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Determinants of Family Size Preferences in Pakistan

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The paper attempts to investigate and identify some of the most important predictors of family size-preferences in Pakistan. Based on cross-sectional data relating to 9416 currently married women, the results of this study suggest that having one or more sons in the family is the principal predictor of the desired family size. Yet another important predictor is the education of the wife which plays a critical role in the family size determination. The study shows that the preferences for family size do not vary greatly between urban and rural areas. However, it seems that if more refined measures of such preferences are used in the future surveys, the practice would provide a better understanding of the prevailing reproductive norms in different segments of the society.

INTRODUCTION

The importance of understanding the reproductive norms can hardly be emphasized. Although the information pertaining to ideal and desired family size has been gathered in fertility-related surveys in Pakistan, an assessment of these variables as the factors influencing the achieved family size remains problematic. Keeping in view the fact that the process of family size regulation requires the motivation and use of family planning methods, for which education is a closely related variable, one has to be careful in drawing any inference about the linkages between the ideal or desired family size and actual family size. In this connection, it has to be kept in view that the number of living children a woman has at a given time is not only the product of her reproductive behaviour, but also of the risks of mortality through which the children ever-born pass overtime. To the extent that the rise in survival probabilities owing to decline in child mortality is not internalized by the parents in their reproductive norms, an excess of living children over the desired number appears to be an obvious outcome. Such a non-correspondence is also driven in case the son preference is operative.

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Review of Literature

The relevance of the statements on family size preferences to the actual reproductive behaviour and the possible considerations behind such preferences have, however, been the subject of interest to the demographers in different parts of the world [Hauser (1967); Ware, (1974)]. Using the 1975 Pakistan Fertility Survey (PFS) data, Shah and Palmore (1979) examined the consistency between measures of desired family size and contraceptive use in the country. They observed that in the absence of longitudinal studies, the desired family size and contraceptive use could be considered to be meaningfully related. Using an earlier data source, namely the 1968-69 National Impact Survey (NIS), Khan and Sirageldin (1983) examined the credibility of numerical responses to the survey questions concerning the desired additional fertility. They also carried out an investigation into the determinants of these responses.

Although some demographers have agreed upon the usefulness of these measures in predicting future fertility in developed countries, they doubt a meaningful application of the same in developing countries [Hauser, (1967); Lightbourne and MacDonald (1982)]. They argue that women in developed countries are relatively more independent in their socio-economic and demographic behaviour and hence their family size preferences may be reliable predictors of the future family sizes. Others are of the opinion that the responses could be meaningful in developing countries provided the questions are correctly framed and presented [Gay (1971); Ware (1974)]. In fact, in surveys across Africa, Ware (1974) observed that proper question ("If you could choose how many children God would send, how many would you choose?") did elicit meaningful numerical responses "from the most fatalistic of respondents, all of whom are well-aware that abstinence would limit God's gift".

Another criticism of these measures is that the responses to the questions on family size preferences are highly correlated with the actual or completed family size. Particularly, in a situation where the question about the preferred family size is put to women who continue child-bearing in spite of having no desire for additional children. Such women tend to correlate their family size with the preferred family size in order to avoid implying that any of their children are unwanted. However, a study in Nigeria shows that among women over age 40, only a one-fifth of the responses regarding ideal family size tallied with their actual family size [Ware (1974), p. 6].

In societies influenced by sex preference, young couples may understate their fertility preference, while in reality they continue child-bearing until they have at least one or two children of the desired sex. But another argument is that the preference for a specific sex is likely to affect the fertility levels of a small proportion of couples. The proponents of this argument contend that by biological chance,

50 percent chances are that the first child born is of the desired sex. In case of a second birth, again 50 percent chances are that it is likely to be of the desired sex, and so on. Therefore, a large majority of all couples will have at least one child of the desired sex early in their child-bearing careers.

Farooq (1981) suggests that in developing countries though observed fertility may not reflect the actual demand for children, yet the family size preferences would do.

Although the precise relevance of these measures has always been argued, an attempt is made here to examine these measures utilizing Pakistan's data.

Objective of the Study

In this study, we intend to explore the following:

(1) Stated fertility preferences are meaningful in Pakistan.
(2) The preference for a specific number of children varies between different groups of people, according to their socio-economic and demographic characteristics.
(3) Having one or more sons in a family is an important determinant of family size preferences.

Data and the Limitations

The present study is based on the data collected through the fertility module of the 1979-80 Population, Labour Froce and Migration (PLM) Survey. The survey was based on a national sample of 11288 households. Out of these, a total of 10098 ever-married women aged 10 to 50 were interviewed to elicit fertility-related infomation. The analysis in this paper relates to currently married women aged 49 and less, thus excluding women who were widowed and divorced and those whose stated age was 50 years. The remaining sample was of 9416 women. The two measures of family size preferences, namely 'ideal family size' and 'desired family size', were analysed in the present study. The question on ideal family size was worded, "In your opinion how many children should a married couple have?"; whereas the 'desired family size' was determined by adding the number of living children and additional children wanted. In cases where the respondents did not want additional children, the existing number of children was considered as their desired number. 'Additional children wanted was phrased in the questionnaire as "How many more children do you want to have?"

