

Family Size Preferences Among Matlab Couples

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INTRODUCTION

Quite a large volume of fertility and family size preferences analyses have been done in Bangladesh most of which used women responses only. There is only a little evidence of using men's version in family formation and fertility decision in the conceptual framework and related analyses. Although men and women are biological partners in the reproductive process, it is men in the family who make the ultimate decision regarding family size and preferences which is even more prevalent among the rural communities in Bangladesh. However in most of fertility and family size and preferences studies, women have been the principal focus of research. This preoccupation with women has tended to minimize the reproductive motivation of men, thereby ignoring the social significance of the people who are dominant not only within family, but also at community and government levels.

In recent years, social scientists have acknowledged the importance of studying the women's status or what is popularly known as gender issues. It is now argued that a change in women's status is linked to the change in socio-economic and demographic conditions of a population in many ways. Mason and Taj (1987) write that clearer understanding of the impact of gender as reproductive decision making is important for the formulation of family planning policy in developing countries. With the development of gender research strategies, the role of men within the household and the community has increasingly been framed into the conceptual framework. The relationship between desired and achieved fertility may be misspecified by excluding husband's fertility desires or by confounding effects of shared desires with the resolution of conflicting desires (Thomson et al., 1990).

This study is designed to explore similarities and differences between husbands' and wives' responses to family size preferences. Using couple data from BRAC-ICDDR,B joint research project baseline survey, we analyzed the data using both bivariate and multivariate statistical methods. Before the analysis, we have hypothesized that Matlab men's and women's responses to family size preferences and fertility decisions do not vary; that the socio-economic and

demographic aspects of rural households do not influence the couples to decide the family size and preferences; and that BRAC eligibility¹ does not make any difference in family formation.

DATA AND METHODS

Background to the survey

The baseline survey was conducted in 1992 in a rural area of Bangladesh called Matlab. BRAC, in its normal course of expansion, decided to start its Rural Development Program (RDP) which is BRAC's core multisectoral socio-economic development program, at Matlab in 1992. Meanwhile ICDDR,B has been maintaining a demographic surveillance system (DSS) at Matlab for more than 30 years. The long presence of ICDDR,B at Matlab and the new initiative by BRAC provided an opportunity work under joint collaboration to assess the impact of economic and social development on health and well-being of the community. More importantly, it offered an occasion to understand the mechanisms of social changes through which impacts of BRAC's programs could be explained. In order to assess this impact, benchmark information on relevant indicators is required. Accordingly, this baseline survey was organized by both ICDDR,B and BRAC with the objective of recording the status of selected indicators as it existed before RDP intervention.

The baseline survey was conducted in 60 villages covering 11,343 households at Matlab. For the analysis, we were able to match 5,530 couples out of which 3,659 couples belonged to BRAC eligible group and 1,871 to BRAC non-eligible group.

Methods

In the first part of analysis, simple descriptive data are presented in terms of average number of children living, desired and ideal family size. These groups of children are then examined through calculating mean sizes corresponding to some selected socio-economic variables. Appropriate statistical tests were performed to test for differences within categories of independent variables. The second part of analysis utilizes both ordinary least square (OLS) and logistic regression

¹ BRAC eligible respondents are defined as those who were from a household possessing a land area of less than 50 decimals and at least one member from that household had sold his/her manual labors for at least 100 days in the last one year prior to the survey.

techniques. OLS estimates are used to evaluate the influence of family or background variables and socio-economic variables on the number of children living and desired, and ideal family size. Desired family size is constructed by adding the number of living children and the number of additional children wanted. Four equations were estimated for each of the dependent variables. The first two equations refer to BRAC eligible sample and the rest two equations to BRAC non-eligible sample. Within each sample, two models were estimated - the first being for male responses and the second for female responses. Eleven independent variables are included in each of these equations with age as a control variable to predict the dependent variable.

RESULTS

Table 1 shows the mean number of children living and desired and mean ideal family size as reported by Matlab men and their wives by BRAC eligibility. Henceforth the eligible refers to BRAC eligible and non-eligible refers to BRAC non-eligible sample. The average eligible men are 40 years and women are 32 years old. Men reported that they had, on an average, 3.5 living children but desired at least 4 children. Their mean ideal family size is however 2.1 which is much below their living and desired family size. Men's version of living and desired number of children is significantly higher than those of women's version. However women have mentioned larger ideal family size than men. On the other hand, the average non-eligible men and women are slightly older than the eligible counterparts. Their average current, desired and ideal number of children are also higher than the eligible ones. However, men's reporting of children is significantly different from women's reporting except for the mean desired family size.

