Assessment of the Perceived Importance of Religion in Couple Relationships in Christians, Muslims, Buddhists and the Non-Religious

Sarah K. Skellern[1], Cagla Sanri[1], Shahid Iqbal[2], Nadia Ayub[3], Somboon Jarukasemthawee[4], Kullaya Pisitsungkagarn[4], & W. Kim Halford[1]

[1]School of Psychology, University of Queensland, St. Lucia, Queensland, 4072 Australia; [2]Dept of Psychology, Federal Urdu University, Karachi, Pakistan; [3]Dept of Business Psychology, Institute of Business Managment, Karachi, Pakistan; [4]Faculty of Psychology, Chulalongkorn University, Bangkok, Thailand.

Corresponding author: Professor Kim Halford, School of Psychology, University of Queensland, St. Lucia Queensland 4072 Australia. Email: K.Halford@psy.uq.edu.au.

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/FAMP.12669

DR NADIA AYUB (Orcid ID : 0000-0003-4308-3777)
PROFESSOR KIM HALFORD (Orcid ID : 0000-0001-9645-9147)

Article type : Original article

Abstract

Couple relationship standards (beliefs about what makes for a satisfying couple relationship) have not included standards held about religion, which is surprising given how important religion is in many parts of the world. In the current study, we developed the Importance of Religion in Couple Relationships Scale (IRCRS) with the aim of having a scale suitable for use across different cultural and religious groups. The IRCRS was administered to three samples: 354 Pakistani residents (178 females, 176 males) who identified as Muslim; 274 Thai residents (157 females, 117 males) who identified as Buddhist; and 165 Westerners (resident in Australia or the US, 60 males, 105 females) who identified as either not religious (n = 74) or Christian (n = 91). We developed a 13-item measure with a two level structure yielding an overall importance of religion score. The items in the IRCRS had acceptable cross-cultural structural invariance in a multi-group confirmatory factor analysis of the Pakistani Muslims, Thai Buddhists and Westerners. Pakistani Muslims endorsed IRCRS standards most strongly, Western Christians next most strongly, Thai Buddhists next, and Westerners with no religion least strongly. There were no gender differences, and only very small differences by relationship status. The IRCRS can be used in future research to investigate the association of religious relationship standards with couple relationship satisfaction, and might be a useful clinical tool to assess the importance of religion to couples.

Keywords: Relationship satisfaction, measure development, relationship standards, cross-cultural relationships, beliefs

Assessment of the Perceived Importance of Religion in Couple Relationships in Christians, Muslims, Buddhists and the Non-Religious

Relationship standards are the beliefs that people hold about what makes for a satisfying couple relationship (Hiew et al., 2015a). Standards are what people believe should happen in a relationship and differ from relationship expectations, which reflect what people expect to happen in a relationship, or relationship behavior, which reflects what does happen in a relationship (Baucom et al., 1989). Given the centrality of religion to many people's lives, it is perhaps surprising that there has been no examination of religious relationship standards, or how these standards may be associated with relationship satisfaction. The current study developed a measure of standards about the importance of religion in couple relationships, and examined the endorsement of the standard by Christians, Buddhists, Muslims and non-religious people.

Measures of Relationship Standards

There are five published measures of relationship standards. Four were developed within Western cultural contexts. The Relationship Belief Inventory (RBI; Eidelson & Epstein, 1982), the Inventory of Specific Relationship Standards (ISRS; Baucom et al., 1996), and the Relational Standards Measure (RSM; Vangelisti & Daly, 1997), were developed in the United States. The Ideals in Intimate Relationships (Fletcher et al., 1999) was developed in New Zealand. Understandably all these measures reflect the cultural context of their development, and assess relationship standards reflecting romantic love, such as emotional intimacy, and demonstrations of love and caring.

The fifth measure is the Cross-Cultural Couple Relationship Standards Scale (CCCRSS; Hiew et al., 2015a), which was developed to assess the importance of relationship standards across cultures. Five of the relationship standards reflect Western beliefs: demonstration of love, demonstration of caring, intimacy expression, intimacy responsiveness (Hiew et al., 2015a), and relationship effort (also known as relationship self-regulation; Iqbal et al., 2019). The first four of these relationship standards form a super-ordinate scale called Couple Bond. Relationship Effort correlates strongly with Couple Bond, and both Couple Bond and Relationship Effort are strongly endorsed across all cultural groups (Halford et al., 2018a; Hiew et al., 2015b; Iqbal et al., 2019). The remaining four CCCRSS relationship standards reflect beliefs often endorsed in collectivist cultures of Asia like China and Pakistan: Relations with the extended family, face/mian zi, relational harmony and gender roles. Collectively, these form the super-ordinate scale Family Responsibility standards, which are endorsed more by Chinese and Pakistani collectivistic cultures than by individualistic Western cultures (Halford et al., 2018a; Hiew et al., 2015b; Iqbal et al., 2019).

Relationship standards have been suggested to influence couple relationship satisfaction in three different ways. First, satisfaction might be a function of the extent to which the relationship meets the partners' relationship standards, and there does seem to be an association between these constructs (e.g., Baucom et al., 1996). However, predicting satisfaction from the extent to which your relationship meets your relationship standards seems circular in that satisfaction can be seen as just another way of saying the relationship meets your standards. Second, it has been suggested that some standards reflect behaviors that enhance couple relationship satisfaction. For example, standards such as shared decision-making and frequent demonstration of caring have been suggested to enhance relationship satisfaction (Baucom et al., 1996). Some modest associations exist between endorsement of some of these standards and relationship satisfaction in Western couples (e.g., Baucom et al., 1996). However, the country and its culture moderate the association between endorsement of specific standards and satisfaction (Goodwin & Gaines, 2004). This suggests that at least some standards may not be universally adaptive, but rather different standards may be appropriate for different cultural contexts. Third, similarity between partners' standards might predict relationship satisfaction (Hiew et al., 2015b). This prediction is based on the assumption that if both partners believe similar behaviors are important, then it is more likely the relationship can meet each partner's standards.

In two studies using the CCCRSS, strong endorsement of Couple Bond standards was associated with high relationship satisfaction in Western and Chinese couples (Halford et al., 2018b; Hiew et al., 2015b). The level of endorsement of Family Responsibility standards did not predict relationship satisfaction, but agreement between the partners on those standards predicted high satisfaction in Western and Chinese couples (Halford et al., 2018b; Hiew et al., 2015b). Relationship Effort, which refers to the importance of putting effort into the relationship, predicts relationship satisfaction in Western couples (Wilson et al., 2005), but the association with satisfaction in other cultures is untested.

The CCCRSS expanded the range of relationship standards assessed by other measures, but no published measure of standards includes assessment of the importance of religion in couple relationships. This is a surprising omission given the importance of religion to many people.

