How Does Religiosity Affect Fertility? A Tale of 'Two Bengals'

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Abstract

The relationship between religion and fertility is well-studied, with the general finding that religious affiliation is associated with higher fertility. Yet the relationship between *religiosity* and fertility is understudied, and there is debate regarding what it is *about* religion that drives higher levels of fertility—a crucial topic for uncovering the mechanisms underlying the relationship between religion and fertility. Moreover, when religiosity is studied relative to fertility, this has generally been done using only one or two simple measures with little attention to the multiple dimensions of religiosity. This paper uses newly-collected data on over 2,000 women from HDSS sites in Matlab, Bangladesh and Birbhum, West Bengal, India to evaluate 7 theoretically-based dimensions of religiosity. We find that (1) the public practice of religion is associated with higher fertility in both Bangladesh and West Bengal, (2) measures of self-reported religiosity and religious identity are associated with higher fertility in West Bengal, and (3) relationships with people in one's own and other religions is associated with higher fertility in West Bengal. Our results are consistent with theories that public practice strengthens cooperation and altruism among group members, theories of secularism, and theories emphasizing the effects of marginalization on religious minorities.

INTRODUCTION

Religiosity & Fertility

That religious people have higher fertility has been widely demonstrated, both when comparing religious to secular individuals and also when comparing across more and less orthodox denominations (e.g. Goldscheider 2006; Rowthorn 2011)—though the magnitude of fertility differences varies spatially, temporally and across denominations (Schooenheim and Hülsken 2011; Peri-Rotem 2016, 2020). In recent decades the literature has shifted from a focus on particular religions to a general study of the effect of religiosity, or the strength of religious commitments, on fertility and the same positive relationship has generally been found (e.g. Hackett et al. 2015; Hayford and Morgan 2008; Galbraith and Shaver 2018). This relationship has been studied using several proxies of religion or religiosity. Some studies focus on whether individuals declare a religious affiliation (Philipov and Berghammer 2007; Frejka and Westoff 2008; Peri-Rotem 2016; Shaver et al. 2019). Those who have studied religiosity have generally used one of two variables, either (a) individuals' self-reported importance of religion ((Frejka and Westoff 2008; Hayford and Morgan 2008; Baudin 2015), or (b) some variant on attendance at religious services (Adsera 2006; Philipov and Berghammer 2007; Frejka and Westoff 2008; Berghammer 2012; Peri-Rotem 2016; Shaver et al. 2019; Shaver et al. 2020).

Less research has directly explored the mechanism for this relationship, at least in any detail, but most authors argue that this can be traced to differences in ideology and/or cultural schemas that strongly value family and children (McQuillan 2004; Goldscheider 2006; Hackett 2008; Hayford and Morgan 2008, Schoonheim and Hülsken 2011; Baudin 2015; Yancey and Emerson 2018). Religious teachings influence individual behavior either directly through the teaching of family-oriented ideals, or indirectly through a process of socialization and embeddedness of individuals in social groups with a norm of higher fertility, or the combination of the two in cultural schemas of traditional family roles alongside family-oriented values (Hayford and Morgan 2008). Yet while this cultural approach is most common in the literature, others have proposed a functional perspective that religion facilitates more cooperative social networks among co-religionists that promote higher fertility through either material support (i.e. help with childcare or housework) or emotional support (Peri-Rotem 2016; Shaver 2017; Shaver et al. 2019; Shaver et al. 2020; Spake et al. 2021). These two perspectives are not mutually exclusive, however, as cultural norms reinforce the creation of supportive social networks and such networks would be expected to propagate appropriate social norms; indeed, the fact that studies find effects of measures of religion related to both of these perspectives suggests that they may often be acting in concert (Goldscheider 2006).

Yet this literature has significant limitations. The mechanisms underlying the relationship between religion and fertility are not well-explored or agreed on, in part—we would argue—because religiosity is not well-specified in the existing literature, where it is often measured with one (or occasionally two) limited variables. This is despite the fact that there is robust literature on dimensions of religiosity (see below) and explicit calls for more attention to the multidimensionality of religiosity (e.g. Hayford and Morgan 2008; Cranney 2015).

