

Does Professed Religion Moderate the Relationship Between Women's Domestic Power and Contraceptive Use in India?

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Abstract: The aim of the present research was to determine whether religion moderates the relationship between women's domestic power and the use of family planning methods in India. It has been suggested that contraception is less extensively used by the Muslim minority than the Hindu population because domestic power is weaker among Muslim women. An analysis of women's responses in the 2005-06 India National Family Health Survey data set was undertaken to evaluate the power-contraception relationship within each of five religious groups. Women whose sterilization occurred two or more years before the survey were excluded and age, education, work for cash, number of children, and place of residence were statistically controlled. Women's overall domestic power explained contraceptive use among Hindus and Buddhists but not among Muslims, Christians, nor Sikhs; women's overall power was measured by the sum of power scores from four decision areas (own health, large purchases, purchases for daily needs, visits). Similar were the results concerning the influence of women's joint decision making about large household purchases, except that Sikhs presented a significant relationship. The minority status hypothesis cannot explain the observed differences and no meaningful pattern was discerned in the complex relationships observed between religion, women's power, demographic and socioeconomic variables, and contraceptive use. The key to understanding may be in a relevant ideological component, to be discovered, that differentiates Hinduism/Buddhism from Islam/Christianism.

Keywords: Women's household decisionmaking power, contraceptive use, Muslim, Hindu.

INTRODUCTION

Social programs increasingly use the strategy of empowering women, that is, strengthening their ability to formulate strategic choices and control resources and decisions that affect important life outcomes [1]. Some of the applications seek the enhancement of health and demographic indicators, such as the contraceptive prevalence rate (CPR). Underlying them is the expectancy of a significant relationship between the amount of power held by women and their use of contraception. The expectancy stems from the assumption that women need power to overcome husbands' opposition to family planning when they disagree on controlling fertility [2] and is reinforced by the realization that freedom of movement, use of economic resources, and the woman's habit of taking care of her own health, all components of the power construct, can promote access to contraceptive methods under any type of couple affairs [3]. Blanc found evidence that is consistent with the power-contraception expectancy when she reviewed studies on gender power imbalances that may have an impact on sexual and reproductive health, albeit the evidence was far from conclusive [4]. Subsequently, 16 Demographic and Health Surveys country studies, out of 22 reporting results, have shown monotonic increases in CPR as a function of whether the woman participates in 0, 1-2, or 3 or more decisions entailing her health care, large household purchases, purchases for daily needs, visits to family and relatives, and the like (which does not necessarily imply lack of relationship in the other

six countries). Other 16 studies have marshalled findings that, on the whole, support the contention that women's power facilitates the use of contraception [5-19]. Yet, a number of issues remain unresolved.

One of them refers to the role of religion as a moderator of the power-use relationship. The issue had an antecedent in an analysis of Bangladeshi data collected in the 1980s which revealed that Muslim women had lower levels of freedom of movement than non-Muslim women [20]. Then, in a study conducted in the late 1990s in Pakistan, India, Malaysia, Thailand, and Philippines, Mason and Smith reported that a decreasing degree of influence of husbands' fertility desires on contraceptive use, as compared to wife's influence, was observed as the country became less gender stratified, that is, presented less differentiation in the behaviors expected of men and women; however, Muslim populations of India and Thailand were free of the moderating effect of gender stratification [2]. Although the issue entails three variables (religion, power, contraception), subsequent studies have focused on partial relationships. The religion-CPR link is well established empirically. In a study conducted in two regions of India (Uttar Pradesh, Tamil Nadu) and one of Pakistan (Punjab), it was reported that being a Muslim reduced by half the likelihood of using contraception as compared to being a Hindu [17]. India's National Family Health Survey (NFHS) has produced information which is consistent with this finding; since age, education, and other demographic and socioeconomic variables are known covariates of contraceptive behavior, and Muslims are at a socioeconomic disadvantage compared to Hindus in India, such variables have been statistically controlled. An analysis of 1992-93 data (NFHS-1) [13] and two analyses of 1998-99