The Association of Religion and Couple Relationship Satisfaction

The importance of religion in one's life is reported to be "very important" by 90% of Pakistanis, 85% of Malaysians, 57% of Thais, 41% of Americans, 15% of Australians and 3% of Chinese (World Values Survey, 2017). Religion clearly is very important to

some people, but rated importance varies greatly between cultures. Moreover, while some cultures are relatively homogenous in strong endorsement of the importance of religion, (e.g., Pakistan and Malaysia), in other cultures importance varies markedly between individuals (e.g., many Western countries).

Christians report their religion shapes their sense of meaning within a romantic relationship (Ellison et al., 2010). In a meta-analysis of 94 studies, identification as religious showed a small correlation with high relationship satisfaction in Christians (Mahoney et al., 2008). Similar associations were found in Muslims living in majority Muslim countries (Yeganeh & Shaikhmahmoodi, 2013). Most studies on the association of religion and relationship satisfaction have been done with Christians, and religious relationship standards might differ across faiths. For example, Christian religious services usually involve the genders mixing, whereas Islamic religious services usually are gender segregated. Hence standards about conjoint couple participation in religious practices might differ between faiths. As a second example, Christians and Muslims tend to endorse the view that marriage is a God ordained relationship, and there is a religious duty to have a lifelong relationship. In contrast, most Buddhists consider marriage to be a secular institution, although they still value fidelity.

There are several religion-related relationship standards that might be associated with relationship satisfaction. Marital sanctification is one such standard, which refers to the belief that one's relationship should be blessed by God (Mahoney et al., 2008). Couples who believe in marital sanctification have high relationship satisfaction (Kusner et al., 2014). Religious communication is another potential standard, which is the belief that partners should talk about their religious faith. Couple communication about important life issues is promoted in most approaches to couple therapy (Gurman et al., 2015), and such communication likely enhances relationship satisfaction. Another potential standard is the extent that partners believe they should practice the teachings of their religion. Couples who share joint religious practices (e.g., praying together), have high relationship satisfaction (Mahoney et al., 2008). We developed a set of items to assess these three aspects of religious relationship standards and tried to word items to be applicable to people of diverse faiths.

Religious Relationship Standards and Other Standards.

Developing a new measure is useful only to the extent that it validly measures the desired construct. The construct we aimed to measure was standards about what should be the role of religion in the couple relationship. These relationship standards are different to

broader measures of religiosity, which assess the importance of religion to an individual, but we expected religiosity to be associated with religious relationships standards. We predicted that our new religious relationship standards scale would correlate highly, $r > .50$, with individual religiosity as measured by a widely used measure of religiosity across diverse religions: the Centrality of Religion Scale (Huber & Huber, 2012).

Many religious faiths promote relationship norms of love and nurture (Mahoney et al., 2008). Accordingly, it was expected that religious relationship standards would correlate with Couple Bond standards. Many religions also promote family responsibility standards relevant to relationships, including fulfilling one's familial role, and closeness in families (Lambert & Dollahite, 2006). Furthermore, conservative religious faiths promote the endorsement of traditional gender roles (Fisher, 1994). In summary, many religions value maintaining harmonious relationships, relationships with the extended family, and traditional gender roles. Consequently, it was expected that a scale measuring religious relationship standards would demonstrate a large positive correlation with Family Responsibility standards.

Marriage is highly valued in most religions, and highly religious individuals endorse the belief that people should work to make their marriage a positive relationship (McCullough & Willoughby, 2009). Consequently, it was predicted that religious relationship standards would positively correlate with relationship effort.

Aims of the Study

The first aim was to develop an Importance of Religion in Couple Relationships Scale (IRCRS). More specifically, we aimed to develop a scale that had a conceptually coherent underlying dimension demonstrating adequate reliability (i.e., $\alpha \geq .8$). We also aimed to have a scale that could be used with diverse religious groups and recruited samples of Pakistani Muslims, Thai Buddhists, and Westerners (consisting of Christians and those of no religious faith), and tested the structural invariance of the scale across these groups. We tested whether the scale related to conceptually similar and dissimilar constructs, and predicted that the new scale would show a moderate to high correlation with the centrality of religion in people's lives (Hypothesis 1), and a low correlation with social desirability (Hypothesis 2). We also wanted to test predictions that the new scale would positively correlate with existing relationship standards of Couple Bond, Family Responsibility, and Relationship Effort standards, but not so high, $r > .8$, as to render the new religious relationship standards redundant (Hypothesis 3). We also compared the strength of endorsement of the importance of religion in couple relationships in Pakistani

Muslims, Thai Buddhists, Western Christians, and non-religious Westerners. We made no predictions about the differences between religions, but predicted each religion would rate religion in couple relationships as more important than non-religious participants (Hypothesis 4).

Chinese, Westerners and Pakistanis show little difference within cultures in endorsement of Couple Bond or Family Responsibility relationship standards by gender or relationship status (Halford et al., 2018a; Hiew et al., 2015a; Iqbal et al., 2019). It was unclear whether this would also be true of religious relationship standards. We made no specific predictions but did test for differences by gender and relationship status. We assessed relationship standards in single individuals, as that might influence processes of mate selection, and in individuals in relationships, as standards are associated with satisfaction in committed relationships (Halford et al., 2018b; Hiew et al., 2015b).

The current study used data previously collected for a broader study of couple relationship standards in Pakistan reported by Iqbal et al. (2019) and in Thailand, which have not yet been published. Data were collected for the Western sample specifically for the current study, and had not been reported in any other publication.

Method

Participants

We recruited three samples for a study described to them as a "study of couple relationship standards, which are beliefs people have about what is important to have a good couple relationship". Sample 1 was 354 Pakistani residents (176 females, 178 males), recruited via social media. Inclusion criteria were being over 18 year of age and identifying as Muslim. Participants were of mean age 33.3 years (SD = 8.5). Two hundred and nine Pakistani participants (59%) reported being in a current relationship, and 290 (82%) had a university degree. The second sample consisted of 274 Thai residents (157 females, 117 males), also recruited via social media. Inclusion criteria were that they were aged 18 years or over and identified as Buddhist. Participants' mean age was 31.3 years (SD = 7.8), 112 participants (41%) were currently in a relationship, and 209 (76%) had a university degree.

Sample 3 were residents of one of two Western countries (Australia or the United States). The Australian portion of the sample were University of Queensland first year psychology undergraduates (N = 122, 101 female and 21 male) who participated for course credit, and the US portion was MTurk participants (N = 68, 49 male and 19 female) who were paid US $10 to complete the questionnaire. Inclusion criteria were that the participants were 18 years of age, resided in either Australia or the United States, and self-

identified as heterosexual. Western participants' mean age was 25.1 years (SD = 8.4), 79 participants (50%) were currently in a relationship, 74 (45%) percent reported identifying with no religion, and 91 (55%) identified as Christian.

