Chapter 5
Fertility Transition and Differences Between the Hindu and Muslims: A Case of North 24 Pargana District, West Bengal

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5.1 Introduction

Religious affiliation is an important characteristic feature of the people in man countries that has immense significance in their socioeconomic and political lif (Balasubramanian, 1984). It is also a determinant of fertility behavior of the peopl at the forefront of demographic research at any time (Akintunde et al., 2013 Religion is frequently cited as a significant factor that influences the fertility deci sion of the people (Moulasha & Rao, 1999). So, demographic researchers hav always been interested in finding out the correlation between religious affiliatio and fertility. Fertility differentials based on religious affiliation of the people hav been observed in developed and developing countries (Bhagat & Praharaj, 2005). I the demographic literature, several reasons have been put forward to explain th differentials in fertility by religion (James & Nair, 2005).

In India, fertility estimates from various sources have found that, among th major religious groups (Knodel et al., 1999), Muslims had the highest fertility an the Sikhs had the lowest (Census, 2011). In between these two extremes were th Hindus and the Christians. For the country as a whole, the Muslim fertility ha always been higher than Hindu fertility and Christian fertility is lower than th Hindu fertility. However, because of the cultural, economic, and geographical diver sity, the magnitude of regional variations in fertility was large in India (Bankol 1995). Populations of various religions were not evenly distributed across state: and the religious differentials observed at the national level might be due to region:

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or spatial variations rather than religion factor (Jeffrey et al. ? this context it would be interesting and rewarding to assess religious fertility differentials in the context of the spatial variations of the population (Dharmalingam, et al. 2005). Most of the studies on religious fertility differentials in India were centered on the fertility difference between Hindu and Muslims (Nasir, 2012). This research took place in North 24 Pargana District, West Bengal, India. According to the National Family Health Survey Report (NFHS) 4, fertility was much higher among the Muslims as compared to the Hindus. The fertility rate was low for Hindus (2.65), but for Muslims the TFR was relatively high (3.09). NFHS-IV data also show the same pattern of fertility differentials among the three groups, total fertility rate of low for Hindus and that of high for Muslims.

The study's objectives were to investigate the differences in fertility rates and patterns between the two religious groups and to pinpoint the variables that contributed to these differences. The results showed that the fertility rates between the Muslim and Hindu groups were significantly different. It was discovered that Muslim women's total fertility rate (TFR) was greater than that of their Hindu counterparts. Moreover, it was shown that the most important variables influencing fertility trends in both societies were the age at marriage and the degree of schooling. The study sheds light on the necessity of implementing targeted policy changes to address the disparities in fertility between the two populations in the district.

5.2   Study Area

North 24 Parganas, also known as 24 PGS (N), is a district located in southern West Bengal, India. The district headquarters of North 24 Parganas is Barasat. With a population of 10,009,781 as per the 2011 census, it is the most populous district in West Bengal and the tenth-largest district in the state in terms of area. It is also the most populated district in India since 2014. The district has a population density of 2463 inhabitants per square kilometer (6380/sq. mi) and a population growth rate of 12.86% between 2001 and 2011. The sex ratio in North 24 Parganas is 949 females per 1000 males, and the literacy rate is 84.95%. Scheduled Castes and Scheduled Tribes make up 21.67% and 2.64% of the population, respectively. The district has 35 police stations, 22 development blocks, 27 municipalities, 200 gram panchayats, and 1599 villages (Table 5.1).

Studies on the shift in fertility and the distinctions between Hindus and Muslims have been conducted in the West Bengal, India, North 24 Parganas District. Hindus and Muslims have different reproduction rates, which have been linked to variations in socioeconomic position, educational attainment, and traditional religious and cultural practices. These characteristics have been studied in depth using a variety of data sources, and the results have implications for the policies and programs intended to advance reproductive health and family planning in the area and beyond.

Table 5.1 Administrative setup of the study area

District	Subdivision	Block and Municipalities (M)
North 24 Parganas	Bongaon subdivision	Bagdah, Bongaon, Bongaon (M), Gaighata
	Barasat subdivision	Habra I, Habra II, Habra (M), Gobardanga (M), Ashoknagar Kalyangarh (M), Barasat I, Barasat II Barasat (M), Madhyamgram (M), Amdanga, Deganga, Rajarhat Rajarhat-Gopalpur (M)
	Barrackpur subdivision	Kanchrapara (M), Halisahar (M) Barrackpur I, Naihati (M) Bhatpara (M), Garulia (M), North Barrackpur (M),Titagarh (M) Khardah (M), Barrackpur, Barrackpur II, Panihati (M) New Barrackpur (M), Kamarhati (M) Baranagar (M). Dum Dum (M) South Dum Dum (M), North Dum Dum (M)
	Bidhannagar subdivision	Bidhannagar (M)
	Basirhat subdivision	Baduria, Baduria (M), Haroa Minakhan, Swarupnagar, Hasnabad Taki (M), Hingalganj, Sandeshkhali I, Sandeshkhali II, Basirhat I, Basirhat II, Basirhat (M)