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data (NFHS-2) confirmed the Muslim-Hindu difference in CPR and that it was not explained by demographic or socioeconomic factors [13, 21]. In the 2005-06 survey (NFHS-3) the CPR difference emerged again; CPR was 56.3 at country level, 45.7 among Muslims, and 57.8 among Hindus [22]. On the other hand, the findings concerning the religion-power relationship have been ambiguous or contradictory. The Muslim-Hindu CPR differences observed in the India-Pakistan study coincided with lower average levels of women's power among Muslim than Hindu women [17]; however, the power differences became modest and inconsistent once region and country were statistically controlled [17, 23]. An analysis of most of the multi-country database of the Mason and Smith study revealed non-significant differences in women's freedom of movement and economic decisionmaking between Muslim women and women of other religious denominations [24]. In contrast, the 2005-06 India survey (NFHS-3) showed Muslims to be below Hindus in the percentage of women who participated in each of four actions requiring freedom of movement as well as in each of five household decisions. The differences, though small, were consistent, but possible confounders were not controlled [22]. The evidence, thus, suggests the presence of a direct effect of religion on contraceptive use rather than one moderated by religion. The moderator hypothesis, however, has not been explicitly tested.

The aim of the present study was to evaluate the hypothesis that religion moderates the relationship between women's power and contraceptive use. The research strategy was built on the assumption that the average level of women's power may be similar or different between Muslims and non-Muslims in specific settings, yet power may function in one way for Muslims and in different ways for other religious groups. Thus, the research, instead of looking at power differences between religious groups, assessed how power functions with respect to contraceptive behavior within religious groups. Another difference with most of the previous studies is the more encompassing treatment of the religion variable. The present research compared the power-contraception link of Hindus with those of various religious minorities, not just Muslims. This allowed the author to encompassingly test the minority status hypothesis, which states that the marginality, insecurity, and lack of upward social mobility of minority religious groups, rather than the ideological content of the minority religions or the associated culture, are responsible for key social outcomes [21]. Also unlike past research on the topic, the study targeted the *common core* of women's power, that is, the level of power that women sustain across household decision areas, as has been done in a number of studies already referenced in which power scores concerning women's freedom of movement, economic decisionmaking, and other decision areas were summated. But Islam is stricter in imposing sanctions to women on public movement than private decisionmaking [20]. Consequently, the research also differentiated the specific area of women's freedom of movement from those of economic choices and other private decisionmaking areas. Furthermore, different types of women's involvement in economic decisions were differentiated within each decision area considering results of a recent analysis of NFHS-3 data according to which women who made joint decisions with the husband about

large household purchases had significantly lower odds of using a modern method of contraception than did women who mainly decided alone [12]. Finally, in a country with a dominant prevalence of female sterilization, such as India, power-use relationships could express to a considerable extent associations between facts of the remote past (sterilizations performed on average several years earlier) and facts of the present (current women's power behavior). Since the assumption of the study was that women's power caused contraceptive use, women with old sterilizations were excluded from the analysis.

MATERIALS & METHODS

Setting

Containing the second largest population of the world (pop. 1,173,108,018) [25], India has a large Hindu majority (80.5%) and an important Muslim minority (13.4%, or 157,196,474), followed by Christians (2.3%), Sikhs (1.9%), and Buddhists (0.8%) [26]. India ranks 134th among the countries of the world in human development as measured by the population's life expectancy at birth, education, and wealth [27].

Data

The study took advantage of the availability of the India 2005-06 (NFHS-3) survey [22]. This was conducted by the Mumbai-based International Institute for Population Sciences with assistance from Demographic and Health Surveys (DHS), a U.S.-based global enterprise seeking to diagnose the health status of populations. DHS surveys use a multi-stage, stratified sample design and specially calculated weights to provide nationally representative estimates of variables of interest. The India survey design was delineated so that all women of India who satisfied the inclusion criteria (ever-married, 15-49 years of age) had an equal probability of being sampled. Initial target sample sizes were stipulated for each state and each of eight selected cities on the basis of the 2001 Census. The sample size targets were adjusted considering an HIV research objective. Urban and rural samples were drawn independently in each state. A two-stage procedure was followed in rural areas (villages, households) and a three-stage procedure in urban areas (wards, blocks, households); both included random sampling at the last stage. All ever-married women of reproductive age in the household were interviewed. The data set contained women's responses obtained in 35,579 urban and 73,462 rural households. Household response rate in the survey was 97.7%; women's response rate was 94.5%.