Dimensions of Religiosity

When designing our study, we reviewed the literature on typologies of the dimensions of religiosity, choosing a pluralistic approach aiming to cover major dimensions without privileging a single typology. Based on our review of the religiosity literature, including but not limited to those measures used in the

study of fertility, we identified seven dimensions or categories of religiosity, each of which is associated with a general prediction of directional effect (Table 1). While we drew on well-known discussions by Glock (1962), Allport & Ross (1967), King and Hunt (1972a, 1972b, 1975, 1990), and others, our approach is most strongly influenced by that of Cornwall et al. (1986) which attempts in part to synthesize earlier approaches. For each dimension, we pre-tested and included multiple questions in each dimensional category, thus we measure religiosity with 25 questions divided across the 7 larger dimensions. While we are able to create internally-consistent mini-indices for several dimensions of religiosity using our data, this approach was not preferred as it was likely to obscure important relationships between individual variables and fertility as an outcome, undermining our goal of exploring multiple potential mechanisms linking the two.

Various measures of **self-rated religiosity** are used in the literature, and we collected 4 of these to captures religiosity in a general sense. We then captured 4 measures of **internal beliefs** to capture a dimension variously referred to as cognitive (Cornwall et al. 1986) or ideological (Glock 1962) religiosity. We collected three measures to capture a sense of the strength of **religious identity**, in part to capture affective dimensions of religiosity (Cornwall et al. 1986). **Religious behavior/participation** we captured as two measures of private practice and six measures of public practice, terms used by Davidson (1975) but echoing dimensions of interest to Allport and Ross (1967) as intrinsic vs. extrinsic dimensions of religious participation and to Cornwall et al. 1986 as the personal mode and the institutional mode.

Finally, we captured 4 measures of **social relationships with co-religionists** and an additional two measures **of social relationships with those in other religions**, factors which may be important in settings where cooperative childcare is common and/or where religious minority and majority dynamics have clear influence on social experiences and behaviors. While there is disagreement among researchers regarding whether these are properly considered aspects of religiosity per se, they are commonly studied aspects of sociality related to religion and religiosity which theory and empirical studies suggest may be especially important to outcomes such as fertility which are strongly influenced by cooperative relationships and access to caregivers (e.g. Sear and Mace 2008, Shaver et al. 2019).

Our literature review suggests the following **general prediction**: at least in principle, all measures of religiosity are expected to be associated with higher fertility except social relationships with those in other religions, which, as a potential marker of secularism, is expected to be associated with reduced fertility.

Table 1. Dimensions of religiosity with predicted directions of effect

Dimension of Religiosity (Number of Measures)	Predicted Direction of Effect
1. **Self-rated religiosity (4)**	+
2. **Strength of internal beliefs (4)**	+
3. **Strength of religious identity (3)**	+
4. **Private practice of religion (2)**	+
5. **Public practice of religion (6)**	+
6. **Social relationships with co-religionists (4)**	+
7. **Social relationships with those in other religions (2)**	-

History, Fertility and Religion in Two Bengals

Not only is there debate regarding the most important dimensions of religiosity but most of the existing research on this topic focuses on denominations of Christianity and study populations in North America or Western Europe; far less work has been done on Hinduism, Islam, or in other regions of the world.

Before the British colonial era, the regions that are now West Bengal in India and the nation of Bangladesh were both part of Bengal Subah, one of the largest and wealthiest provinces in Mughal India and the first significant territory conquered by the British East India Company in 1757. Under British Rule the region was part of the Bengal Presidency and later the Province of Bengal, but remained one of the most politically influential areas in the British Empire, at the time the most powerful sociopolitical entity on the planet. In 1905, however, the Province of Bengal was divided for reasons that were both administrative and part of a colonial strategy of 'divide and rule' to curtail local power (Sengupta 2011). While later revoked, this first partition of Bengal had profound political consequences, including the stage it set for the partition of British India in 1947 when West Bengal became a state in independent India, while East Bengal become East Pakistan and later the independent nation of Bangladesh in 1971.

