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Son Preference-A resonance of traditional societal value: Parental Voices from Nabadwip Municipality, West Bengal, India

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Abstract: Son preference remains an important component to shape demographic trend and cultural reality in the country despite its socio-economic advancement. The research explores the prevalence, determinants, and consequences of son preference among residents of Nabadwip Municipality, West Bengal, through primary data collection from 100 participants. The adopted research methodology is a combination of qualitative and quantitative approaches, which include descriptive statistics, chi-square tests, odds ratios, and logistic regression analysis. The findings reveal a consistent but verities in dimension on son preference and related complex opinion of parents. While a majority (56%) favored balanced gender distribution in their family, 28% had a greater preference for male children, as also evidenced by the existing Child Sex Ratio of 909 girls to every 1000 boys. Education turns out to be the most important variable as higher education level tends to decrease gender bias. On the contrary, low socio-economic classes tend to exhibit son preference. Further, this research indicates that there is an influence of son preference on fertility practices such as delayed use of contraception and following the 'stopping rule'. Issues of lineage, old age security, and dowry continue to drive cultural influences in this regard. Although knowledge of gender equity programs is fairly high, their effects are rather minimal in terms of changing existing mindsets.

Index Terms - Son Preferences, Gender equity, old age security, West Bengal.

I. INTRODUCTION

Son preference is a global phenomenon with significant demographic, cultural, and socio-economic implications. It is particularly pronounced in many Asian, African, and Middle Eastern societies, where patrilineal inheritance systems and patriarchal traditions assign greater value to male offspring (Croll, 2000). In East Asia, historical evidence from China, South Korea, and Taiwan shows sex ratios at birth rising above 115 male births per 100 female births during the late 20th century, largely due to the interaction of strong son preference and the availability of prenatal sex determination technologies (Guilmoto, 2012; Park & Cho, 1995). China's one-child policy intensified this trend, as parents sought to ensure that their single child was male, leading to millions of "missing" girls (Sen, 1990). Globally, the United Nations Population Fund (2020) estimates that more than 142 million girls are "missing" due to sex-selective practices, neglect, and excess female mortality, underscoring the scale of the issue.

In India, son preference is deeply rooted in patriarchal social structures and reinforced by economic and cultural factors (Das Gupta et al., 2003). Miller's (1981) ethnographic research in rural North India revealed the systematic neglect of daughters in nutrition, medical care, and parental attention, driven by dowry obligations, inheritance customs, and expectations of old-age support from sons. The introduction of ultrasound technology in the 1980s facilitated prenatal sex selection, contributing to a decline in the child sex ratio from 962 in 1981 to 945 in 1991 (Sudha & Rajan, 1999). Clark (2000) and Arnold et al. (1998), analysing NFHS data, confirmed the prevalence of the "stopping rule," where couples without sons continued childbearing until the desired number of male children was reached. Declining fertility rates in India have not necessarily reduced gender bias; instead, they may intensify investment in sons (Bongaarts, 2013). Das Gupta (1994) found that in Punjab, daughters born at higher birth orders faced greater nutritional and healthcare neglect, leading to higher mortality. Within West Bengal, while the state performs better than many northern states in terms of sex ratio, evidence suggests that subtle but persistent son preference continues to shape reproductive behaviour and family decision-making. Bose (2016) documented a pro-male bias in educational investment, particularly among low-income households, with boys receiving more resources than girls. Mukherjee and Sinha (2009) reported that in Hooghly district, mothers with at least one son were significantly more likely to adopt contraceptive methods, while those without sons had higher fertility intentions. Ethnographic studies highlight the influence of cultural traditions on reproductive preferences in West Bengal. Chattopadhyay (2018) noted that in many Bengali Hindu families, sons are preferred for performing funeral rites, inheriting property, and ensuring financial security for parents. Pal and Lahiri-Dutt (2009) found that in rural West Bengal, agricultural families placed particular value on sons for their perceived role in labour and family lineage continuity. In urban and semi-urban areas such as Nabadwip Municipality, where religious identity is strong and socio-economic diversity is high, these cultural norms often intersect with modern reproductive choices, making the phenomenon complex and context-specific.

II. Objectives of the Study

The primary aim of this research is to examine the prevalence, determinants, and implications of son preference in Nabadwip Municipality, Nadia District, West Bengal. The specific objectives are:

- a. To portray the present situation of prevalence of son preference of the studying urban space
- b. To analyze the factors associated with the event as principal agent
- c. Understanding the prominent impacts of this preference on fertility behaviour and gender right
- d. To examine the role of government policies and local initiatives in nurturing the hidden culture in urban society

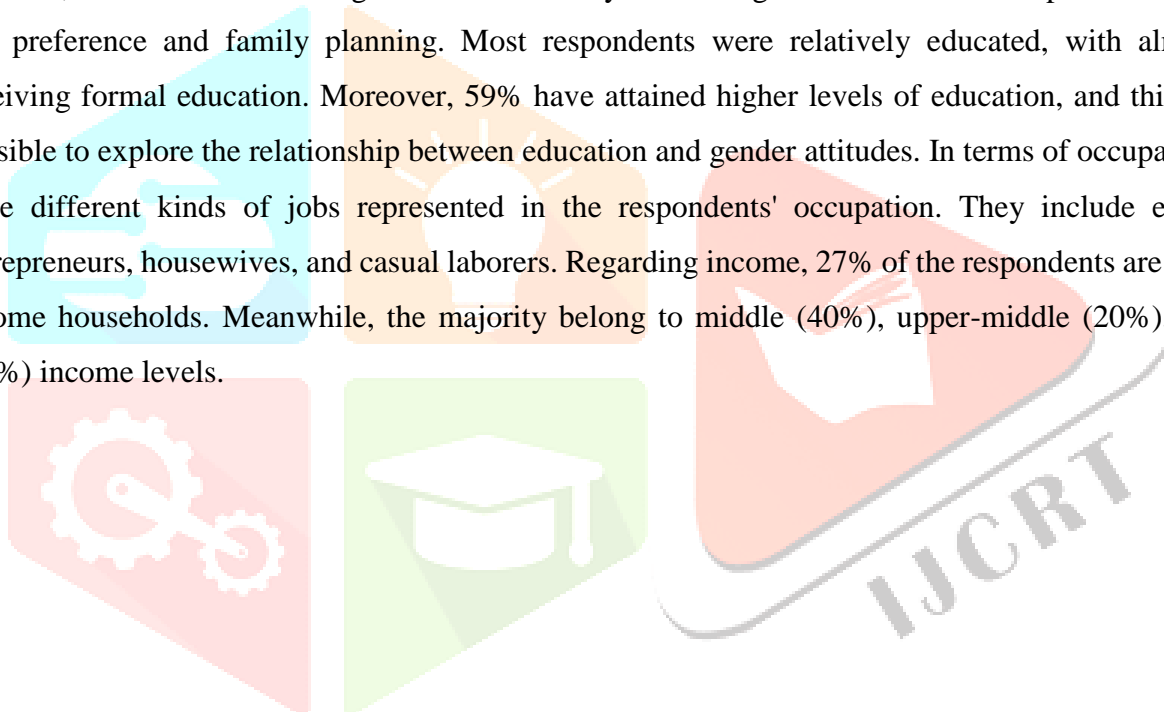
III. Nabadwip Municipality: A Case Study

Nabadwip Municipality, located in the Nadia district of West Bengal, India, is a historically and culturally significant urban settlement. Administratively, the municipality is divided into 24 wards and functions as an important religious, educational, and commercial hub in the region. Historically, Nabadwip is renowned as the birthplace of Sri Chaitanya Mahaprabhu, the 15th-century saint and social reformer whose teachings

played a central role in the Bhakti movement (Banerjee, 1995). According to the **2011 Census**, Nabadwip Municipality had a population of 125,543, with males comprising 52% and females 48% of the total population. The literacy rate was recorded at 85.21%, which is higher than the state average of 76.26% (Census of India, 2011). From a demographic research perspective, Nabadwip presents an important case study for examining son preference in an urban–semi-urban context. Its combination of traditional cultural norms, relatively high literacy levels, and low fertility trends creates a setting where modern demographic transitions intersect with persistent patriarchal values.