Measurements

The measures utilized were those needed and available in the data set or with a potential for development. They corresponded to the dependent (contraceptive use), independent (women's power), and moderator (religion) variables, and included five possible confounders given their known relationships with contraceptive use and/or women's power. The older the woman, the greater is the likelihood that she has already met her fertility desires and needs contraception [28]; age is also consistently associated with women's autonomy in household decisionmaking [29]. Similar is the case of parity, which in this case was operationalized as the number of living children. Education

is strongly associated with the use of family planning [30] and the level of women's domestic power [29]. Work for cash is more strongly related to power [29] and place of residence to contraceptive use [31].

Religion. Women were asked "What is your religion?". The response codes referred to Hindu, Muslim, Christian, Sikh, Buddhist/Neo-Buddhist, Jain, Jewish, and Parsi/Zoroastrian options. NFHS-3 did not specify sub-classifications of major religious denominations (e.g., Shiite, Sunni).

Contraceptive Use. Women were asked "What method are you using?". The response codes referred to female sterilization, male sterilization, pill, IUD/loop, injectables, implants, condom/Nirodh, female condom, diaphragm, foam/jelly, rhythm method, withdrawal, and others. This variable was recoded; women who said they were not using any contraceptive method received a 0 score and those who mentioned any traditional or modern method received a 1 score.

Women's Power. Respondents were asked "Who usually makes the following decisions, mainly you, mainly your husband, you and your husband jointly, or someone else?". To measure women's power, responses to *Own health*, *Large purchases*, *Purchases for daily needs*, and *Visits to her family and relatives* were considered. For each item, "husband" and "someone else" was recoded 0, "respondent and husband" = 1, and "respondent" = 2. To address women's *Overall power*, a summated score (encompassing the power scores of each area) was computed, generating a 9-point scale that ranged from 0 through 8.

Current Age in Completed Years. This variable was calculated from the century month code of the date of birth of the respondent and the century month code of the date of interview. Women were asked "In what month and year were you born?" and "How old were you at your last birthday?". Inconsistencies in responses were corrected.

Education in Single Years. Women were asked "What is the highest standard you completed?". The variable was constructed considering the educational level (primary, secondary, etc.), the grade at that level, and the number of years taken to reach that grade.

Work for Cash. Respondents were asked whether they worked in the last 12 months and whether they received cash for their work, they were paid in kind, a combination of the two, or were not paid. The two variables were combined by assigning a 0 to women who did not work during the last 12 months or worked but were paid only in kind, and a 1 to those who worked and were paid in kind and cash or in cash alone.

Number of Living Children. This is the sum of responses to questions about the total number of sons living at home, daughters living at home, sons living away from home, and daughters living away from home.

De Facto Type of Place of Residence. A 0 score was assigned to rural residence and a 1 to urban residence. This is not the respondent's own categorization, but was created based on whether the cluster or sample point number where the respondent was interviewed was defined as urban or rural.

Inclusion Criteria

Women who defined themselves as Hindu, Muslim, Christian, Sikh, or Buddhist were selected for analyses; the other minority religions had small numbers of cases in the data set and were ignored. Only formally married or cohabiting women were included in the analyses; the concept of domestic power is not relevant to widowed or divorced women. Excluded from the analyses also were sterilized women for whom the gap between the sterilization date and the date of the survey was two or more years.

Statistical Analyses

Sample Weights. Data from the NFHS-3 are self-weighted only at the domain level. Sample weights are needed to obtain precise estimates at the national level. Since the study targeted relationships rather than point estimation, the sample weights provided by NFHS-3 were not utilized. Applying them to contraceptive use would have generated a continuous variable with a bimodal distribution that would have prevented the utilization of any type of regression analysis.

Standardizations. All the predictor scores were standardized in order to transcend their different metrics (e.g., power to decide visits to family and relatives ranged from 0 through 2 while age ranged from 15 through 49). Converted into *z* scores, the common unit of measurement was the variable's standard deviation. Therefore, the odds-ratios (ORs) corresponding to these variables became more easily comparable.

Internal Consistency of Overall Power Scores. Cronbach's α was applied to calculate the internal-consistency reliability of the overall power scale within each religious group. Alpha depends on the number of items and their intercorrelations.