The long history of political and cultural unity that was disrupted by partition sets the stage for a series of the demographic consequences for the 'Two Bengals' (Kamal 2020) which remain to this day some of the most populous and densely settled regions in the world. The partition of Bengal created a 'natural experiment' in which language, cultural norms, and deeper history remain the same while recent history diverges in terms of politics, economic development, and public policy, creating a demographic divergence in rates of fertility. West Bengal began its fertility decline early, with notable decreases in the 1940s among urban elites followed by significant declines across all sectors of society from the 1960s through 1980 (Kamal 2009, 2020). The total fertility rate is currently 1.7 children per woman, one of the lowest rates in India and similar to much of Europe. Bangladesh, in contrast, is well-known for its late but very rapid fertility decline of over 4 children per woman which began in earnest in the 1980s. The total fertility rate is currently 2.1, in line with much of Latin America. West Bengal also contrasts relatively high fertility in some rural areas with lowest low fertility (1.2 children per woman) among the educated urban classes in Kolkata, while Bangladesh's demographic transition shows greater equality across rural and urban regions.

Muslims have higher fertility than Hindus in both regions, but Hindu and Muslim fertility is converging in West Bengal (Ghosh 2018). There is also evidence of latent son preference in patterns of contraceptive adoption in this region of India and Bangladesh, though they may manifest differently among Hindus and Muslims in India and Bangladesh (Ghosh & Chattopadhyay 2017, Ghosh 2020, Ghosh et al. 2020).

METHODS

Study Populations

Data for this paper were collected in icddr,b's Matlab HDSS located in Matlab *thana*, Chandpur District, Bangladesh and from the Birbhum HDSS in Birbhum District, West Bengal, India.

The fertility transition took place relatively recently in both sites. The TFR in Matlab, Bangladesh was 2.6 in 2019 (icddr,b 2021), having decreased rapidly from a high of 6.7 in 1966 across the 1980s and 1990s and more slowly since. Fertility transition was later in West Bengal, where children ever born stood at 3.7 among women in West Bengal aged 40-44 in 2002-2004 (and 3.8 in the study district of Birbhum) but

fell sharply and TFR is currently among the lowest in rural India at 1.80 in 2019 (1.64 for Hindus, 2.09 for Muslims; Ghosh calculation from HDFS 5 Data).

Data collection took place as part of the "Evolutionary Dynamics of Religion, Family Size, and Child Success" project funded by the John S. Templeton Foundation (Grant ID 61426) to study the relationship between religiosity, fertility, and child outcomes across five fieldsites globally.

Data and Samples

Data were collected in spring of 2022 from the Birbhum HDSS and Matlab HDSS sites using virtually identical research protocols. The Birbhum HDSS was founded in 2008 and covers a rural and peri-urban area of 351 villages in the central western part of West Bengal state in eastern India with over 300,000 residents, more than 55,000 of whom live in the 12,557 households enrolled by the HDSS (Ghosh et al. 2017). The majority of residents of the area are Hindu (70.3%) while the largest minority are Muslim (29.1%). The Matlab HDSS, founded in 1966, is the oldest continuously running surveillance site in the world (Alam et al. 2017), currently covering 142 villages with a 2019 population of 240,804. A large majority of the population are Muslim (88.2%) while the remaining minority are Hindu (11.8%).

A key advantage of working in HDSS sites is access to a full population register from which one can draw a fully random sample. In both sites we sought to interview half Hindu and half Muslim women to produce statistically comparable samples of each. Data was collected from in the Matlab HDSS area on 1,004 women including 501 Hindus and 502 Muslims; in this analysis we use data on 902 women (447 Muslims and 455 Hindus) who had completed fertility at the time of the survey. In the Birbhum HDSS data was collected on 1,196 women (598 Hindus and 515 Muslims) of whom 1,023 (508 Hindus, 515 Muslims) had completed fertility and are used in this analysis. To measure completed fertility, samples were limited to women over 45 and those whose responses affirmed they do not intend to have more children; this constituted 89.8% of the Bangladesh sample and 85.5% of the India sample.