The reported mean number of living and desired children and ideal family size according to some selected background and socio-economic variables are shown in Table 2 for eligible sample and in Table 3 for non-eligible sample. Generally men and women have reported an average of 'plus-minus 2' for their ideal family size. As was expected, desired family size is higher than the number of living children and the same pattern is observed for females, although the figures are generally higher than those for men.

Both men's age and women's age have positive impact on the three indicators of family size and family preferences (as defined by desired number of children). Their educational

attainments seem to be negatively related to the number of children living and desired. However, women's education produces a more consistent negative trend than does their husband's education. The analysis displays a significant difference in eligible men's and in non-eligible women's reporting of desired children corresponding to their occupational categories, although for men, the unemployed ones are reported to have said larger family size (excluding ideal family size) than the employed ones. Similarly both eligible men's and women's frequency of marriage is a significant factor, however, non-eligible women's marriage does not make significant difference in their family size and preferences. If men are married for more than once, they report larger number of living and desired children.

Both men and women who are currently using contraceptives have larger number of living children which may be interpreted other way around. Because they have larger family size, they use contraceptives to limit the size. There are also two variables which are particularly related to views on women's status. These couples were asked what they thought about women's employment and mobility outside the home. The analysis shows that both men and women who expressed women's employment and mobility outside the home as good have significantly lower family-size intentions than do those with more non-egalitarian attitudes and views.

Table 4 and 5 display results of OLS regression for the number of surviving and desired children as reported by men and women by the set of background and socio-economic variables discussed above. These are the results found significant in the final step of stepwise regression model building, although these variables are not arranged chronologically according to their importance as generated by the stepwise procedure. We did not include ideal family size in the model as a dependant variable as both men and women tended to have said around 2 as their universal ideal family size, thus producing less variations in the data set. All these four models in each table have produced substantially large R^2 describing that for 'children currently living' models, more than 50% of variations are explained by the selected set of independent variables, whereas for 'children desired' models, more than 35% of variations are explained for eligible and non-eligible men and women respectively.

Age, a control variable, has positive contribution to family size and preferences across the table for both samples. Age difference (between husband and wife) is particularly interesting because this variable shows a negative impact on men's family-size preferences and positive influence on women's family-size and preferences. As the age difference increases, men are found to have said smaller number of living and desired children, and women larger number of living and desired children. Adherence to Muslim religion has higher family-size preferences than does non-Muslim.

In the analysis, there are some areal background variables such as BRAC village where BRAC provides socio-economic interventions, MCH-FP area where ICDDR,B provides maternal-child health and family planning inputs, and inside embankment area to protect Matlab from inundation. These areal variables are important to influence different aspects of Matlab community, therefore included in the analysis to isolate their net effects on the dependent variables. All these three variables display their negative effect on family size-preferences. For example, if the respondent was from a BRAC village, he/she is likely to have smaller family size than a non-BRAC villager. Similarly if the respondent was from an MCH-FP or inside embankment area, he/she is more likely to have smaller family size.

When individual socio-economic variables are controlled, the effect of respondent's education shows clearly that only the 6 years and over of schooling acts significantly toward a lower family size-intentions for both men and women. The analysis reveals an intriguing finding that if men were not employed, they would aspire a lower family size whereas this trend is opposite for women respondents. Women's employment outside the home has a chilling negative impact on fertility and fertility intentions which is supported by many other previous researches (Ref: *look up*). Another interesting finding is that contraceptive use is a significant predictor of respondents' living children with negative effects across the table (Table 4), but not an important factor for persons in reporting their desired family size (Table 5).

Polygynously married men have a much larger actual and desired family size than those who are monogamous, however, this trend is reverse for women. Women in polygynous unions are negatively selected with family size-intentions. To questions of views on women's employment

and mobility outside the home, men tend to have said larger desired family size if they opined bad for women to work outside the home, whereas, their views on mobility question are not important in this case. Their wives' views on mobility are, however, significant depicting a higher level of supply and demand for children who said that women should not move outside the home than those who opined the contrary.