Effects of Women's Domestic Power on Contraceptive Use. The summated power score over decisionmaking areas served as predictor of contraceptive use in binary logistic regression analyses that also included age, education, work for cash, number of children, and place of residence as covariates. One regression was performed per religious group. Additionally, a binary logistic regression per each of the five religious groups was performed to predict contraceptive use from each of the four decision areas (own health, large purchases, purchases for daily needs, visits). The power scores (Husband alone = 0, Joint decisionmaking = 1, Wife alone = 2) were treated as levels of a factor. With the husband making the decision alone set to 1, husband autonomy was the reference of the resulting ORs for women's autonomous and joint decisionmaking. These regressions are not redundant with those entailing women's overall power. Whereas the sum of power scores captures the correlated components of women's power behavior across household areas [32], the regression of contraceptive use on the four area scores targets the specific, uncorrelated effects.

The Statistical Package for the Social Sciences (SPSS), version 17 [33], was utilized in data analysis.

RESULTS

Table 1 shows that Hindu women, on average, were younger than women of any other group and less powerful,

Table 1. Means for Contraceptive Use, Overall Power and Demographic and Socioeconomic Variables, per Religious Group

| Religion | N | Use | Power | Age | Education | Work | Children | Residence |
|-----------|-------|------|-------|-------|-----------|------|----------|-----------|
| Hindu | 42263 | .386 | 3.22 | 29.44 | 6.05 | 0.30 | 1.99 | 0.43 |
| Muslim | 9123 | .352 | 3.08 | 29.58 | 4.00 | 0.20 | 2.83 | 0.50 |
| Christian | 5182 | .292 | 4.53 | 31.68 | 6.63 | 0.43 | 2.67 | 0.39 |
| Sikh | 1385 | .524 | 3.41 | 31.22 | 7.34 | 0.14 | 1.94 | 0.31 |
| Buddhist | 678 | .420 | 4.27 | 29.63 | 6.07 | 0.32 | 1.92 | 0.42 |

excepting Muslim women. Muslim women were less educated and powerful, had a greater number of children, and presented a higher proportion living in urban settings than women of the other religious denominations. Christians were older and more powerful and exhibited a higher proportion working for cash and a lower proportion using contraception. Sikh women were more educated and more frequent users of contraception, and presented a lower proportion living in urban areas and working for cash. Buddhists had less children.

Cronbach's α was .738 among Hindus, .769 among Muslims, .617 among Christians, .640 among Sikhs, and .617 among Buddhists. These coefficients are satisfactory for research purposes. They emerged at such high levels despite the small number of items entering the sums, only four. What these coefficients indicate is a high correlation between women's power behaviors over the diverse household decisionmaking areas. The power held by Muslim women was less differentiated across decision areas while that of Christians and Buddhists was more differentiated. Table 2 presents correlations between the study variables. Age was the strongest determinant of women's power in most groups, but was unrelated to contraceptive use in most groups, too. Education, on the other hand, was more strongly related to contraceptive use than to power. Work for cash presented weak correlations with both, power and use. On the other hand, number of children and residence were importantly related to power and use among Hindus,

Muslims, and Sikhs. Hindus and Buddhists presented the highest power-contraception correlations, but differed in their pattern of correlations with the other variables. Contrariwise, Muslims and Sikhs exhibited similar patterns.

Table 3 shows, for each religious group, the ORs associated with the prediction of contraceptive use from the summated power score and the other five variables. Each OR gives the increase (if $OR > 1.000$) or decrease (if $OR < 1.000$) in the odds of using family planning as a function of a one-unit increase in the predictor. For example, the first $OR = 1.098$ indicates that the odds of a woman who is one standard deviation above the average in overall power is 9.8% greater than if she were on the average in overall power, net of the other variables included in the equation. The probability for this OR to have emerged due to sampling error is extremely small ($p < .000$) and, hence, is considered significant. The power-contraception relationship was significant only among Hindus and Buddhists. Age was a significant determinant of contraceptive use in all the groups except Buddhists; the younger the woman, the greater the likelihood of using contraception. This is explained by the control exerted upon the number of living children; otherwise, the ORs for age would have emerged with positive sign. Education was a significant determinant in all the groups and presented high ORs. In contrast, work for cash was a significant determinant of contraceptive use only among Muslims. Number of living children was associated with the highest ORs of the study in addition to being