Analysis

The dependent variable in our analyses is the number of children ever born. Generalized Poisson models were first run as the standard for analyzing fertility as count data, but many models failed to converge due to the zero-cell problem, especially with higher parities and among Hindus in Bangladesh. Fertility data were thus re-coded to compare lower fertility (1 or 2 children per woman) to higher fertility (3 or more children per woman) and set of binary logit regressions were used. Around half of the women in each fieldsite fell into the low vs. high fertility categories (Bangladesh 37.6% low vs. 62.4% high; India 46.9% low vs.53.1% high), making this an appropriate categorization. In addition, this specification fits with the research question being explored here as we are less interested in precise differences in parity and instead interested in discovering factors that motivate women to have larger than average numbers of children.

The first set of logit models each contains a single measure of religiosity as an independent variable alongside a standard set of control variables including religion (Hindu/Muslim), woman's education, and a categorical variable capturing husband's occupation (agriculture/primary production; labor; business or self-employment; education-based; not working) to proxy for SES. We do not control for the woman's age as we only include women with completed fertility and because age is strongly associated with secular trends in fertility, obscuring some of the variation in fertility we are interested in exploring. A second set of models includes all variables described above in addition to an interaction between

religion and the religiosity variable. Interactions are intended to capture whether it is members of one or both religions that drive any effect of religiosity seen in the model. As we are interested in interactions to aid in interpretations of main effects, we only report and interpret interactions IF there is a main effect of religiosity.

All analyses were conducted in Stata version 17.

RESULTS

Descriptive statistics can be found below in Tables 2 and 3. Religion is evenly balanced across both samples. Women have slightly higher levels of education in our Bangladesh fieldsite, in keeping with the faster pace of economic development in this region. Similarly consistent, while primary employment in agriculture (or other forms of primary production) is equally common across sites, more husbands are employed as laborers in West Bengal whereas more people are self-employed or employed in business in Bangladesh and double the number of husbands have education-based jobs.

Our suite of 25 religiosity variables (see Table 3) shows both a great deal of consistency across the regions but also variation. Religiosity is greater on some measures in Bangladesh, with higher importance across variables related to religious identity, more common belief that God judges actions, and more common involvement in religious leadership roles among women. In West Bengal we also see evidence of greater variance across numerous variables, particularly those relating to self-rated religiosity. Public practice shows limited variation across the sites, while some types of home practice are more common in Bangladesh.

Regression results (Table 4) suggest important effects of measures of self-rated religiosity, internal beliefs, and social relationships with members of the same and different religions on fertility in West Bengal but not in Bangladesh. We also see evidence of a clear relationship between fertility and both public religious practice and aspects of religious identity in both Bangladesh and West Bengal, while we see no evidence of such a relationship for private practice or religious leadership.

We have also done preliminary analyses of religion-specific measures of religiosity and find similar results that we will detail in later version of the paper.

DISCUSSION

Our preliminary results show three clear trends, each of which lends support to a different mechanism that may underlie the relationship between religion and fertility. The very fact that the relationship between religion and fertility is so commonly found across temporal and social contexts makes a multicausal explanation likely, thus this result is not surprising.

First, we show clear evidence that higher levels of public practice is associated with higher fertility across contexts—and that some other variables that are plausibly related to the idea of public practice (e.g. the effect of religion on social activities, and the belief that the temple/mosque is the most important place for social activities) show similar results. These results with both Allport and Ross's (1967) concept of extrinsic religiosity as well as with costly signaling approaches within evolutionary demography (e.g. Shaver et al. 2019). Public religious behavior is thought to promote cooperative relationships with co-religionists by signaling group belonging, adherence to group beliefs and practices, and a willingness to cooperate—and increased access to cooperative social partners is likely to increase

both access to the help and resources needed to raise offspring (e.g. Shaver et al. 2019) and exposure to prenatal ideologies frequently thought to be relevant to high fertility settings (e.g. Hayford and Morgan 2008).