3.1 Population and Sample

The socio-demographic features of the study are characterized by 100 married respondents from Nabadwip Municipality with equal gender representation (50% men and 50% women). In addition, a large percentage of the respondents belong to the reproductive age group. About 47% are aged 25-40 years, while another 33% are within 41-55 years. A minority of the respondents (12%) fall into the age category of 18-24, and 8% of them are aged between 56-65 years. This gives both current and past information on son preference and family planning. Most respondents were relatively educated, with almost 75% receiving formal education. Moreover, 59% have attained higher levels of education, and this makes it possible to explore the relationship between education and gender attitudes. In terms of occupation, there were different kinds of jobs represented in the respondents' occupation. They include employees, entrepreneurs, housewives, and casual laborers. Regarding income, 27% of the respondents are from low-income households. Meanwhile, the majority belong to middle (40%), upper-middle (20%), and high (13%) income levels.



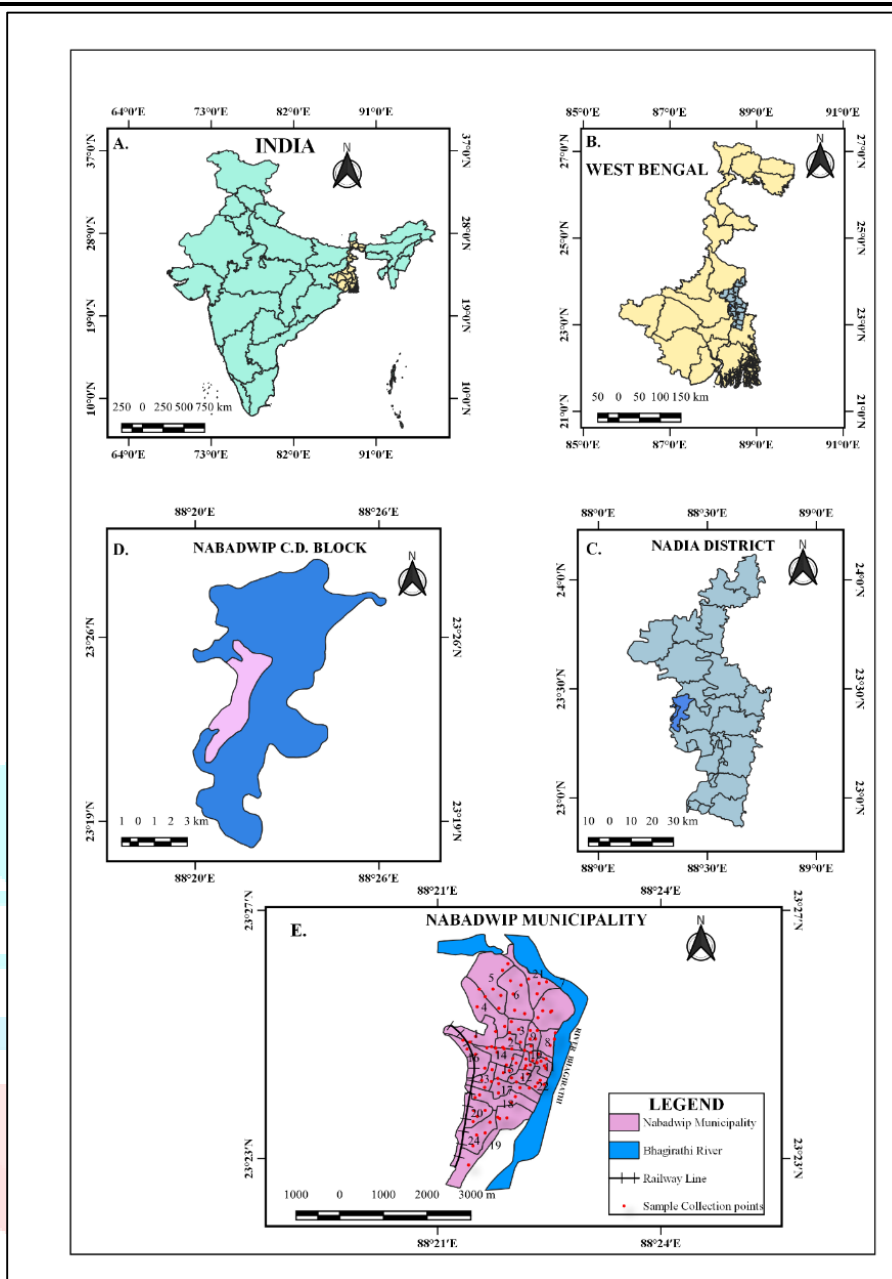


Fig-1: Location Map of the Study Area

3.2 Data and Sources of Data

The study includes **primary data collection** through surveys from Nabadwip Municipality, West Bengal, India and **secondary data** from census reports.

3.3 Research Methodology

This study employs a **mixed-methods approach**, combining both **quantitative and qualitative research techniques** to examine son preference and gender imbalance in Nabadwip, a semi-urban area of West Bengal. The methodology includes **primary data collection** through surveys as well as **secondary data analysis** from census reports. A **descriptive and exploratory research design** has been adopted to investigate the causes and manifestations of son preference in Nabadwip. The religious and economic diversity of Nabadwip further contributes to the complexity of gender-based attitudes, necessitating a detailed investigation. The study primarily relies on **primary data collected through structured household surveys** conducted among **100 respondents**. The respondents were selected using a **stratified random sampling technique** to ensure representation across different socio-economic groups, including

variations in caste, religion, education, and income levels. Data was collected using a structured questionnaire administered through face-to-face interviews. **Informed consent** was obtained from each participant, and strict measures were taken to ensure the anonymity and confidentiality of their responses. Participation was entirely voluntary.