Table 2. Correlations Between Women's Overall Domestic Power, Contraceptive Use and Five Demographic and Socioeconomic Variables, per Religious Group

| | | Hindu | Muslim | Christian | Sikh | Buddhist |
|-------------|-----------|---------|---------|-----------|---------|----------|
| Power with: | Age | .283*** | .223*** | .146*** | .349*** | .152*** |
| | Education | .127*** | .055*** | .055*** | .083** | .072 |
| | Work | .077*** | .067*** | .055*** | .078** | .050 |
| | Children | .104*** | .156*** | .056*** | .142*** | .014 |
| | Residence | .169* | .144*** | .071*** | .150*** | .035 |
| Use with: | Age | .074*** | .013 | .006 | .007 | .033 |
| | Education | .239*** | .126*** | .238*** | .141*** | .120** |
| | Work | -.020** | .035*** | .000 | .067* | -.026 |
| | Children | .143*** | .101*** | .002 | .146*** | .122*** |
| | Residence | .162*** | .093*** | .156*** | .103*** | -.009 |
| Power with: | Use | .096*** | .040*** | .016 | .007 | .095* |

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Adjusted Odds Ratios and 95 Percent Confidence Intervals from Binary Logistic Regressions in which Contraceptive Use was Predicted from Women's Overall Domestic Power and Five Covariates, Per Religious Denomination

| Religion | N | Predictor | Odds-Ratio | 95% Confidence Interval |
|-----------|-------|---------------|------------|-------------------------|
| Hindu | 40391 | Power | 1.098*** | 1.074 – 1.124 |
| | | Age | 0.777*** | 0.756 – 0.799 |
| | | Education | 1.947*** | 1.899 – 1.996 |
| | | Work for Cash | 1.022 | 0.999 – 1.046 |
| | | Children | 2.162*** | 2.096 – 2.231 |
| | | Residence | 1.218*** | 1.189 – 1.247 |
| Muslim | 8703 | Power | 1.014 | 0.908 – 1.073 |
| | | Age | 0.768*** | 0.722 – 0.818 |
| | | Education | 1.517*** | 1.435 – 1.604 |
| | | Work for Cash | 1.157*** | 1.097 – 1.221 |
| | | Children | 1.494*** | 1.420 – 1.572 |
| | | Residence | 1.170*** | 1.116 – 1.227 |
| Christian | 5100 | Power | 0.987 | 0.908 – 1.073 |
| | | Age | 0.879** | 0.811 – 0.953 |
| | | Education | 1.836*** | 1.697 – 1.988 |
| | | Work for Cash | 1.033 | 0.971 – 1.099 |
| | | Children | 1.298*** | 1.210 – 1.391 |
| | | Residence | 1.215*** | 1.135 – 1.301 |
| Sikh | 1271 | Power | 0.975 | 0.854 – 1.113 |
| | | Age | 0.715*** | 0.614 – 0.831 |
| | | Education | 1.610*** | 1.396 – 1.857 |
| | | Work for Cash | 1.161 | 0.992 – 1.359 |
| | | Children | 2.357*** | 1.826 – 2.789 |
| | | Residence | 1.157* | 1.008 – 1.329 |
| Buddhist | 657 | Power | 1.239* | 1.026 – 1.496 |
| | | Age | 0.905 | 0.748 – 1.095 |
| | | Education | 1.724*** | 1.397 – 2.128 |
| | | Work for Cash | 0.888 | 0.752 – 1.050 |
| | | Children | 1.711*** | 1.355 – 2.160 |
| | | Urbanization | 0.849 | 0.705 – 1.024 |

* $p < .05$, ** $p < .01$, *** $p < .001$.

