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Fertility Preference: A Study of Some Basic Concepts and Considerations

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Basic Rationale of Studying Fertility Preferences

Research in fertility, preferences, particularly in developing countries, has received considerable attention in recent years because of its relationship with and important bearing on the complex family building processes. The subject of parental attitudes and aspirations in relation to household fertility decision-making have gained importance in recent fertility researches since these seem to be related to the future course of fertility in a society. The thrust of most of the research has been on the desired or preferred family size as a substitute variable for eventual fertility or completed family size. [1-4] If a respondent's stated fertility preferences are related in some way to her eventual fertility, then information on fertility preference should have a predictive value in forecasting the future course of fertility [5], and under voluntary control the desired number of children will be an increasingly important determinant of fertility. [6]

Studies on fertility preferences conducted in developed countries appear to confirm the above phenomenon but it has not yet been well-established, whether they are also true for many developing countries where fatalism and superstition are widely prevalent and where fertility regulation is not widespread. One of the concerns in this area stems from the controversy with regard to the meaningfulness or face validity of such attitudinal data with respect to fertility preferences. Thus, it has been long felt that an assessment of the quality of data on fertility preferences with a view to establishing their meaningfulness, reliability and validity is one of the first and most important steps in any attempt to analyse fertility preference data particularly in the context of developing countries.

In the above perspective, it is important to note that various conceptual and methodological issues and problems are of serious concern in any study related to fertility preference without which even face validity of preference data may not have any meaning. This concern is even more serious for Bangladesh, where most of the respondent women are illiterate and where conscious family planning is almost non-existent. Hence, the objective of this study is, first of all, to highlight some basic conceptual and methodological issues and problems, and then, to see how these are conceptualised by Bangladeshi women in stating

fertility preferences so that together, ultimately, it will help gain some insight into face validity in terms of the meaningfulness of the stated preferences in the context of Bangladesh.

Some Conceptual and Methodological Issues

A wide range of approaches have been used in the measurement of fertility preferences. In the literature, four types of questions are used for measuring preferred family size: "how many more" "over-again", "ordering" and "projective" [7]. The literature also indicates various conceptualisations on the preferred number of children, including "ideal family size", "desired family size", "intended family size" and "expected family size". In practice, surveys have varied widely in the wording of questions used to measure these concepts [8]. Again, the theoretical and empirical literature contains many assumptions about the nature of fertility decision-making in the family building process. In some cases, the notion of individual decision-making is ignored and the focus is on societal decisions on the basis of norms and values formulated to achieve the behaviour. In others, the emphasis is on the individual as the decision-maker carefully weighing costs and benefits of making choices to satisfy personally defined objectives. Furthermore, overlapping spiritual, social and physical realities together define the position of the individual within the culture and the context within which the decision is made [9]. Thus, actual changing circumstance will lead to a continuing revision of fertility preferences as time passes. Accordingly, several controversies and difficulties arise with regard to the concept and use of stated family size preferences, especially in developing countries. Without going into the details, we have tried to discuss in brief, some of the important issues below.

A Key assumption underlying the analytical framework is that a couple makes a decision about their preferred family size under certain conditions, and tries to implement this decision. Thus, the analytical framework addresses the issue of what decisions are made but not the behavioural and psychological steps and social interventions involved. An empirical investigation of this process has so far mainly used samples from developed countries [10]. Several aspects such as the timing of decisions, how decisions about fertility regulation methods are related to decisions, who participates in the decision process and with what influence; how material satisfaction and other concepts of marriage colour the process and so on, deserve attention in a perfect decision process.

It is also often unclear as to what constraints the respondents have in mind while answering questions on family size preferences and to what extent their responses reflect personal ideals in contrast to societal norms. Further, there is usually an implicit assumption that for all respondents a given number of

children has the same meaning and that the psychological distance, between a specific number of children is the same for all respondents [6]. In addition, it is also argued that the preference questions are not specific as to whether the children are counted at birth or as adults, which can make a substantial difference in a high mortality situation. There is also no allowance for possible contingencies (e.g. continued good health, a rise in income etc.) which the women may anticipate [11].

Another general assumption, which is also seriously questioned in the case of developing countries, is that whether the concept of ideal or desired family size makes any sense to respondents in populations where voluntary fertility control is not widespread. In general, where some control of fertility is possible, most respondents would be able to answer questions on family size preferences. But where fertility control is not easily accessible or may not be even considered the situation is more ambiguous [12], [13].