Second, we find that in areas with greater variance in religiosity—in this data, West Bengal, India—measures of self-rated religiosity, internal beliefs, and social relationships with members of the same and different religions are positively associated with fertility—but this relationship does not hold in Bangladesh which has lower variance in measures of religiosity, likely due to high levels of religiosity overall. This finding is consistent with theories of secularism in which levels of religiosity decrease alongside aspects of economic development and market integration—but only if we view India as a whole, since this region of Bangladesh is in fact better off than the area of India for which we have data. Another explanation is statistical—that if there is little variation in religiosity on certain measures, other predictors will become more important in explaining differences in fertility. Differences in religiosity may not matter much where overall religiosity is quite high, though it is also possible that in areas where religiosity is very high people may rely heavily on kin-based social networks for cooperation, and thus it is only with economic development's erosion of kin networks or secularization's erosion of religious networks that we see strong differences in fertility across levels of religiosity.

Third, we find that there are stronger relationships between fertility and various markers of increased social interaction with/trust for members of one's own religious group in West Bengal, but not in Bangladesh. This finding is consistent with in-group dynamics observed across regions—that in places with more conflict one sees a rise in negative attitudes towards other groups, an erosion of public trust, and greater reliance on cooperation and social partnership with in-group than with out-group members. A related dynamic that has explicitly been found in comparing the attitudes of Bangladesh and West Bengal where members of the minority religion have been found to be less trusting than those in the majority (e.g. Mahmud et al. 2014). The pattern we find with respect to fertility may thus be linked to rising rates of communalism and religious tension in West Bengal in the recent past, at least in part related to the rise of Hindu nationalism and the political prominence of the right-wing Bharatia Janata Party (BJP) which has been in power at the national level since 2014. While the BJP is not the ruling power in the state of West Bengal, communal tensions in the state have risen in the past decade. Mitra and Ray (2014) have argued that such conflicts are often spurred by rising economic status among minority Muslim communities in India. While anti-Hindu sentiment and occasionally violence do exist in Bangladesh, these were far more muted social forces under the Awami League government, and it is thus perhaps not surprising that we see less evidence of such a dynamic in Bangladesh in 2022.

Finally, we find that when there are interactions between religion and religiosity there are two primary patterns. Interactions related to religious practice or sociality results appear to be driven by groups with more variance in religiosity (e.g., Hindus in India) while results related to beliefs results appear to be driven by groups with more conservative or formalized belief systems (e.g., Muslims in India).

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Table 2. Descriptives for Fertility and Control Variables

Variable	Bangladesh	Muslims	Hindus	West Bengal	Muslims	Hindus
Fertility	1 or 2 = 37.6% 3 or more = 62.4%	Low = 30.2% High = 69.8%	Low = 45.3% High = 54.7%	1 or 2 = 46.9% 3 or more = 53.1%	Low = 29.6% High = 70.4%	Low = 64.8% High = 35.2%
Religion	Hindu = 50.4% Muslim = 49.6%			Hindu = 49.7% Muslim = 50.3%		
Education	None = 23.3% Primary = 33.8% Secondary & Higher = 42.9%	None = 14.54% Primary = 37.6% Secondary + = 47.9%	None = 31.9% Primary = 29.7% Secondary + = 38.5%	None = 40.1% Primary = 23.4% Secondary & Higher = 36.5%	None = 40.9% Primary = 33.1% Secondary+ = 26.0%	None = 39.5% Primary = 13.6% Secondary+ = 46.9%
Husband's Occupation	Agriculture = 19.0% Labor = 22.0% Business = 41.5% Education-Based= 12.8% Not Working = 4.8%	14.8% 26.6% 39.2% 13.2% 6.3%	23.1% 17.4% 44.0% 12.5% 3.1%	Agriculture = 19.7% Labor = 45.3% Business = 25.5% Education-Based = 5.2% Not Working = 4.3%	15.3% 49.8% 26.5% 3.2% 5.2%	24.4% 40.5% 24.4% 7.3% 3.3%

Table 3. Descriptives for Self-Rated Religiosity Variables. Variables are organized by dimensions of religiosity as discussed above. Most variables are measured on a Likert scale [L] while a few are measured dichotomously [D] or as count variables [C].