5.3   Objectives

(i) To understand the differentials of fertility among the Hindus and Muslims.
(ii) To know the socioeconomic and demographic factors responsible for the fertility differentials among these two religious' groups.

5.3.1   Research Questions

(i) Is fertility is higher among the minorities compared to the majority?
(ii) Has there any relation between the socioeconomic factors (age at marriage, educational level, income of family, and occupation on fertility. on fertility)?

5.3.2   Data and Methodology

Religious differentials in fertility have been observed in a large number of countries. Demographic estimates carried out by various agencies in India also come across the same observation, but this transition has not been uniform across region and among the three concerned religious groups. In the present study, an investigation has been carried out to understand the socioeconomic, religious, and geographic factors that determine fertility differentials among the Muslims and Hindu in North 24 Parganas, West Bengal.

5.3.3 Types and Tools of Data

The secondary data for the study are collected from the National Family Health Survey IV (2015–2016), which covered various aspects of fertility and family planning in all the states of India.

In order to examine the levels, trends and differentials of fertility by religion, data from recent censuses, Sample Registration System 2018, and other surveys will use. The International Institute for Population Sciences (IIPS) in Mumbai was then given the responsibility of leading the NFHS-III and IV surveys, which were carried out in 2015–2016, by the Ministry of Health and Family Welfare (MOHFW). Offering information on fertility, family planning, infant and child mortality, reproductive health care, child health care, nutrition of women and children, and the standard of health and family welfare services were important objectives of NFHS-IV. Another objective was to examine this information in the context of related socioeconomic and cultural factors. However, information regarding various denominations or sects within a religion was not obtained in the survey. It collected basic information on age, sex, marital status, relationship to the head of the household, education, and occupation. This was used to identify the eligible respondents for the questionnaire.

The study's questionnaire included 10 distinct topics. The first box was devoted to background information, such as location, age, marital status, education, and job status. Additionally, questions on the traits of the respondents' wives were posed. The second section, reproductive behavior and goals, gathered information on each woman's current pregnancy status, planned future pregnancies, and reproductive behavior. The effectiveness of family planning and healthcare services was evaluated in the third area, care quality. The fourth category, knowledge and use of contraception, gathered data on the justifications for not using a method of contraception, intentions toward future usage, and other relevant aspects. The fifth sector was devoted to family planning resources.

5.3.4 Sample Size

A total of 814 households have been selected for the primary survey. The total Muslim population is 1,041,925, and total Hindu population is 3,230,488. To get the proper result, 407 households were selected from the Hindu female population and 407 households were selected from Muslim female population based on arbitrary method. Barasat and Basirhat subdivisions were chosen based on the stratified random sampling based on the higher concentration of the Hindu and Muslim population.

Table 5.3 Total Fertility Rate Among the Hindu and Muslim Based on NFHS-III and NFHS-IV

Religious group		S-IV
Hindu	2.6	1.9
Muslim	3.4	2.7

Source: National Family Health Survey III and IV (2005–2006 and 2015–2016)

for North 24 Parganas and for 2.7 children for Muslims, which was also declined but compared to the Hindus the rate is quite higher among them.

5.4.2 Factors Influencing on Fertility Differentiation Between Hindu and Muslim

The immediate factors that have an immediate impact on changes in fertility are known as proximal determinants of fertility. By having an impact on proximal variables, non-proximate determinants have an impact on fertility. The following are the factors employed in the current study: current age of ladies who have never wed their age at their first union, where they live, and their religion, ethnicity, education lifestyle, and desire for contraception region and profession.

5.4.3 Age at First Marriage

In Islamic viewpoint, the girl should eligible for marrige after the starting of ther puberty. The Special Marriage Act of 1954 (Maertens, 2013) and the Prohibition of Child Marriage Act of 2006 both declared that women have 18 and men have 21 years old, the legal age of their marriage, to consent to the marriage (Hajna 1953), whereas for the Hindu the age of the marriage lies between above 18.