Family size preference, which is, measured in several ways-as a generalised ideal i.e., for a woman in the society; as a projected ideal; or as a personal ideal i.e., for her own family size-creates another conceptual issue [13]. However, the focus of most of the studies is on the last measure because of its greatest validity and strong association with individual characteristics. Thus, the response to preferred family size remains sensitive especially with reference to proper "wording" and "formation" of the question.

Another issue that claims considerable attention and acts as a serious problem especially in the context of developing countries is the rationalisation effect. In principle, rationalisation could be either upward (for unwanted births) or downward (among the involuntary childless women) though the later has seldom been reported in the literature [14]; and is less likely in developing countries. Theoretical considerations identify that actual family size and desired family size should develop through a combination of two mechanisms: one is implementation, where actual family size will be less than or equal to desired family size; and the other is rationalisation of actual family size; i.e. adjustment of desired family size in accordance with actual family size, which is also known as rationalisation bias [11]. Related research and the findings that have been accumulated during the past two decades in this field show that a large body of work has been undertaken to establish the "meaningfulness" or to examine the "face validity" in terms of the stability and predictive capacity of stated family size preferences. Hanser [15] argues that the concept of family size preference is a meaningful notion in society, where the number of children is determined by nature, spirits or God? [16]. Thus, it is often argued that women in developing countries have an irrational tendency, which is not often found in Western society, to have children according to fate.

In contrast, although the concept of family size preference, especially desired or ideal family size, and its usefulness are strongly debatable, convincing empirical evidence from many developing countries has compelled a number of scholars to conclude that such attitudinal responses to very specifically worded questions, although doubtless flawed by both theoretical and methodological problems, are the best available indicators of family size preference [13], and that findings related to these concepts are a reassuring confirmation that desired or ideal family size is a meaningful concept in developing countries [12], [17]. More importantly, even if fertility preferences need to be interpreted with all possible caution due to the sensitivity of the concept itself these, nevertheless, can be of use to the population analyst.

The other important aspect that has received considerable interest in recent fertility preference research, mostly conducted in developing countries, is the correlates of family size desires. An extensive review of such findings has been reported by Pullum [13]. Reviewing earlier studies, he mainly focuses on life-cycle factors (eg. no of living children, current age, age at marriage, marriage duration etc.), socioeconomic factors, child mortality and gender preference, and contraceptive use, and identifies them as the four primary sources of variation in family size desires.

These considerations along with many others lead to the fundamental issue that has been a recurrent concern with regard to the predictive validity of stated fertility preferences.

Discussion on Various Issues in the Context of Bangladesh

It is certain that in any circumstance, the conceptual and methodological issues behind the stated fertility preference are the prime concern that contributes substantially to any preference data and thus, to any study related to fertility preference. In this section, certain aspects that are considered result of the multitudinal effects of the conceptual issues mentioned above and others are discussed in the context of Bangladesh.

The Bangladesh Fertility Survey [18] which is the single most important and comprehensive preference data source in Bangladesh, is used as the database.

The first aspect namely, the extent and specificity of non-responses concerns responses in the 'undecided' and 'not stated' categories. Substantial evidence of non-responses is generally argued to be the result of a lack of conceptualisation of the conceptual and methodological issues that make the available information questionable. Table 1 clearly shows that non-responses are present in all

feasibles, some of which, however, are not large enough to cause any serious concern. But the nonspecific responses for desired family size which constitute about 28.52 percent and 3.75 percent non-stated, as well as for 'total number of additional children wanted, that is 24.98 percent and 4.12 percent respectively, are substantially high. Answers, such as, "it is up-to-God", "it depends on fate", "it is not in our hands" and so on are some typical non-responses. Thus, the responses available for any analysis are about 71 and 68 percent.

Table 1 : Extent of non-response and non-specific responses for different fertility preference variables, Bangladesh 1975

Fertility preference variable	**Category of respondents**	**Category of response**			**Total**
		Specific	**Other/undecided**	**Not stated**	
Desire for further births	All current married fecund women	91.87	7.91	0.22	100.00 (5348)
Gender preference	Currently married, fecund non-pregnant women, who want more children	99.55	--	0.45	100.00 (1332)
Additional children wanted	Currently married fecund women, who wanted further births	70.90	24.98	4.12	100.00 (1601)
Wantedness of last birth	Currently married, fecund women with at least one birth or current pregnancy	91.23	8.57	0.20	100.00 (4960)
Desired family size	All currently married women	67.74	28.52	3.75	100.00 (5767)

Figure in brackets indicate the total number of respondents.