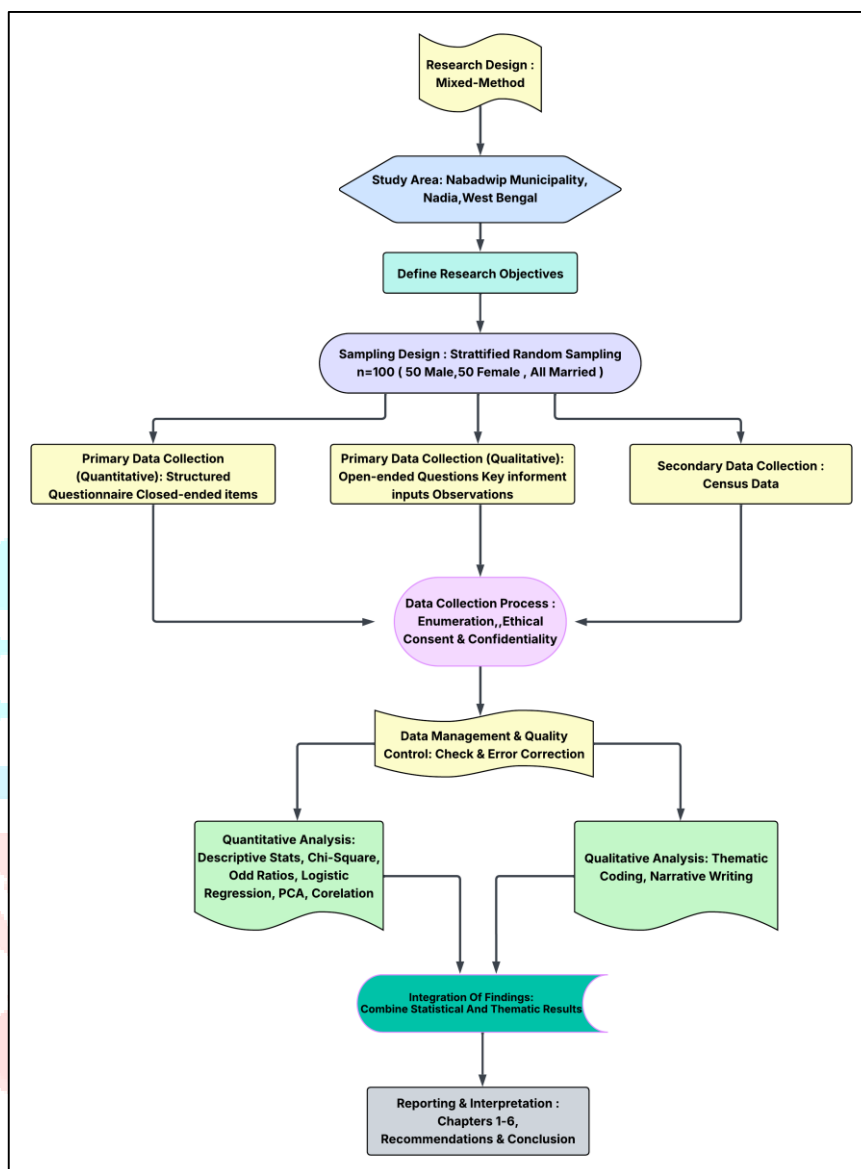


Fig-2: Flow Chart of Methodology

3.4 Prevalence and Perceptions of Son Preference in Nabadwip

The Objective 1: "To trace out the prevalence of son preference in Nabadwip" presents the empirical findings pertaining to the prevalence and various manifestations of son preference among the surveyed population in Nabadwip Municipality. Drawing primarily from the quantitative data collected through structured questionnaire items and enriched by qualitative insights from open-ended responses.

3.4.1 Expressed Family Composition Preference

Respondents were asked about their ideal number of sons and daughters. Across the 100 respondents, the total desired number of sons was **93** (mean = 0.93 per respondent), while the total desired number of

daughters was **75** (mean = 0.75 per respondent). Among respondents, 56% preferred equal numbers of sons and daughters, while 28% preferred more sons and 16% preferred more daughters. The Son Preference Index (+0.18) indicates a slight bias toward sons. Overall, despite dominant claims of equality, a notable proportion still favours sons, which may influence reproductive decisions.

3.4.2. Preference for a Single Child

Older age groups (40+ years) and respondents with lower educational qualifications (illiterate or primary) exhibited a stronger preference for a son as their only child compared to younger and more educated counterparts. To investigate the role of education in influencing attitudes toward gender preference, a cross-tabulation was carried out between **educational qualification** and **preferred child gender** (Son, Daughter, No Preference). The goal was to identify whether educational attainment significantly affects these preferences. **strongest among the illiterate and primary-educated groups**. As education increases, there is a **marked rise in daughter preference and gender neutrality**, with **higher education levels showing the highest rates of non-son preference**. To determine whether the observed relationship is statistically significant, a **Chi-square test of independence** was conducted. **Null Hypothesis (H₀):** There is no association between educational qualification and gender preference. **Alternative Hypothesis (H₁):** There is an association between educational qualification and gender preference. **Chi-square Test Results: Critical χ^2 value at $df = 8, \alpha = 0.05 = 15.51, \chi^2 = 16.30 > 15.51$.** The results show a significant association between educational qualification and gender preference ($p < 0.05$). Lower-educated individuals tend to prefer sons, whereas higher-educated respondents are more likely to have no gender preference or even prefer daughters. Among the highly educated group, only 25.4% preferred sons, while 45.8% reported no preference. Overall, higher education is linked to more egalitarian gender attitudes and reduced son preference.

3.4.3. Willingness to Continue Childbearing After Two Daughters

Educational Qualification	Son (%)	Daughter (%)	No Preference (%)	Row Total (n)
Illiterate	5	1	0	6
Primary	3	0	1	4
Secondary	7	4	3	14
Higher Secondary	8	6	3	17
Higher Education	15	17	27	59
Overall Preference	38	28	34	100

Table -1: Cross-tabulation of Child Preference by Educational Qualification (n = 100)

Respondents were asked whether they would have another child if their first two children were daughters. Out of 100 respondents, **16%** answered “Yes,” while **84%** said “No”. This indicates that the majority in Nabadwip Municipality would not explicitly continue childbearing solely for the purpose of having a son. However, the minority who would reflects the persistence of behavioural son preference among certain sections of the population. When education level was taken into account, the differences were stark. Among respondents with **below secondary education**, **45.8%** indicated they would continue childbearing for a son, compared to only **6.6%** among those with **secondary or higher education**.

An **odds ratio analysis** showed that respondents with below secondary education were **12.02 times more likely** to continue childbearing after having two daughters than those with secondary or higher education (OR = 12.02, 95% CI: 3.58–40.39). This large and statistically significant difference underscores the critical influence of education on reproductive decision-making and its link to son preference.

Education Level	Yes (n)	No (n)	Total (n)	Yes (%)
Below Secondary	11	13	24	45.8
Higher Secondary & Above	5	71	76	6.6
Total	16	84	100	16

Table-2: Willingness to Continue Childbearing After Two Daughters

Odds Ratio = 12.02, 95% CI = (3.58, 40.39)

3.4.4. Perceived Importance of Having a Son

Generally, 68% of the interviewees stated that it was more important for one to have a son rather than a daughter, hence showing clear attitudinal preferences for sons. This trend was even greater among those who belonged to lower income groups (79.1%) as opposed to their counterparts from higher income groups (45.5%). Individuals belonging to the lower income category were 4.54 times more likely to show attitudinal preference for sons (OR=4.54). The analysis yielded a **moderately strong positive correlation** ($\rho = 0.608$, $p < 0.001$), indicating that respondents who strongly agreed with Q4 were also significantly more likely to strongly agree with Q11. The p-value of 2.01×10^{-11} confirms that this association is

statistically significant at the 0.1% level. This finding suggests that **general attitudinal son preference is closely linked to cultural beliefs** about the necessity of sons for lineage preservation. In other words, for many respondents, the perceived importance of having a son is reinforced by deep-rooted cultural and ritualistic traditions, such as carrying forward the family name and performing specific religious rites.