A two-way Analysis of Variance (ANOVA) of age by nationality (Western, Pakistani, Thai) by gender (male, female) found that men (M = 32.98 years, SD = 8.43) were a little older than women (M = 29.32 years, SD = 8.56), $F(1, 782) = 23.816$, $p < .001$, $\eta_p^2 = 0.030$, and there was a main effect of nationality, $F(2, 782) = 42.274$, $p < .001$, $\eta_p^2 = 0.108$. There was no interaction of gender by sample on age, $F(2, 782) = 1.415$, $p = .244$, $\eta_p^2 = 0.004$. Post hoc comparisons collapsed across gender showed the Pakistani sample (M = 33.26 years, SD = 8.47) was older than the Thai sample (M = 31.3 years, SD = 7.8), $p < .001$, and in turn the Thai sample was older than the Westerners, (M = 25.08 years, SD = 8.36), $p < .001$.

Measures

There were some differences in the measures administered to the three samples. In all three samples we assessed religious relationship standards, and relationship standards. In the Western sample, who were recruited specifically for the current study, we also assessed the importance of religion to an individual and social desirability, which assessed the validity of the items in the Importance of Religion in Couple Relationships Scale (IRCRS). The measures of relevance to the current study from the Thai and Pakistani samples, and the measures administered to the Western sample are described below.

Importance of Religion in Couple Relationships Scale (IRCRS). We reviewed the literature on couple relationships and religiosity, and qualitative data from semi-structured interviews we conducted in Thailand, China and Australia regarding what people believe couple relationships should be like, to generate items for the new measure. The appropriateness of items for Christians, Buddhists and Muslims were reviewed by ten cultural informants who between them had extensive knowledge of religion and culture in Australia, the United States, Thailand, Pakistan and Malaysia. We generated an initial pool of 14-items to assess three constructs related to the importance of religion within couple relationships: (1) the concept of marital sanctification (4 items, e.g., "*Sense God's presence* in their relationship"); (2) religious communication (3 items, e.g., "Be open and honest with each other about their religious convictions"); and (3) religious practice (7 items, e.g., "Follow religious teaching in how they lead their life together"). All items are rated on a 6-point scale (0 = Not Important, 5 = Extremely Important).

Cross-Cultural Couple Relationship Standards Scale (CCCRSS). The CCCRSS developed by Hiew et al. (2015a) and extended by Iqbal et al (2019) is a 79-item measure in which participants rate particular behaviours' importance in having a successful couple relationship on a 6-point scale (0 = Not Important, 5 = Extremely Important). There are nine standards assessed by the CCCRSS: (1) The demonstration of love (7 items, e.g., *"Hold hands when they go out*"); (2) the demonstration of caring (8 items, e.g., *"Help each* other solve *problems"*); (3) intimacy self-expression (11 items, e.g., *"Discuss the reasons* for their p*ositive emotions"*); (4) intimacy responsiveness (6 items, e.g., *"Ask each other about their thoughts")*; (5) relations with the extended family (12 items, e.g., *"Provide financial support to their parents"*); (6) face/mian zi (6 items, e.g., *"Follow social rules in* public*"*); (7) relational harmony (7 items, e.g., *"Remain calm during discussions"*); (8) adherence to traditional gender roles (12 items, e.g., *"The man protects the woman"*); and (9) relationship effort (10 items, "*Make the relationship the number one life priority"*).

The mean for each scale was computed, followed by the means of the first four scales to form the super-ordinate scale Couple Bond standards, and the means of the next four scales to form the super-ordinate scale Family Responsibility standards. Higher scores indicated higher endorsement for the corresponding relationship standard. The reliability for each relationship standard range from .72 to .92 (Hiew et al., 2015a), indicating satisfactory internal consistency.

Centrality of Religion Scale (CRS). The CRS (Huber & Huber, 2012) is a widely used 15-item measure of the importance of religiosity to an individual. The 15-item measure asks participants to indicate either the frequency or the importance of individual religious practice. For frequency items, responses are measured on a 5-point scale (1 = Never, 5 = Once a day or Once a week); an example item being: "How often do you pray?" For intensity items, responses are measured on a 5-point scale (1 = Never, 5 = Very often or Very much so); an example item being: "How important is personal prayer for you?" The mean CRS was computed with higher scores indicating higher religiosity. The reliability for the CRS is high, α = .96 (Huber & Huber, 2012), indicating good internal consistency.

Social Desirability Scale-16 (SDS-16). The SDS-16 (Stöber, 2001) is a 16-item measure of social desirability in responding. Respondents indicate whether they have partaken in socially desirable but improbable behaviours (true-false; e.g., "I sometimes litter"). Items endorsed are summed, higher scores indicate social desirability effects on responses. Previous research found good concurrent and convergent validity, and acceptable internal consistency, α =.72 (Stöber, 2001).

Procedure

Participants were provided with a link to the online survey. The online survey described the study as assessing people's beliefs about what makes for a positive marriage or similar committed couple relationship. The questionnaire was completed in English by the Western samples (Australia and the United States). The Pakistani sample completed the online questionnaire in Urdu, and the Thai sample in Thai. Translation into Urdu and Thai was done by native Urdu and Thai speakers, respectively, and each translation was then independently back translated into English, checked for accuracy of translation, and modified as needed to achieve accurate translations. Australian university student participants received an online debriefing on the aims and methods of the study, which was required to achieve the educational aims of research participation for which they received course credit. United States MTurk participants received a six digit token on completion of the questionnaire which they sent to the researchers by email and the researchers then released a payment to their bank account through the MTurk online administration system. Neither Pakistani nor Thai participants received any incentive or payment for participation. The University of Queensland Human Research Ethics Committee approved the data collected in Australia and the United States (Reference Number: 17-PSYCH-MAP-08-JMC), and in Thailand and Pakistan (Reference Number: 2015000773).

Results

We first examined the Importance of Religion in Couple Relationships Scale items' construct validity in the 354 participants in the Pakistani sample. We started with that sample because it was our largest sample. In addition, as noted in the introduction, religion is rated as more important by Pakistanis relative to Thais and Westerners. One item "*Respect each other's religious differences*" had communality below .5 with the other items. As it seemed possible that low covariance with other items might be specific to the Pakistani Muslims, we checked communality in the Western and Thais samples. In both cases communality was below 0.5, showing the item was not related to the underlying variance measured by the remaining items[1]. This item was removed from the item pool.

We conducted an exploratory factor analysis with the Pakistani sample data using maximum likelihood extraction and obliminal rotation on the remaining 13 items. The Kaiser-Meyer-Olkin (KMO) was 0.923, indicating excellent sampling adequacy for the analysis. Three factors were extracted with eigenvalues over one. The first factor accounted for 53.4% of the variance and four items loaded onto this factor at 0.5 or greater with content regarding sanctification of marriage (Sanctification); for example, "Feel that

their relationship is blessed by God". The second factor accounted for an additional 9.4% of the variance and had 5 items loading on it covering content of religious practice (Practice). For example "Follow religious teachings in how they lead their life together". The third factor accounted for 8.0% of the variance and had 4 items loading on it covering religious communication (Communication); for example, "Listen carefully and show respect when one of you talks about spiritual thoughts and feelings." There was a large correlation between each of the three extracted factors; r = .61 between Sanctification and Practice, r = .68 between Sanctification and Communication, and r = .65 between Practice and Communication. Moreover, in the structure matrix showing simple correlations between factors and items there were substantial correlations (r > 0.43) for all items with each factor.