Source : Bangladesh Fertility Survey, 1975, Record Tape and First Country Report, 1978.

Unfortunately, non-numeric answers are very common in most developing countries but to a greater extent where religious and traditional beliefs are

strong. Again, it is also argued that such non-specific responses are not necessarily due to a lack of understanding. "A large proportion of non-numerical response is a way of avoiding direct confrontation with an issue that is believed to be beyond the respondent's control. Expressing the number of additional children desired may also be premature especially given the high incidence of miscarriage and infant mortality" [19]. In fact, non-specific responses on certain fertility preferences are the highest in Bangladesh, among the first 18 WFS countries [8]. However, the main concern about non-response is that this may bias the measure. Thus, poor conceptualisation and thereby materialisation of Bangladeshi women of various conceptual and methodological issues relating to their desired goal with respect to future preferences are dearly evident, though the reporting of specific responses does not guarantee that these conceptual and methodological issues are correctly or consciously behind the responses i.e. that the responses are meaningful. These responses may simply be random replies without conscious thought.

The second aspect considered here deals with internal consistency which is performed to check how consistent the responses are with respect to similar responses on other variables, on the assumption that higher consistency is believed to add conscious thought to the conceptualisation of conceptual and methodological issues. A comparison of total desired family size with wanted family size that is, the number of living children plus the total additional children wanted is presented in Table 2.

Table 2 : Consistency between wanted family size and desired family size* by current age and number of living children, Bangladesh, 1975

	Mean wanted family size (WFS)	Mean desired family size (DFS)	Difference (WFS) (DFS)
Current age in years	3.72 (117)	3.83 (119)	- 0.11
15	3.65 (409)	3.67 (414)	- 0.02
15-19	4.15 (325)	4.07 (333)	0.08
20-24	4.53 (163)	4.40 (159)	0.13
25-29	5.36 (69)	4.47 (62)	0.89
30-34	4.97 (19)	4.24 (25)	0.73
35-39	5.43 (14)	3.78 (9)	1.65
40-44	4.22 (9)	3.22 (9)	1.00
45 +			
No. of living children +	3.44 (397)	3.58 (402)	- 0.14
0	3.69 (314)	3.76 (320)	- 0.07
1	4.14 (189)	4.05 (196)	0.09
2	4.86 (130)	4.43 (124)	0.43
3	5.76 (54)	5.21 (47)	0.55
4	7.31 (32)	5.88 (26)	1.43
5	7.91 (11)	6.33 (9)	1.58
6	10.00 (8)	5.83 (6)	4.17

7+			
All	4.10 (1135)	3.06 (1130)	0.14

* The data is confined to currently married fecund women who wanted more children.

+ including current pregnancy.

WFS = Number of living children + additional children wanted

Source : Bangladesh Fertility Survey, 1975, Record Tape.

The findings show that the consistency criterion is satisfied at all family sizes except in the case of younger women with 0 and 1 living children where too the differences are virtually zero. At the overall level, wanted family size is 4.1, whereas desired family size is about 4.0 on an average. To be consistent, wanted family size would have to be equal to or greater than desired family size. The reason as to why a greater value for desired family size is considered consistent is that if, for some women, actual family size has already exceeded desired family size, even if they report 'zero' number of additional children, wanted family size would be greater than desired family size, which is consistent.

Again, a comparison of the percentage of women under various broad categories from variables, also seems to show adequate consistency at the aggregate level.

Obviously, in reality, perfect consistency is virtually not possible due to problems of conceptualisation as well as various considerations relating to the life cycle states of the respondent. Thus, from the consistency criterion it appears that various conceptual and methodological issues seem to derive from conscious thought upto the specific responses to a great extent; these are not merely random.

Again, mean desired family size and the standard deviation are presented in Table 3.

Table 3 : Mean desired family size of currently married fecund women who gave numerical answers by number of living children*, Bangladesh, 1975

No. of living children	Mean desired family size	Standard deviation	Total number of cases
0	3.5	1.64	640
1	3.6	1.85	679
2	3.8	2.22	596

3	4.0	1.53	561
4	4.2	1.84	472
5	4.7	1.90	396
6	4.9	1.92	245
7	5.0	1.84	149
8	5.6	2.80	80
9	5.8	2.85	50
All	4.1	2.00	3906

* including current pregnancy.