In developing countries, the "up to God" or "as many as possible" answers in response to the question on "ideal family size" or "additional children desired" occur frequently. In the case of the PLM data, upto 15.6 percent women gave such non-numeric answers to the question on ideal family size, and a 7.7 percent for the

one on "whether additional children were desired". Moreover, a further 5.8 percent of the women were undecided about the additional number of children desired. Likewise, in the 1975 PFS, an 8 percent of the women gave non-numeric responses to the question on the number of additional children wanted [Lightbourne and MacDonald (1982)].

The present analysis is limited to women who provided numeric answers to questions on family size. The reason for this is based on the following observations. Analysing the data from Guatemala and India, where a relatively large number of women gave non-numeric responses to a question on the additional children desired, Jensen (1985) observes that no empirical support is provided to the notion that women who provide non-numeric responses are likely to prefer large families. Similarly, in WFS data from Bangladesh, where approximately 14 percent of the respondents were reported to give non-numeric answers to the question on the number of additional children wanted [Lightbourne and MacDonald (1982)], the authors observed no difference in the underlying preferences between those who did and those who did not provide numeric responses. The circumstances in which Pakistani women live are not very different from the circumstances of those living in Bangladesh or India. Thus, it is presumed that their attitude regarding family size preferences will also be similar to that of the women in the above two countries. In view of the above findings, and also because of the relatively large sample size of the present data, it is expected that the validity of the results will not be compromised to any great extent by restricting the analysis to numeric responses.

Stated Family Size Preferences and Actual Behaviour – An Inter-temporal Comparison

A comparative view of the estimates of children ever-born, children living, and stated ideal family size, as worked out from the 1975 Pakistan Fertility Survey, the 1979-80 PLM Survey, and the 1984-85 PCP Survey is provided in Table 1.

The Table shows that the estimate of mean number of children ever-born for the 1975 PFS is the same as for the 1984-85 PCPS, while for the 1979-80 PLM it is somewhat lower. The estimate of mean number of living children, however, indicates an increasing trend, which, in view of no evidence of increase in fertility[1] (and hence children ever-born) over the decade 1975–85, can only be due to a decline in infant-child mortality.[2]

Table 1 also shows that in comparison to 1975, the estimates of ideal family

[1]The estimates of Total Fertility Rate from 1975 PFS and 1984-85 PCPS are 6.27 and 5.95 respectively, which indicates a decline in fertility even though the estimates of children ever-born per woman for the two surveys was the same.

[2] The estimates of infant-child mortality from the three surveys clearly confirm the declining trend [Afzal *et al.* (1988)].

Table 1

Comparative View of Children Ever-born, Children Living, and Stated Ideal Family Size in Pakistan from the 1975 Pakistan Fertility Survey (PFS), the 1979-80 PLM Survey, and the 1985-85 PCP Survey

	All Areas			Urban			Rural		
	1975 PFS[1]	1979-80 PLM[2]	1984-85 PCPS[3]	1975 PFS[1]	1979-80 PLM[2]	1984-85 PCPS[3]	1975 PFS[1]	1979-80 PLM[2]	1984-85 PCPS[3]
Children Ever-born	4.3	4.0	4.3	4.4	4.3	4.4	4.2	3.8	4.2
Living Children	3.2	3.3	3.5	3.5	3.7	3.7	3.1	3.1	3.4
Additional Children Desired	1.2	1.6	–	1.3	1.2	–	1.4	1.8	–
Ideal Family Size	4.2	4.6	4.9	3.9	4.3	4.7	4.3	4.7	5.0

Sources: [1]Population, Planning Council of Pakistan, 1976.
[2]PLM Survey, original analysis of data tape.
[3]Population Welfare Division, Islamabad, 1986.

size for 1979-80 and 1984-85 are higher. Given the fact that the increase in children ever-born between 1975 and 1985 has not occurred, the increasing trend in stated ideal family can be either a validation exercise and/or a data limitation. The possibility that the ideal and desired family sizes were under-estimated in the previous surveys cannot be rejected.

Consistency of the Measures of Family Size Preferences

To measure the consistency of the responses, two variables – ideal family size and whether a woman wants more children – were compared so that the proportion of consistent responses was obtained by adding together those women who wanted no more children when they already had more than, or the same number as, their ideal. The inconsistent responses pertained to those women who wanted more children in spite of having as many as, or more than, their ideal, and to those who did not want any more children, although they had fewer than their ideal number.

The analysis of the present survey data indicates that 85 percent of those who were interviewed gave consistent responses (Table 2). The corresponding figure in the 1975 PFS was 84 percent [Shah and Palmore (1979)]. Interestingly, no difference in reporting consistency was found between the rural and the urban areas.

Most of the inconsistent responses are given by those women whose actual family size was less than their stated ideal, but who said that they wanted no more children. Presumably, these women have not responded to this question in the context of a personal ideal. Another explanation is that in optimum circumstances these women would have wanted more, but their circumstances at the time of survey were such that they did not express a desire for more children. Similar views are also expressed by Palmore and Concepcion (1985) and Shah and Palmore (1979). The above findings suggest that the responses about family size preferences are consistent in most cases.

