The Golden Rule Ethic, its Measurement, and Relationships with Well-Being and
Prosocial Values Across Four Religions in India

by

Dimitri Putilin

Department of Psychology & Neuroscience
Duke University

Date:_______________________

Approved:

___________________________
Philip R. Costanzo, Supervisor

___________________________
Mark R. Leary

___________________________
John F. Curry

___________________________
Timothy J. Strauman

___________________________
David Wong

Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor
of Philosophy in the Department of
Psychology & Neuroscience in the Graduate School
of Duke University

2015
ABSTRACT

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Abstract

As a psychological principle, the golden rule represents an ethic of universal empathic concern. It is, surprisingly, present in the sacred texts of virtually all religions, and in philosophical works across eras and continents. Building on the literature demonstrating a positive impact of prosocial behavior on well-being, the present study investigates the psychological function of universal empathic concern in Indian Hindus, Christians, Muslims and Sikhs.

I develop a measure of the centrality of the golden rule-based ethic, within an individual’s understanding of his or her religion, that is applicable to all theistic religions. I then explore the consistency of its relationships with psychological well-being and other variables across religious groups.

Results indicate that this construct, named Moral Concern Religious Focus, can be reliably measured in disparate religious groups, and consistently predicts well-being across them. With measures of Intrinsic, Extrinsic and Quest religious orientations in the model, only Moral Concern and religiosity predict well-being. Moral Concern alone mediates the relationship between religiosity and well-being, and explains more variance in well-being than religiosity alone. The relationship between Moral Concern and well-being is mediated by increased preference for prosocial values, more satisfying interpersonal relationships, and greater meaning in life. In addition, across religious
groups Moral Concern is associated with better self-reported physical and mental health, and more compassionate attitudes toward oneself and others.

Two additional types of religious focus are identified: Personal Gain, representing the motive to use religion to improve one’s life, and Relationship with God. Personal Gain is found to predict reduced preference for prosocial values, less meaning in life, and lower quality of relationships. It is associated with greater interference of pain and physical or mental health problems with daily activities, and lower self-compassion. Relationship with God is found to be associated primarily with religious variables and greater meaning in life.

I conclude that individual differences in the centrality of the golden rule and its associated ethic of universal empathic concern may play an important role in explaining the variability in associations between religion, prosocial behavior and well-being noted in the literature.
Dedication

This work is dedicated to my dearest wife Dikki, whose unconditional love, wisdom, endless support and sacrifice have made it possible, and to my beautiful daughter Nicole who always reminds me that play is not an option but a necessity.

It is also dedicated to my parents, who had the courage to uproot their lives and leave their relatives and friends to come to the United States so that their children could have a better future. Without their love and courage I would surely not be here today.

I also dedicate this work to my advisors: Philip R. Costanzo, who empowered me to choose my own path and follow my vision, and supported me every step of the way; and A. Harvey Baker, who treated me as an equal when I was not yet even a graduate student, and taught me lessons of integrity and generosity by his example.

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1. Introduction

"This is the sum of duty: Do not do to others what would cause pain if done to you."
(Hinduism: Mahabharata 15:1517)

"So in everything, do to others what you would have them do to you, for this sums up the Law and the Prophets."
(Christianity: Matthew 7:12 New International Version)

"Not one of you truly believes until you wish for others what you wish for yourself."
(Islam: an-Nawawi’s Forty Hadith, 13)

"Conquer your egotism. As you regard yourself, regard others as well."
(Sikhism: Sri Guru Granth Sahib, Raag Aasaa 8:134)

The golden rule represents an ethic with a surprisingly global reach across time and place, often formulated independently and prior to cultural exchange between the communities where it arose (Wattles, 1997). Across the tremendous diversity of belief systems of the world’s religions, the golden rule stands out as a unique element of consensus. Acknowledging its ubiquity and importance, the 1993 World Congress of Religions produced a statement which reads, in part:

There is a principle which is found and has persisted in many religious and ethical traditions of humankind for thousands of years: What you do not wish done to yourself, do not do to others. Or in positive terms: What you wish done to yourself, do to others! This should be the irrevocable, unconditional norm for all areas of life, for families and communities, for races, nations, and religions. (The Council for the Parliament of the World’s Religions, 1993, p.23)

The golden rule’s purview is not limited to religious contexts. It was emphasized in ancient Greece by Plato ("One should never do wrong in return, nor mistreat any man, no matter how one has been mistreated by him"; Plato, trans. 2002, p.52); in ancient Rome by Epictetus ("What you shun enduring yourself, attempt not to impose on
others”; Epictetus, 90/1935); in ancient China by Confucius ("Do not impose on others what you do not wish for yourself”; Confucius, trans. 1979); and in Enlightenment Europe by Kant in his famed categorical imperative ("Act only in accordance with that maxim through which you can at the same time will that it become a universal law”; Kant, 1785/1993).

The golden rule is not merely present across cultural contexts, but frequently emphasized as the ultimate moral principle. For Kant, it was the unqualified foundation of rational morality. For Confucius, it answered the question, "Is there any single [idea] that could guide a person’s entire life?” For the 1st century B.C.E. Jewish sage Hillel, it was the summation of the entirety of divine Law: "What is hateful to yourself, do not do to your fellow man. That is the whole of Torah and the remainder is but commentary" (as quoted in Allinson, 2003).

Yet the puzzle remains: why, whenever and wherever a culture has historically attempted to answer the ultimate questions of existence, the golden rule was included as a part of the answer – and frequently emphasized as its epitome? Functionalist accounts of religion dating back to Durkheim recognize that religion serves a purpose within society. Primary among these is social cohesion, promoted through shared beliefs, rituals and moral rules sanctified by religion (e.g., Durkheim, 1915/1965; J. Graham & Haidt, 2010). Perhaps the golden rule’s presence across religions represents a particularly effective means of promoting social cohesion or other social goals; if so, the
psychosocial correlates of the golden rule’s presence within religion are certainly deserving of research attention.

From a psychological perspective, the golden rule prescribes an attitude of equal moral concern for all others, rather than any specific behavior. It attempts to minimize the natural human tendency toward egocentrism, replacing it with the suggestion that others' needs, wishes and goals should be given equal consideration as our own. Although it is named "the ethic of reciprocity" by philosophers, it transcends reciprocity in the usual sense of quid-pro-quo, enjoining us to treat others not as they have treated us, but as we would wish to be treated by them – taking a proactive rather than a reactive stance on compassionate behavior. This distinction is crucial if the goal is to increase compassionate behavior above its current levels within a society, rather than to maintain those levels.

Implied and prerequisite in the application of the golden rule is the need to become mindfully aware of one’s impact on others, and to employ the skill variously termed perspective-taking or empathy: the proverbial practice of putting ourselves in others’ shoes. However, it is insufficient to simply become aware of others’ feelings and inner states; these insights alone can equally be used to help others or to manipulate them for personal gain (e.g., Konrath, Corneille, Bushman, & Luminet, 2014). The golden rule states that, in addition to accurate empathy, the other’s well-being must be valued as much as our own.
This combination of empathy and concern for the other’s well-being is known as empathic concern. In a brilliant series of experiments, Batson found that empathic concern for others leads people to engage in personally costly helping behavior, the ultimate motive of which is to benefit the other rather than to obtain some self-focused benefit. Helping as a function of empathic concern occurred even when alternative courses of action were available, which allowed participants to avoid helping (and its associated cost) while obtaining the social and personal rewards of helping and avoiding the costs of not helping (Batson, 2011).

Subsequently, Cialdini and colleagues (e.g., 1997) demonstrated that it is the degree of the perceived self-other overlap between the participant and the person in need that accounts for the degree of help provided to him or her. This overlap is typically measured by the “inclusion of other in self” scale (Aron, Aron, & Smollan, 1992); Cialdini (1997) aptly refers to the corresponding cognitive perception of self-other overlap as “oneness.” Increasing empathic concern for the person in need also induces a greater sense of oneness with him or her, thereby producing willingness to bear a cost to oneself in order to help.

In other words, the exact behaviors required to apply the golden rule are known to produce other-focused helping, and increase perceived oneness between members of a community – both of which are highly desirable outcomes that are historically vital to a community’s survival under conditions of scarce resources, and essential to its smooth
operation even under prosperity. But, how to persuade individuals to follow it? As a guide to behavior in daily life, the golden rule may fall victim to "the tragedy of the commons" (Hardin, 1968). Although most people would probably enjoy living in a society where all others afforded their wishes, needs and goals the same consideration as their own, doing the same when others may or may not reciprocate becomes a far less appealing proposition. In other words, the golden rule does not appear to carry any immediate benefit for oneself. Not only does it require mindfulness about one’s own behavior and the investment of conscious effort needed to always consider another’s perspective, it also carries a direct personal cost by placing restrictions on what one may or may not do. As a result, it may be readily sacrificed to considerations of expediency in achieving one’s personal objectives.

Embedding the golden rule within the moral codes of religions may have served as a solution to this problem. By sanctifying aspects of human life and behavior or imbuing them with the authority of "divine will", religions are able to produce costly behavior on a society-wide scale – for instance, severe dietary restrictions, time-consuming and effortful ritual observances (e.g., interrupting activities for prayer six times per day or fasting from sunrise to sundown, as in Islam), and donations of time and money for volunteer activities.

Religion’s causal effect on prosocial and antisocial attitudes has been demonstrated in a series of experiments. Exposing American and Iranian students high
in religious fundamentalism to passages containing the golden rule in the Bible and the Koran, respectively, decreased their support for extreme military action against the outgroup, but only when these passages were presented as originating in religious rather than secular sources (Rothschild, Abdollahi, & Pyszczynski, 2009). Exposure to a violent Biblical passage produced increased aggression in both religious and non-religious students, but the effect was particularly pronounced among the religious (Bushman, Ridge, Das, Key, & Busath, 2007). In a series of three studies, Blogowska and Saroglou (2013) found that exposing religious fundamentalists to either prosocial or violent Biblical passages produced increased prosocial or antisocial attitudes, respectively, reversing the sign of the association between religious fundamentalism and prosociality.

Clearly, the behavioral and value norms communicated by religious sources have a causal effect on values and behavior. Through sanctification, values, attitudes and behaviors become imbued with ultimate importance and significance (J. Graham & Haidt, 2011; Tetlock, Kristel, Elson, Green, & Lerner, 2000). As a consequence, religious values tend to occupy positions of priority in the value hierarchy. They have a stronger impact on behavior because people are willing to invest more effort into the pursuit of religious goals (Mahoney et al., 2005). Therefore, although religion is not required to subscribe to the golden rule, it can be a powerful means of emphasizing it.

Yet despite the presence of the golden rule in every major religion, after decades
of research the question of whether religion promotes prosocial behavior remains to be settled (e.g., Galen, 2012; Myers, 2012; Saroglou, 2014b). Overall, religion is associated with greater prosociality, including charitable giving to religious and non-religious organizations, increased volunteering of time and effort toward religious and secular humanitarian activities, and prosocial personality traits (for reviews, see Bekkers & Wiepking, 2011; Preston, Ritter, & Hernandez, 2010; Saroglou, 2013a). However, the effects are particularly pronounced when the recipient of the behavior is an ingroup member, and are weaker, nonexistent or even reversed toward outgroup members and, especially, people perceived as threats to core religious values. The relationship between religion and prosociality has been called “complex”, “paradoxical” “inconsistent” and “confusing” by researchers intimately familiar with the accumulated literature (Batson, 1976; Batson, Floyd, Meyer, & Winner, 1999; Bekkers & Schuyt, 2008; Bekkers & Wiepking, 2011; Galen, 2012; Preston et al., 2010; Preston, Salomon, & Ritter, 2014; Saroglou, 2014b). Clearly, religious people do not consistently follow the golden rule, and can act in ways that contravene it.

This may occur because people do not necessarily perceive the golden rule to be a centrally important aspect of their religion. After all, religions include a plurality of other concepts, rules and demands on the practitioner; these may be consonant or competitive with the golden rule ethic. Within each religion, every individual construes his or her own, unique interpretation of how important each of these various aspects are.
The importance ascribed to the universal ethic of the golden rule can therefore vary greatly from person to person. Therefore I set out, in the present study, to devise a way to measure the centrality of the golden rule within an individual's understanding of his or her religion; and to explore the relationships of golden rule centrality within religion with well-being, prosocial values, quality of relationships, and meaning in life.

This work builds upon earlier efforts to identify the individual differences in approach to religion that would consistently distinguish between prosocial and antisocial attitudes. Almost five decades ago, Allport and Ross proposed that individual differences in religious orientation might reconcile the apparent contradictions between "the teachings of equality and brotherhood, of compassion and humanheartedness, that mark all the great world religions" (p.433) and the observation that the religious were, on average, more prejudiced than the non-religious (Allport & Ross, 1967). They distinguished between the intrinsically religious, who endeavor to live their lives according to their religion's teachings, and the extrinsically religious, who use religion instrumentally to serve more primary needs - for example, to provide "security and solace, sociability and distraction, status and self-justification"(Allport & Ross, 1967, p.434). More recently, Batson (1991) has added the quest orientation, which defines a doubting, questioning and malleable approach to religion.