Variables Compared	Spearman's ρ	p-value	Strength of Association
Q4 vs. Q11	0.608	<0.001	Moderately strong

Table-3: Spearman's Rank Correlation between Q4 and Q11

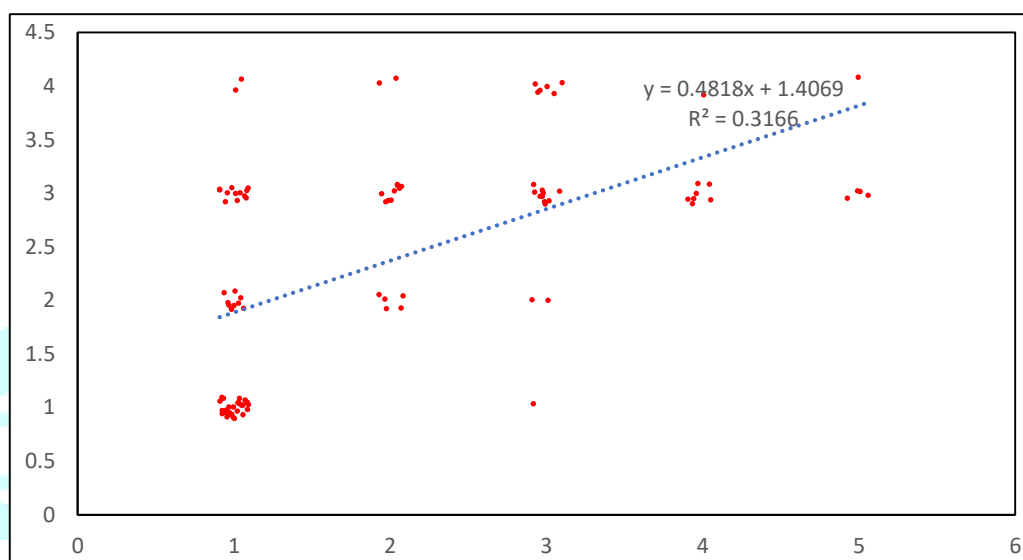


Fig-3: Relationship between attitudinal son preference and cultural beliefs about the role of sons in lineage continuation

When respondents were asked whether they believed that son preference has contributed to the decline in the female population in India, **69%** answered “Yes,” indicating an awareness of the demographic consequences of gender-biased attitudes. A smaller proportion, **18%**, responded “No,” while **13%** were not sure. These findings suggest that the majority of people in Nabadwip Municipality recognise the role of son preference in shaping the country’s gender imbalance. However, the fact that nearly one-third of respondents either disagreed or were unsure highlights the need for further awareness-building and education on the issue.

3.4.5. Behavioural Indicators of Son Preference

Beyond stated desires and attitudes, the questionnaire probed behaviours that indirectly reveal the prevalence of son preference.

3.4.6. Sources of Influence on birth of a Son Child

Respondents were asked to identify the family or societal source most likely to insist on the birth of a son. The findings reveal that **in-laws** were the most frequently cited source of pressure (**35%**), followed by **husbands** (**11%**) and the broader **society** (**5%**). Only **5%** of respondents indicated that wives themselves were the source of pressure, while a significant proportion (**44%**) reported experiencing **no pressure** to

have a son. This distribution suggests that son preference in Nabadwip Municipality is more often reinforced through **extended family influence**, particularly from in-laws, rather than being driven by women themselves. The high share reporting “No pressure” could indicate either changing social norms or a reluctance to acknowledge family pressure.

3.4.7. Analysis of Social Stigma Perception

Binary Logistic Regression: Gender and Perception of Social Stigma

A binary logistic regression was conducted to examine the relationship between gender and the perception that families with only daughters face social stigma. The dependent variable was coded as 1 for “Yes” and 0 for “No/Sometimes.” Gender was coded as 0 for male and 1 for female. The model was statistically significant, $\chi^2(1, N = 100) = 4.51, p = 0.034$, with a Pseudo R^2 of 0.035. Gender was a significant predictor of stigma perception ($B = 0.912, SE = 0.437, p = 0.037$). The odds ratio for gender was 2.49 (95% CI: 1.06 – 5.86), indicating that females were about 2.49 times more likely than males to agree that families with only daughters face social stigma. The model’s intercept ($B = -1.153, p < 0.001$) corresponds to the baseline log-odds for males. The predicted probability of agreeing with the statement was 0.24 (24%) for males and 0.44 (44%) for females.

Predictor	B (Coef.)	SE	Wald z	p-value	Odds Ratio (Exp(B))	95% CI for OR
Gender ¹	0.912	0.437	2.09	0.037	2.49	1.06 – 5.86
Constant	-1.153	0.331	-3.48	0	0.316	0.165 – 0.604

Table-4: Gender and Perception of Social Stigma Binary Logistic Regression

Model Fit: $N = 100; LR \chi^2(1) = 4.51, p = 0.034; Pseudo R^2 = 0.035$

These results suggest that female respondents are significantly more likely to acknowledge the existence of social stigma toward families with only daughters compared to male respondents. This gender difference may reflect varying degrees of awareness or personal experience with gender-based social attitudes.

3.4.8. Distribution of Attention and Resources in the Family

Respondents were asked to identify whether sons, daughters, or both equally receive greater attention and resources within their families. The findings reveal that **36%** of respondents believed that **sons** receive more attention and resources, while only **7%** indicated that **daughters** are given preferential treatment. A majority (**57%**) stated that both sons and daughters are treated equally. These results suggest that while most households in Nabadwip Municipality report equal distribution of attention and resources, a notable proportion still exhibit **behavioural son preference** by allocating more resources to sons. The relatively low percentage favouring daughters further confirms that gender bias in household investment tends to work in favour of male children.

3.4.9. Actual Family Sex Composition (Child Sex Ratio - CSR)

Based on the reported number of sons and daughters (Question 2) across all 100 families in the sample, the aggregate Child Sex Ratio (CSR) was calculated. This ratio provides a snapshot of the actual sex composition within the surveyed households Total Sons reported by sample: **77**; Total Daughters reported by sample: **70**; Calculated Child Sex Ratio (Daughters per 1000 Sons): **909**. This sample-specific CSR of 909 indicates a notable male-biased sex composition within the sampled households of Nabadwip Municipality. While not an official demographic statistic for the entire municipality, this figure aligns with broader national and state-level trends of son preference influencing actual family structures and demographic outcomes. The discrepancy from the biologically normal range suggests that the expressed and attitudinal son preference likely translates into real-world fertility patterns that favour male births.

3.4.10. Actual Sex Ratio: A Comparative Context

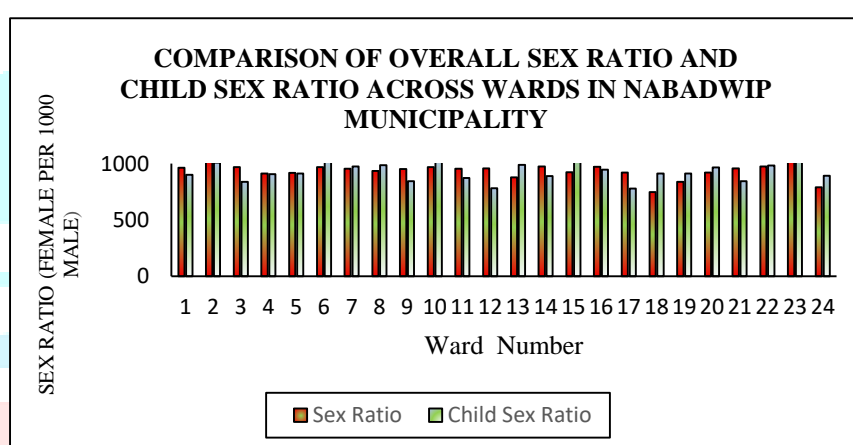


Fig-4: Comparison of overall Sex Ratio & Child Sex Ratio across the Wards

To complement the primary data collected from respondents, it is important to assess the **actual sex ratio** and **child sex ratio** across different wards of Nabadwip Municipality. These figures provide important demographic insights that help contextualize the persistence of son preference in the region. Sex Ratio in terms of wards is not even in Nabadwip, as there are wards that have reached the level of parity or above whereas there are other wards that are showing strong male predominance. The Child Sex Ratio in terms of wards is not consistent either, as there are many wards where this ratio is very low (less than 850), implying gender discrimination during birth or survival, whereas some high values of child sex ratio might be due to smaller population size or migration. The Municipal Child Sex Ratio is 932 which implies the male bias in terms of the total population, whereas the child sex ratio from the sample taken is 909, which is much more skewed.