Muslim marriage rate in lower age is quite higher than comparatively high marriage age, and opposite situation has been seen for Hindus. In North 24 Parganas there were variances in the average age of marriage, though. Compared to Hindus Muslim married at a younger age between 15–20 and 21–25. According to th study, it has been seen the mean CEB also varied among the two major region based on their marriage (Table 5.4). So, marriage is one of the major reasons that th number of children has increased.

5.4.4 Education Level of Women

Female education has been found to have a favorable relationship with fertility u to 5.3 years of schooling and a negative relationship thereafter until replacemer fertility is reached at the graduate level of education. Education is regarded as

Table 5.4 Age at the Time of Marriage and Mean CEB

Age at the time of marriage	Hindu (Percentage of respondent)	Percentage of live birth	Mean child ever born (CEB)	Muslim (percentage of respondent)	Percentage of live birth	Mean child ever born (CEB)
15–20	1	1	0.13	17	13	2.71
21–25	25	27	3.21	52	50	3.89
26–30	45	40	3.52	28	22	3.55
31–35	17	9	2.62	8	10	2.56
>35	12	2	2.15	4	5	0.26

Source: Calculated by researcher based on primary survey, 2021

Table 5.5 Education level of women and mean child ever born

Education level	Hindu (number of respondents)	Live Birth	Mean CEB	Muslim (number of respondents)	Live Birth	Mean CEB
Illiterate	87	12	2.12	162	32	2.65
Primary	92	25	2.41	111	24	2.89
Upper primary	47	19	1.54	45	17	1.72
Madhyamik	71	17	1.23	51	24	2.45
Higher secondary	50	13	1.14	32	12	1.26
Graduate	37	15	1.21	20	12	1.26
Postgraduate	14	7	0.82	5	9	1.11
Research area	9	1	0.25	6	5	0.96
Total	407	117	2.12	407	135	2.93

Calculated by researcher based on primary survey, 2022

potent instrument that aids in the development of a society of equality, autonomy, independence, awareness, justice, and decision-making capabilities as well as weapons to defeat the long-standing societal stigmas that have failed to acknowledge the role of women in society. Numerous studies have found strong correlations between education, socioeconomic status, and demographic characteristics and mother health, child health, and reproductive outcomes, which has resulted in a decline in infant mortality and maternity problems.

Educational level is one of the major social parameters that influence the fertility. Based on the data from the respondent, it has been noticed that there is a tendency of high birth among the illiterate couple. There 87 women among Hindus who given 12 live birth on the other hand for 162 Muslim women give 32 live birth (Table 5.5). Based on the increasing level of the education, the live birth is also varying and declining for both, but the situation is quite better for the Hindus than Muslims. Among the Hindus and Muslims, the table also shows that educational background and fertility index are inversely proportional. In general, educated women are more

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Table 5.6 Computation of the r-value for different categories

Religious group	No of couples	Value of r	Value of coefficient
Hindu	407	−0.89	−0.74
Muslims	407	0.76	0.66

Source: Computed by the data collected from field survey, 2022

interested in the size and composition of their families, but for the Muslims high mean CEB also noticed among the women who are graduate as well. May be there is another factor that also influences the fertility among the Muslim.

5.5 Income of Family and Fertility

Unearned income and assistance payments raise family size, making children cheaper, which is an essential concern given the sample's character. Smaller family sizes are associated with wealthier societies. The percentage of children per woman decreased from 5.9 in 1960 to 2.5 in 2012 and 2.4 in 2014 (Morgan et al., 2002). The average number of births per woman in India, or the total fertility rate, has considerably declined over time. The rate was 5.9 in 1960, but it fell to 2.5 in 2012 and then to 2.4 in 2014. The total fertility rate—the average number of births per woman— rose as India's yearly per capita income increased to Rs 72,889, however (Haque & Patel, 2016).

Karl Pearson's linear correlation has been applied here to understand the hypothesis that there is a significant relation between income of family and fertility among the Hindu and Muslim, where income of the family has been considered as independent variables and fertility has been considered as dependent variables.

The above data show perfect negative correlation between income and fertility for Hindus and positive correlation between income and fertility among the Muslims (Table 5.6). The high-income group people have low fertility for Hindus and high fertility for Muslims, which means that income can decline the fertility among Hindus. In the case of lower-income group among the Muslims, it is also positive, which means the birth rate is higher as well. So, there is another factor that tends to create the differentiation among the variation of fertility among Hindu and Muslims.