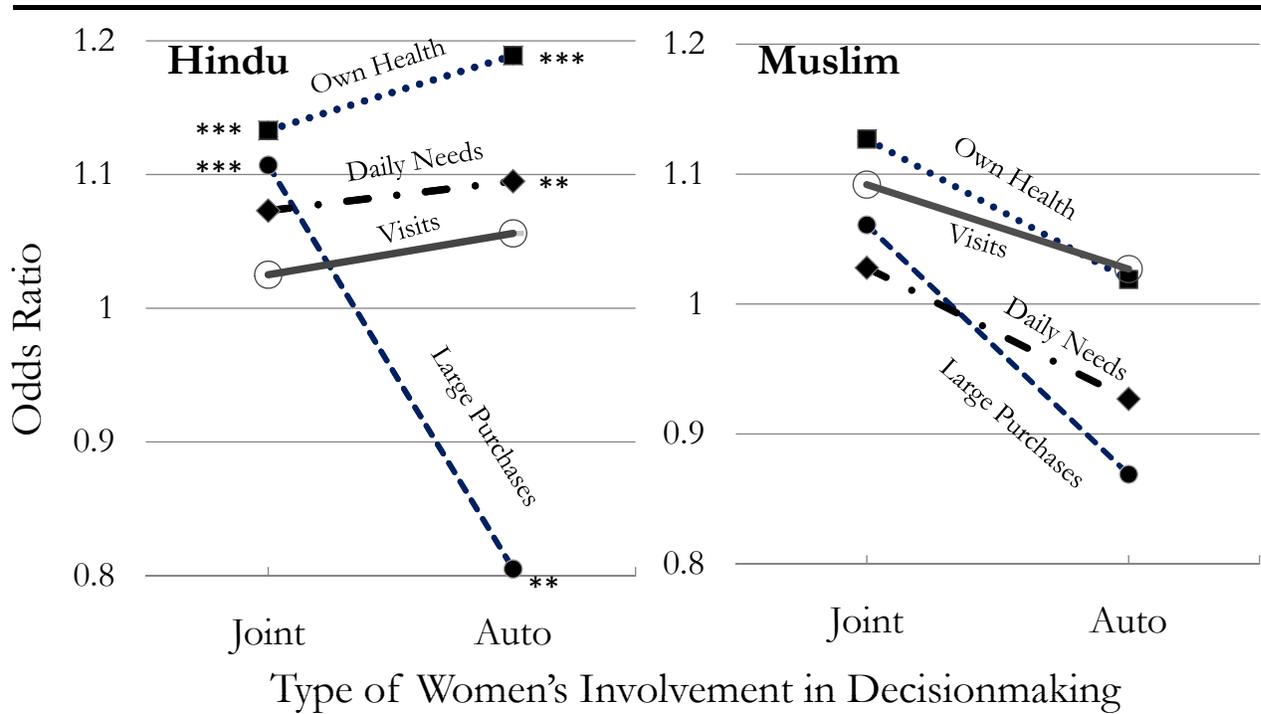
significant in all religious groups. Women living in urban settings were more likely to use contraception in all religious groups, except Buddhists.

The second type of regression analysis differentiated types of women's involvement in decisionmaking within each of the various household areas. Since the four areas were simultaneously included in the regressions, the results provide information about the specific impact of each particular area on contraceptive use, net of the effects of the other areas and the other five covariates. In this case the ORs refer to the odds of using family planning for a woman who is autonomous in decisionmaking or makes the domestic decision jointly with the husband, as opposed to the husband making the decision alone. Fig. (1) depicts the results in the Hindu and Muslim groups. The only pattern these groups shared was the opposite relationships that joint and autonomous decisionmaking in large purchases had with contraceptive use: joint decisionmaking was positively related to the outcome whereas women's autonomous decisionmaking was negatively related. This pattern was also

shared by the Christian, Sikh, and Buddhist groups (see Fig. 2). Autonomous decisionmaking presented higher ORs than joint decisionmaking in all the other areas among Hindus, while the opposite occurred among Muslims; yet, none of the Muslim ORs reached statistical significance. Christians did not present significant ORs, but Sikhs and Buddhists did, both in the area of large purchases.