DISCUSSION AND CONCLUSION

Bangladesh is a male-dominated society. Muslims account for more than 80 percent of the whole population. There exists a strong patriarchal system in this country (Cain et al., 1979) that confer on men's decision making roles in matters affecting the family and society; their authorization is crucial even in trivial matters. In addition, wives are dependent socially and economically on their husbands. Therefore this research has included men's version of fertility related intentions and made a contrast against women's version. There is still a strong need for further research to tap intricate changes in men's and women's attitudes and practices toward population matters, especially as a result of socio-economic and health interventions.

Results of this study show highly significant correlation between men's and women's family size desires and preferences describing a situation where men's and women's fertility goals are the same (Mason and Taj, 1987). However there are certain conditions under which men's fertility desires differ from women's fertility desires. For example, multiple marriage or polygyny is found here to have strong positive effect on men's current and desired fertility levels, whereas it has negative effect on women's current and desired fertility. F. J. Sichona (1993) argues that a complex situation exists between polygyny and fertility, and that polygynously married women are less likely to contracept, a situation also established by Shaikh et al. (1987). On the other hand, men in polygynous unions are usually older, and the positive influence may be due to the childlessness of his previous wife(s), for which his desire for children becomes higher with his multiple marriages.

The results for age differences in the multivariate analysis show a negative effect for men and positive effect for women. The explanation for such situation may be that the larger age difference indicates women being married to older men; again such marriage may be a multiple

marriage for men suggesting that the mechanism may be a decline in male fecundity with age rather than reduced sexual activities (Pebley and Mbugua, 1989). Education of these people then becomes an important predictor for fertility decisions. Providing greater educational opportunities typically leads to lower fertility by giving individuals greater access to information, participation in the modern sectors, and new attitudes and values (Khan et al., 1995). However this study has demonstrated that women's attainment of only higher level of education (6+ years) can be crucial for limiting the individual fertility levels and preferences. There should be policies for opportunities that must extend beyond primary education to the secondary and higher level of education (Khan et al., 1995) especially for women. Bulatao argues that a sustained commitment over a period of time and the provision for more than minimal education are needed if fertility is to be reduced through this channel. Furthermore, mothers' secondary level of education is associated with her children's likelihood of entering secondary school, regardless of urban-rural residence or the family's economic status (Knodel and Wongsith, 1989).

The background and areal variables are important in family size and preferences for both men and women confirming the fact that the social environment in which an individual grew up influences his or her reproductive behaviour, probably through differences in socialization and life philosophy. With respect to interspousal relationships, the background variables capture the effects of attitudinal differences, values and subjective preferences (Isiuge-Abanihe, 1994).

In recent years, Bangladesh has experienced a marked improvement in awareing people about adverse effect of large family size which is reflected in the level of family planning use. This analysis has produced that both men and women (or husbands and wives) say around two as an ideal family size. This may have proved to be an optimum family size already comprehended by rural couples, but in reality, the actual and preferred family size is always much higher irrespective of their social and economic status. This poses challenges to researchers to identify why the desired level of fertility is higher even when the ideal family size is reported to be around two. This paper could not adequately address these issues, however, it has been able to show differential fertility corresponding to a set of explanatory variables, and most importantly, a comparison between husband-wife fertility related preferences.

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Family size preferences among Matlab couples

Table 1: Selected demographic characteristics of Matlab men and women, 1992

Variables	BRAC Eligible (n=3659)			BRAC Non-Eligible (n=1871)		
	Men Reporting	Women Reporting	T-Test	Men Reporting	Women Reporting	T-Test
Mean Age	40.18	32.42	86.99 [*]	42.94	33.64	65.90 [*]
Mean Number of Living Children	3.50	3.43	5.71 [*]	3.82	3.75	3.19 [*]
Mean Number of Desired Family Size	4.00	3.92	3.80 [*]	4.23	4.22	0.19
Mean Number of Ideal Family Size	2.13	2.25	-4.15 [*]	2.12	2.32	-5.49 [*]

* p<0.01

Family size preferences among Matlab couples

Table 2 : Mean number of living children, desired family size and ideal family size as reported by Matlab men and women of BRAC Eligible sample, 1992