The interdependence of the three extracted factors suggested there might be a two level structure of three factors of Sanctification, Practice and Communication, with each of these factors then loading onto a superordinate factor. This was consistent with our original conception of an overall importance of religion in couple relationships standard. One item "Share the same religious convictions" loaded substantially on each factor, and we included those three loadings in the measurement model as the item seemed conceptually related to each factor. We tested the two level model with the 13 items in the Pakistani sample with a Confirmatory Factor Analysis (CFA) using AMOS 25, and found acceptable fit to the data, $\chi^2(60) = 181.385$ $p < .001$, TLI = .945, CFI = .958, RMSEA =.076. We then tested the structural invariance of the scale across the Pakistani, Thai and Western samples with a multi-group unconstrained model that had adequate fit to the data, $\chi^2(180) = 486.129$ $p < .001$, TLI = .951, CFI = .962, RMSEA =.046. Constraining measurement weights to be constant across groups significantly decreased model fit, $\Delta\chi^2(24) = 87.954$ $p < .001$, but fit of the constrained model remained acceptable, TLI = .948, CFI = .955, RMSEA =.047. However, also constraining measure intercepts to be equal made model fit unacceptable, $\Delta\chi^2(50) = 712.683$ $p < .001$, TLI = .879, CFI = .881, RMSEA =.072. Thus, the overall model structure and the measurement model weights are acceptably invariant across nationalities, but the mean endorsement (intercepts) of religious relationship standards vary between countries.

Table 1 shows the standardized item factor loadings in the unconstrained confirmatory factor analysis for each of the three samples. Figure 1 shows the structure and standardized coefficients in the constrained model. As is evident, all items load as

predicted onto the three factors across all three samples, except that item 8 loads onto all three factors in the constrained model and slightly differently across samples in the unconstrained model. We contemplated dropping item 8, but removing that item worsened model fit. Given our primary focus was on an overall total scale score, and item 8 did load onto the overall total, we opted to retain the item. To prevent redundancy across subscale scores, we only included item 8 in the scoring for the Practice subscale. Each subscale was calculated as the mean score across the constituent items, and the overall importance of religion in couple relationship standards scale was the mean of the three subscales scores.

Convergent, Divergent and Discriminant Validity

Table 2 presents correlations between the three subscales, and the total score of the IRCRS with conceptually similar and unrelated constructs in the Westerner sample. As predicted, the IRCRS subscales and the total each had a large positive correlation with the Centrality of Religiosity Scale. The IRCRS subscales Sanctification and Practice, and the total IRCRS, each had small to medium positive correlation with social desirability, but the Communication subscale had no association with social desirability.

Table 2 also presents the correlations of each of the IRCRS subscales and the total with other relationship standards in each of the three samples (Westerners, Pakistanis and Thais). Across the three samples, neither the IRCRS total or any of the IRCRS scales had correlation with other standards exceeding 0.6, and most correlations were in the range of 0.2 to 0.4, suggesting there was not redundancy of the new religious relationship standards with pre-existing relationship standards in the CCCRSS. In sum, these correlations suggest the subscales and total IRCRS related as expected to the Centrality of Religiosity, but there were small to medium correlation of Social Desirability with the two of the three IRCRS subscales and the total. Each of the subscales and the total IRCRS score also show association with pre-existing relationship standards that are modest in magnitude and do not suggest redundancy with those pre-existing relationship standards. As our original focus was on an overall IRCRS score, we focus our remaining analyses on that score.

We conducted a three-way ANOVA of the total IRCRS by religion (Pakistani Muslim, Thai Buddhist, Western no religion, Western Christian) by Relationship Status (single or partnered) by Gender (male or female). There were no effects of gender; no significant main effect of gender, $F(1, 774) = 0.032$, $p = .857$, $\eta_p^2 = .000$; no significant two-way interactions of religion by gender, $F(7, 774) = 0.747$, $p = .524$, $\eta_p^2 = .003$, or of relationship status by gender, $F(1, 774) = 0.479$, $p = .489$, $\eta_p^2 = .001$; and no significant three-way interaction of religion by relationship status by gender, $F(3, 774) = 0.070$, $p =$

.976, η_p^2 =.000. As expected, there was a significant, large main effect of religion, F(3, 774) = 168.126, p < .001, η_p^2 = 0.395. There was no significant effect of relationship status, F(1, 7774) = 3.471, p = .063, η_p^2 =.004, and a small but significant two-way interaction of religion by relationship status, F(3, 774) = 4.911, p = .002, η_p^2 =.019.

The sample sizes were sufficient to provide adequate power to detect medium size main effects of religion (n = 74 no religion, n = 91 Christians, n = 351 Muslims, n = 274 Buddhists), relationship status (n = 320 singles, n = 470 partnered), and gender (n = 352 males, n = 438 females). However, three of the 16 cells (four religions by two relationship statuses by two genders) had samples of less than 20 participants (n = 17 single males of no religion, n = 10 partnered males of no religion, and n = 13 single Christian males). Hence, the interaction terms, particularly the three-way interaction, need to be interpreted cautiously as power to detect effects is low.

Figure 2 presents the means for the total IRCRS by religion and relationship status, collapsed across gender as there were no gender differences. Post-hoc pair-wise comparison of means showed that non-religious Westerners' scores (M = 1.38, SD = 0.87) were significantly lower than all other groups; Pakistani Muslims (M = 3.98, SD = 0.84), p <.001, d = 2.99; Thai Buddhists (M = 3.28, SD = 0.79), p <.001, d = 2.30; and Western Christians (M = 3.54, SD = 1.11), p <.001, d = 2.20. Relative to Pakistani Muslims, Thai Buddhists, p = .001, d = 0.84, and Australian Christians, p < .001, d = 0.44, both rated religion in relationships as less important; and Thai Buddhists rated religion as less important than Western Christians, p = .007, d = 0.28.

To assess the source of the small Religion by Relationship Status interaction, we analyzed the relationship status effects on the IRCRS in each religious group. Among non-religious Westerners, single people (M = 1.71, SD =0.98) scored higher than partnered people (M = 1.03, SD = 0.55), F(1, 72) = 13.593, p < .001, η_p^2 =.159. In all other religious groups there was no difference in IRCRS scores of single versus partnered people: Western Christians, F(1, 89) = 0.111, p = .739, η_p^2 =.001; Pakistani Muslims, F(1, 350) = 2.928, p = .088, η_p^2 =.008; Thai Buddhists, F(1, 272) = 0.156, p = .693, η_p^2 =.001.

As mean age differed between samples, religion was confounded with age. To establish if age was related to the IRCRS, we calculated the correlation between age and the total IRCRS scores separately by sample. We found no significant association for the Western sample, r = -.036 p = .644; or Pakistani sample, r = -.004 p = .973; but there was a small association in the Thai sample, r = .168 p = .005. Given the small association of age

with the IRCRS, and the large effect size differences between religions on the IRCRS, age seems unlikely to explain the differences between religions on the IRCRS.