Variable	**Bangladesh**	Muslims	Hindus	**West Bengal**	Muslims	Hindus
Self-Rated Religiosity	Min to Max (N)	Min to Max (N)	Min to Max (N)	Min to Max (N)	Min to Max (N)	Min to Max (N)
Piety [L]	-2.73 to 1.70 (902)	-3.02 to 1.63 (444)	-2.51 to 1.80 (455)	-2.46 to 1.47 (1023)	-2.62 to 1.38 (515)	-2.34 to 1.58 (508)
Religiosity relative to family [L]	-2.60 to 2.68 (902)	-2.53 to 2.47 (444)	-2.68 to 2.96 (454)	-3.17 to 3.21 (1021)	-3.30 to 3.17 (514)	-3.06 to 3.27 (507)
Religiosity relative to village	-2.52 to 2.88 (893)	-2.48 to 2.63 (435)	-2.59 to 3.22 (454)	-3.09 to 3.43 (966)	-3.09 to 3.41 (492)	-3.10 to 3.44 (474)
Importance of religious identity [L, new one]	-16.13 to 0.17 (904)	-16.33 to 0.11 (446)	-13.40 to 0.22 (455)	-4.67 to 3.11 (1023)	-5.01 to 0.85 (515)	-2.68 to 3.81 (508
Public Practice						
Religious attendance formal	-0.63 to 2.13 (906)	-0.08 to 14.13 (447)	-1.13 to 1.40 (455)	-0.70 to 1.76 (970)	-0.19 to 6.57 (462)	-1.23 to 1.14 (508)
Religious attendance all [contin/count]	-0.34 to 17.99 (906)	-0.30 to 10.05 (447)	-0.40 to 13.78 (455)	-0.22 to 5.21 (1023)	-0.29 to 3.75 (515)	-0.13 to 15.04 (508
Religious discussion	-1.16 to 0.86 (904)	-0.73 to 1.36 (447)	-1.95 to 0.51 (453)	-0.83 to 1.21 (1016)	-0.65 to 1.54 (511)	-1.04 to 0.96 (505)
Religious giving	-1.99 to 1.52 (906)	-1.84 to 1.59 (447)	-2.16 to 1.47 (455)	-1.46 to 1.51 (1023)	-1.37 to 1.40 (515)	-1.58 to 1.65 (508)
Religious activity	-0.28 to 8.58 (906)	-0.27 to 6.48 (447)	-0.29 to 7.67 (455)	-0.22 to 8.45 (1023)	-0.22 to 7.99 (515)	-0.21 to 8.99 (508)
Private Practice						
Types of home practice	-1.84 to 3.19 (906)	-1.98 to 3.22 (447)	-1.72 to 3.19 (455)	-1.44 to 3.47 (1023)	-1.71 to 3.14 (515)	-1.27 to 2.83 (508)
Frequency of home practice	-0.34 to 7.58 (880)	-0.38 to 5.60 (441)	-0.29 to 7.66 (435)	-0.12 to 28.1 (826)	-0.13 to 21.0 (456)	-0.30 to 6.90 (370)
Internal Beliefs						
Private prayer is as meaningful as public prayer	-2.87 to 0.74 (903)	-3.08 to 0.77 (445)	-2.70 to 0.72 (454)	-1.91 to 1.54 (998)	-1.78 to 1.46 (505)	-2.07 to 1.65 (493)
Importance of private prayer and meditation	-4.33 to 0.71 (904)	-4.75 to 0.62 (445)	-4.03 to 0.79 (455)	-2.20 to 1.62 (998)	-2.30 to 1.50 (506)	-2.12 to 1.77 (492)
God judges my actions	-3.18 to 0.31 (899)	-2.90 to 0.34 (443)	-3.56 to 0.28 (452)	-0.90 to 1.11 (983)	-1.14 to 0.87 (495)	-0.69 to 1.44 (488)
Religious Identity						
Importance of religion to my social activities	-5.23 to 0.77 (906)	-3.48 to 0.71 (447)	-4.98 to 0.82 (455)	-3.06 to 1.27 (999)	-3.49 to 1.16 (504)	-2.78 to 1.45 (495)
Temple/mosque most important place to form social relationships	-5.29 to 0.64 (905)	-5.27 to 0.63 (446)	-5.37 to 0.64 (455)	-3.89 to 1.57 (999)	-3.72 to 1.58 (502)	-2.68 to 1.57 (497)