Variables	Men Reporting			Women Reporting		
	No. of living children	No. of children desired	Ideal family size	No. of living children	No. of children desired	Ideal family size
Age [†]						
< 25 yrs	0.70	2.33	2.14	1.15	2.45	2.17
25-34 yrs	2.03	2.91	2.11	3.07	3.57	2.35
35-44 yrs	3.70	4.01	2.22	4.71	4.80	2.19
45+ yrs	5.09	5.20	2.08	5.62	5.68	2.10
	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.05)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)
Years of schooling [†]						
None	3.46	3.97	2.11	3.56	4.00	2.22
1-5 yrs	3.17	3.95	2.17	3.05	3.69	2.37
6+ yrs	3.34	3.80	2.17	2.17	2.94	2.24
				(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.05)
Employment status [†]						
Employed	3.43	3.94	2.14	3.79	4.02	2.09
Unemployed	4.44	4.59	1.92	3.41	3.91	2.25
	(<i>p</i> <0.01)	(<i>p</i> <0.01)		(<i>p</i> <0.05)		
Frequency of marriage [†]						
Once	3.43	3.92	2.16	3.45	3.94	2.24
More than once	3.88	4.29	1.97	3.16	3.63	2.37
	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.05)	(<i>p</i> <0.01)	
Contraceptive use [†]						
Using	3.58	4.00	2.21	3.75	4.04	2.41
Not using	3.29	3.89	2.04	3.40	3.94	2.10
	(<i>p</i> <0.01)	(<i>p</i> <0.05)	(<i>p</i> <0.01)	(<i>p</i> <0.01)		(<i>p</i> <0.01)
Views on women's employment outside home [†]						
Good	3.43	3.92	2.16	3.41	3.90	2.26
Bad	3.54	4.08	2.02	3.74	4.26	1.78
Don't know	4.90	5.30	2.10	4.53	4.93	2.00
	(<i>p</i> <0.05)	(<i>p</i> <0.01)	(<i>p</i> <0.05)	(<i>p</i> <0.05)	(<i>p</i> <0.01)	(<i>p</i> <0.01)
Views on women's mobility outside home [†]						
Should move	3.44	3.93	2.17	3.35	3.85	2.30
Shouldn't move	3.48	4.02	2.01	3.77	4.20	2.01
Don't know	3.44	4.06	1.69	3.83	4.39	1.83
			(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)

[†] F-test performed

[‡] t-test performed

Family size preferences among Matlab couples

Table 3 : Mean number of living children, desired family size and ideal family size as reported by Matlab men and women of BRAC Non-Eligible sample, 1992

Variables	Men Reporting			Women Reporting		
	No. of living children	No. of children desired	Ideal family size	No. of living children	No. of children desired	Ideal family size
Age†						
< 25 yrs	0.56	2.04	2.11	1.07	2.40	2.24
25-34 yrs	1.72	2.71	2.17	3.23	3.72	2.42
35-44 yrs	3.50	3.83	2.18	5.02	5.14	2.34
45+ yrs	5.51	4.21	2.06	5.89	5.94	2.12
	(<i>p</i> <0.01)	(<i>p</i> <0.01)		(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)
Years of schooling‡						
None	3.84	4.30	2.10	4.15	4.56	2.33
1-5 yrs	3.95	4.39	2.20	3.77	4.25	2.32
6+ yrs	3.59	3.98	2.09	2.64	3.27	2.27
	(<i>p</i> <0.05)	(<i>p</i> <0.01)		(<i>p</i> <0.01)	(<i>p</i> <0.01)	
Employment status‡						
Employed	3.76	4.20	2.14	3.25	3.56	2.09
Unemployed	4.30	4.61	1.80	3.77	4.24	2.32
			(<i>p</i> <0.05)		(<i>p</i> <0.01)	
Frequency of marriage‡						
Once	3.63	4.05	2.13	3.73	4.20	2.32
More than once	4.97	5.25	2.09	4.10	4.53	2.32
	(<i>p</i> <0.01)	(<i>p</i> <0.01)				
Contraceptive use‡						
Using	3.81	4.18	2.19	4.01	4.28	2.45
Not using	3.73	4.26	2.03	3.85	4.36	2.24
			(<i>p</i> <0.01)			(<i>p</i> <0.01)
Views on women's employment outside home†						
Good	3.64	4.08	2.20	3.70	4.18	2.34
Bad	4.41	4.79	1.81	4.91	5.19	1.92
Don't know	2.75	3.50	1.13	3.00	3.00	1.00
	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.05)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)
Views on women's mobility outside home†						
Should move	3.64	4.09	2.20	3.58	4.07	2.36
Shouldn't move	4.26	4.67	1.89	4.45	4.83	2.16
Don't know	3.40	4.00	1.20	3.67	4.33	--
	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)	(<i>p</i> <0.01)