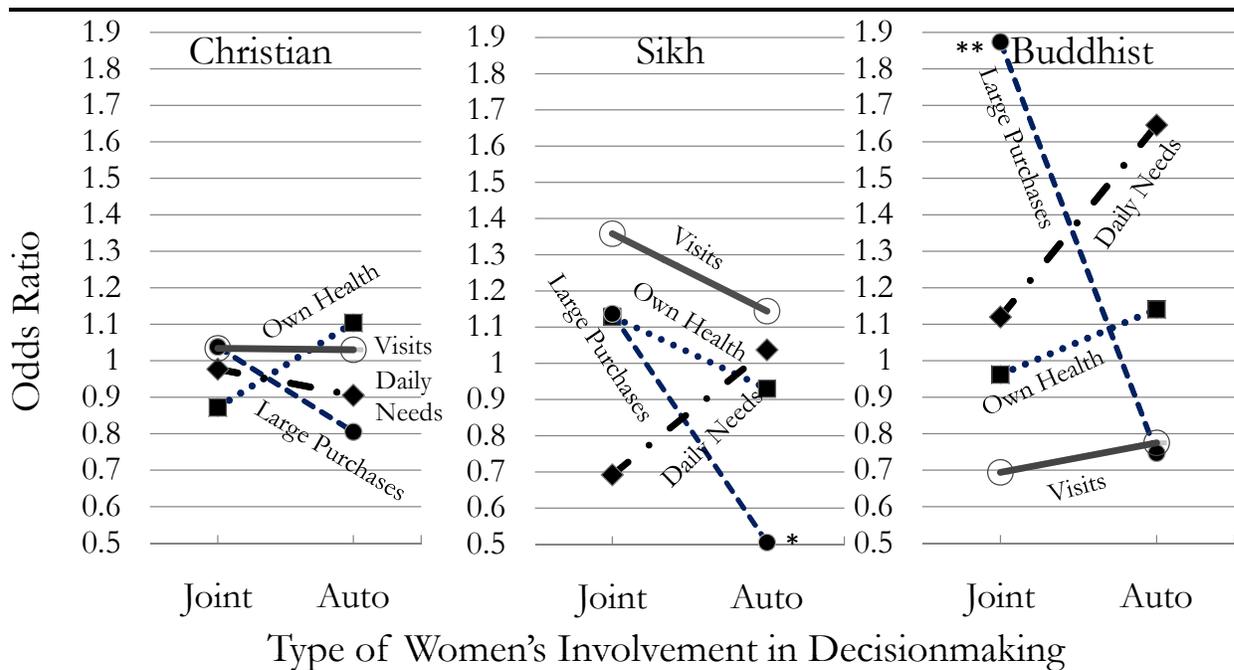
DISCUSSION

Four limitations of this study deserve discussion. 1. Professed religion was a crude measure that ignored the existence within major denominations of sub-groups with relevant differences (e.g., Protestants' and Catholics' attitudes toward contraception [34]). Nonetheless, differences between denominations (e.g., Muslims versus Christians) are greater than differences within denominations and justify treating the larger concepts as legitimate objects of study [e.g., 35]. 2. Professed religion did not take into account the woman's degree of religious compromise, a dimension of known relevance to family planning [36]. Nonetheless,



Note. The ORs are adjusted for each other household area as well as for age, education, work for cash, number of children, and place of residence.
 * $p < .05$, ** $p < .01$, *** $p < .001$.

Fig. (1). Adjusted odds ratios from binary logistic regressions predicting contraceptive use from women's joint and autonomous decisionmaking as compared to husband's autonomy, among Hindus and Muslims.



Note. The ORs are adjusted for each other household area as well as for age, education, work for cash, number of children, and place of residence.
 * $p < .05$, ** $p < .01$, *** $p < .001$.

Fig. (2). Adjusted odds ratios from binary logistic regressions predicting contraceptive use from women's joint and autonomous decisionmaking as compared to husband's autonomy, among Christians, Sikhs, and Buddhist.

members of a religious denomination, regardless of their present degree of religiosity, share values and attitudes that were shaped by a family environment that, in turn, reflected the culture associated with a religion [37]. 3. Another weakness was the pooling of different contraceptive methods into the use-non use dichotomy; the amount of power needed to get the pill and use it secretly may be smaller than that required to persuade a patriarchal husband to use condoms. But providing the reader with (mostly useless) details about the 13 possible contraception sub-groups seemed excessive. 4. Since the study did not utilize the NHFS-3's sample weight, the observed relationships could be biased in unknown ways. The weighting issue could be dismissed considering that the control exerted on the demographic and socioeconomic variables made unlikely the presence of important biases in the adjusted ORs. However, the study results were inconsistent with findings recently reported by Kishor and Gupta from an analysis of NHFS-3 data in which weighting apparently was used [12]. These investigators found that women who had only a joint say or no say in decisions about large household purchases had significantly lower odds of using a modern method of contraception than did women who mainly decided alone in this area. Virtually the opposite was found in the present study; in each religious group, the ORs for autonomous decisionmaking in large purchases were below 1.00 and those for joint decisionmaking were above 1.00. But more than a weighting problem would be needed to cause such an extreme discrepancy. In fact, Kishor and Gupta ignored users of traditional methods, did not exert control for age nor the other decisionmaking areas, controlled household wealth instead of women's work for cash, and included thousands of cases with old sterilizations in the regressions. These methodological differences fully explain the observed discrepancy.