Source: Bangladesh Fertility Survey, 1975, First Country Report, 1978.

Table 3 shows that mean desired family size is not invariant (constant). The overall mean-4.1-in not insignificant by any standard, reinforcing that stated desires are influenced by conscious thought of the respondents; and these are not just some kind of a reflection of the societal norm. Similar findings were observed in the case of mean total children wanted (Table 4). Individual variations existing to a considerable degree among these variables thus, lends credibility to conscious conceptualisation of various stated issues and thereby, to data quality.

Table 4 : Mean number of additional children wanted by currently married fecund women who wanted more children and gave numerical answers by number of living children*, Bangladesh, 1975

No. of living children	Mean desired family size	Standard deviation (+)	Total number of cases
0	3.44	1.54	397
1	2.69	1.52	314
2	2.14	1.29	189
3	1.86	1.42	130
4	1.76	1.29	54
5	2.31	1.64	32
6 +	2.16	--	19
All	2.70	1.59	1135

Source: Bangladesh Fertility Survey, 1975, Record Tape.

Finally, we consider rationalisation that is, an adjustment of desired family size in accordance with achieved family size. To the extent that this phenomenon operates, desired family size tends to be more than or equal to the actual but there is a correlation. If no strong correlation is evident between the two, then it is possible that a strong norm has substantially reduced the range of behavioural

implication or, in other words, the respondents have tended to report the group ideal rather than personal preferences [11]. From the above discussion, it is clear that the stated desired family size is not completely implemented, that is, considerations of varied issues are not perfect or accurate in replies, something that is practically impossible. Now the question is whether rationalisation issues, which as expected in the context of developing countries, are significant enough for the study population.

As can be observed from Table 5, the mean desired family size increases with the subsequent addition of living children, which may be interpreted as reflecting the increasing effect of rationalisation of actual family size as women pass through child bearing stages.

Table 5 : Percent distribution of currently married women according to whether desired family size is greater than, equal to or less than the number of living children

No. of living children	Desired greater than Actual	Desired less than Actual	Desired equal to Actual	Total	Mean desired family size	Total no. of cases
0	99.6	0.4	-	100	3.5	640
1	96.7	2.9	0.4	100	3.6	679
2	80.5	18.7	0.8	100	3.8	596
3	58.5	36.1	5.4	100	4.0	561
4	24.8	54.3	20.9	100	4.2	472
5	16.6	43.7	39.7	100	4.7	396
6	14.0	27.9	58.1	100	4.9	245
7	8.0	22.1	69.9	100	5.0	149
8	7.6	21.6	70.8	100	5.6	88
9 +	6.0	23.7	70.3	100	6.3	50
All	12.9	32.6	54.5	100	4.74	955

Source : Bangladesh Fertility Survey, 1975, Record Tape and First X Country Report, 1978.

Again, rationalisation is essentially a phenomenon, which occurs at higher family sizes. It is seen that as many as 60 percent of the women with family size of 5+ and 30 percent with a family size of 9+ do seem to report greater desired as compared to actual family size. Thus, it appears that there is a certain amount of rationalisation. Taking the mean desired family size, of 4.1 as the dividing line, about 11. 13 percent (435 women) at family size 5+ reported a desired family size which was greater than the actual family size. Now, if we take this as an extent of rationalisation, it may be said that in the study population, about 11 percent of

the women seemed to have rationalised their actual family size behaviour. In practice, however, an accurate estimate of rationalisation is not possible. The above estimate thus, may be simply treated as an indicator of a comparatively lower extent of rationalisation.

Concluding Remarks

Recognising that the study of motivation in human reproductive behaviour is of central importance to any attempt in understanding future fertility, and in designing and implementing successful family planning as well as other related public policies, this study has been an effort to highlight some of the basic conceptual and methodological issues of fertility preferences and their conceptualisation by Bangladeshi women.

In practice, an accurate estimate of the multitudinal effect of these issues is virtually impossible. However, the various aspects discussed above are clearly related to various conceptual and methodological issues and problems in terms of a meaningful consideration as well as face validity of the data. As such then this study may help future research in the area of fertility preference.

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