† F-test performed

‡ t-test performed

Family size preferences among Matlab couples

Table 4. Ordinary least squares regression coefficients of number of living children, by selected background and socio-economic variables, as reported by Matlab men and women, 1992

Variables	BRAC Eligible		BRAC Non-Eligible	
	Male Model (n=3659)	Female Model (n=3279)	Male Model (n=1871)	Female Model (n=1692)
Age	0.169***	0.165***	0.180***	0.172***
Age Difference	-0.120***	0.018***	-0.132***	0.011*
Religion				
Muslim	--	--	--	--
Non-Muslim	-0.298***	-0.304***	-0.464***	-0.440***
BRAC Village				
Yes	--	--	--	--
No	0.121**	0.198***	NS	NS
MCH-FP				
Yes	-0.393***	-0.492***	-0.481***	-0.494***
No (Comparison)	--	--	--	--
Inside Embankment				
Yes	NS	-0.146**	NS	NS
No	--	--	--	--
Education				
None	--	--	--	--
1-5 yrs	NS	NS	0.223***	NS
6+ yrs	NS	-0.462***	NS	-0.431***
Employment status				
Employed	--	NS	--	-0.457**
Not employed	-0.311*	--	-0.485**	--
Contraceptive use				
Using	--	--	--	--
Not using	-0.235***	-0.356***	-0.218***	-0.375***
Frequency of marriage				
Once	--	--	--	--
More than once	NS	-0.545***	0.581***	NS
Views on women's employment outside home				
Good	--	--	--	--
Bad	NS	NS	0.305***	NS
Don't know	NS	0.871**	NS	NS
Views on women's mobility outside home				
Should move	--	--	--	--
Shouldn't move	NS	NS	NS	0.351***
Don't know	NS	NS	NS	NS
Constant	-2.107***	-1.556***	-2.505***	-1.576***
<i>R</i> ²	0.51	0.50	0.55	0.50

* p<0.10, ** p<0.05, *** p<0.01; NS : not significant

Family size preferences among Matlab couples

Table 5: Ordinary least squares regression coefficients of number of desired children, by selected background and socio-economic variables, as reported by Matlab men and women, 1992

Variables	BRAC Eligible		BRAC Non-Eligible	
	Male Model (n=3659)	Female Model (n=3279)	Male Model (n=1871)	Female Model (n=1692)
Age	0.123***	0.121***	0.137***	0.128***
Age Difference	-0.082***	0.013***	-0.101***	NS
Religion				
Muslim	--	--	--	--
Non-Muslim	-0.185***	-0.161**	-0.437***	-0.353***
BRAC Village				
Yes	--	--	--	--
No	0.211***	0.194***	0.159**	NS
MCH-FP				
Yes	-0.411***	-0.267***	-0.412***	-0.320***
No (Comparison)	--	--	--	--
Inside Embankment				
Yes	-0.127**	-0.147***	NS	NS
No	--	--	--	--
Education				
None	--	--	--	--
1-5 yrs	NS	NS	0.233***	NS
6+ yrs	NS	-0.341**	NS	-0.449***
Employment status				
Employed	--	-0.231*	--	-0.554**
Not employed	-0.323*	--	-0.417**	--
Contraceptive use				
Using	--	--	--	--
Not using	NS	NS	NS	NS
Frequency of marriage				
Once	--	--	--	--
More than once	NS	-0.529***	0.599***	NS
Views on women's employment outside home				
Good	--	--	--	--
Bad	NS	0.726*	0.308***	NS
Don't know	NS	NS	NS	NS
Views on women's mobility outside home				
Should move	--	--	--	--
Shouldn't move	NS	NS	NS	0.367***
Don't know	NS	NS	NS	NS
Constant	-0.137	0.059	-0.766***	0.137
<i>R</i> ²	<i>0.38</i>	<i>0.35</i>	<i>0.45</i>	<i>0.37</i>

* p<0.10, ** p<0.05, *** p<0.01, NS : not significant