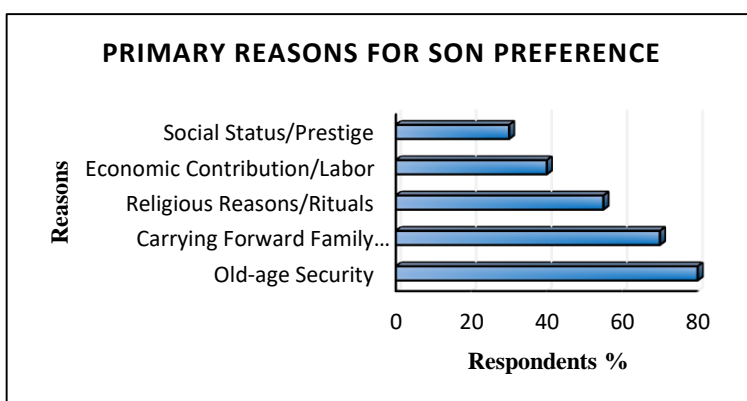
IV. Socio-Cultural Perceptions and Reasons for Preference

Qualitative insights from open-ended questions provide deeper understanding into the perceived importance of sons and the reasons underpinning son preference.

4.1. Primary Reasons for Son Preference

Analysis of responses to Question 8 ("What do you think is the primary reason for preferring a son over a daughter in your family?") revealed several recurring themes: **Security during old age (80 percent)** plays the main role in shaping son preference because they will be the care-givers in their parents' old age. Second on the list is **lineage preservation (70 percent)**, **78 percent of people** who think that **sons are necessary to carry on the family name**. **Religious roles (55%)**, **economic contribution (40%)**, and **social status (30%)** also contribute, highlighting a mix of cultural, economic, and social motivations.

Fig-5: Primary Reasons for Son Preferences



4.2. Social Stigma for Families with Only Daughters

Responses to Question ("Do you feel that families with only daughters face social stigma?") further illuminated the social pressures associated with son preference: **70%** of respondents believed that families with only daughters do face social stigma. **15%** felt they did not. **15%** were unsure. Qualitative elaborations indicated that this stigma often manifests as sympathetic glances, unsolicited advice to have another child, and implicit questioning of the family's "completeness." This perceived stigma acts as a powerful motivator for families to desire a son.

4.3. Perception of Female Population Decline

Almost 60 percent of the respondents acknowledged the role played by son preference in reducing the number of females in India, with 25 percent disagreeing and 15 percent being undecided. In terms of dowry perceptions, 79 percent agreed that daughters were burdens due to dowry (60 percent strongly agreeing and 19 percent agreeing). Only 6 percent disagreed with this notion, while 14 percent were indifferent.

4.4. Summary of Key Findings

The analysis highlights a strong and multi-dimensional son preference in Nabadwip Municipality. Many respondents prefer sons in ideal family composition and even when limited to one child, supported by beliefs that sons are more important. This is reflected in behaviours such as continued childbearing for a son and preferential resource allocation. The child sex ratio also indicates a male bias. Key drivers include traditional norms related to lineage, old-age security, religion, and economic roles, along with social stigma around having only daughters. Although some respondents are aware of broader

some still showed conditional acceptance under social or economic pressure. This indicates that legal awareness alone is insufficient to eliminate deeply rooted gender bias.

5.4. Contraceptive Use Patterns and Barriers

In the sample, 58% of people adopted contraceptive methods consistently, whereas 42% practiced inconsistent or non-use, attributable to accessibility, adverse reactions, and son preference. The choice of family planning methods is mostly guided by the wife (42%) and/or jointly made (29%). Education is a key determinant of fertility practices ($\chi^2 = 12.28$, $p < 0.001$), with less-educated individuals delaying sterilization until they have a son, while education fosters neutral choices on gender. Some critical impediments to adoption of birth control include financial inadequacy (29%), adverse effects (14%), and lack of awareness (11%), although 41% of individuals faced no hindrances at all.

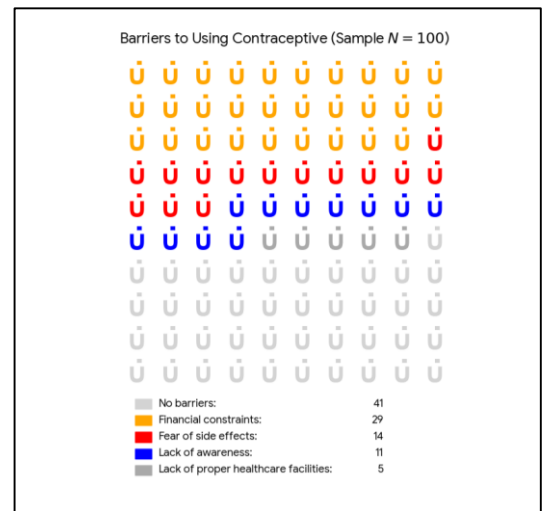


Fig-7: Barriers of Using Contraceptive

5.5. Perception on Gender Imbalance

The Chi-square test shows a significant association between education level and perception of female population decline ($\chi^2 = 14.06$, $df = 2$, $p = 0.001$), indicating that opinions vary across educational groups. Respondents with higher education were more likely to recognize the link between son preference and declining female population, suggesting greater awareness of its societal impacts. Additionally, 68% of respondents (42% “Yes” and 26% “Sometimes”) acknowledged that gender imbalance leads to social problems, reflecting widespread concern, though 26% did not perceive this connection