5.6 Occupational Status of Women

The percentage of women in India's labor force who are either employed or actively seeking employment (LFPR) has not only been steadily falling over the past several years, much below the 47% worldwide average. According to a World Bank analysis, India's rate of female workforce participation has decreased over time. The rate was 31.9% in 1983, more than 26% in 2005, and 20.3% in 2019 before further

declining. The 2011 census estimates that there are 149.8 mill[...]en in India overall. Even while most women contribute financiall[...] lot of it goes unrecorded. Less than 5% of women are unemployed, just 25% of women are employed, and only 25.3% of women are in the labor force overall. This number has steadily decreased over the past 10 years. According to occupational type, the Indian employment shows that more women than men are salaried or wage earners in metropolitan regions. Female self-employed involvement is higher than male engagement in rural regions. In rural regions, employment in casual work is virtually equally distributed between the sexes; however, in metropolitan areas, male employment is slightly greater, but the rate of Muslim work participation is low in India and the different states, which is also a great cause to affect the fertility. In the 50th round of the National Sample Survey, conducted in 1993–1994, more than 36% of Hindu women and just 16% of Muslim women reported having jobs. Only 101 of every 1000 women in the labor force were Muslims, according to the 66th round of the National Sample Survey Organization (2009–10).

The results also show that women who work in the home have the greatest CEB, which are 2.56 and 3.65, respectively, for Hindu and Muslims. The mean CEB is quite higher among the Muslims compared to the Hindu. For those who are in primary sector, the mean CEB is 1.89 and 2.89 for Hindu and Muslim, respectively, so for both cases the situation has the same. The Muslim mean CEB is higher than the Hindus. It is going the same way for the other cases also. Of course, based on the development of sectors the mean CEB has declined, but Hindu fertility rate has declined higher than the Muslims (Table 5.7). This situation has been noticed among the Muslims because Indian Muslims said that accepting a woman's earnings is "haram" and banned under Sharia law in the study area; also, there has been a conception about this that the women are not allowed to work as it is not accepted by their husband and family. It is one of the reasons to the increasing fertility rate among the homemaker compared to the other profession. There have also other barriers that affect the women empowerment and create the high fertility among the women who are not going to job or doing any outsight work.

Table 5.7 Occupational status of women and mean child ever born

Type of occupation	Hindu (number of respondents)	Live birth	Mean CEB	Muslim (number of respondents)	Live birth	Mean CEB
Home maker	179	72	2.56	210	75	3.65
Primary sector	32	22	1.89	74	25	2.89
ICDS and Anganwadi	89	49	2.54	35	12	1.72
Small farm worker	52	37	1.51	75	65	2.72
Teacher	40	13	1.14	3	1	2.12
Other government sectors	12	3	1.69	7	2	1.59

Source: Calculate by researcher based on primary survey, 2022

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5.7   Findings

This study looked at the fertility difference of Hindus and Muslims in India, as well as the reasons why Muslims had greater fertility rates. Although fertility decline was remarkably similar among Muslim and Hindu women, Muslim women will need more additional years than Hindu women to reach replacement level fertility of 2.1 children per woman in the future if this fertility patterns among Hindus and Muslims continue. It is also found that not only religious factors, other than the socioeconomic circumstances of religious group members that affect their reproductive behavior. There is a claim that one of the factors contributing to Muslim women's greater level of fertility is the fact that they marry at a younger age than Hindu women. It also discovered that there was a 0.83 children per woman reduction in the fertility gap between Muslims and Hindus. This indicates that Muslim women want to have substantially more children. For instance, according to the NFHS-4, roughly 16.21% of Muslim women and 0.9% of Hindu women who replied indicated they did not utilize family planning methods at the time of the survey because it was against their faith.

5.8   Conclusion

Fertility is one of the major parameters that influence the demography overall. Based on the religious appearance, it is varying among the different groups. There are several parameters like education, occupation, age at marriage, reproductive health, and family income, and all these affect the fertility. Regarding the respondent's age, use of contraception, and religious affiliation, the relationship is favorable. The data also demonstrate the significant regional influence on fertility. The age, education, occupation, and way of life of the respondent, among other factors, have a big impact on the fertility transition. According to the question arising from the current study, variances in religious fertility are brought about by socioeconomic factors and variations in the geographic concentration of various religious groups. The number of children born is not determined by the socioeconomic makeup of the religious groups but rather by the area in which they reside. Notwithstanding the fact that Muslims in the study area have higher fecundity than Hindus do. The MECB also varied based on individual parameters as well. Yet, because of the complexity of the connections between fertility and spatial dimensions, it is still unclear how these connections affect differences in religious fertility. Further study is necessary in this regard.