Discussion

As intended, we developed a scale that had a coherent underlying structure reflecting the importance of religion in couple relationships, which demonstrated structural invariance across religious affiliations and nationalities (Muslim, Buddhist, Christian and non-religious). Consistent with Hypothesis 1, the items in the new IRCRS showed convergent validity with the centrality of religion in people's lives. As predicted in Hypothesis 2, the IRCRS items showed acceptable divergent validity from social desirability. Results supported Hypothesis 3 in that the new IRCRS items correlated with other couple relationship standards, but not so highly as to indicate redundancy. As predicted (Hypothesis 4), people identifying with any of three religions (Muslim, Buddhist or Christian) rated religion in couple relationships as more important than people identifying as non-religious.

The current study developed the first measure of the importance of religion in couple relationship standards. While related to religiosity, the IRCRS is conceptually different to religiosity in that it focuses on beliefs about religion in the couple relationship. The 13 items that formed the IRCRS are consistent with the model proposed in the current study, as they reflect the concepts of marital sanctification, religious communication, and religious practice. The single superordinate factor structure in the current data indicates that the concepts of sanctification, communication, and practice are closely related to each other, and reflect an overarching standard reflecting the importance of religion in the couple relationship.

The current study adds religious standards to the range of couple relationship standards that have been assessed, which is important given the centrality of religion to so many people's lives. Moreover, religious relationship standards showed distinction from pre-existing couple standards. For example, Couple Bond standard, which assesses couple communication and intimacy, showed only a medium correlation with the religious communication subscale of the IRCRS.

The current study identified a potentially important difference in religious relationship standards across religious faiths. Pakistani Muslims endorsed the IRCRS more strongly than Western Christians or Thai Buddhists. This is consistent with evidence about the strong importance Pakistanis attach to religion in their lives (World Values Survey,

2017), and underscores that attention to religiosity in couple relationships is likely to be of particular importance in some religious groups.

Limitations

One limitation of the current study is that two of the measures testing for convergent validity (religiosity) and divergent validity (social desirability) were only collected for the Western sample, and further testing of validity of the IRCRS in non-Western samples is needed. A second limitation is that, while overall the samples were large enough to provide adequate power to test the main effects of religion on religious relationship standards, there were small sample sizes in some cells in the three-way ANOVA of religion by gender by relationship status. Consequently, the interaction terms in the analyses lacked power to detect effects and need to be interpreted with caution.

Another limitation of the study was that all three samples were convenience samples and the representativeness of the samples is questionable. It is likely that the samples over-represent people with higher levels of education, as many volunteer samples tend to do. This is likely to be of particular significance in Pakistan, which has great diversity in education, ranging from educated often Westernized progressives living in large cities of Sindh, through farmers living in the vast agricultural plains of the Punjab, to semi-nomadic tribal people of the deserts of Baluchistan, and the mountains of the North-West Frontier Province (Zaman et al., 2006). There is substantial rate of illiteracy in Pakistan – more than 40% (Rehman et al., 2015). Hence, the Pakistani sample over-represents the educated elite. Assessing standards in populations with low literacy, or those with low access to technology, clearly cannot rely on the online assessments used in the current research. Developing structured interviews to assess standards is likely to be important in future research to assess standards in more diverse samples.

The mean ages of the samples differed with Thais and Pakistanis being on average six and eight years older, respectively, than the Westerners. This might suggest the samples were at somewhat different developmental points in experience of committed relationships. However, we found no main effect of relationship status and only a very small interaction of relationship status by religion, which was single non-religious people rating religious relationship standards as a little more important than did non-religious people in a relationship. We found little evidence of an association between religious relationship standards and age, which is consistent with previous research that found negligible association of relationship standards with age or relationship status (single versus in cohabiting relationship) across diverse cultures (Halford & van de Vijver, 2020). This is

also consistent with previous research arguing that most relationship standards are related to culture and formed by early adulthood (Halford & van de Vijver, 2020). Nonetheless, it would be useful in future research to have samples more closely matched in age to ensure there are not potential confounds between religion and age.

Religious affiliation was confounded with country of residence, which makes it hard to separate out religion from other cultural values. One widely used typology of culture is that of Inglehart and Baker (2000), who suggest cultures vary along two major dimensions of values: 1) Survival versus Self-expression, and 2) Traditional/religious versus Secular/Rational. Pakistan and Thailand are both much higher on traditional/religious values, and survival values, than the United States or Australia (World Values Survey, 2017). Hence the observed differences across religions might be, at least partially, attributable to some of these other cultural differences. Separating out religion from other cultural values is quite difficult as religiosity is a major aspect of a key dimension of cultural variability between countries, and many countries in the world have large majorities of a particular religious affiliation (Hackett et al., 2012). However, some countries have greater religious diversity, and these countries might have less cultural tightness around religious practices. Future research needs to investigate religious relationship standards in countries other than those studied in the current research to establish the extent to which the current findings are generalizable to other Christians, Buddhists, and Islamic individuals.

Implications for Theory and Research

The IRCRS makes an important addition to the scope of couple relationship standards adding attention to the beliefs that individuals hold about the importance of the role of religion in their relationship. The Importance of Religion couple standards were rated as variably important across religions and cultures and were rated of high importance by those with a religious identification, particularly by Pakistani Muslims. This extends previous findings on the considerable cross-cultural variability in some couple relationships standards (Iqbal et al., 2019) to the domain of religion.

We found the IRCRS had three factors of sanctification, practice and communication, that were highly correlated and loaded onto a superordinate factor of Importance of Religion. Interestingly, one item assessing "Share the same religious convictions" loaded onto each of the three level one factors, while a discarded item "*Respect each other's religious differences*" did not relate to the other items. Agreement

about key religious standards seems to relate more closely to beliefs about the importance of religion in relationships than does acceptance of religious differences.

The IRCRS can be used to assess the association of the importance of religion standards with relationship satisfaction. One possibility is that endorsing religious relationship standards leads an individual to engage in behaviors that are relationship enhancing, which in turn may increase relationship satisfaction. For example, if a couple believe religion is important in their relationship, they might regularly attend religious services together, pray together, and raise their children in a shared faith. Those shared experiences might be relationship enhancing.

Conversely, it is also plausible that relationship satisfaction may increase one's religiosity and in turn their religious relationship standards. For example, it is possible that a highly satisfying relationship may lead an individual to attribute that state to a benevolent God (Park, 2005), facilitating more religiosity. Alternatively, the proposed relationship between religious relationship standards and relationship satisfaction may be the result of a third variable. For example, religious individuals tend to be embedded in families, communities and organisations that provide more formal and informal relationship-affirming support for couples, such as financial assistance and peer mentoring models of healthy relationships (Dollahite & Marks, 2009). Such support likely does assist couples through relationship difficulties (Edgell, 2006), and such support partially mediates the association between religiosity and relationship satisfaction (for a review, see Mahoney et al., 2008). At the same time, it is important to note that there may be occasions where social pressure from religious networks to remain in a dysfunctional relationship may be unhelpful. For example, in our clinical experience sometimes victims of domestic violence are pressured to stay in a marriage by a religious leader due to the belief that marriage is sanctified by God, and divorce is unacceptable.