5.6. Social Problems Arising from Gender Imbalance

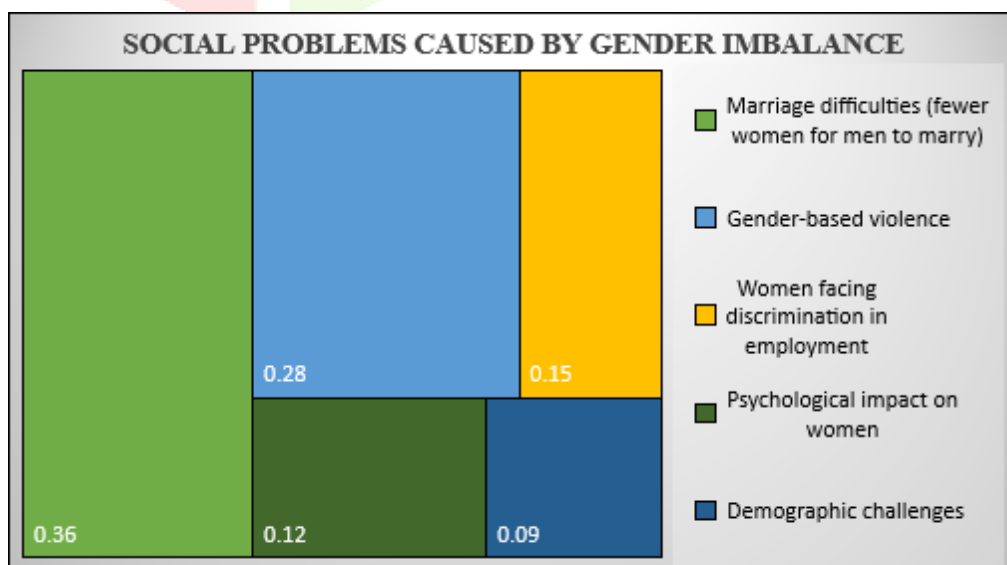


Fig-8: Major Social Problems caused by Gender Imbalance

The analysis of responses to Question 36, which allowed for multiple selections, provides a clear hierarchy of perceived social problems stemming from gender imbalance. **Marriage difficulties (36%)** emerged as the **primary concern**, reflecting awareness of a skewed sex ratio leading to a shortage of marriageable women. **Gender-based violence (28%)** was the **second major concern**, indicating recognition of the link between gender imbalance and increased risks to women's safety. As a **Tertiary concern**, Employment discrimination (15%) and psychological impacts on women (12%) were less frequently cited, suggesting they are seen as less immediate concerns. Similarly, demographic challenges (9%) were mentioned but viewed as more abstract compared to pressing issues like marriage difficulties and violence. Overall, the findings clearly show that son preference strongly influences fertility behaviour in Nabadwip Municipality. Many respondents reported delaying contraception or having additional children to ensure the birth of a son. Although reported cases of sex-selective abortion are low, its consideration by some reflects persistent social pressure. Contraceptive decisions and sterilization are often delayed until a son is born, with some male-dominated influence still evident. Despite high awareness of gender imbalance and its consequences—such as future marriage difficulties—son preference continues to shape reproductive choices, contributing to a male-biased sex ratio and long-term social concerns.

VI. Socio-cultural, economic & educational determinants

Son preference is a complex and deeply rooted social phenomenon shaped by the interaction of socio-cultural, economic, and educational factors.

6.1. Socio- Cultural Norms and Religious Beliefs

Chi-Square Test of Independence: Age and Perception of Cultural Son Preference

```
. pca fin_support rel_reasons inheritance family_name social_status
```

```
Principal components/correlation      Number of obs   =      100
                                      Number of comp. =       3
                                      Trace           =       5
Rotation: (unrotated = principal)    Rho             =     1.0000
```

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	3.35877	1.79701	0.6718	0.6718
Comp2	1.56177	1.4823	0.3124	0.9841
Comp3	.079462	.079462	0.0159	1.0000
Comp4	0	0	0.0000	1.0000
Comp5	0	.	0.0000	1.0000

```
Principal components (eigenvectors)
```

Variable	Comp1	Comp2	Comp3	Unexplained
fin_support	-0.5220	0.2220	0.3158	0
rel_reasons	0.2275	-0.7194	0.4758	0
inheritance	0.3165	0.6470	0.3513	0
family_name	-0.5346	-0.1193	-0.4733	0
social_sta~s	0.5383	0.0203	-0.5713	0

Table 5: PCA Table for showing the drivers of Son preferences

The Chi-square test ($p = 0.001$) shows a significant association between age and perceptions of cultural or religious son preference. Younger respondents (18–40) were more likely to disagree that such values favour sons, while older respondents (41–65) were more likely to agree, indicating a generational difference in attitudes. For Q38, the mean score of 4.29 indicates strong agreement that daughters are seen as a burden due to dowry, while the low standard deviation (1.02) reflects a high level of consensus among respondents on this issue. Question 38, here is the analysis of the mean and standard deviation.

The Likert scale responses were assigned numerical values from 1 (Strongly Disagree) to 5 (Strongly Agree) to calculate the central tendency and dispersion. **Mean:** 4.29 **Standard, Deviation:** 1.02 A majority of respondents (63%) believe sons are better providers of financial support, reflecting traditional norms of inheritance and old-age security, while 28% are uncertain and only 9% disagree, indicating a deeply rooted perception. The main drivers of son preference are family lineage, inheritance, and financial support, highlighting concerns over legacy and economic security. In contrast, religious reasons and social status are less influential, suggesting that son preference is driven more by practical and economic factors than symbolic ones. The PCA results identify two key dimensions explaining 98.41% of the variance in reasons for son preference. Component 1 (67.18%) – Socio-Economic Security: Driven by financial support, family lineage, and social status, highlighting economic stability and legacy as primary motivations. Component 2 (31.24%) – Traditional and Religious Factors: Defined by inheritance and religious reasons, reflecting cultural and traditional influences on son preference.



Fig-9: Economic Rationales of Son Preferences

6.2. Economic Rationale

The word cloud highlights key economic concerns such as dowry, marriage, and expenses, reinforcing the perception of daughters as a financial burden, while sons are seen as economic assets who provide support and inherit property. This confirms that economic factors strongly drive son preference. Survey responses further support this, with 63% believing sons are better financial providers, while 28% disagree, indicating some shift toward more progressive views. The small “sometimes” group (9%) reflects generally strong and clear opinions on this issue.

6.3. Education and Awareness

The findings show that actual education level—not just belief in its importance—is the key factor reducing gender bias, with higher education significantly increasing egalitarian attitudes. Responses to Q46 indicate that school education is the main source shaping views on gender equality, followed by media and family influence, while religion and NGOs play a smaller role. Younger and more educated

respondents rely more on education and media, whereas older and less educated individuals depend more on family and religious values. For Q47, 64% of respondents reported high or very high awareness of gender equality, though 36% remain in moderate to low categories, highlighting the need for targeted awareness efforts among less exposed groups.

6.4. Media Influence and Gender Equality Messaging

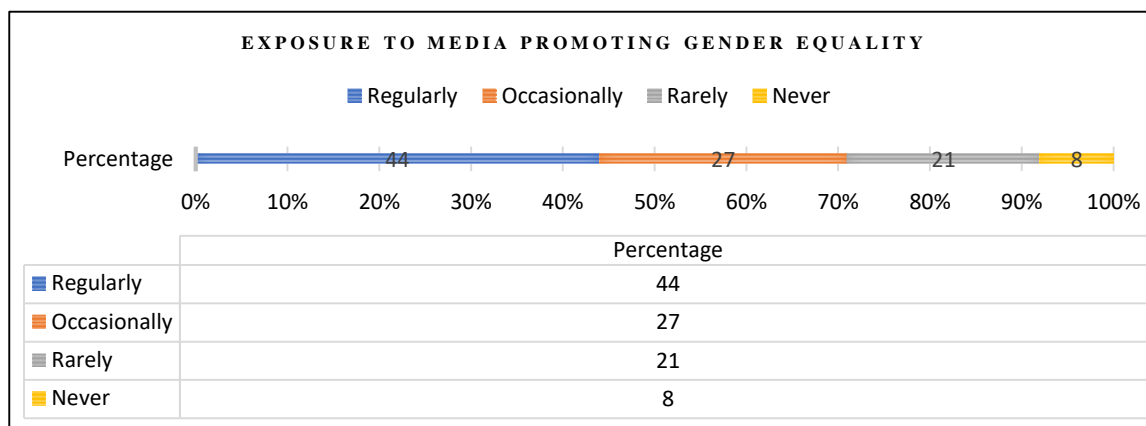


Fig-10: Exposure to Media Promoting Gender Equality

The findings show that 44% of respondents are regularly exposed to gender equality messages through media, while 27% encounter them occasionally. However, 29% have limited or no exposure, indicating gaps in reach and the need for broader dissemination. Media content reflects a mix of progressive and traditional narratives. While many respondents reported exposure to empowering messages (e.g., girls' education and women's rights through initiatives like Beti Bachao Beti Padhao and Kanyashree), others noted persistent portrayals of traditional gender roles in entertainment media. This coexistence suggests that although media promotes gender equality, its impact is diluted by stereotypical representations, highlighting the need for more consistent and gender-sensitive messaging.

