.01	-.05	-.03	-.03	.07	-.01	1		
13. H-YIR	17.86 (4.90)	-.12*	-.08	.01	-.02	-.05	-.01	.01	-.02	-.02	.04	-.03	.90**	1	
14. MFI	7,026 (5,350)	-.03	-.03	.09	.11*	.05	.10†	-.15*	-.16*	-.08	-.17**	-.01	.11*	.09	1

Note: † $p < .10$; * $p < .05$; ** $p < .01$ All correlations are two-tailed. W = Wives, H = Husbands, MS = Marital Satisfaction,

Dep. = Depressive Symptoms, NOC = Number of Children, YIR = Years in the Relationship, MFI = Monthly Family Income

Table 7

Correlation Matrix for Religiosity, Forgiveness, Marital Satisfaction, Depressive Symptoms, Number of Children, Income, and Years in the Relationship

	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1. W Rel.	11.39 (4.12)	1																				
2. H Rel.	10.14 (4.26)	.71**	1																			
3. W OFOP T1	16.75 (3.39)	-.01	.11†	1																		
4. H OFOP T1	16.61 (3.23)	.01	.07	.25**	1																	
5. W OFOP T3	16.43 (3.45)	-.02	.11†	.69**	.27**	1																
6. H OFOP T3	17.01 (3.23)	.13*	.21**	.29**	.76**	.37**	1															
7. W PPPF T1	16.61 (4.02)	.01	.09	.59**	.49**	.45**	.42**	1														
8. H PPPF T1	15.74 (3.92)	.02	.07	.38**	.67**	.32**	.52**	.31**	1													
9. W PPPF T3	16.74 (3.93)	-.11†	.02	.43**	.39**	.65**	.42**	.69**	.31**	1												
10. H PPPF T3	15.44 (4.17)	.10	.15*	.33**	.49**	.45**	.62**	.34**	.66**	.38**	1											
11. W MS T1	33.51 (6.13)	-.01	.01	.49**	.43**	.37**	.36**	.53**	.44**	.39**	.35**	1										
12. H MS T1	33.51 (5.97)	.01	.07	.33**	.63**	.30**	.50**	.49**	.55**	.39**	.42**	.54**	1									
13. W MS T4	31.44 (6.94)	.02	.13*	.47**	.35**	.50**	.32**	.51**	.38**	.53**	.39**	.66**	.48**	1								
14. H MS T4	32.03 (6.41)	.03	.15*	.36**	.55**	.39**	.56**	.49**	.46**	.48**	.45**	.51**	.66**	.59**	1							
15. W Dep. T1	14.79 (3.04)	.07	.08	-.28**	-.17*	-.20**	-.13*	-.30**	-.18**	-.22**	-.15**	-.30**	-.26**	-.23**	-.22**	1						
16. H Dep. T1	14.74 (2.98)	.05	.03	-.14*	-.44**	-.13*	-.34**	-.36**	-.28**	-.27**	-.23**	-.29**	-.46**	-.24**	-.34**	.26**	1					
17. W Dep. T5	15.15 (1.67)	.03	-.01	-.25**	-.23**	-.21**	-.22**	-.27**	-.23**	-.20**	-.23**	-.29**	-.28**	-.29**	-.27**	.59**	.25**	1				
18. H Dep. T5	14.95 (1.62)	.03	.00	-.19**	-.43**	-.18**	-.42**	-.34**	-.30**	-.26**	-.30**	-.33**	-.45**	-.32**	-.46**	.26**	.61**	.37**	1			
19. NOC	2.45 (1.03)	.22**	.23**	-.05	.04	.09	.05	.04	.03	.07	.05	.01	.08	.06	.08	.10	.07	.00	.03	1		
20. W YIR	18.01 (4.99)	-.12*	-.11†	-.00	.02	-.04	-.03	-.07	.08†	-.02	-.01*	-.02	-.02	-.08	.00	-.05	-.03	-.03	.07	-.01	1	
21. H YIR	17.86 (4.90)	-.12*	-.08	.02	.01	-.04	-.01	-.05	.09	-.01	-.02	.01	-.02	-.05	-.01	.02	-.02	-.02	.04	-.03	.90**	1
22. MFI	7,026 (5,350)	-.03	-.03	.11†	.07	.09	.12†	.13*	-.02	.10†	.11†	.09	.11*	.05	.10†	-.15*	-.16*	-.08	-.17**	-.01	.11*	

Note: † $p < .10$; * $p < .05$; ** $p < .01$ All correlations are two-tailed. W = Wives, H = Husbands, Rel. = Religiosity, OFOP = Own Forgiveness of Partner, PPPF = Personal Perception of Partner's Forgiveness, MS = Marital Satisfaction, Dep. = Depressive Symptoms, NOC = Number of Children, YIR = Years in the Relationship, MFI = Monthly Family Income