Religious orientation has become the most commonly utilized construct in the study of individual differences in religion, with over 3200 citations of the original article.
reported on Google Scholar as of this writing. Despite its value and utility as a construct, however, religious orientation did not succeed in uniquely capturing prosocial religiosity. Studies have found that the differences in prejudice between intrinsically and extrinsically oriented participants may be attributable to social desirability, and there were no differences between the orientations in their willingness to stop to help a person in distress (Batson, 1976; Batson, Naifeh, & Pate, 1978). Intrinsically oriented participants were found to be more likely to incur a cost to themselves to benefit another, but only if religion had been primed (Carpenter & Marshall, 2009). Students with the extrinsic-social orientation were more likely than others to sign up for posthumous organ donation (Ryckman, Thornton, Borne, & Gold, 2004). However, Chen and Tang (2013) found that extrinsic religiosity predicted increased unethical intentions, while intrinsic religiosity had the opposite relationship. Both intrinsic and extrinsic religiosity but not quest predicted reduced support for coercive counterterrorism in an international study (Golec de Zavala, Cichocka, Orehek, & Abdollahi, 2012). Summarizing the literature, Saroglou (2014a) writes, "across studies, the existing scales [of religious orientation] have provided null results, inconsistent results, or findings that are hard to interpret." It appears that the existing measures of religious orientation are not particularly helpful in clarifying the relationship between religion and prosocial behavior.

Saroglou (2011) has suggested that all essential individual religious differences
can be represented by four dimensions, which differ in importance across cultures and individuals: believing (religious beliefs), bonding (emotional and ritual aspects), behaving (following religious prescriptions for moral behavior), and belonging (participation in the religious community). Individual variations in the importance ascribed to each of these dimensions may function like equalizer settings, producing a qualitatively unique interpretation of a given religion across its adherents – and, presumably, producing corresponding individual differences in the correlates and consequences of religious practice.

Yet it is important to recognize that religious moral prescriptions differ -- due to differences in religious teachings themselves, as well as individual differences in the interpretations of those teachings. Individuals’ moral attitudes arising from different interpretations of the same religious moral code can be rigid or flexible, prescriptive or proscriptive, focused on correct performance of rituals or on interpersonal behavior norms. Therefore it may be insufficient to simply assess the importance of the moral dimension of religion to the individual.

The present work takes a different approach. It considers as its focal construct the centrality of a clearly defined, universal prosocial message relative to other aspects of religion, and explores its correlates within a sample of adherents of four distinct religious traditions: Hinduism, Christianity, Islam and Sikkhism.

The primary hypothesized effect in this study is a positive association between
the centrality of the golden rule and well-being. Aristotle (1982) argued that eudaimonic happiness (from the Greek eu, meaning "good" and daimon, meaning "spirit") is the ultimate human good, and all other goals are pursued only insofar as they are instrumental in attaining it. He proposed that a virtuous character is the means to attaining eudaimonia — a position that has received accumulating validation from the social sciences. For example, volunteering, whether for secular or religious organizations, is associated with greater well-being and self-reported health, with sustained volunteering producing continuing incremental increases in well-being over time (Binder & Freytag, 2013; Borgonovi, 2008). Spending money to benefit others was found to be associated with increased well-being in both correlational and experimental (retrospective recall) studies (Aknin et al., 2013; Aknin, Dunn, & Norton, 2012; Aknin, Hamlin, & Dunn, 2012; Dunn, Gilbert, & Wilson, 2011). Steger (2008) found that engaging in behaviors to obtain pleasure (hedonic behaviors) is associated with lower well-being, whereas eudaimonic behaviors including volunteering or giving money to a needy person predicts greater well-being. Similarly, McMahan and colleagues (2011) found that when both eudaimonic and hedonic well-being are entered into a regression model, only the eudaimonic dimension uniquely predicts well-being. If the golden rule promotes prosocial behavior, seeing it as central within one’s religion should therefore also predict greater well-being.

Additionally, the centrality of the golden rule is expected to mediate the
relationship between religiosity and well-being. There is ample evidence that religiosity is associated with increased well-being, but the mechanisms underlying this association continue to be investigated. Reviewing data from several national surveys in the United States, Myers (2000) reported that people with the highest scores on spiritual commitment were twice as likely to report being "very happy" than those with the lowest level of commitment; similarly, people endorsing "feeling very close to God" were 178% more likely to be "very happy" compared to those who did not feel close to God or did not believe in God. Among those attending religious services less than monthly, 28% were "very happy"; that percentage increased monotonically as a function of attendance frequency to 47% for those who attended several times per week (Myers, 2000).

Although international studies remain rare, they too find that religiosity is associated with greater well-being. In a 2011 study of a world-wide representative sample, Diener, Tay and Myers found that, after controlling for difficult circumstances, religiosity correlated with well-being both in the U.S. and internationally, however the effects were small ($\beta = .07, p < .001$ in the US data and $\beta = .02, p < .001$ in worldwide data).

If the centrality of the golden rule within religion is found to contribute to explaining religion's impact on well-being, I expect this to occur via increased preference for prosocial values among the individuals who see the golden rule as a central aspect of
their religion. Values are overarching beliefs about what one holds to be important in life, and serve as guides to action and choice across specific situations (Schwartz, 2012). Schwartz and his colleagues (2012) have identified a set of ten basic values that are present and possess an identical circumplex structure in every one of the 82 cultures sampled to date.

Of the entire range of values, I expect the centrality of the golden rule to emphasize benevolence and universalism. In an earlier version of the theory both of these values had been subsumed under the single category termed "prosocial", which represented valuing the well-being of all others regardless of their ingroup or outgroup status (Schwartz & Bilsky, 1987). Currently the theory distinguishes between benevolence ("preserving and enhancing the welfare of those with whom one is in frequent personal contact"), and universalism ("understanding, appreciation, tolerance, and protection for the welfare of all people and for nature"; Schwartz, 2012). Because the golden rule does not make a distinction between close and distant others, seeing it as central within one’s religion should promote both of these values.

Prosocial values provide a stable source of motivation to engage in prosocial behavior – itself known to produce increased well-being. Therefore prosocial values also should predict well-being, mediating the relationship between well-being and the centrality of the golden rule. A meta-analysis across 15 countries found that, indeed, religious people value benevolence (Saroglou, Delpierre, & Dernelle, 2004); however, the
results of past studies examining the relationships between universalism, benevolence
and well-being across cultures have been mixed (e.g., Bobowik, Basabe, Páez, Jiménez, &
Bilbao, 2011; Joshanloo & Ghaedi, 2009; Sagiv & Schwartz, 2000).

Satisfying interpersonal relationships are essential to well-being (Baumeister &
Leary, 1995; Ryan & Deci, 2000; Ryan, Huta, & Deci, 2008). People who value the well-
being of others are more likely to engage in actions that build and maintain strong
interpersonal ties, fulfilling that essential need. In return, they receive the benefits
associated with greater social capital, which include happiness, health and life
satisfaction (Helliwell & Putnam, 2004). Relationship quality is positively correlated
with spirituality (Kirby, Coleman, & Daley, 2004). Meaning in life has also been found
to be a robust predictor of well-being, and a mediator of the pathway between religion
and well-being (Krause, 2003; C. Park, 2007; C. L. Park & Hale, 2014; Ryan & Deci, 2001;
M. F. Steger & Frazier, 2005). I therefore expect that the impact of the centrality of the
golden rule on well-being will be additionally mediated by both of these variables.

In summary, I expect that people who see concern for others as the core aspect of
their religion will utilize it as a salient guide to behavior, which will manifest in their
increased preference for prosocial values. I expect that the relationship between the
centrality of the golden rule and well-being will be fully mediated by prosocial values;
and the prosocial values, in turn, will produce their impact on well-being through
improved quality of interpersonal relationships and meaning. The conceptual model is
presented in Figure 1. To distinguish between the unique effects of golden rule centrality and overall religiosity (i.e., importance of religion), both of these are allowed to predict all endogenous variables.

**Figure 1: Hypothesized relationships between the Golden Rule, Prosocial Values, Quality of Relationships, Meaning in Life, and Well-being**

Because the golden rule exists across religions but fundamentally represents an ethical principle, I expect it to have the same psychosocial correlates, regardless of the religious or philosophical framework of beliefs in which it is embedded. It is possible that the golden rule may find more opposition in the form of contradictory or incompatible material in some contexts than in others; however, using its centrality within a given framework obviates these concerns, because people who see the golden rule as increasingly central to their religion will see other aspects of their religion as increasingly secondary. Therefore, I expected the same model to be applicable across
religions. If the predicted relationships are supported by the data, it would clarify the
extent to which a single shared ethical principle common to all major religions,
potentiated by the equally universal (across religions) psychological process of
sanctification, accounts for the impact of religions on well-being and prosocial values.

The specific aims of the present study are (a) to identify whether the importance
ascribed by the individual to the golden rule within his or her religion, relative to other
constructs religions contain (this construct will hereafter be called "moral concern
religious focus" or "moral concern RF"), is a viable construct amenable to measurement,
and to develop a means of measuring it; (b) to examine the extent to which moral
concern RF contributes to well-being, relative to overall religiosity; (c) to identify
whether moral concern RF predicts well-being across several religions, some of which
are historically unrelated; (d) to explore the mediating mechanisms of the relationship
between moral concern RF and well-being; and (e) to identify psychological and
religious characteristics associated with moral concern RF and other types of religious
focus.

A significant limitation of the literature on religion and its correlates concerns its
over-reliance on Western and overwhelmingly Christian samples (Tay, Li, Myers, &
Diener, 2014). This follows a broader criticism of the entire field of psychology as being
overly reliant on WEIRD (Western, Educated, Industrialized, Rich and Democratic)
samples, who are among the least representative populations on the planet (Henrich,
Heine, & Norenzayan, 2010). Given this limitation of past research, it would be valuable to corroborate and extend the existing literature to a non-Western culture where the major world religions have been rooted for many centuries. This is particularly relevant considering that the development and validation of a cross-religious measure was a major aim of the present effort.

India provides just such a context. Over than 99% of India’s more than 1,200,000,000 people report a religious affiliation (Indian Ministry of Home Affairs, 2001, 2011). In addition to its Hindu and Sikh populations, offering the opportunity to sample its native religions within their culture of origin and comprising 80.5% and 1.9% of the population respectively, India has substantial Muslim (13.4%) and Christian (2.3%) minorities. Together, these are the four largest religious groups in India. Like the majority of religions, all four are theistic, which facilitates consistent item construction. The ability to include Christians in the sample conveniently provides a link with the extant literatures cited above. All of these religions have a long-standing and firmly established presence in Indian society, and their own distinct subcultures.

2. Method

The questions described above were addressed in this study by collecting cross-sectional questionnaire data from a convenience sample of Indian adults. To measure the centrality of the golden rule within an individual’s religious framework, the
Religious Focus Inventory (RFI) was developed. In addition to focus on the golden rule, two additional types or domains of religious focus were empirically identified and included in all subsequent analyses. Details on the development of the RFI are provided later in the Method section.

Subsequent data analyses consisted of two major stages. First, a sequence of path models was estimated using the R package lavaan 0.5 (Rosseel, 2012), with each model incorporating additional mediators into the model from the preceding step. This stage elucidated the relationships between the RFI domains and well-being, prosocial values, meaning in life and relationship quality. Additionally, the discriminant predictive validity of the RFI was examined with respect to extant religious orientation measures and an index of individual importance of religion (i.e., “religiosity”).

In the second stage, partial correlations were computed between each of the types of religious focus identified during the development of the RFI and other measures in the questionnaire, controlling for demographic variables, social desirability and religion. The aim of these exploratory analyses was to understand values, attitudes, and religious beliefs associated with each type of religious focus. Additional details about the methodology are provided below.

### 2.1 Sample Characteristics and Survey Administration

Participants were Hindus, Christians, Muslims and Sikhs recruited from the
community in three geographical locations: New Delhi, Varanasi, and
Thiruvananthapuram. Surveys were provided to participants to complete at home in
English or Malayalam. Upon return of the survey participants received compensation
valued at 150 Indian rupees (US $3). A total of 632 participants completed the study.
Participants failing the attention check (n = 47), those not belonging to any of the four
target religions (n = 19), indiscriminate responders on the Religious Focus Inventory (i.e.,
those who had used three or fewer of the seven available response scale categories, n =
58) and four outliers were eliminated from analyses (some participants fell into more
than one of these categories), producing an analysis sample of 534 participants. The
characteristics of the final sample are presented in Table 1.

2.2 Measures

Diverse measures of psychological and religious constructs were utilized in
order to ascertain the convergent and discriminant validities of the Religious Focus
Inventory (RFI), and to characterize the religious and psychological attributes associated
with each type of religious focus. In addition to the RFI itself, measures comprised the
following categories: (a) multiple measures of well-being, intended to capture a breadth
of approaches to well-being measurement; (b) attitudes toward others, as reflected in
values, willingness to harm or help others whom one dislikes, and gratitude; (c)
attitudes toward oneself, including self-esteem, self-compassion, and unconditional self-
acceptance; (d) other psychological measures, including personality, meaning in life, relationship quality and social desirability, (e) demographic measures, and (f) additional measures of religious beliefs and practices. The latter included multiple single- and multi-item measures created by the author in order to more fully characterize the approach to religion represented by each type of religious focus measured by the RFI.

Except as noted, all measures used a seven-point Likert-type response scale.