6.5. Conclusion

The findings show that gender attitudes are shaped by socio-cultural norms, economic factors, education, and media. While traditional beliefs still influence roles, gradual shifts toward equality are visible. Education emerges as the strongest driver of change, though economic and media influences remain mixed. Overall, achieving gender equality requires a comprehensive approach addressing cultural norms, economic barriers, education, and consistent media messaging.

VII. Evaluation of governmental and community responses

This objective, examines the role of governmental and community- level interventions in addressing son preference and promoting gender equality within Nabadwip Municipality.

7.1. Awareness and Participation in Gender Equality Programs

The analysis (fig-11) shows a significant association between education and awareness of gender equality programmes, with awareness rising from 33.3% among illiterate respondents to 98.3% among those with higher education. Overall, 84% were aware of at least



one scheme, highlighting education as a key factor in accessing information and the need for targeted outreach to less-educated groups. Similarly, participation in gender equality campaigns is significantly linked to education ($\chi^2 = 14.70, p = 0.005$). Lower-educated groups show low participation, while involvement increases steadily with higher education, with the highest participation among the most educated. This underscores the importance of education in both awareness and active engagement.

Fig-11: Awareness of Gender Equality Programmes by Education Status

7.2. Evaluation of Effectiveness of Scheme

In general, 68% felt that the government campaigns were successful in addressing son preference, while 22% viewed them as unsuccessful and 10% had an uncertain perception about their success. With respect to education levels, it was observed that those with higher education levels (76%) viewed the government campaigns as effective in most cases.

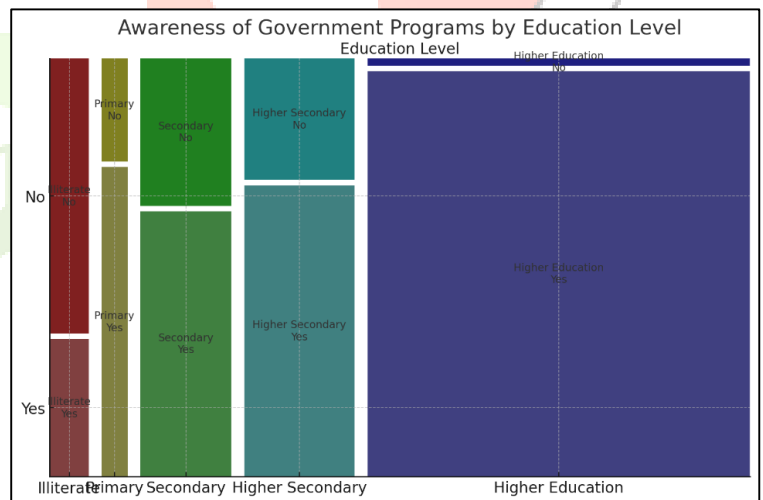


Fig-12: Initiatives Influencing Respondents' Thinking about Gender Equality

The word cloud for Q52 reveals, that Kanyashree and Beti Bachao Beti Padhao are the most influential initiatives shaping gender equality views, reflecting their wide reach.

Community-based efforts like Self-Help Groups, school campaigns, and street plays also play an important role, while targeted programmes have a smaller impact. Overall, both government schemes and grassroots activities work together to build awareness

7.3. Perceived Change Over Time and Future Directions

Respondents were asked to reflect on how community attitudes toward son preference had changed over the last decade. The open-ended responses were thematically coded into five categories:

1. Improved – Greater gender equality awareness (42% respondents)
2. Improved – Due to education and schemes (18% respondents)
3. No significant change (20% respondents)
4. Worsened – Economic and social pressures still drive son preference (10% respondents)
5. Mixed – Younger generation changing, older generation resistant (10% respondents)

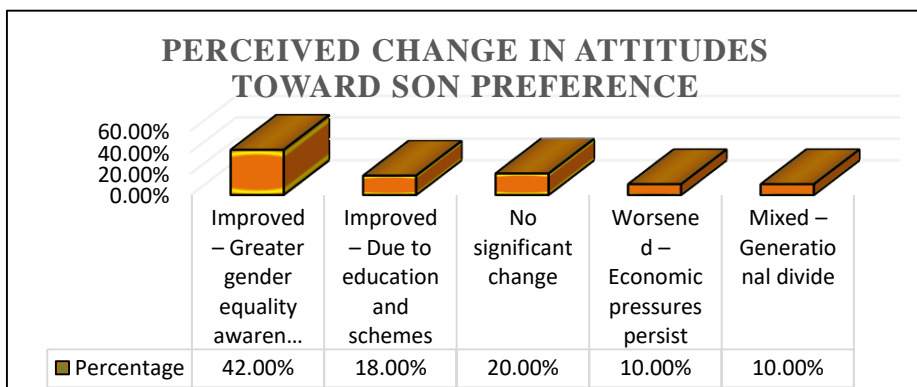


Fig-13: Perceived Change in Attitudes Toward Son Preference

7.4. Respondents’ Suggestions and Opinions

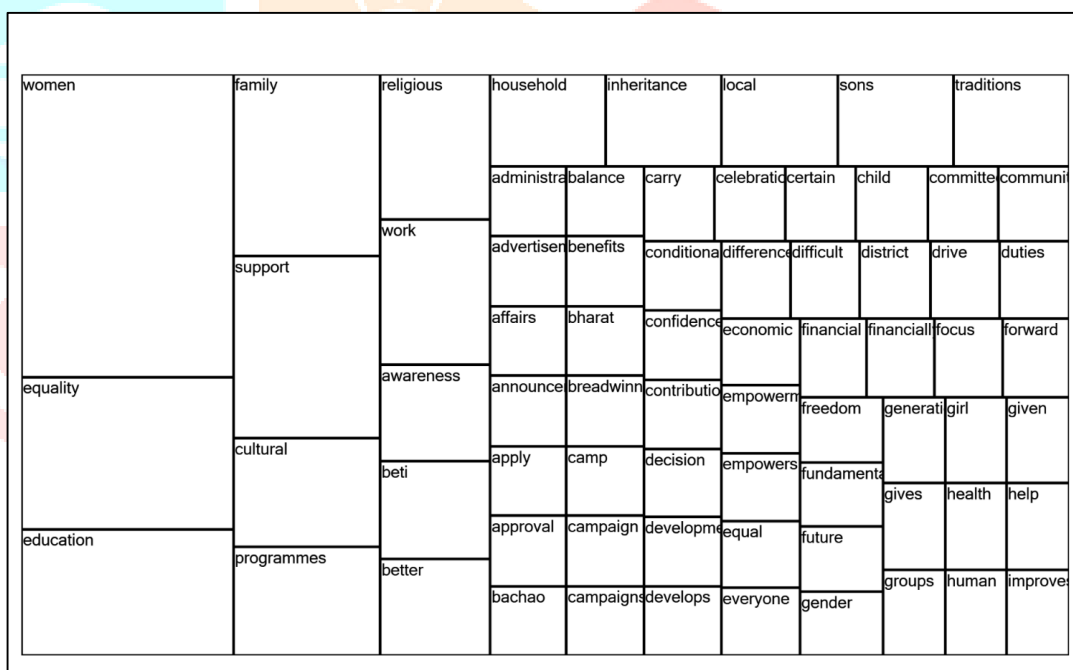


Figure-14: Tree map of Thematic Keywords from Respondents’ Views on Equal Rights for Women

The Tree map highlights strong support for gender equality, with dominant themes like “women,” “equality,” and “education,” emphasizing education as key to empowerment. Other themes link equality to family support, cultural context, and government Programmes, while rights-based terms reflect moral and ethical justifications. Economic benefits of women’s participation are also recognized. However smaller references to household roles, inheritance, and sons indicate that traditional norms still persist, showing a mix of progressive and conventional view.