Similarity between partners' religious relationship standards might also enhance relationship satisfaction, as agreement makes it more likely that the relationship fits with both partners' standards. Similarity effects exist with other relationship standards. For example, high partner similarity of Family Responsibility standards predicts high relationship satisfaction (Hiew et al., 2015b). Future research needs to test these possibilities about the association of religious relationship standards with couple satisfaction.

Implications for Practice

There is a long standing debate about the lack of attention to religiosity and spirituality within psychotherapy generally (for a review, see Post & Wade, 2009). Some argue that psychotherapy is fundamentally a secular enterprise that should not incorporate religiosity (e.g., Ellis, 1971), while others argue that it is important to include religiosity because of its centrality to many people's lives (e.g., Quackenbos et al., 1985). Models of couple therapy tend to be secular, and do not take into account the role religious beliefs might have in enhancing relationships. For example, one of the most widely used couple therapy texts the Clinical Handbook of Couple Therapy (Gurman et al., 2015) does not mention religiosity. However, the current study suggests that religiosity, at least for those who are religious, might be an important issue in couple relationships.

When working with couples, therapists can use the IRCRS to assess standards about the role of religion in a couple's relationship. Shared standards can be identified as a strength of the relationship and discrepancies between partner standards can prompt guided discussion about how to address those discrepancies (e.g., helping couples to negotiate differences in standards about attendance at religious services, or in the raising of children). Such assessment might be of particular value in working with interfaith couples, as some couples struggle to explicate and manage their religious differences as they impact on their relationship (Hiew et al., 2014). Furthermore, many religious couples engage in pre-marital counselling with pastoral counsellors (Halford, 2011). The IRCRS could be useful to pastoral counsellors, pre-marital counsellors and couple therapists to identify relationship issues stemming from religious relationship standards so that those issues can be negotiated early in the relationship.

Measures of couple relationship standards vary in the behavioral specificity of the standards described in their items. The Relationship Belief Inventory (Eidelson & Epstein, 1982) has predominantly broadly described standards such as: "People who have a close relationship can sense each other's needs as if they could read each other's mind". The ICRCS has more specific items like "Raise any children to follow religious teachings". The scales with behavioral specificity in their items seem better suited clinically to facilitate focused examination of shared and different standards of spouses.

In conclusion, the IRCRS extends current measures of relationship standards to include a measure of religious relationship standards. The current study provides preliminary evidence that the 13 items of the IRCRS provide a measure of religious relationship standards with an invariant structure across multiple religions, high internal consistency, and convergent, divergent and discriminant validity. Future research needs to

replicate the scale's factor structure in different religions and cultures. Future research also needs to test the association between religious relationship standards and relationship satisfaction in diverse religions and cultures, and the current study provides a measure to enable these research questions to be pursued.

References

Baucom, D. H., Epstein, N., Rankin, L. A., & Burnett, C. K. (1996). Assessing relationship standards: The Inventory of Specific Relationship Standards. Journal of Family Psychology, 10(1), 72–88. https://doi.org/10.1037/0893-3200.10.1.72

Baucom, D. H., Epstein, N., Sayers, S. L., & Sher, T. G. (1989). The role of cognitions in marital relationships: Definitional, methodological, and conceptual issues. Journal of Consulting and Clinical Psychology, 57(1), 31–38. https://doi.org/10.1037/0022-006X.57.1.31

Dollahite, D. C., & Marks, L. D. (2009). A conceptual model of family and religious processes in a diverse, national sample of highly religious families. Review of Religious Research, 50(4), 373–391. https://www.jstor.org/stable/25593754

Edgell, P. A. (2006). Religion and family in a changing society. Princeton University Press.

Eidelson, R. J., & Epstein, N. (1982). Cognition and relationship maladjustment: Development of a measure of dysfunctional relationship beliefs. Journal of Consulting and Clinical Psychology, 50(5), 715–720. https://doi.org/10.1037/0022-006X.50.5.715

Ellis, A. (1971). *The case against religion: A psychotherapist's view*. Institute for Rational Living.

Ellison, C. G., Burdette, A. M., & Wilcox, W. B. (2010). The couple that prays together: Race and ethnicity, religion, and relationship quality among working-age adults. Journal of Marriage and Family, 72(4), 963–975. https://doi.org/10.1111/j.1741-3737.2010.00742.x

Fisher, R. D. (1994). Religiousness, religious orientation, and attitudes towards gays and lesbians. Journal of Applied Social Psychology, 24(7), 614–630. https://doi.org/10.1111/j.1559-1816.1994.tb00603.x

Fletcher, G. J., Simpson, J. A., Thomas, G., & Giles, L. (1999). Ideals in intimate relationships. Journal of Personality and Social Psychology, 76(1), 72–89. https://doi.org/10.1037/0022-3514.76.1.72

Goodwin, R., & Gaines, S. O. (2004). Relationship beliefs and relationship quality across cultures: Country as a moderator of dysfunctional beliefs and relationship quality in three former Communist societies. Personal Relationships, 11, 267-279. https://doi.org/10.1111/j.1475-6811.2004.00082.x

Gurman, A. S., LeBow, J. L., & Snyder, D. K. (Eds.) (2015). Clinical handbook of couple therapy. Guilford.

Hackett, C., Grim, B., Stonawski, M., Skirbekk, V., Potancoková, M., & Abel, G. (2012). The global religious landscape: A report on the size and dis*tribution of the world's* major religious groups as of 2010. Washington DC: Pew Research Centre.

Halford, W K., Leung, P., Hung-Cheung, C., Chau-Wan, L., Hiew, D., & van de Vijven, F. J. R. (2018a). Couple relationship standards and migration: Comparing Hong Chinese with Australian Chinese. Family Process, 57, 996-1011. https://doi.org/10.1111/famp.12337

Halford, W. K., Leung, P. W. L., Hung-Cheung, C., Chau-Wan, L., Hiew, D. N., & Van de Vijver, F. J. R. (2018b). Relationship standards and relationship satisfaction in Chinese, Western, and intercultural couples living in Australia and Hong Kong, China. Couple and Family Psychology: Research and Practice, 7, 127–142. https://doi.org/10.1037/cfp0000104

Halford, W. K., & van de Vijver, F. D. R. (2020). Culture, couple relationship standards, and couple relationship education and therapy. In W. K. Halford & F. D. R. van de Vijver (Eds.), Cross cultural family research and practice (pp. 523-564). Elsevier.