**Table 1: Sample Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Hindu (n = 191)</th>
<th>Christian (n = 172)</th>
<th>Muslim (n = 112)</th>
<th>Sikh (n = 59)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean (SD)</td>
<td>27.56 (11.00)</td>
<td>32.11 (9.92)</td>
<td>26.22 (6.01)</td>
<td>35.67 (12.09)</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>123 (64.4%)</td>
<td>98 (57.0%)</td>
<td>61 (54.5%)</td>
<td>17 (28.8%)</td>
</tr>
<tr>
<td>Male</td>
<td>67 (35.1%)</td>
<td>72 (41.9%)</td>
<td>51 (45.5%)</td>
<td>41 (69.5%)</td>
</tr>
<tr>
<td><strong>Wealth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Poor</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Moderately Poor</td>
<td>7</td>
<td>23</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Below Average</td>
<td>37</td>
<td>48</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Average</td>
<td>49</td>
<td>16</td>
<td>56</td>
<td>18</td>
</tr>
<tr>
<td>Above Average</td>
<td>75</td>
<td>71</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>Moderately Rich</td>
<td>17</td>
<td>3</td>
<td>4</td>
<td>56</td>
</tr>
<tr>
<td>Very Rich</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Disadvantaged Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheduled Caste</td>
<td>19 (9.9%)</td>
<td>7 (4.1%)</td>
<td>0 (0%)</td>
<td>2 (3.4%)</td>
</tr>
<tr>
<td>Scheduled Tribe</td>
<td>3 (1.6%)</td>
<td>5 (2.9%)</td>
<td>3 (2.7%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Other Backward Class</td>
<td>53 (27.7%)</td>
<td>83 (48.3%)</td>
<td>20 (17.9%)</td>
<td>3 (5.1%)</td>
</tr>
</tbody>
</table>

*Note. Disadvantaged status refers to recognition of historical disadvantage by the Indian government used in employment and education quotas.*
2.2.1 The Religious Focus Inventory

The Religious Focus Inventory is designed to measure the relative importance of several common aspects of religious involvement, including the empathic concern for others represented by the golden rule, to the individual practitioner. Participants are presented with a list of statements, and are asked to rate how central each of the statements is to their individual religious or spiritual belief and practice system: "To what extent do you feel that each of the following is central to what your religion/spirituality is all about for you?"

Based on interviews and feedback provided by leaders (i.e., clergy) and members of religious groups in the U.S. and India, 74 candidate items were selected for initial evaluation. Items reflected the following categories: fitting in with the religious ingroup; improving one's life circumstances through divine favor; obtaining reward in the afterlife; seeking mystical and spiritual experiences; establishing or maintaining a relationship with God; valuing and working to improve the welfare of others, including an explicit statement of the golden rule; increasing one's religious or spiritual knowledge; obedience to rules and performance of rituals; and receiving emotional comfort from religion.

Responses were subjected to principal components analysis, generally following the methodology of Leung and colleagues (2002). Two to six factor solutions were examined using oblique and orthogonal rotations, with the oblique (promax) rotation
ultimately chosen due to substantial correlations among the components. The three-component solution was selected based on the scree plots and conceptual coherence of the components, accounting for 43% of the variance. Items loading .35 or higher on a single component with no cross-loadings above .35 were selected for inclusion in the final scale. Each scale has demonstrated good to excellent internal consistency in each of the sampled religions. The final set of items was again subjected to principal components analysis. The resulting component loadings and scale reliabilities are presented in Table 2; scale correlations are presented in Table 3.

The resulting three empirically derived scales coalesce around three distinct themes. The first of these captures the centrality of concern for others' well-being expressed through spiritual, social and material means, consistent with the notion of the golden rule and including it explicitly as one of the items ("always treating all the people I come into contact with the way I want to be treated"). Additional content includes efforts to reduce negative (i.e., antagonistic or harmful to others) emotions or behaviors. Because the resulting construct reflects a broader construct than the golden rule alone, it is named Moral Concern.

The second religious focus, Personal Gain, contains items related to using religion as a means to improve one's temporal existence. Item content includes fitting in with one's community, acquiring material wealth and status, and having God's assistance in overcoming one's enemies. The third religious focus (Relationship with
God) consists of items expressing the wish to engage in a direct relationship with the divine and obtain the spiritual and emotional (rather than material or social, as in the Personal Gain RF) benefits of doing so.

The scales are worded in such a way as to be applicable to all theistic religions. Additional validity information is provided in the Results section. The other scales used in this study will be described next.

**Table 2: Pattern matrix of the principal components analysis of the final RFI items with Promax rotation.**

<table>
<thead>
<tr>
<th>Cronbach’s a</th>
<th>Moral Concern</th>
<th>Personal Gain</th>
<th>Relationship with God</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire sample:</td>
<td>.91</td>
<td>.88</td>
<td>.91</td>
</tr>
<tr>
<td>Christians:</td>
<td>.91</td>
<td>.87</td>
<td>.87</td>
</tr>
<tr>
<td>Hindus:</td>
<td>.90</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Muslims:</td>
<td>.87</td>
<td>.86</td>
<td>.84</td>
</tr>
<tr>
<td>Sikhs:</td>
<td>.87</td>
<td>.78</td>
<td>.81</td>
</tr>
</tbody>
</table>

Variance Explained: 18% 16% 17%

*Religious Focus Inventory Items*

- Keeping my mind pure and free of malicious thoughts: .62 - .18 .15
- Serving God by how I treat others: .55 - .08 .19
- Living righteously and honorably: .52 - .13 .33
- Looking for ways to serve others: .66 - .16 .19
- Volunteering my free time for charity: .54 - .03 .23
- Praying for strangers I come across who seem to need help: .57 - .10 .25
- Always treating all the people I come into contact with the way I would want to be treated: .59 .26 - .25
- Actively looking for ways and opportunities to relieve the suffering of the less fortunate: .59 .18 - .07
<table>
<thead>
<tr>
<th>Fortunate</th>
<th>Moral Concern</th>
<th>Personal Gain</th>
<th>Relationship with God</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminating or overcoming anger, hatred and resentment</td>
<td>.71</td>
<td>.15</td>
<td>-.20</td>
</tr>
<tr>
<td>Praying for the benefit of everyone in the world (for example, world peace, end of hunger, etc.)</td>
<td>.65</td>
<td>-.14</td>
<td>.15</td>
</tr>
<tr>
<td>Being always concerned with avoiding or minimizing the unhappiness that my actions inflict on others</td>
<td>.75</td>
<td>.14</td>
<td>-.28</td>
</tr>
<tr>
<td>Living a moral life</td>
<td>.69</td>
<td>.10</td>
<td>-.09</td>
</tr>
<tr>
<td>Avoiding causing harm to anyone, regardless of how they have treated me</td>
<td>.56</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>Having the courage to stand up against injustice in the world</td>
<td>.76</td>
<td>-.14</td>
<td>-.09</td>
</tr>
<tr>
<td>Noticing when I treat others badly, and making an effort to change</td>
<td>.43</td>
<td>.09</td>
<td>.25</td>
</tr>
<tr>
<td>Making sure that I follow the same beliefs, customs and practices as everyone else in my religion</td>
<td>.05</td>
<td>.44</td>
<td>.14</td>
</tr>
<tr>
<td>Giving me the things and possessions that I want</td>
<td>-.15</td>
<td>.77</td>
<td>-.06</td>
</tr>
<tr>
<td>Receiving divine help in increasing my material wealth</td>
<td>-.21</td>
<td>.81</td>
<td>.13</td>
</tr>
<tr>
<td>Fitting in with my religious/spiritual community</td>
<td>.11</td>
<td>.76</td>
<td>-.08</td>
</tr>
<tr>
<td>Being around people who share my religion/spirituality</td>
<td>.07</td>
<td>.69</td>
<td>-.01</td>
</tr>
<tr>
<td>Having status and the respect of others</td>
<td>.12</td>
<td>.71</td>
<td>-.15</td>
</tr>
<tr>
<td>Receiving what I ask or pray for</td>
<td>-.13</td>
<td>.67</td>
<td>.20</td>
</tr>
<tr>
<td>Having God’s help against those who oppose me</td>
<td>.10</td>
<td>.64</td>
<td>-.04</td>
</tr>
<tr>
<td>Feeling that I belong – that I am accepted or included by others in my religion/spirituality</td>
<td>.05</td>
<td>.71</td>
<td>.00</td>
</tr>
<tr>
<td>Reading, watching television programs, or listening to radio programs about my religion/spirituality</td>
<td>.00</td>
<td>.61</td>
<td>.17</td>
</tr>
</tbody>
</table>
Table 3: Zero-order correlations between the RFI and religiosity.

<table>
<thead>
<tr>
<th>Measure</th>
<th>RFI Moral Concern</th>
<th>RFI Personal Gain</th>
<th>RFI Relationship w/God</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFI Personal Gain</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RFI Relationship w/God</td>
<td>.70</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>Religiosity</td>
<td>.26</td>
<td>.27</td>
<td>.38</td>
</tr>
</tbody>
</table>

Note. All p < .001

2.2.2 Well-Being Index

The following scales measured well-being. Participant scores on each scale were standardized and combined into a single index due to the high correlation across measures, and the superior signal-to-noise ratio obtained when averaging measures of
well-being (Helliwell, Barrington-Leigh, Harris, & Huang, 2009).

- **Flourishing** (Diener et al., 2010): an eight-item measure described by its author as a "summary measure of the respondent’s self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism" (p.143) from which item four ("I actively contribute to the happiness and well-being of others") was deleted to avoid tautological correlations with measures of concern for others. Sample item: "I am engaged and interested in my daily activities." Cronbach’s α = .77.

- **SPANE** (Scale of Positive and Negative Experience; Diener et al., 2010): a 12-item scale measuring six positive (e.g., "pleasant", "joyful") and six negative (e.g., "unpleasant", "sad") feeling states over the past four weeks. Scores on the negative subscale were reversed and added to the positive subscale. Cronbach’s α = .82.

- **Satisfaction with Life Scale** (Diener, Emmons, Larsen, & Griffin, 1985): a five-item scale designed as a measure of global life satisfaction. Sample item: "In most ways my life is close to my ideal." Cronbach's α = .69.

- **Subjective Vitality Scale** (Ryan & Frederick, 1997): a six-item scale measuring “a positive feeling of aliveness and energy” reflecting “organismic well-being” (p.529). Sample item: "I feel alive and vital." Cronbach’s α = .78.

### 2.2.3 Values

- **Portrait Values Questionnaire (PVQ-R)** (Schwartz et al., 2012): a 57-item
internationally validated measure of values. Sample items: "Taking care of people she is close to is important to her" (Benevolence); Cronbach’s α = .77. “Protecting the weak and vulnerable people in society is important to her” (Universalism); Cronbach’s α = .79.

2.2.4 Measures of Religion Because there is evidence that asking about religion acts as a prime, all questions related to religion followed the other measures in the questionnaire (Ginges, Hansen, & Norenzayan, 2009; Saroglou, 2014a). Throughout the entire questionnaire, the term "religiosity/spirituality” was used to enable individuals who may have preferred the alternative term to respond.

The following measures of religion were used:

- Religion and religious subgroup.
- Religiosity: an index of the importance of religion/spirituality in a participant’s daily life, computed as a sum of five items, each item standardized within each religion. The items are: "How often do you interrupt something that you are doing, or hold off doing something that you value, in order to devote time to your religion/spirituality?", "How often do you attend religious or spiritual services or other religious or spiritual meetings?", "How often do you spend time in private religious or spiritual activities, such as prayer or meditation?", "How religious are you?", and "How important is your religion/spirituality in your daily life now?" Cronbach’s α = .70. A similar item, “how spiritual are you?” was dropped from the
index when it was discovered that 88 participants in the analysis sample (16.5%) left this item unanswered. Discussions with Indian faculty indicated that this was most probably due to the incomprehensibility of spirituality apart from religiosity in Indian culture, particularly among those with limited education.

- Religious Beliefs: individual items assessing belief in God, images of God (including beliefs in God’s ingroup favoritism and universalism), the afterlife, and interconnectedness of life. The categories included: (a) images of God – including belief in God’s existence; beliefs in God’s nature as benevolent or punitive; God’s partiality to the ingroup or universal benevolence; and perceptions of God’s omniscience and capacity for negative emotion; (b) beliefs about the quality of one’s relationship with God; and (c) beliefs about the interconnectedness of all life, which could explain prosocial attitudes and behaviors toward others (cf. Cialdini et al., 1997). These items and topics were selected in order to explore whether particular types of religious focus, as assessed by the RFI, are associated with particular religious beliefs and attitudes across religions. Item content is listed in Table 2.

- I/E Scale - Revised (Gorsuch & McPherson, 1989): a 13-item measure of Intrinsic and Extrinsic religious orientations (Allport & Ross, 1967). Sample items: "I try hard to live all my life according to my religious beliefs" (Intrinsic; Cronbach's α = .74.), "Although I am religious, I do not let it affect my daily life" (Extrinsic). Cronbach's α = .40.
• Quest religious orientation (Batson & Schoenrade, 1991): a measure of open-minded, questioning approach to religion. Sample item: "There are many religious issues on which my views are still changing." Cronbach’s α = .68. Religious orientation is one of the oldest and most widely utilized means of differentiating among individual approaches to religion; the Quest and I/E-Revised scales were included in this study to determine whether the RFI added unique predictive validity over and above the established measures.

• Effort and Grace: two items asking whether the ultimate spiritual good (i.e., heaven, nirvana, etc.) can be achieved through personal effort, or as a divine gift regardless of one's effort. A difference score between the two is used in analyses. Because the golden rule requires conscious effort (i.e., mindfulness and perspective-taking) in its application, I anticipated that people who see it as central to their religion would express stronger belief in effort as the means of attaining the benefit specified as the ultimate goal in their religion.