Stemming from a within-religion analysis of the impacts of women's power on contraceptive use, the findings of this study confirmed what the between-religion evidence had merely suggested: women's domestic power is more influential determining contraceptive behavior among Hindus than among Muslims in India. The difference between these religious groups was observed at three levels of analysis. Overall domestic power was significantly correlated with contraceptive use both among Hindus and among Muslims, but the correlation was stronger among the former than among the latter. In the regression analyses, effects of overall power on contraceptive use *as well as* specific effects of autonomous and/or joint decisionmaking in large purchases, own health, and purchases for daily needs were significant in the Hindu group, but not in the Muslim group; no trace of significance was left in the Muslim group when demographic and socioeconomic variables were controlled. The Hindu relationship maintained its significance because its r was higher than the Muslim r before covariate control and because work for cash did not subtract from power-contraception covariance among Hindus while it did among Muslims.

Mishra discussed three hypotheses that could explain the influence of religious denomination on contraceptive behavior [21]. The *particular theologies hypothesis* argues that religious doctrine and ideology determine the outcome. At first sight, this does not seem to apply to the explanation of the differences observed between Muslims and Hindus in this study. First, the Quran and other Islamic sources do not contain rules on

contraception and the interpretations of the local *ulama* in India are so heterogeneous in this respect as to render useless this hypothesis [21]. Second, concerning women's role in society, Islam is neither more nor less patriarchal than other world religions, especially Hinduism and Christianity [38]. However, the particular theologies hypothesis cannot be ruled out. Hindus and Buddhists had something in common that caused power to emerge significantly related to contraceptive use in both groups. Muslims and Christians had something in common that caused power to emerge unrelated to contraceptive use in both groups once demographic and socioeconomic variables were controlled. The key may be in the historic fact that Hinduism and Buddhism originated in the Aryan population of India, whereas Islam and Christianity, which emerged from semitic societies far away, arrived from abroad many centuries later. This author, however, lacks the expertise needed to uncover the essential difference between the native and foreign religions that could explain the study findings.

The *minority status hypothesis*, stating that marginality, insecurity, and lack of upward social mobility determine the outcome, is contradicted by the findings of this study, which showed that women's power was highly relevant to contraceptive behavior among Buddhists, but not among Christians.

The *characteristics hypothesis* argues that behavioral or attitudinal differences stem from differences in demographic and socioeconomic differences existing between the religious groups. Although variables of this type were controlled in the study, a look at the differences between Hindus/Buddhists and Muslims/Christians could be useful. Hindus and Buddhists presented virtually identical average age, years of education, and number of children, as well as virtually identical proportions of them working for cash and residing in urban settings; despite such similarities, Buddhist women were more powerful and used family planning to a greater extent than Hindu women. As for the other pair, not only the demographic and socioeconomic profiles of Muslims and Christians had little in common, but Christians used contraception less frequently than Muslims despite being more powerful. Sikhs led the other groups in family planning use and presented the odd combination of being the most educated and less urban of the groups.

Since the Muslim results can be meaningfully described only in the Indian context, any generalization of the findings outside India would be unjustified. Lesser use of contraception by Muslims than Protestants has been reported in a southern region of Ethiopia [10], but failures to document differences in contraceptive use between Muslims and non-Muslims have been reported in Egypt [9] and between Muslims and Catholics in Malawi [35]. The most detailed study on the issue in Africa targeted fertility rates and showed that differences in socioeconomic and demographic characteristics accounted for most of the fertility differences found between Muslims and non-Muslims in West African countries where Muslims were a minority; when Islam was the leading religion, no significant differences were observed [39]. A study in rural Ghana also reported the disappearance of religious variance in contraceptive behavior when socioeconomic factors were controlled [40]. The relationship between religion and women's power, however, has not been addressed in Africa.

CONCLUSION

Once demographic and socioeconomic influences are discounted, women's overall domestic power explains contraceptive use only among Hindus and Buddhists of India; a specific type of women's involvement in decisions in a particular household area, joint decisionmaking with the husband to purchase large items, increases the use of family planning methods among Hindus, Buddhists and Sikhs. On the other hand, women's domestic power is irrelevant to contraceptive behavior among Muslims and Christians. Neither the minority status nor the characteristics hypotheses help to understand the observed religious differences. The particular theologies hypothesis could on the basis of a relevant difference between Aryan and semitic religions, yet to be discovered.

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