Hiew, D. Halford, W. K. & Lui, S. (2014). Loving diversity: Living in intercultural relationships. In: A. Abela & J. Walker (Eds.) Contemporary Issues in Family Studies: Global Perspectives on Partnerships, Parenting and Support in a Changing World. (pp. 87 - 99). Wiley-Blackwell.

Hiew, D. N., Halford, W. K., Van de Vijver, F. J., & Liu, S. (2015a). The Chinese-Western Intercultural Couple Standards Scale. Psychological Assessment, 27(3), 816–827. https://doi.org/10.1037/pas0000090

Hiew, D. N., Halford, W. K., Van de Vijver, F. J. R., & Liu, S. (2015b). Relationship standards and satisfaction in Chinese, Western, and intercultural Chinese-Western couples in Australia. Journal of Cross-Cultural Psychology, 46(5), 684–701. https://doi.org/10.1177/0022022115579936

Huber, S., & Huber, O. W. (2012). The centrality of religiosity scale (CRS). Religions, 3(3), 710–724. https://doi.org/10.3390/rel3030710

Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. American Sociological Review, 65 (1), 19-51. https://doi.org/10.2307/2657288

Iqbal, S., Ayub, N., Van de Vijver, F., & Halford, W. K. (2019). Couple relationship standards in Pakistan. Couple and Family Psychology Research and Practice, 8(4), 208–220. https://doi.org/10.1037/cfp0000124

Kusner, K. G., Mahoney, A., Pargament, K. I., & DeMaris, A. (2014). Sanctification of marriage and spiritual intimacy predicting observed marital interactions across the transition to parenthood. Journal of Family Psychology, 28(5), 604–614. https://doi.org/10.1037/a0036989

Lambert, N. M., & Dollahite, D. C. (2006). How religiosity helps couples prevent, resolve, and overcome marital conflict. Family Relations, 55(4), 439–449. https://doi.org/10.1111/j.1741-3729.2006.00413.x

Mahoney, A., Pargament, K. I., Tarakeshwar, N., & Swank, A. B. (2008). Religion in the home in the 1980s and 1990s: A meta-analytic review and conceptual analysis of links between religion, marriage, and parenting. Psychology of Religion and Spirituality, 8(1), 63–101. https://doi.org/10.1037/1941-1022.S.1.63

McCullough, M. E., & Willoughby, B. L. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. Psychological Bulletin, 135(1), 69–93. https://doi.org/10.1037/a0014213

Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. Journal of Social Issues, 61(4), 707–729. https://doi.org/10.1111/j.1540-4560.2005.00428.x

Post, B. C., & Wade, N. G. (2009). Religion and spirituality in psychotherapy: A practice-friendly review of research. Journal of Clinical Psychology, 65(2), 131–146. https://doi.org/10.1002/jclp.20563

Quackenbos, S., Privette, G., & Klentz, B. (1985). Psychotherapy: Sacred or secular? Journal of Counseling & Development, 63(5), 290–293. https://doi.org/10.1002/j.1556-6676.1985.tb00661.x

Rehman, A., Jingdong, L., & Hussain, I. (2015). The province-wide literacy rate in Pakistan and its impact on the economy. Pacific Science Review: Humanities and Social Sciences, 1(3) 140-144. https://doi.org/10.1016/j.psrb.2016.09.001

Stöber, J. (2001). The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. European Journal of Psychological Assessment, 17(3), 222–232. https://doi.org/10.1027//1015-5759.17.3.222

Vangelisti, A. L., & Daly, J. A. (1997). Gender differences in standards for romantic relationships. Personal Relationships, 4(3), 203–219. https://doi.org/10.1111/j.1475-6811.1997.tb00140.x

Wilson, K. L., Charker, J., Lizzio, A., Halford, K., & Kimlin, S. (2005). Assessing how much couples work at their relationship: The Behavioral Self-Regulation for Effective Relationships Scale. Journal of Family Psychology, 19(3), 385–393. https://doi.org/10.1037/0893-3200.19.3.385

World Values Survey (2017). World values survey wave 6: 2010-2014. http://www.worldvaluessurvey.org/WVSOnline.jsp

Yeganeh, T., & Shaikhmahmoodi, H. (2013). Role of religious orientation in predicting marital adjustment and psychological well-being. Sociology Mind, 3, 131-136. https://doi.org/10.4236/sm.2013.32020

Zaman, R. M., Stewart, S. M., & Zaman, T. R. (2006). Pakistan: Culture, community, and familial obligations in a Muslim society. In J. Georgas, J. W. Berry, F. J. R. van de Vijver, C. Kagitcibasi, & Y. H. Poortinga (Eds.), Families across cultures: A 30-nation psychological study (pp. 427-434). Cambridge University Press. https://doi.org/10.1017/CBO9780511489822.032

Footnote

As the item had high face validity to us, as a further check ran three separated Exploratory Factor Analyses with all 14 items in the Pakistani, Thai and Western samples. In each analysis the item did not load onto the factors extracted from the other 13 items.

Table 1.

Standardized items factor loading in Unconstrained Model Confirmatory factor Analysis

Item	Pakistanis			Thais			Westerners		
	San	Com	Prac	San	Com	Prac	San	Com	Prac
1. Feel that their relationship is blessed by God	.84			.88		¤	.96		
2. Feel that their relationship is part of a larger spiritual plan.	.80			.75			.91		
3. Sense God's presence in their relationship.	.89			.92			.96		
4. Feel that God played a role in how they ended up in their relationship.	.55			.88			.93		
5. Be open and honest with each other about their religious convictions		.80			.81			.78	
6. Support each other in their religious convictions.		.86			.90			.93	
7. Listen carefully and show respect when one of you talks about spiritual thoughts and feelings.		.82			.67			.81	
8. Share the same religious convictions.	-.04	.55	.17	.19	-.10	.45	.35	.02	.38
9. As a couple, draw on their religion to help them cope with stress.			.69			.65			.87
10. Follow religious teachings in how they lead their life together.			.88			.88			.94
11. Raise any children to follow religious teachings.			.84			.90			.93

12. Avoid doing things that are against religious teachings.	.78	.80	.86
13. Follow religious practices in their home life together.	.74	.76	.90

Sanc = Sanctification, Com = Communication, Prac = Practice: NB All blank items factor loadings are set to zero in model