• Belief that the moral code in one’s religion is perfect: mean of two items: "The moral code taught by my religion/spirituality is perfect in every way" and "At no time in the future will anyone ever be able to improve upon the moral code that is taught by my religion/spirituality." This was added as an exploratory measure to assess religious moral dogmatism.

• Willingness to follow one’s conscience if it disagrees with the religious community:
mean of two items: "If I was convinced that my religious or spiritual community was wrong about something important, I would choose to follow my conscience even if it meant losing my community’s approval" and "If I thought that some teaching or practice of my religion or spirituality was wrong or harmful, I would not follow it even if it meant that others disapproved of me.” This is conceived as a measure of moral integrity, to the extent that moral action can require going against ingroup consensus -- which can carry negative consequences to one’s relationship with the ingroup. Willingness to risk such consequences therefore represents a sign of moral commitment.

- Non-superficial religious practice: mean of four items: "I do what I’m required to do as part of my religion/spirituality, but I don’t think a great deal about it" (reversed), "When practicing my religion/spirituality, I always try to think about the spiritual meaning behind what I am doing", "It’s not enough for me to simply perform the rituals of my religion/spirituality; I have to feel the connection with God when I perform them”, "When performing a ritual, one’s mind must be fully focused on its spiritual meaning; otherwise, the ritual serves no purpose.” This measure was devised to assess thoughtful and deliberative, rather than perfunctory approach to religion. Cronbach’s α = .53.

- Compassion for religious rule violators: mean of 4 items with the prompt, "People who violate the rules or requirements of my religion/spirituality should be ...." —
"avoided by the religious/spiritual community" (reversed), "punished by the religious/spiritual community" (reversed), "not resented and not treated poorly because of it", "treated with understanding and compassion." This was intended to measure whether people who see the golden rule as central also impose the same moral demand on others. Cronbach's $\alpha = .68$.

- Ingroup identification and favoritism: mean of ten items. This measure was designed to assess religious ingroup identification, ingroup favoritism and outgroup derogation (Dovidio & Gaertner, 2010), which could be promote intergroup conflict and contradict the universalism implicit in the golden rule. The items are:

1. I feel very close to other followers of my religion.
2. I think of people who follow my religion as "my people."
3. I feel a special bond with other followers of my religion.
4. It troubles me when people from my religion are portrayed badly in the press.
5. Generally speaking, the followers of my religion tend to be nicer people.
6. The followers of my religion generally have some unique and positive qualities.
7. The followers of my religion have a unique and special relationship with God.
8. I find it more difficult to completely trust people who follow other religions than I do.
9. Followers of my religion should keep together and help each other when
dealing with people from other religions.

10. Compared to other religions, the followers of my religion are more likely to receive God’s blessings and favors.

Cronbach’s α = .89.

2.2.5 Additional Measures

- Meaning in Life Questionnaire - Presence subscale (M. F. Steger, Frazier, Oishi, & Kaler, 2006): a five-item scale. Sample item: "My life has a clear sense of purpose."
  Cronbach’s α = .82.

- Ten-Item Personality Inventory (TIPI) (Gosling, Rentfrow, & Swann, 2003). A measure of the Big Five domains of personality, with two items per domain.

- Self-reported Health: a 7-item abbreviated version of the Centers for Disease Control Health-Related Quality of Life (HRQOL-14) scale was used, which contains items assessing the number of days out of the past 30 days one experienced ill mental or physical health, and the number of days that physical health, mental health, and pain interfered with one’s participation in one’s usual daily activities. (Moriarty, Zack, & Kobau, 2003)

- Quality of Relationships: This was measured using nine items of the ten-item Positive Relations with Others scale (Ryff & Singer, 1996). To eliminate spurious correlation with measures of prosocial values, item 4 ("People would describe me as
a giving person, willing to share my time with others”) was eliminated. Sample item: ”Maintaining close relationships has been difficult and frustrating for me” (reverse-scored). Although Ryff and Singer (1996) included this scale as one of their Psychological Well-Being subscales, Ryan and colleagues (2008) conclude that having warm, trusting and satisfying relationships fulfills a psychological need, and thereby contributes to well-being rather than measuring it. Cronbach’s α = .73.

• Willingness to Harm or Help Disliked Person: participants were asked to select an individual who is not a relative whom they dislike, and to rate their attitude towards him or her. They were subsequently presented with a series of 11 vignettes describing opportunities to harm or help that person, and asked how likely they would be to do so. Sample vignettes are:

  o You know a shop that has a very bad reputation for cheating its customers. You find out from a friend that this person is planning to go there and make a large purchase. Do you tell your friend to warn this person? (Willingness to help). Cronbach’s α = .81.

  o You are walking down the street, and notice that this person is walking in the same direction ahead of you. Some papers fall out of this person’s bag, but he or she does not notice and keeps walking. You pick them up and realize that the papers are a signed contract. No one else is around. How likely are you to throw the papers in the garbage? (Willingness to harm). Cronbach’s α
The present measure enabled a consistent outgroup (i.e., disliked persons) to be defined across participants regardless of their actual social group memberships, and behavioral intentions toward outgroup members to be assessed. Virtually all participants listed an individual who had either impinged or was continuing to impinge negatively upon their lives, making this a measure of willingness to help or harm those who have inflicted some degree of harm upon them. Behavioral willingness and behavioral intention are positively correlated, but each independently predicts actual behavior (Gibbons, Gerrard, Blanton, & Russell, 2003; Webb & Sheeran, 2006).

- Gratitude: Trait gratitude was measured with the GQ-6 (McCullough, Emmons, & Tsang, 2002). Sample items: “I have so much in life to be thankful for” and “I am grateful to a wide variety of people.” Cronbach’s α = .63.

- Tendency to express gratitude to one’s partner: Expression of gratitude in relationships measure (Lambert, Clark, Durtschi, Fincham, & Graham, 2010), a three-item measure. Items are: “I express my appreciation for the things that my partner does for me,” “I let my partner know that I value him/her,” “When my partner does something nice for me I acknowledge it.” Cronbach’s α = .84.

● Unconditional Self-Esteem: The extent to which participants believe their self-worth is unconditional, rather than contingent. It was measured by the 20-item Unconditional Self-Acceptance Questionnaire. Sample item: “My sense of self-worth depends a lot on how I compare with other people” (reversed). Cronbach’s α = .50.

● Self-Compassion: The tendency to respond to one’s own setbacks or emotional distress with compassion and understanding, recognizing that occasions of struggle and failure are a universal part of the human experience: the 12-item short form (Neff, 2003; Raes, Pommier, Neff, & Van Gucht, 2011). Cronbach’s α = .60.

● Tendency to provide socially acceptable answers (social desirability) was measured using the Lie scale of the Eysenck Personality Questionnaire Revised - Short Form (Eysenck, Eysenck, & Barrett, 1985), a 10-item Yes/No measure consisting of items that most participants would endorse if answering truthfully (sample item: "Have you ever said anything bad or nasty about anyone?"). Past research has identified a consistent relationship between religiosity and social desirability (Sedikides & Gebauer, 2010); therefore, this variable was used as a control in all analyses. Cronbach’s α = .60.

● Attention check. Participants were presented with a 10-item scale and requested to use the provided 3-point response scale to answer it, in contrast to the remainder of the questionnaire which used a 7-point scale. Participants who responded with values 4-7 were considered to have failed the attention check.
3. Results

3.1 Path Model Analysis

Analyses were conducted as a series of path models using the R package lavaan 0.5 (Rosseel, 2012), which enabled multiple mediation hypotheses to be tested, and allowed the use of full information maximum likelihood (FIML) to handle missing data. FIML computes each observation’s contribution to the joint likelihood of the data based on the non-missing values of the observed predictors for that participant. It performs as well as multiple imputation with a large number of imputed datasets, producing unbiased parameter estimates and standard errors when the data are missing at random (MAR) or missing completely at random (MCAR), but offers advantages over multiple imputation when interaction effects are present in the model (Enders, 2010; J. W. Graham, Olchowski, & Gilreath, 2007).

A current limitation of FIML compared to regression-based approaches is the inability to calculate the overall F test for the model, or the $R^2$-change F test to compare models. This limitation arises from the variability of the effective number of predictors in the model under FIML, i.e., an observation with two missing values in a $p$-predictor model will effectively contain $p-2$ predictors. As a consequence, any statistics that rely on a fixed value of $p$ in the entire sample are not available, including the $F$ and adjusted $R^2$. Therefore, I report the 95% confidence interval of $R^2$ and $R^2$ change obtained under FIML via bootstrap with 1000 replications (Ohtani, 2000). Robust Huber-White standard
errors were used (Huber, 1967; White, 1980). Measures of model fit are reported for non-saturated models. All the coefficients reported in this section are standardized coefficients.

To ascertain the unique contributions of religiosity and the RFI to well-being, the baseline model included only control variables as predictors, i.e., social desirability, gender, age, years of education, wealth, and membership in a historically disadvantaged caste or tribe as designated by the Indian central government (i.e., scheduled caste, scheduled tribe, or other backward class). This model explained 6.5% of the variance in well-being, 95% CI of $R^2 [0.038, 0.121]$.

In the next step (Model 1), religiosity and dummy variables representing three of the four religions were added as predictors. Adding these religion variables explained an additional 7.2% of variance (95% CI of $R^2 [0.099, 0.218]$, 95% CI of $\Delta R^2 [0.034, 0.125]$). Religiosity ($\beta = .225, p < .001$), male gender ($\beta = .112, p = .013$) and Sikh religion ($\beta = .130, p = .010$) predicted significantly increased well-being. Inflation of well-being scores due to social desirability was evident ($\beta = .126, p = .009$), and was statistically controlled by including social desirability in this and all subsequent analyses.

The next model (Model 2) added the three RFI scales as predictors of well-being. The RFI scale scores entered in this and all subsequent path models were raw (i.e., not residualized). Because the RFI was conceptualized as a more nuanced measure of religiosity than the global religiosity measure, it was hypothesized that the RFI would
partially mediate the relationship between religiosity and well-being. The resulting model is shown in Figure 2.

The RFI predicted well-being over and above the control variables and religiosity, explaining an additional 8% of variance in well-being compared to the preceding model. As seen in Figure 2, religiosity has relationships of similar magnitude with all three RFI scales, with the largest coefficient associated with the Relationship with God scale. However, of the three RFI scales, well-being was only predicted by Moral Concern RF, which was also the sole mediator of the association of religiosity with well-being (indirect effect $A*E \beta = .08, p < .001$). This indicates that the global measure of religiosity conflates crucial differences in the way individuals approach and understand their religions; the RFI is able to clarify these relationships.

The standardized coefficient for religiosity decreased from .225 in Model 1 to .137 in this model, but remained significant. Overall, this model indicates that the Moral Concern RF explains an additional impact of religious or spiritual participation on well-being, beyond that captured by the global religiosity measure, and, additionally, explains a part of the impact of religiosity on well-being.
Figure 2. Model 2: mediation of religiosity’s impact on well-being by the RFI. *p < .05, ** p < .01, *** p < .001. Dashed lines indicate non-significant paths. All coefficients are standardized. Well-Being $R^2 = .217$, 95% CI of $R^2 = (.173, .304)$; $\Delta R^2 = .080$, 95% CI of $\Delta R^2 = (.042, .132)$. RFI Moral Concern $R^2 = .071$, 95% CI of $R^2 = (.035, .118)$. RFI Personal Gain $R^2 = .072$, 95% CI of $R^2 = (.036, .121)$. RFI Relationship with God $R^2 = .143$, 95% CI of $R^2 = (.095, .202)$. 
Model 3 (Figure 3) explored the possibility that the RFI scales overlapped with the well-established measures of individual approach to religion: I/E-Revised and Quest (Batson & Schoenrade, 1991; Gorsuch & McPherson, 1989). Correlations between the RFI and religious orientation measures are reported in Table 4. The three I/E-Revised scales (Intrinsic, Extrinsic-Personal, Extrinsic-Social) and the Quest scale were added as predictors of well-being to Model 2, and allowed to mediate the relationship between religiosity and well-being. None of the newly added variables significantly predicted well-being (all $p > .328$). The change in $R^2$ was close to zero (.007) and the corresponding 95% confidence interval of $\Delta R^2$ (-.002, .057) included zero. The changes in the coefficients of previously entered variables were similarly negligible, and the Moral Concern RF remained as the sole mediator of religiosity on well-being (indirect effect $A^*H \beta = .083$, $p < .001$). Clearly, the RFI is not redundant with the preexisting measures of religious orientation. Measures of religious orientation were therefore dropped from the subsequent models.

The next analysis (Model 4) explored whether the relationship between the RFI and well-being varied across religions. The RFI scales were multiplied by dummy variables representing three of the four religions and added to Model 2. The model explained an additional 2.5% variance in well-being ($R^2 = .242$, 95% CI of $R^2 = [.214, .341]$, $\Delta R^2 = .025$, 95% CI of $\Delta R^2 = [.015, .072]$). Examination of the coefficients revealed that the
only significant interaction was between the Personal Gain RF and the Sikh religion, indicative of a stronger negative impact of the Personal Gain RF on well-being in Sikhs than in Christians ($\beta = -.110, p = .01$); the remaining interaction terms were not significant, indicating that all other relationships between the RFI scales and well-being are consistent across religions. Therefore, the remaining analyses were conducted in the entire sample.