My religious beliefs lie behind my whole approach to life	-6.68 to 0.73 (904)	-3.35 to 0.68 (445)	-6.25 to 0.79 (455)	-4.81 to 1.59 (984)	-5.23 to 1.45 (502)	-4.59 to 1.80 (482)
Social Relationships—Same Religion						
Most of my friends have the same religion	-2.91 to 0.34 (895)	-3.48 to 0.29 (447)	-2.53 to 0.39 (444)	-6.86 to 0.15 (1009)	-7.91 to 0.13 (509)	-6.11 to 0.16 (500)
If ill, how much would co-religionists help me	-1.77 to 1.27 (899)	-1.85 to 1.21 (445)	-1.70 to 1.33 (450)	-1.46 to 1.53 (987)	-1.53 to 1.31 (502)	-1.41 to 1.83 (485)
If faced with a difficult situation how much would co-religionists help me	-2.00 to 1.26 (900)	-2.03 to 1.22 (443)	-1.97 to 1.28 (453)	-1.52 to 1.48 (986)	-1.61 to 1.27 (501)	-1.47 to 1.76 (485)
Most people from my religion can be trusted	-0.74 to 1.47 (903)	-0.78 to 1.39 (445)	-0.71 to 1.55 (454)	--1.82 to 1.55 (995)	-1.86 to 1.47 (506)	-1.78 to 1.64 (489)
Social Relationships—Different Religion						
Most people from other religions can be trusted	-0.78 to 1.52 (895)	-0.55 to 2.22 (439)	-1.04 to 1.15 (452)	-1.12 to 1.94 (989)	-1.34 to 1.81 (499)	-0.93 to 2.15 (490)
It doesn’t matter what people believe so long as they live a moral life	-3.12 to 0.33 (904)	-2.67 to 0.40 (445)	-4.02 to 0.26 (455)	-2.99 to 1.58 (977)	-2.98 to 1.41 (493)	-3.04 to 1.78 (484)
Religious Leadership						
Religious leadership role	-0.24 to 4.13 (904)	-0.20 to 4.87 (446)	-0.27 to 3.63 (455)	-0.13 to 7.66 (1016)	-0.15 to 6.74 (511)	-0.11 to 9.11 (505)

Table 4. Regression results for the effects of self-rated religiosity variables on fertility modeled as a binary logit (1 or 2 children vs. 3 or more children). Model set 1 shows the effects of each religiosity variable on fertility controlling for religion, education, and husband's occupation. Model set 2 shows the interaction of each religiosity variable with the respondent's religion retaining the same set of controls include. All effects are odds ratios with 90% confidence intervals. Significance of results is indicated at the following p values: * = 0.05, ** = 0.01, *** = 0.001.