Table 2

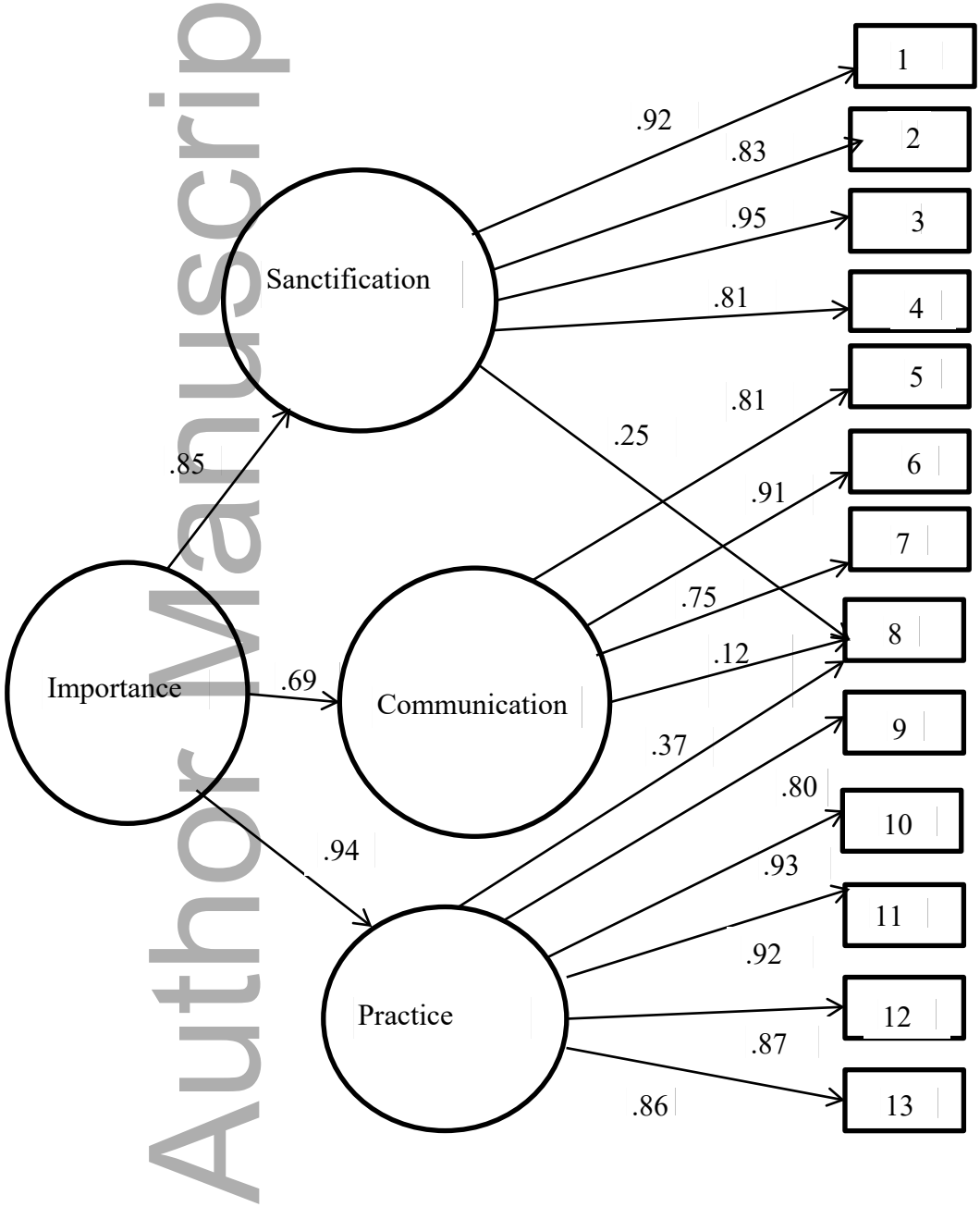
Correlations between Religion in Couple Relationship Standards and Validity Constructs in Western Sample, and with other Relationship Standards in all Three Samples

Variable	1.	2.	3.	4.
Association with Validity Constructs in Western sample				
1. Religious Sanctification		.55*	.92*	.95*
2. Religious Communication			.61*	.76*
3. Religious Practice				.96*
4. Importance of Religion in Couple Relationships				
Convergent validity				
Centrality of Religion	.85*	.63*	.87*	.89*
Divergent Validity				
Social Desirability	.26*	.07	.24*	.22*
Association with Other Relationship Standards				
Western Sample				
Couple Bond	.15*	.32*	.14*	.21*
Family Responsibility	.56*	.26*	.57*	.54*
Relationship Effort	.41*	.39*	.40*	.44*
Pakistani Sample				
Couple Bond	.45*	.42*	.36*	.48*
Family Responsibility	.47*	.45*	.38*	.50*
Relationship Effort	.55*	.50*	.50*	.60*
Thai Sample				
Couple Bond	.20*	.31*	.20*	.27*
Family Responsibility	.40*	.33*	.52*	.51*
Relationship Effort	.26*	.42*	.39*	.42*

* $p < .05$

Figure 1

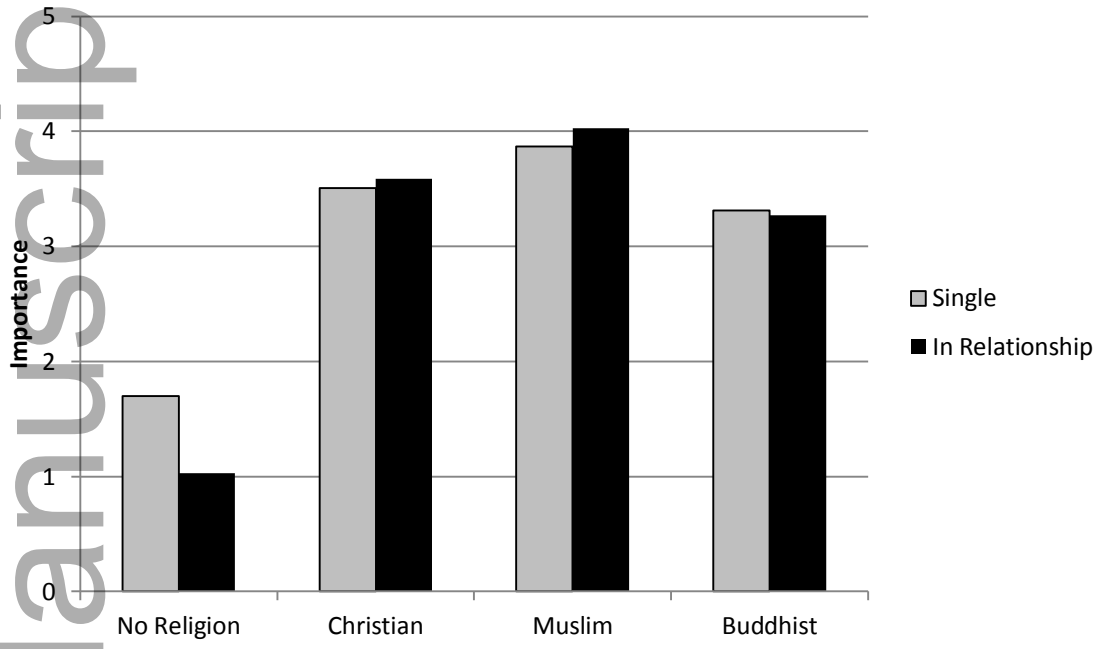
Structure of Importance of Religion in Couple Relationships Across Western, Pakistani and Thai Participants (n = 817)



Note: Standardized coefficients, all $p < .001$

Figure 2

Mean Rated Importance of Religion in Couple Relationship Standards by Religious Identification and Relationship Status



Note: as there were no gender differences, data are presented collapsed across gender.