Having established that (a) the RFI predicts well-being over and above religiosity and other control variables, and (b) does so consistently across religions (except as noted above for Sikhs), understanding the mediators of that relationship became the next objective. In Model 5, the hypothesized first-level mediators were introduced: the PVQ-R values benevolence and universalism. With the relationship between religiosity and RFI established in the preceding models, religiosity was now entered as an exogenous predictor at the same level as the RFI, in order to control for its effect in the model. The model and its results are presented in Figure 4.

Results indicated that Moral Concern and Personal Gain predict both benevolence and universalism, with Moral Concern having uniformly positive and Personal Gain having uniformly negative associations. Of the two values, only universalism but not benevolence predicted well-being, indicating that it is only the broader concern for all others regardless of ingroup or outgroup status (i.e., universalism) rather than concern for close others only (benevolence) that accounts for
increased well-being. However, universalism only partially mediated the impact of Moral Concern RF on well-being (path C*F indirect effect $\beta = .120, p < .001$), with Moral Concern continuing to have an additional direct (i.e., unexplained) effect on well-being (path A $\beta = .177, p = .008$).

Table 4: Zero-order correlations between the RFI, residualized RFI, and religious orientation.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Moral Concern</th>
<th>Personal Gain</th>
<th>Rel’p with God</th>
<th>Moral Concern residualized</th>
<th>Personal Gain residualized</th>
<th>Rel’p with God residualized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic</td>
<td>.44***</td>
<td>.39***</td>
<td>.61***</td>
<td>.02</td>
<td>-.01</td>
<td>.32***</td>
</tr>
<tr>
<td>Extrinsic–All</td>
<td>.22***</td>
<td>.45***</td>
<td>.33***</td>
<td>-.06</td>
<td>.32***</td>
<td>.05</td>
</tr>
<tr>
<td>Extrinsic–Personal</td>
<td>.37***</td>
<td>.31***</td>
<td>.50***</td>
<td>.04</td>
<td>-.01</td>
<td>.25***</td>
</tr>
<tr>
<td>Extrinsic–Social</td>
<td>-.05</td>
<td>.31***</td>
<td>-.01</td>
<td>-.12***</td>
<td>.42***</td>
<td>-.15***</td>
</tr>
<tr>
<td>Quest</td>
<td>.00</td>
<td>.09*</td>
<td>-.07</td>
<td>.04</td>
<td>.17***</td>
<td>-.14***</td>
</tr>
</tbody>
</table>

Note. * $p < .05$, *** $p < .001$. Residualized RFI scales are residuals of each RFI scale predicted by the remaining two RFI scales and religiosity.

A second mediated effect indicated that a religious focus on Personal Gain is associated with decreased well-being through lower universalism (path E*F indirect effect $\beta = -.04, p = .005$). No other mediated effects were observed. A test of moderated mediation of the relationship between benevolence and well-being by universalism was not significant ($p = .859$), indicating that the relationship between benevolence and well-being is not influenced by universalism.
Figure 3. Model 3: mediation of religiosity by the RFI, I/E-Revised and Quest. *p < .05, ** p < .01, *** p < .001. Dashed lines indicate non-significant paths. All coefficients are standardized. Well-being $R^2 = .224$, 95% CI of $R^2 = (.186, .333)$, $\Delta R^2 = .007$, 95% CI of $\Delta R = (-.002, .057)$
Figure 4. Model 4: Mediation of religiosity and the RFI by benevolence and universalism. *p < .05, ** p < .01, *** p < .001. Dashed lines indicate non-significant paths. All coefficients are standardized. Well-being $R^2 = .254$, 95% CI of $R^2 = (.218, .348)$, $\Delta R^2 = .037$, 95% CI of $\Delta R^2 = (.015, .080)$. Benevolence $R^2 = .159$, 95% CI of $R^2 = (.107, .234)$. Universalism $R^2 = .212$, 95% CI of $R^2 = (.152, .292)$. CFI = .967, TLI = .917, RMSEA = .044.
Figure 5. Model 5: Final mediation model. *p < .05, ** p < .01, *** p < .001. Dashed lines indicate non-significant paths. All coefficients are standardized. Well-being $R^2 = .341$, 95% CI of $R^2 = (.295, .441)$, $\Delta R^2 = .087$, 95% CI of $\Delta R^2 = (.045, .129)$. Benevolence $R^2 = .158$, 95% CI of $R^2 = (.101, .230)$. Universalism $R^2 = .212$, 95% CI of $R^2 = (.147, .291)$. Meaning $R^2 = .153$, 95% CI of $R^2 = (.110, .226)$. Quality of Relationships $R^2 = .122$, 95% CI of $R^2 = (.081, .197)$. CFI = .962, TLI = .907, RMSEA = .043.
To further understand the process through which Religious Focus predicted well-being, additional mediators were introduced, hypothesized to be more proximal to well-being: Meaning in Life and Quality of Relationships. All predictors of focal interest (i.e., other than the controls) were allowed to predict these variables both directly and indirectly. The model and results are presented in Figure 5.

The addition of the second-level mediators clarified the relationships between the RFI, first-level mediators and well-being. Specifically, benevolence was found to predict well-being only through its impact on quality of relationships (path M*O indirect effect $\beta = .023$, $p = .022$), but not through meaning in life (indirect effect $\beta = .030$, $p = .098$). The impact of benevolence on quality of relationships explained the entire association between benevolence and well-being, as evidenced by a lack of any additional significant paths or unexplained "direct" effects. Caring about all others (universalism) did not contribute to quality of relationships (indirect effect $\beta = .006$, $p = .378$), but predicted well-being through increased meaning in life (path K*N indirect effect $\beta = .043$, $p = .021$) and directly, i.e., through unidentified mechanisms (path L $\beta = .159$, $p = .002$).

Participants who saw Moral Concern as central to their religion exhibited a stronger endorsement of both benevolence and universalism. In addition, they enjoyed a higher quality of relationships than would be predicted by their benevolence alone, as evidenced by the additional direct effect (path A $\beta = .169$, $p = .016$). The total effect of Moral Concern RF on well-being as mediated by quality of relationships was significant.
The greater valuing of universalism by participants with a religious focus on Moral Concern contributed to their well-being both directly and through a stronger sense of Meaning in Life (path $E^*K^*N+E^*L$ indirect effect $\beta = .121, p < .001$); each of the two constituent paths was independently significant (path $E^*K^*N \beta = .025, p = .027$; path $E^*L \beta = .093, p = .003$).

In addition to these effects, there was a significant positive effect of Moral Concern on well-being that was not explained by any of the mediators in the model (path $C \beta = .132, p = .037$). That is, seeing moral concern for others as central to one’s religion incrementally predicted well-being, even after the effects of overall religiosity, universalism, benevolence, quality of relationships, meaning in life, demographic variables and social desirability were accounted for.

Religious focus on Personal Gain predicted lower benevolence (path $G \beta = -.179, p < .001$), universalism (path $I \beta = -.194, p < .001$), lower quality of relationships (path $J \beta = -.260, p < .001$) and less meaning in life (path $F \beta = -.206, p < .001$). These effects indirectly contributed to reduced well-being: universalism (path $I^*L+I^*K^*N$ indirect effect $\beta = -.040, p = .006$), quality of relationships (path $J^*O+G^*M^*O$ indirect effect $\beta = -.039, p = .008$), and meaning in life (path $F^*N+I^*K^*N$ indirect effect $\beta = -.078, p < .001$). The indirect effect of the Personal Gain RF on well-being via lower benevolence was not significant ($\beta = -.003, p = .784$). Surprisingly, after partialling out the effects of these mediated pathways, Personal Gain RF was found to have a residual positive direct
association with well-being (path H $\beta = .117, p = .015$).

Focus on Relationship with God did not predict either benevolence or universalism, and had no impact on quality of relationships. It did, however, have an indirect positive association with well-being through increased meaning in life (path B*N indirect effect $\beta = .059, p = .006$).

Finally, religiosity indirectly predicted well-being via increased meaning in life (path Q*N indirect effect $\beta = .058, p = .001$) but not any of the other mediators. Religiosity had an additional effect on well-being (path R $\beta = .098, p = .03$) which was not explained by any of the variables in the model.

### 3.2 Beliefs and values associated with each religious focus

The breadth of the data set allows us to explore the traits and characteristics associated with scores on each of the subscales of the RFI. In other words, what can we say about participants who see Moral Concern as being central to their religion, versus those focused on their Relationship with God or Personal Gain? To answer this question, we calculated partial correlations between the RFI subscales and other measures.

The analysis proceeded as follows. First, each RFI subscale was residualized with respect to the other two RFI scales and the religiosity/spirituality index, generating scores that disentangled each subscale from the other variables. The residuals were entered into a partial correlation model with other variables of interest, following the
structural equation modeling method developed by Preacher (2006) which allowed the use of full-information maximum likelihood (FIML) for missing data. Correlations controlled for social desirability, age, gender, years of education, financial status, and membership in a disadvantaged caste, group or tribe subject to affirmative action.


The RFI was devised to investigate the possibility of the existence of distinct psychological approaches to religion that have the same function regardless of the religion being followed. This was ascertained by computing partial correlations between the RFI and other variables in the study for the entire sample, and testing their consistency across religions. Because such a test essentially entails an attempt to quantify support for the null hypothesis (i.e., that there are no differences between
partial correlation coefficients across religious groups), it cannot be conducted with the usual (frequentist) statistical methods but is best suited to a Bayesian analysis.

### 3.2.1 The Bayes Factor and the Model Comparison Approach to Correlation Testing

In the Bayesian paradigm, the Bayes factor (BF) is functionally analogous to the classical null hypothesis significance test (NHST). It provides a comparison of two models, given a prior belief about the distribution of model parameters and a particular sample of data (Jeffreys, 1961). As a ratio of marginal likelihoods, it quantifies how much more (or less) likely the obtained data are to have arisen under Model A than Model B. Unlike an NHST, it does not ascribe special significance to either of the two models, so that the asymmetry in interpretation of the *p* value that is present in classical statistical tests is absent. Under the Bayesian approach, evidence in favor of the null hypothesis model has the straightforward interpretation that it is the superior model, such that a *BF*$_{01}$ of 100 means that the model in the numerator of the factor is 100 times more probable, given the observed data and the prior, than the model in the denominator.

Although the Bayesian approach requires a prior distribution to be specified, objective or "default" priors exist which have the desirable property of producing identical results for a given sample of data regardless of a particular investigator's prior beliefs. An objective prior with desirable computational properties is the Jeffreys-Zellner-Siow (JSZ) prior (Liang, Paulo, Molina, Clyde, & Berger, 2008). A test using a
default prior is called a default test.

Wetzels and Wagenmakers (2012) pointed out that a default test of correlation and partial correlation can be framed as a Bayes factor comparing two regression models. The null hypothesis model (i.e., no correlation) includes only the intercept term, while the alternative hypothesis model adds the second of the two variables being correlated as a predictor. The coefficient of determination, $R^2$, of each model is weighed against model complexity (i.e., the number of parameters), and the ratio of the resulting marginal likelihoods produces the Bayes factor.

This method produces valid results for zero-order correlation, but when applied to partial correlations produces discrepant results depending on which of the two focal variables is entered as the regressor and the regressand, such that entered in one order the Bayes factor may appear to provide strong evidence for the alternative hypothesis, but with reverse variable order may provide equally strong support for the null. This inconsistency appears to have gone unnoticed by the authors, and attempts to reach them for comment or clarification were unanswered.

It arises due to the fact that the change in $R^2$ of a regression model from adding a predictor is the square of that predictor’s semi-partial correlation with the dependent variable — the variance the predictor shares with the variables being partialled out is removed from the predictor, but not from the dependent. Therefore, the difference in $R^2$ from adding a predictor when other predictors (the variables being partialled out) are
already in the model represents improvement in model fit due to the *semipartial* correlation of the predictor and the dependent, rather than partial correlation as Wetzels and Wagenmakers state; and due to the differences in correlation between the variables being partialled out and each of the two focal variables, the change in \( R^2 \) will not be symmetric with regard to variable order.

The partial correlation coefficient is defined as the correlation between the residuals of two variables, each residualized with respect to the variables being partialled out. Therefore, once the residuals are obtained, the problem reduces to one that is equivalent to a test of zero-order correlation, and can be carried out precisely as described by Wetzels and Wagenmakers.

### 3.2.2 A default Bayesian test of the equality of partial correlations across groups

The same Bayesian model-comparison approach can be extended to test the equality of partial correlations across groups. If group membership is irrelevant to the magnitude of the correlation, then a model with a single parameter representing that correlation should provide the best fit to the data. If there are differences, an alternative model which allows the correlation coefficient to vary across groups will provide a superior fit.

The two models can be compared using the Bayes factor approach, as follows. First, both of the focal variables are residualized within groups with respect to the control variables. This ensures that the differences in \( R^2 \) between the two models do not
reflect any improvement in fit if a control variable, rather than one of the two focal variables, has a correlation with either focal variable that varies across groups.