Variable	Bangladesh (Model Set 1)	West Bengal (Model Set 1)	Bangladesh Interactions (Model Set 2)	West Bengal Interactions (Model Set 2)
Self-Rated Religiosity	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)
How pious are you according to your own assessment? [L]	1.11 (0.96, 1.29)	1.49*** (1.28, 1.72)	0.97 (0.72, 1.31)	0.80 (0.60, 1.06)
Religiosity relative to family [L]	1.10 (0.95, 1.26)	1.26** (1.08, 1.47)	1.04 (0.78, 1.40)	1.34 (0.99, 1.82)
Religiosity relative to village [L]	1.09 (0.94, 1.27)	1.16* (1.00, 1.35)	1.16 (0.86, 1.56)	1.20 (0.89, 1.62)
Importance of religious identity [L]	1.04 (0.88, 1.24)	1.25** (1.07, 1.47)	0.74 (0.54, 1.01)	0.78 (0.57, 1.06)
Public Practice				
Religious attendance formal	1.28** (1.07, 1.54)	0.94 (0.77, 1.16)	1.42 (0.60, 3.40)	0.80 (0.38, 1.68)
Religious attendance all [Contin]	1.07 (0.84, 1.35)	1.09 (0.96, 1.25)	1.01 (0.59, 1.74	0.89 (0.58, 1.36)
Religious discussion	1.25** (1.06, 1.48)	1.17* (0.98, 1.39)	1.00 (0.71, 1.40)	1.01 (0.73, 1.40)
Religious giving	1.19* (1.03, 1.39)	1.24** (1.06, 1.45)	0.83 (0.61, 1.11)	0.85 (0.62, 1.15)
Religious activity	1.09 (0.93, 1.27)	1.09 (0.94, 1.25)	0.94 (0.67, 1.30)	0.97 (0.73, 1.31)
Private Practice				
Types of home practice	0.96 (0.82, 1.12)	1.09 (0.92, 1.29)	0.90 (0.67, 1.21)	0.75 (0.54, 1.06)
Frequency of home practice	0.93 (0.80, 1.08)	0.99 (0.89, 1.10)	0.92 (0.68, 1.24)	2.60 (0.50, 13.4)
Internal Beliefs				
Private Prayer is as meaningful as public prayer	1.06 (0.92, 1.22)	1.04 (0.89, 1.21)	1.11 (0.83, 1.49)	1.35 (0.98, 1.87)
Importance of private prayer and meditation	1.04 (0.90, 1.21)	1.28** (1.10, 1.50)	0.97 (0.72, 1.32)	0.90 (0.67, 1.22)
God judges my actions	1.07 (0.92, 1.24)	1.21* (1.03, 1.42)	0.93 (0.69, 1.24)	0.63** (0.45, 0.86)
Religious Identity				
Importance of religious identity				

Effect of religion on social activities	1.16* (1.00, 1.35)	1.24** (1.06, 1.44)	0.96 (0.71, 1.29)	1.00 (0.74, 1.36)
Temple/mosque most important place for social relationships	1.13 (0.97, 1.32)	0.97 (0.83, 1.12)	0.89 (0.66, 1.21)	1.35* (1.01, 1.82)
My religious beliefs lie behind my whole approach to life	1.07 (0.92, 1.24)	1.35*** (1.15, 1.59)	1.03 (0.76, 1.39)	1.05 (0.76, 1.46)
Social Relationships—Same Religion				
Most of my friends have the same religion	1.03 (0.89, 1.18)	1.13* (1.00, 1.28)	1.12 (0.83, 1.51)	1.28 (0.96, 1.72)
If ill, how much would co-religionists help you	0.94 (0.82, 1.09)	1.08 (0.92, 1.26)	1.16 (0.86, 1.55)	1.66** (1.21, 2.27)
If faced with a difficult situation how much would co-religionists help you	0.96 (0.83, 1.11)	1.07 (0.92, 1.25)	1.31* (0.98, 1.75)	1.54** (1.12, 2.11)
Most people from my religion can be trusted	1.03 (0.89, 1.19)	1.40*** (1.19, 1.63)	0.78 (0.58, 1.06)	0.95 (0.70, 1.29)
Social Relationships—Different Religion				
Most people from other religions can be trusted	0.92 (0.78, 1.07)	1.42*** (1.20, 1.67)	0.93 (0.67, 1.30)	1.15 (0.83, 1.58)
It doesn't matter what people believe so long as they live a moral life	1.06 (0.92, 1.23)	1.11 (0.95, 1.31)	0.88 (0.64, 1.22)	0.89 (0.64, 1.25)
Religious Leadership				
Religious leadership role (Y/N)	1.11 (0.96, 1.28)	1.00 (0.89, 1.13)	0.60 (0.35, 1.01)	0.90 (0.69, 1.17)