Table-6: Thematic Distribution of Personal Experiences Influencing Views on Son Preferences**7.5. Personal experiences influencing son preference view**

The findings show strong support (82%) for education and awareness campaigns in shaping family planning choices. Key suggestions include improving awareness of methods (34.1%), challenging son preference (24.4%), promoting women's empowerment (18.3%), increasing male involvement (14.6%), and using local media and leaders (8.5%). Overall, campaigns should address both knowledge gaps and

Theme	Description	Percentage
Family Pressure	Influence from in-laws, parents, or relatives to continue having children for a son	28.00%
Cultural / Social Expectations	Belief that a son is necessary for family honour or continuity	18.00%
Inheritance & Property Traditions	Sons inherit land/property and carry on the family name	10.00%
Economic Responsibility of Sons	Sons expected to support parents financially in old age	8.00%
Positive Female Role Models	Experiences with successful or influential women in family/community	12.00%
Educational Equality Observations	Witnessing daughters excelling academically	8.00%
Economic Independence of Women	Women contributing equally or more to household income	6.00%
Negative Impact of Son Preference	Observing harm or neglect towards daughters	5.00%
Shift in Perspective Over Time	Change in belief after exposure to education/media/urban life	5.00%
Total	—	100%

cultural norms in a locally relevant and inclusive manner.

The analysis shows that while awareness of gender-related programmes in Nabadwip is high, actual participation remains limited, reflecting a gap between knowledge and engagement. Education significantly influences both awareness and involvement. Government

schemes are viewed positively but face challenges in implementation

and outreach. Despite gradual improvements, persistent cultural norms like son preference continue to

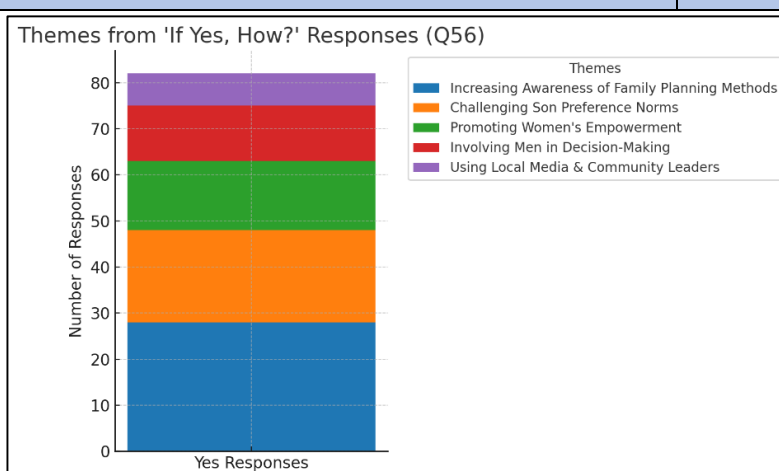


Fig-15: Thematic Representation: Role of Awareness in Shaping Family Planning Choices

hinder progress. Overall, stronger community engagement and culturally sensitive strategies are needed to address the root causes of gender inequality

VIII. Discussion, conclusion & recommendations

8.1. Summary of Key Findings

Research Objective	Key Findings	Supporting Evidence	Corresponding Recommendations
1. To examine the prevalence of son preference in Nabadwip Municipality	Son preference persists in both attitudes and behaviours; Son Preference Index = +0.18; significant gender bias in resource allocation and fertility intentions.	- 28% explicitly preferred more sons than daughters. - 36% households allocated more resources to sons. - Calculated Child Sex Ratio (Daughters per 1000 Sons): 909	- Strengthen educational interventions from primary level. - Promote community awareness campaigns to challenge gender bias. - Engage local influencers and leaders in advocacy.
2. To analyse the impact of son preference on gender imbalance and fertility decisions	Son preference influences fertility behaviour, leading to extended childbearing and delayed contraceptive adoption; indirect demographic imbalance without overt sex-selective abortion.	- 33% reported pressure to continue childbearing until a son was born. - 62% reported family/in-law pressure. - 74.1% delayed contraception for a male child.	- Provide targeted reproductive health counselling. - Involve in-laws/elders in awareness programmes. - Offer incentives for two-child norm adoption regardless of gender.
3. To examine socio-cultural, economic, and educational determinants of son preference	Cultural traditions (lineage, funeral rites), economic insecurity, and dowry norms sustain son preference; education reduces bias significantly.	- 80% cited old-age security. - 70% cited continuation of family name. - 79% agreed daughters are a dowry burden. - PCA identified socio-economic and religious-cultural drivers.	- Target low-education and low-income households with combined awareness and economic incentives. - Promote women's economic empowerment via skill training and microcredit. - Reform media messaging to counter stereotypes.
4. To evaluate the effectiveness of governmental and community interventions	High awareness of Kanyashree and Beti Bachao Beti Padhao, but partial success in reducing son preference; inconsistent NGO outreach in low-income wards.	- Awareness: Kanyashree (84%), Beti Bachao (79%). - Participation higher among educated respondents. - Limited impact in socio-economically disadvantaged areas.	- Improve equitable access to schemes across all wards. - Strengthen monitoring and enforcement of dowry prohibition and PCPNDT laws. - Expand consistent NGO-led community workshops.

8.2. Recommendations

Based on the key findings and their alignment with existing literature, the following recommendations are proposed:

1. Strengthen Educational Interventions, 2. Target Low-Education and Low-Income Households
3. Address Cultural and Religious Norms, 4. Reform Media Messaging
5. Strengthen Policy Implementation and Enforcement, 6. Promote Women's Economic Empowerment

8.3. Significance of this study

The issue of son preference remains a significant demographic and social concern in India, with implications for gender equity, population structure, and development (Das Gupta et al., 2003; Guilmo, 2012). While broader datasets provide useful insights, they often overlook local variations shaped by socio-cultural and economic contexts (Bhat & Zavier, 2003). This study addresses that gap by examining son preference in Nabadwip Municipality, a culturally and religiously significant urban setting in West Bengal. From a policy perspective, the study provides micro-level evidence on the prevalence and determinants of son preference, which is crucial for designing context-specific interventions. In the context of West Bengal—where overall sex ratios are relatively favorable but subtle gender biases persist (Bose, 2016)—the study helps uncover hidden forms of discrimination. Overall, it bridges macro-level trends with micro-level realities, offering insights relevant for both research and policymaking.

8.4. Conclusion

The purpose of this research is to analyze the frequency, reasons, and consequences of son preference in Nabadwip Municipality through a combination of methods. The results indicate that son preference is still a prevailing sociocultural phenomenon that affects fertility practices, contraception, and resource distribution, although education significantly reduces prejudice. Cultural, economic, and familial motives maintain a preference for boys. In spite of greater knowledge due to governmental programs such as Kanyashree and Beti Bachao Beti Padhao, underlying structures have not been eliminated.

8.5. Limitations of the Study

While this study offers valuable insights into son preference in Nabadwip Municipality, several limitations should be noted. The use of a purposive sample of 100 respondents limits the generalizability of the findings. Reliance on self-reported data may introduce recall and social desirability biases, especially given the sensitive nature of the topic. Despite these limitations, the study provides an important basis for understanding local dynamics and informing targeted policy interventions.

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