To construct the alternative hypothesis model, the residuals are standardized to a mean of 0 and variance 1 within each group in order to prevent group differences in mean and scale, rather than correlation, from influencing the model fit and therefore the Bayes factor. Either variable can be selected to be the dependent, producing $R^2$ coefficients that are consistent within the limits of rounding error. The predictors consist of the other variable of interest, and its multiplicative interaction terms with the dummy variables representing groups. In this model, the coefficients of the interaction terms correspond precisely to differences in correlation coefficients between the omitted group and the remaining groups. The null hypothesis model is identical to the alternative hypothesis model for a correlation test, i.e., a simple regression where either of the unstandardized residualized variables is the dependent and the other unstandardized variable is the predictor. The main effect for group is omitted because it is 0 by definition following within-group standardization. The two models for a data set with $j$ groups are as follows:

$$H_0 : Y = B_0 \cdot X$$

$$H_1 : Y = B_0 \cdot X + B_1 \cdot G_1 + \ldots + B_{j-1} \cdot G_{j-1}$$

Simulation study demonstrated that when the null hypothesis model is true (i.e., the true correlation coefficient does not vary across groups), both models produce equal
$R^2$ values, and the resulting Bayes factor favors the null hypothesis (single-correlation) model due to the intrinsic Bayesian penalty for more complex models (Dunson, 2010). The opposite case is true when differences in correlations across groups are present. When the two models are equivalent in their balance of explanatory power and parsimony, the Bayes factor approaches 1. Jeffreys (1961) provided guidelines for interpreting Bayes factor values, with values greater than or equal to 100 (or, equivalently in favor of the other model, less than or equal to 1/100) representing the highest level of evidence which he termed “decisive evidence.” In the results that follow, $p$-values indicate the statistical significance of the partial correlation in the overall sample, while greater Bayes factor values indicate stronger evidence of equality of partial correlation coefficients across religious groups.

3.2.3 Partial correlation results

In order to control for multiple comparisons, I selected more stringent criteria of significance. Although the full set of correlations is reported in Table 5, I highlight and discuss only those that are (a) significant in the overall sample at or below an alpha of .01, and (b) consistent across religious groups with Bayes factor values favoring the single correlation coefficient model in the “decisive evidence” range ($BF_{01} \geq 100$). These results serve to provide evidence for the convergent and discriminant validities of each scale within the RFI.
Table 5: Partial correlations of residualized RFI and Religiosity with other variables.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Importance of Religion</th>
<th>Personal Gain RF</th>
<th>Moral Concern RF</th>
<th>Rel’d with God RF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health-Related Quality of Life</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Days of poor physical health</td>
<td>.05/88</td>
<td>.09*/65</td>
<td>-.13**/1361</td>
<td>.05/12</td>
</tr>
<tr>
<td>Days of poor mental health</td>
<td>.03/219</td>
<td>.06/495</td>
<td>-.13**/285</td>
<td>-.02/203</td>
</tr>
<tr>
<td>Days of physical or mental health interference</td>
<td>.05/251</td>
<td>.17***/793</td>
<td>-.18***/245</td>
<td>-.02/82</td>
</tr>
<tr>
<td>Days of pain interference</td>
<td>.05/344</td>
<td>.18***/1051</td>
<td>-.17***/585</td>
<td>-.02/5</td>
</tr>
<tr>
<td><strong>PVQ-R (Values) ipsatized scores^a</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>.02/1390</td>
<td>-.23***/541</td>
<td>.21***/1808</td>
<td>.02/1258</td>
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<tr>
<td>Universalism</td>
<td>-.04/17</td>
<td>-.24***/836</td>
<td>.25***/905</td>
<td>.01/6</td>
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<tr>
<td>Self-Direction</td>
<td>-.02/62</td>
<td>-.21***/998</td>
<td>.14***/1121</td>
<td>.00/536</td>
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<tr>
<td>Stimulation</td>
<td>-.06/12</td>
<td>.01/32</td>
<td>.29***/44</td>
<td>-.13**/13</td>
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<td>Hedonism</td>
<td>-.01/333</td>
<td>-.08*/1304</td>
<td>-.01/804</td>
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<td>Achievement</td>
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<td>Power</td>
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<td>.36***/387</td>
<td>-.21***/428</td>
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<td>Security</td>
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<td>-.25***/709</td>
<td>.12*/67</td>
<td>.09/161</td>
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<td>Conformity</td>
<td>.04/1041</td>
<td>-.24***/640</td>
<td>.16***/17</td>
<td>.09/126</td>
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<td>Tradition</td>
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<td>.01/2099</td>
<td>.22***/629</td>
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<td><strong>Relating to Self and Others</strong></td>
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<tr>
<td>Willing to harm disliked person</td>
<td>.03/1738</td>
<td>.29***/793</td>
<td>-.12**/77</td>
<td>-.15***/2125</td>
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<td>Willing to help disliked person</td>
<td>.06/1485</td>
<td>-.04/970</td>
<td>.13**/559</td>
<td>-.01/1619</td>
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<tr>
<td>Gratitude</td>
<td>.04/1380</td>
<td>-.30***/2409</td>
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<td>.12**/423</td>
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<td>Expressing gratitude to partner</td>
<td>.05/216</td>
<td>-.18***/785</td>
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<td>Self-Compassion</td>
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<td>-.06/1101</td>
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<td>Self-Esteem</td>
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<td>Unconditional Self-Acceptance^b</td>
<td>.05/17</td>
<td>-.27***/3751</td>
<td>.10*/759</td>
<td>.04/835</td>
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</tbody>
</table>

^a PVQ-R (Values) ipsatized scores

^b Unconditional Self-Acceptance
<table>
<thead>
<tr>
<th>Measure</th>
<th>Importance of Religion</th>
<th>Personal Gain RF</th>
<th>Moral Concern RF</th>
<th>Rel’n with God RF</th>
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<td>Agreeableness</td>
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<td>-.15***/658</td>
<td>.15***/85</td>
<td>.05/59</td>
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<td>Conscientiousness</td>
<td>.09*/265</td>
<td>-.17***/439</td>
<td>.16***/118</td>
<td>.05/1244</td>
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<td>Extraversion</td>
<td>-.03/22</td>
<td>-.17***/672</td>
<td>.15***/1076</td>
<td>.07/820</td>
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<td>Neuroticism</td>
<td>-.11/52</td>
<td>-.07/15</td>
<td>-.09*/431</td>
<td>.04/591</td>
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<td>Openness to experience</td>
<td>-.03/190</td>
<td>-.11**/844</td>
<td>.27***/1235</td>
<td>-.13**/1911</td>
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<td><strong>Religious Beliefs</strong></td>
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<tr>
<td>God exists</td>
<td>.07/1033</td>
<td>-.16***/1357</td>
<td>.11*/188</td>
<td>.26***/72</td>
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<tr>
<td>Life is primarily an opportunity for spiritual growth</td>
<td>.11**/259</td>
<td>.08/21</td>
<td>.09/76</td>
<td>.18***/256</td>
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<tr>
<td>Everyone gets their due at end of life</td>
<td>.09*/394</td>
<td>-.08/1656</td>
<td>.05/1764</td>
<td>.21***/2926</td>
</tr>
<tr>
<td>On a higher level all of us share a common bond</td>
<td>.07/286</td>
<td>-.09*/120</td>
<td>.27***/1177</td>
<td>.01/1247</td>
</tr>
<tr>
<td>All life is interconnected</td>
<td>.04/649</td>
<td>-.08/589</td>
<td>.23***/151</td>
<td>.00/1425</td>
</tr>
<tr>
<td>There is a larger meaning to life</td>
<td>.09/682</td>
<td>-.14***/1826</td>
<td>.26***/699</td>
<td>.04/908</td>
</tr>
<tr>
<td>Death is a doorway to another plane of existence</td>
<td>.07/1308</td>
<td>-.09*/347</td>
<td>.07/41</td>
<td>.24***/1728</td>
</tr>
<tr>
<td>God sends wars, diseases, earthquakes and floods to punish people</td>
<td>-.04/401</td>
<td>.18***/432</td>
<td>-.10/61</td>
<td>.14**/2118</td>
</tr>
<tr>
<td>God will punish those who do not worship him</td>
<td>.00/96</td>
<td>.24***/704</td>
<td>-.16***/140</td>
<td>.13**/247</td>
</tr>
<tr>
<td>God is immensely powerful, and it’s important to stay on his good side to avoid his wrath</td>
<td>.01/8</td>
<td>.23***/23</td>
<td>-.07/391</td>
<td>.14**/427</td>
</tr>
<tr>
<td>God favors some countries over others</td>
<td>-.05/2090</td>
<td>.29***/205</td>
<td>-.23***/612</td>
<td>.07/68</td>
</tr>
<tr>
<td>If you have a good relationship with God, he will give you almost anything you ask for</td>
<td>.10*/10</td>
<td>.20***/698</td>
<td>-.08/79</td>
<td>.20***/94</td>
</tr>
</tbody>
</table>

56
<table>
<thead>
<tr>
<th>Measure</th>
<th>Importance of Religion</th>
<th>Personal Gain RF</th>
<th>Moral Concern RF</th>
<th>Rel’p with God RF</th>
</tr>
</thead>
<tbody>
<tr>
<td>God loves, and wants the best, for every single living being</td>
<td>.07/1833</td>
<td>-19***/1000</td>
<td>.21***/1053</td>
<td>.12**/321</td>
</tr>
<tr>
<td>I have a warm relationship with God</td>
<td>.15***/18</td>
<td>-.06/12</td>
<td>.12*/2</td>
<td>.16***/1012</td>
</tr>
<tr>
<td>I feel loved by God</td>
<td>.09*/11</td>
<td>-.07/8</td>
<td>.13*/951</td>
<td>.20***/540</td>
</tr>
<tr>
<td>God’s love never fails</td>
<td>.09*/946</td>
<td>-.22***/3</td>
<td>.05/373</td>
<td>.30***/1258</td>
</tr>
<tr>
<td>God will forgive anything, as long as you’re sincerely remorseful</td>
<td>.09*/529</td>
<td>-.09*/221</td>
<td>.10*/39</td>
<td>.16***/676</td>
</tr>
<tr>
<td>God will forgive anything if you perform the necessary rituals</td>
<td>.10*/185</td>
<td>.30***/1020</td>
<td>-.08/222</td>
<td>-.03/101</td>
</tr>
<tr>
<td>God wants you to worship and adore him</td>
<td>-.03/743</td>
<td>.05/9</td>
<td>-.11/1</td>
<td>.36***/1796</td>
</tr>
<tr>
<td>God has the same emotions as people – he can become angry, jealous or offended</td>
<td>.01/65</td>
<td>.20***/492</td>
<td>-.06/959</td>
<td>-.15***/346</td>
</tr>
<tr>
<td>God knows all your private thoughts and actions. It is impossible to keep anything hidden from God.</td>
<td>.09/912</td>
<td>-.22***/347</td>
<td>.12*/537</td>
<td>.24***/138</td>
</tr>
<tr>
<td>By being kind to anyone, one is being kind to God</td>
<td>-.01/1069</td>
<td>-.05/94</td>
<td>.17***/1790</td>
<td>.11*/5</td>
</tr>
<tr>
<td>The chances that God will grant a prayer request depend on the amount of the offering or sacrifice one makes</td>
<td>.05/27</td>
<td>.41***/94</td>
<td>-.13***/1306</td>
<td>-.07/111</td>
</tr>
</tbody>
</table>

**Other Religion Variables**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Importance of Religion</th>
<th>Personal Gain RF</th>
<th>Moral Concern RF</th>
<th>Rel’t with God RF</th>
</tr>
</thead>
<tbody>
<tr>
<td>My religion’s moral code is perfect</td>
<td>.08/459</td>
<td>.10*/61</td>
<td>.13***/1743</td>
<td>.05/783</td>
</tr>
<tr>
<td>Willing to follow conscience risking religious community</td>
<td>.01/90</td>
<td>-.23***/166</td>
<td>.18***/174</td>
<td>-.02/449</td>
</tr>
<tr>
<td>Measure</td>
<td>Importance of Religion</td>
<td>Personal Gain RF</td>
<td>Moral Concern RF</td>
<td>Rel’p with God RF</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>disapproval</td>
<td><em><em>.12</em>/878</em>*</td>
<td>-<strong>22</strong>*/222**</td>
<td><strong>.19</strong>*/262**</td>
<td><strong>.18</strong>*/1110**</td>
</tr>
<tr>
<td>Non-superficial religious practice</td>
<td>-.04/23</td>
<td>-<strong>34</strong>*/931**</td>
<td><strong>.18</strong>*/137**</td>
<td>.05/1823</td>
</tr>
<tr>
<td>Compassion for religious rule violators</td>
<td>.04/2059</td>
<td>-.10*/1409</td>
<td><strong>.22</strong>*/172**</td>
<td><strong>.14</strong>*/402**</td>
</tr>
<tr>
<td>Is personal effort more than grace required to obtain ultimate spiritual reward</td>
<td>.08*/96</td>
<td>.<strong>41</strong>*/3478**</td>
<td>-.07/1521</td>
<td>.10*/366</td>
</tr>
</tbody>
</table>

**Note.** Values following the / represent Bayes factors (posterior odds in favor of) the hypothesis that correlations are equal across religions; i.e., the higher the value, the less variability there is in this correlation across the four religions. Correlations significant at $p < .01$ with Bayes factors $\geq 100$ are highlighted in bold. Correlations partial out social desirability, age, gender, disadvantaged (affirmative action) group membership, years of education and financial wealth. Each RFI scale has been residualized with respect to the other two RFI scales and religiosity.  

* The Schwartz values scores were ipsatized (i.e., each participant’s mean score across all PVQ-R items subtracted from his or her score on each value) as recommended by Schwartz (2009).  

b The Unconditional Self-Acceptance Questionnaire (USAQ) correlates positively with self-esteem ($r = .34, p < .001$ in this sample); therefore the USAQ was residualized by self-esteem prior to entry into correlations reported here. The pattern of correlations for the residualized vs. original USAQ is identical.

The majority of correlations were consistent across religions by the previously defined criteria (i.e., $BF \geq 100$), and the number of consistent correlations did not vary by RFI scale, $\chi^2(2) = 0.14, p = .93$. Moral Concern and Personal Gain correlated with variables across all categories (health, values, relating to self and others, and religious beliefs). In all 20 cases where both Moral Concern and Personal Gain had consistent and significant correlations with the same variable, their correlations had opposite signs. A detailed summary of the relationships between the RFI scales and the other variables in the study is presented in the Discussion.
4. Discussion

All religions contain a diversity of aspects which each follower organizes into a coherent but ultimately personal framework, emphasizing some and relegating others to a secondary status. The present study sought to understand the impact of ascribing central importance to the shared moral teaching of all religions - the golden rule - on prosocial values and well-being. Through the development of the Religious Focus Inventory, these relationships were assessed in contrast with two other empirically identified types of religious focus: obtaining personal benefit and establishing a direct relationship with God.

4.1 The Religious Focus Inventory in context

In arguing for the importance of identifying cross-cultural aspects of religion deserving of study, Saroglou (2011) wrote,

For psychological research, especially in the field of cultural and cross-cultural psychology, there is a need to distinguish between basic dimensions of religion/religiosity that (a) are psychologically informed (point to psychological constructs and processes), (b) are not unique to particular religious traditions and do not simply translate theological positions, (c) can serve to study both universals and specifics across religions and cultures, and (d) offer discriminant validity between each other, implying (at least partially) distinct psychological processes, predictors, and consequences. (p.1322)

The three dimensions of religion identified by the RFI meet these criteria. Each of the three types of religious focus measured by the RFI demonstrates a unique pattern of associations with prosocial values, personality, religious beliefs, and measures of
relationship quality, meaning in life, well-being and health. Typically these patterns were consistent across the four religious traditions sampled in the study, indicating that the RFI taps into aspects of religion that have common psychological bearing across religions.

The RFI measure itself represents an innovation in the individual differences approach to the study of religion. Unlike the religious orientation measures, it asks participants about what they see as central to their religion, rather than to what extent religion guides their daily lives (as in the intrinsic orientation) or the extent to which religion is approached with doubt and uncertainty (as in the quest orientation). The closest conceptual overlap is between the extrinsic religious orientation and the Personal Gain religious focus, in that both reflect a utilitarian, instrumental approach to religion. This is reflected in the moderate-sized correlation (Cohen, 1988) between the residualized Personal Gain RF scores and the Extrinsic-Social religious orientation shown in Table 4. There was no similarly unique association between the other two residualized RFI scales and the religious orientation measures, providing additional evidence of the RFI's divergent validity. Moreover, whereas the IE-Revised Extrinsic scale had an unacceptable internal consistency of $\alpha = .40$ in the entire sample, the RFI Personal Gain scale's reliability was good at $\alpha = .88$, suggesting that if there is conceptual overlap between the two, the RFI Personal Gain scale is the superior measure in this population (Kline, 2000).
Another strength of the new measure is its applicability to all theistic religions. Both the editors and authors of recent review volumes on religion and psychology consistently critique the field’s over-reliance on primarily Christian samples investigated in Western countries (Kim-Prieto, 2014; Saroglou, 2013b, 2014c). At the same time, Saroglou (2014a) and others have pointed out the commonalities present across religious traditions, and suggested that these commonalities may be reflected in common psychological processes and pathways. The present results provide additional evidence for this claim, and demonstrate the RFI's applicability to a multireligious, non-Western cultural context.

The RFI demonstrated a sound internal consistency reliability in each religion, and also demonstrated substantial incremental predictive validity. The RFI scales were found to be better predictors of well-being than the well-established religious orientation measures. When both the RFI and religious orientation were entered into the model, only Moral Concern RF predicted well-being. It was also the sole mediator of the association between religion and well-being.

In a meta-analysis, Witter and colleagues (1985) found that religion explains 2-6% of variance in subjective well-being; their analysis is based on zero-order correlations, which can be inflated by social desirability. Consistent with their results, in the present study religiosity explained an additional 7.2% of variance above demographic variables and social desirability. However, the addition of the RFI explained an additional 8% of
well-being variance over and above that already explained by religiosity, indicative of the RFI's utility as a new tool for understanding religion's contribution to well-being.

Together, religiosity, the RFI and demographic variables explained 22% of individual variance in well-being, compared to 6.5% in the model that included social desirability and demographics but excluded all religious variables. This 15.5% increase in explained variance corresponds to an $f^2$ of .20, a medium-size effect (Cohen, 1988). Including prosocial values increased explained variance further to 25%. Considering how multidetermined human well-being is, it is noteworthy that a quarter of its variability can be parsimoniously explained by this small set of variables.

### 4.2 Constructs measured by the RFI

In order to interpret the observed pattern of results, it is beneficial to recognize exactly what construct each of the RFI scales represents, taking into account that in all of the analyses reported here, the three types of religious focus are residualized with respect to each other.¹

When thus residualized, the constructs measured by each variable can be described as follows. Moral Concern measures the degree to which seeing concern for all others' well-being is central to one’s religion, after separating out any aspect of seeing

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¹In the SEM models, the simultaneous inclusion of the RFI scales as predictors produced beta weights corresponding to the unique influence of each religious focus on the dependent variables, over and above the other predictors. In partial correlations, the same was achieved by regressing each religious focus scale on the others and on religiosity, and using the resulting residuals in the correlations.
religion as a tool for self-focused temporal gain, and the focus on one’s relationship with God. In contrast, Personal Gain captures seeing religion as a means to obtain social or material (i.e., temporal) benefit for oneself, after any aspect of concern for others, or focus on God have been removed from it. The Relationship with God RF captures focus on the metaphysical dimension of religion after eliminating from it the focus on benefiting either oneself or others.

In other words, the core contrast between Moral Concern and Personal Gain is that the former represents a pure focus on caring for others in religion, whereas Personal Gain represents a pure focus on serving one’s personal needs through religion. In this way they are diametrically opposed to each other; and have, as one might then expect, nearly mirror-image patterns of relationships with other variables. Together with the Relationship with God RF, these patterns can be understood as representing the correlates of other-focused religion, self-focused religion, and God-focused religion.

Although, for clarity, the next section describes each religious focus as a distinct individual type, in actual practice the three types of religious focus are not independent but rather positively correlated. Every individual will possess some mixture of them, experiencing a summation of these types of religious focus as the overall impact of her religious or spiritual practice on her prosocial values and well-being; this will include the uniformly positive impact of moral concern, the mixed impact of personal gain, and the indirect impact on well-being through meaning in life only of the relationship with
God focus.

4.3 Correlates of each religious focus

Based on the RFI's consistent correlations across the four religions sampled, the following descriptors apply to high scorers on each religious focus.

4.3.1 Moral Concern

Of the three types of religious focus, it is only Moral Concern, i.e., the "golden rule" reflective of seeing concern for the well-being of all others as central to one's religion or spirituality, that was found to be consistently associated with all other indicators in the direction of greater psychological and social health, and was the sole mediator of the relationship between religion and well-being.

Participants who see concern for all others as central to their religion are happier, and more prosocial in their values: they are less interested in accumulating prestige and power over others, but more interested in helping them. They experience a stronger sense of meaning and purpose in their lives, and enjoy more satisfying interpersonal relationships.

Participants high in Moral Concern RF are also healthier: endorsement of the Moral Concern religious focus is associated with better self-reported physical and mental health, and fewer days when either pain, physical health, or mental health interferes with their activities. This is not surprising, since happy people live longer (Diener & Chan, 2011).
Participants high in Moral Concern RF value independent thought and action, and believe that following their religion requires personal effort. Although they endorse their religion's moral code and believe following the rules is important even when no one is watching, they are also willing to incur social costs (disapproval of their religious group) by following their conscience if their conscience and the religious group are at odds. They see God as having similar characteristics to those they express, i.e., as being unconditionally and universally benevolent. In terms of personality, participants high in Moral Concern RF are more agreeable, conscientious, extraverted, and open to experience. They are more compassionate not only to others but also toward themselves, suggesting that it is not a self-critical attitude of rigid adherence to a moral code or fear of divine punishment (since they see God as unconditionally loving and not punitive) that motivates their compassion. They are more likely to feel gratitude, and to express gratitude toward their partners.

The Moral Concern RF predicted both Benevolence and Universalism, with standardized coefficients that were substantial and similar in magnitude (.49 and .58, respectively). This suggests that within each of the four major religions sampled here, there exists an individual approach to that religion that predicts prosocial values, regardless of the ingroup or outgroup status of the target. Consistent with this, participants high in Moral Concern expressed willingness to provide help to the people who had harmed them in the past - perhaps the ultimate outgroup. The religious views
of participants high in Moral Concern RF appear to provide a counterweight to the ingroup/outgroup categorization of people, as indicated by their disagreement with the statement that God favors some countries over others, agreement with the belief that God loves and wants the best for everyone, and their belief in the connectedness of all life.

Even after controlling for the three scales of the RFI, religiosity continued to predict well-being both directly, and through increased meaning in life. Thus, both the Moral Concern RF and overall religiosity each have unique incremental associations with well-being, over and above their shared variance. Therefore, estimates of the association between religion and well-being that are based on religiosity alone omit a relevant predictor of well-being. However, after controlling for the RFI, religiosity had no residual association with either ingroup-focused or universal prosocial values, indicating that Moral Concern RF explains the entire association between religion and prosocial values.

4.3.2 Personal Gain

The Personal Gain RF reflects the perception of religion as being primarily a means to benefit oneself socially or materially. High scorers on the Personal Gain RF are less likely to believe in God or to believe that God has the ability to know private thoughts. Their focus is on their present material existence, and they disagree that life has a larger spiritual meaning or purpose, or that all life is interconnected. They value
power and prestige, and see religion as a resource for improving their lives in the here
and now through the social aspect of the religious community as well as divine
assistance.

Participants focused on Personal Gain see God as a supernatural agent who can
be propitiated into fulfilling their wishes. In their view, God is partial to the individuals
and groups he favors, with offerings and rituals, rather than love or kindness, seen as
the means of earning God’s favor. They see God as being capable of experiencing anger,
jealousy and taking offense, and sending natural disasters and misfortunes to those who
displease him.

Participants with the Personal Gain religious focus value their membership in the
religious ingroup, and see its members as superior to members of religious outgroups,
whom they distrust. They devalue independent thought and action. In a conflict
between their own conscience and the religious group, they endorse following the group
rather than risking its disapproval.

Although they express more punitive and less compassionate attitudes toward
those who violate the rules of their religious ingroup, they do not appear to be as strict
toward themselves, as evidenced by the negative association of Personal Gain RF with
conformity (belief in the importance of restraining one’s impulses that are likely to upset
or harm others, or violate social norms; Schwartz, 2012). They express diminished
concern for, or desire to benefit both close and distant others. They are more willing to
actively and intentionally exact revenge on people they dislike. They are less likely to feel gratitude, or to express gratitude to their partners.

In terms of personality, participants high in the Personal Gain RF are less agreeable, less conscientious, less extraverted, and lower in openness to experience. They are also less compassionate toward themselves. Although their self-esteem is not related to their endorsement of the Personal Gain RF, it is conditional – that is, they feel that they lack self-worth unless they meet certain criteria.

Greater endorsement of the Personal Gain religious focus is associated with greater interference of pain, mental health and physical health problems with participants' ability to carry on their daily activities. However, Personal Gain religious focus has no net impact on well-being, except among Sikhs, and it does not account for any portion of the correlation between religiosity and well-being. This is surprising given its negative associations with meaning in life and quality of relationships, which persist even after controlling for its negative associations with the prosocial values. However, these negatives were balanced by an unexpected positive association with well-being. Somehow, these participants' religion is able to protect their well-being from the effects of multiple consistent indicators of psychosocial dysfunction — perhaps in part through the benefit of belongingness and unconditional acceptance by others (such as those high in Moral Concern RF) within their religious ingroup.

The negative associations of the Personal Gain RF with both benevolence
(concern for close others) and universalism (concern for all others, justice, and nature) indicate that this approach to religion is distinct from the ingroup-focused religious prosociality described by religion researchers (Galen, 2012; Preston et al., 2010; Saroglou, 2013a). Its conceptually coherent pattern of correlations with other variables indicates that it represents a unique approach to religion that, in contrast to every other religious variable in the model, produces less meaning in life the more one engages in it. It is deserving of further empirical investigation.

4.3.3 Relationship with God

The Relationship with God RF captures the explicitly metaphysical aspects of religious belief, with the focus on benefiting self or others partialled out. Participants who see their relationship with God as central to their religion are more likely to believe that life has a greater plan and purpose, and that spiritual growth is the primary purpose of life. They believe in life after death, and that everyone gets their due in the afterlife. The finding that a focus on relating to God predicts increased meaning in life accords well with research showing that people reporting more religious goals, including the goal of deepening their relationship with God, experience an increased sense of purpose (Emmons, Cheung, & Tehrani, 1998).

Participants endorsing this religious focus see God as a figure of central importance in their lives, and believe that the ultimate good religion promises can only be obtained through God’s grace rather than personal effort. The content of the
Relationship with God RFI items explicitly references the existence of a deity that cares about the participant and will provide for the participant's needs and future, protecting her from misfortune. Correlations show that high scorers on the Relationship with God RFI are also more likely to believe that they have a warm relationship with God, and are loved and protected by God. At the same time, they believe that God can be wrathful, causing diseases, earthquakes and floods as punishment, and may punish those who do not worship God. They endorse the belief that it is important to "stay on God's good side."

With concern about caring for others partialled out, religious focus on relating to God appears to have minimal impact on prosocial values or well-being. Participants endorsing this RF did express unwillingness to harm others who had harmed them in the past. Considering that Moral Concern RF has been partialled out, this represents a distinct mechanism of association than concern for others' well-being — possibly, the motive to avoid damaging one's relationship with God or divine punishment.

**4.4 Prosocial Values, Moral Inclusivity and Well-Being**

An individual's characteristic tendency to either to serve his or her own needs without regard for others, or to support and benefit others, carries consequences for that individual’s well-being. For example, a series of longitudinal studies by Jennifer Crocker found that "egosystem" motivation (i.e., prioritizing one’s needs and desires over those of others, and seeking to satisfy one’s needs regardless of the impact on
others) is associated with impoverished relationship quality, increased depression and anxiety, and lower psychological well-being. In contrast, compassionate goals had the opposite effects (Crocker & Canevello, 2012). Along the same lines, a meta-analysis of 259 independent samples found that self-focused, materialistic goals are associated with an increase in psychopathology and a decrease in well-being (Dittmar, Bond, Hurst, & Kasser, 2014). Moreover, goal types are socially contagious: endorsement of compassionate goals increased compassionate goals in one’s relationship partners, and the same was true for egoistic goals (Crocker & Canevello, 2012). It appears that compassionate attitudes not only benefit oneself and others directly, but also maximize the probability that compassionate behavior will be reflected toward oneself from one’s immediate social environment.

The results of the present study fit well with this literature, with Moral Concern RF representing ecosystem and Personal Gain RF representing egosystem motivations. The expected patterns of association with indices of psychosocial functioning are observed, consistently across religions, in the expected directions.

In addition, the present work extends this literature by examining the interplay of individual approaches to religion, prosocial values, and measures of well-being. With both universalism and benevolence entered into the model, only universalism remained as a significant predictor of well-being -- suggesting that the stronger and more inclusive one’s sphere of moral concern is, the more well-being he or she will experience.
Schwartz (1992) describes universalism as an extension of benevolence to the outgroup when he states, "The motivational goal of universalism is understanding, appreciation, tolerance, and protection for the welfare of all people and for nature. This contrasts with the narrower focus of benevolence values" (p. 7). To the extent that the value of benevolence represents a more narrowly circumscribed sphere of compassionate concern, universalism - a broader expression of the same tendency - appears to simply subsume it. If, as the results of this study indicate, well-being is associated with the degree of one's concern and kind feelings and actions directed toward others, then broader appears to be better.

When relationship quality and meaning in life were added to the model, a more nuanced yet entirely coherent pattern of relationships emerged. Benevolence predicted well-being via relationship quality, but universalism did not. This indicates that caring for persons outside of one's circle of direct relationships carries no additional benefit toward improving those relationships - as could be expected. Universalism does, however, make life more meaningful, and contributes to well-being both directly and as a consequence of this increased meaning.

Nothing in this study or the literature suggests that religion is necessary in order to obtain these benefits of concern for others on well-being; neither prosocial nor antisocial attitudes require religion as a necessary cause. However, religion is perhaps unique in its ability to imbue a given set of values with ultimate importance. Religious
people look to their religion to guide their values, attitudes and behaviors, and treat that
guidance as highly authoritative. Sacred values are seen as "possessing infinite or
transcendental significance that precludes comparisons, trade-offs, or indeed any other
mingling with bounded or secular values" (Tetlock et al., 2000, p. 853). This process of
sanctification may be responsible for the increased preference for prosocial values
associated with perceiving the golden rule to be a central tenet in one’s religion.

However, golden rule-focused religion’s role in strengthening prosocial values is
insufficient to fully explain the results observed in this study. Although I expected to
observe full mediation of the relationship between Moral Concern RF and well-being by
benevolence and universalism, this was not the case. Even after accounting for
benevolence, universalism, religiosity, meaning in life and quality of relationships,
Moral Concern RF continued to directly predict well-being ($\beta = .18$); additionally, Moral
Concern predicted quality of relationships over and above benevolence, universalism,
and religiosity ($\beta = .17$). In other words, at any given level of endorsement of prosocial
values, participants who also saw prosociality as central to their religion were happier
and enjoyed more satisfying relationships.

These results suggest that the Moral Concern RF is not simply reducible to (i.e.,
redundant with) benevolence and universalism, or even those variables combined with
greater meaning in life, better relationships, and overall importance ascribed to religion.
Rather, they suggest the presence of some pathway by which a specifically religious
focus on caring for all others provides an incremental boost to well-being and quality of relationships, beyond that reflected in the secular prosocial values.

The answer may be provided by the sense of oneness with all others (as measured by the items "all life is interconnected" and "on a higher level, all of us share a common bond"), which is positively correlated with Moral Concern RF. As mentioned in the Introduction, Cialdini and colleagues' (1997) experiments found that perceived oneness with others produces costly prosocial behavior. Within the secular perspective, oneness with others is a cognitive abstraction representing an overlap in identities with another (Aron, Lewandowski Jr, Mashek, & Aron, 2013). However, that abstract idea of oneness can become literal within the context of religious beliefs, magnifying its meaning and impact. It may not be coincidental that the Rev. Dr. Martin Luther King Jr. and Mahatma Gandhi, exemplars of universalist prosocial behavior coming from two very different religious backgrounds, emphasized the importance of oneness to their worldview: "It really boils down to this: that all life is interrelated. We are all caught in an inescapable network of mutuality, tied into a single garment of destiny. Whatever affects one directly, affects all indirectly." (Washington, 1986); "How can there be room for distinctions of high and low where there is this all embracing, fundamental unity underlying the outward diversity? […] The final goal of all religions is to realise this essential oneness" (J. P. Miller, 2007). Empathic concern and perceived oneness covary
(Cialdini et al., 1997), and perceiving the golden rule as central within religion appears to promote both.  

4.8 Generalizability of results beyond India

One may ask to what extent these results might be unique to the Indian cultural context. Ultimately, that is an empirical question that awaits further research and replication of these results in other cultures. Until then, the evidence is in favor of a broad applicability of these results, for the following reasons.

First, the golden rule exists in all religious traditions across the world. It has been argued that the functional purpose of religion is to promote ingroup cohesion -- in part by imparting a moral code of prosocial conduct that exceeds the prevailing moral standards of the society at large, thereby exerting a steady upward pressure on the conduct of the society’s members (Saroglou, 2013a). In other words, religion serves a utilitarian social function, quite apart from any considerations of its claims to the ultimate truth — which may themselves serve the function of legitimizing the religion’s demands on conduct. In addition, religion serves a variety of functions at the individual level (Tay et al., 2014).

Therefore, if the golden rule has been universally included within all major religions across the globe, there may well be a functional, utilitarian reason for it. It may have withstood the memetic cultural selection process across cultures because of its social and individual-level benefits, similar to the way certain phenotypic features of biology (such as the eye) have independently evolved and persisted across time and
environments because of their usefulness (Crozier, 2008; Kozmik et al., 2008). If that is the case, the benefits associated with the golden rule are unlikely to be unique to India.

In fact, there are particular features of Indian culture which could be expected to have an attenuating effect on any associations of golden rule-based morality with positive outcomes. India is a considerably more collectivist country than the United States (Hofstede, 2015a). In collectivist societies, one's primary obligation is to one's ingroup, from which one derives one's identity and sense of belonging; Hofstede (1991) writes, "Collectivism stands for a society in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty" (pp. 260–261; my emphasis). Furthermore, the boundaries between ingroup and outgroup are much more rigidly delineated in collectivist cultures, as exemplified by the Hindu caste system (Schwartz, 2007).

As an illustration of this, Miller (1994) found that a majority of Indians believed it was morally obligatory to steal "a well-dressed man’s" (i.e., outgroup member's) train ticket in order to fulfill a promise to one's best friend (ingroup member). Across different vignette scenarios with non-life threatening circumstances such as this, 91% of Indians (vs. 46% of Americans) expressed the belief that it was their moral duty to fulfill ingroup loyalty-based obligations over justice obligations, i.e., to benefit the ingroup member at the expense of the outgroup member.
The social expectation embedded in this cultural orientation is that one's duty is to place the interests of one's family, tribe or clan above the interests of outgroup others. A universalism-valuing individual acting against this norm by allocating resources to an outgroup member is unlikely to earn the approval of those within the ingroup who could have benefited from those resources; to wit, Verma (1986) found that Indians' behavior is driven by the anticipated interpersonal consequences of their actions much more strongly than Americans, whose behavior more strongly reflects their affective states.

India is also a highly hierarchical society, as measured by Hofstede's power distance score (Hofstede, 2015a, 2015b). Distinctions of caste and skin color continue to matter; even in the present day, caste-related violence is commonplace, exemplified by incidents such as the murder of an untouchable child for the offense of having the same name as a Brahmin in the same village (Narula, 1999; Scuto, 2008).

This type of social structure does not readily lend itself to universalist attitudes, which go against the cultural grain — and yet, in those who endorsed them, were nonetheless found to be associated with positive health and psychological well-being across four distinct religious groups, despite the potential social costs. The association of golden rule-derived morality with well-being may therefore be expected to be stronger in more egalitarian and morally inclusive cultures where universalism enjoys more cultural support.
4.9 Limitations and Future Directions

Several limitations are present in this study. The non-random sample prevents comparisons of means across religions from being made. However, identifying mean differences across religions was extraneous to the aims of this study, the core objectives of which focused on identifying common aspects and psychological pathways across religions; these goals were unimpeded by the nonrandom sample.

A second limitation concerns its cross-sectional design, which is a function of the limited duration of the Fulbright grant which supported this work. A lack of behavioral measures of prosociality prevents strong conclusions from being drawn regarding the impact of religious focus types on behavior rather than self-reported attitude. However, the results of this study are complemented by extant experimental literature demonstrating causality in the relationships described herein, including the causal effect of prosocial values on behavior (for reviews, see Bardi & Schwartz, 2003; Maio, 2010; Roccas & Elster, 2014). In the present study itself, the impact of the moral concern RF on behavior is implied by its association with improved quality of relationships, which is likely to arise as a consequence of the behaviors necessary to develop and maintain strong and supportive relationships. Nonetheless, effects in the reverse direction of causality are also likely to exist (and known to exist, in some cases; for instance, well-being is known to increase prosocial behavior, with the two directions of influence potentially forming a self-reinforcing feedback loop; Aknin, Dunn & Norton, 2012).
These questions can be resolved through longitudinal replications and extensions of this study, ideally with the simultaneous inclusion of Western and non-Western samples. The substantial magnitude of the Moral Concern RF’s relationships with prosocial values and well-being, combined with the RFI’s ability to explain as much additional variance in well-being as was explained by religiosity alone, suggests that it may prove helpful in explaining the inconsistent associations between prosociality, well-being and religion found in the literature. Given the surprisingly consistent list of positive correlations between Moral Concern RF and indicators of healthy psychosocial functioning, it is very likely that some combination of these variables may be able to explain the residual “direct” effect of Moral Concern on well-being observed in this study. In this paper, however, only the \textit{a priori} hypothesized mediators were included in the models; additional and alternative mediation paths will be explored in future research.

The intergenerational transmission of religious focus is also worthy of future research attention. For example, an individual who becomes increasingly prosocial as a consequence of perceiving the golden rule to be central to his or her religion might raise his or her children with the same values. Prosocial values can be taught, learned, and practiced. Therefore the offspring may not even need to continue in her parents’ religion in order to have it impact their value structure.

Religion continues to be a powerful social force in the modern world, with a direct impact on the 84% of the individuals worldwide who report a religious affiliation,
and an indirect impact on the remaining 16% through contact with religious individuals. Moreover, religious or spiritual beliefs and practices are also maintained by many of those who deny having a religious affiliation. For example, even among the religiously unaffiliated in the United States, one third (37%) classify themselves as spiritual but not religious; 21% report engaging in daily prayer; and 68% report believing in God (Pew Research Center, 2012). Working to develop an enhanced understanding of the ways in which individuals construe and practice their religion or spirituality will promote a more complete understanding of one of the major psychological forces operating upon individuals and societies worldwide.
References


**Biography**

Dimitri Putilin was born in St. Petersburg, Russia and moved to the United States with his family at twelve years of age. He attended Queens College and graduated with a Bachelor of Arts in Psychology, Summa Cum Laude with Highest Honors in Psychology from Queens College on February 1, 2006. He completed his Doctorate of Philosophy in Clinical Psychology under the direction of Philip R. Costanzo at Duke University in September 2015, including a pre-doctoral internship at Duke University Medical Center. As a recipient of the Kenan Institute for Ethics Graduate Instructorship, he developed and taught a class titled “Moral Psychology and Cross-Cultural Religious Ethics.” He was awarded the James B. Duke Fellowship, the Travel Grant from the North Carolina Center for South Asia Studies Program for Advanced Research in Social Sciences Fellowship, and the Salzberger/Levitan Social Policy Graduate Research Fellowship. He received the Fulbright Full Grant and the Duke International Research Fellowship to
support his research in India. Dimitri Putilin is a member of Phi Beta Kappa, Psychologists for Social Responsibility, and the Society for Personality and Social Psychology. After completing his doctoral degree, Dimitri Putilin continued his research as a Postdoctoral Fellow at the Network Analysis Center in the Social Science Research Institute at Duke University while continuing postdoctoral clinical training at the Duke University Medical Center.