Some Differentials in Ideal and Desired Family Size

Table 3 shows that the estimate of mean ideal family size for all the respondent women is lower than their average desired family size. While both these estimates show an increasing trend by age group of mothers, the differentials between the two indicate the higher ideal family size upto age 25–29 years getting reversed beyond that age group, with the desired family size becoming higher than the ideal family size. Similar patterns are observed for urban and rural areas, but for the urban women these differentials are indicated to be relatively higher. The table shows a slight decline in the two estimates for women who get married at the relatively higher ages.

Table 2

*Consistency of Respondent Women's View on Ideal Family Size and their Desire for More Children: 1979-80 PLM Survey**

			Pakistan		Urban		Rural	
			%	N	%	N	%	N
Consistent Responses								
Ideal Number of Children	⩽	Number of Living Children for Mothers who Wanted No More Children	32.9	1916	42.8	669	29.2	1247
Ideal Number of Children	>	Number of Living Children for Mothers who Wanted More Children	52.5	3061	42.7	667	56.1	2394
Total			85.4	4977	85.5	1336	85.3	3641
Inconsistent Responses								
Ideal Number of Children	⩽	Number of Living Children for Mothers who Wanted More Children	3.3	194	3.7	58	3.2	136
Ideal Number of Children	>	Number of Living Children for Mothers who Wanted No More Children	11.3	658	10.8	169	11.5	489
Total			14.6	852	14.5	227	14.7	625
Grand Total			100	5829	100	1563	100	4266

*Based on data relating to currently married fecund women who gave numeric responses. Women who were undecided about having more children are excluded.

Table 3

Mean Family Size Preferences,[1] according to Some Selected Characteristics: 1979-80 PLM Survey

Characteristics	All Areas		Urban		Rural	
	Mean Ideal	Mean Desired[2]	Mean Ideal	Mean Desired[2]	Mean Ideal	Mean Desired[2]
All Women	4.64 (7916)	4.88 (7384)	4.34 (2160)	4.94 (2017)	4.75 (5756)	4.86 (5368)
Age Group (in Years)						
< 20	4.31	4.03	4.27	3.80	4.33	4.07
20 – 24	4.36	4.14	4.02	3.91	4.48	4.21
25 – 29	4.55	4.50	4.20	4.27	4.69	4.60
30 – 34	4.68	5.06	4.38	5.15	4.79	5.03
35 – 39	4.82	5.45	4.56	5.66	4.92	5.36
40 – 44	4.86	5.68	4.52	6.11	5.00	5.51
45 – 49	5.02	5.87	4.64	6.11	5.18	5.77
Age at Marriage (in Years)						
⩽ 15	4.84	5.14	4.62	5.47	4.92	5.03
16 – 17	4.59	4.81	4.34	4.86	4.69	4.79
18 – 19	4.52	4.75	4.21	4.74	4.63	4.76
20 and Above	4.47	4.62	4.07	4.40	4.64	4.72

Continued –

Table 3 – (*Continued*)

Wife's Education						
No Schooling	4.74	4.94	4.56	5.19	4.79	4.87
Primary	4.21	4.63	4.09	4.72	4.32	4.54
Secondary	3.86	4.36	3.84	4.27	3.92	4.66
Tertiary	3.31	3.64	3.29	3.62	3.43[3]	3.76[3]
Husband's Education						
No Schooling	4.78	4.94	4.63	5.21	4.81	4.88
Primary	4.81	5.05	4.60	5.34	4.89	4.94
Secondary	4.37	4.75	4.18	4.79	4.51	4.72
Tertiary	4.01	4.39	3.84	4.29	4.38	4.62
Wife's Work Participation						
Ever Worked	4.97	5.12	4.24	4.87	5.18	5.19
Never Worked	4.60	4.84	4.35	4.94	4.69	4.80
Number of Living Children						
0	4.16	3.84	3.92	3.66	4.23	3.89
1	4.28	3.96	4.03	3.68	4.36	4.05
2	4.31	4.05	3.91	3.75	4.45	4.15
3	4.52	4.25	4.07	3.95	4.69	4.37
4	4.69	4.56	4.43	4.42	4.75	4.61
5	5.04	5.32	4.58	5.18	5.25	5.39

Continued –

Table 3 – (*Continued*)

Characteristics	All Areas		Urban		Rural	
	Mean Ideal	Mean Desired[2]	Mean Ideal	Mean Desired[2]	Mean Ideal	Mean Desired[2]
6	5.22	6.21	4.95	6.18	5.34	6.23
7+	5.42	7.96	4.95	7.99	5.69	7.93
Number of Living Sons						
0	4.27	4.09	4.03	3.96	4.34	4.12
1	4.48	4.36	4.19	4.15	4.57	4.42
2	4.67	4.74	4.25	4.59	4.86	4.81
3+	5.13	6.23	5.79	6.44	5.28	6.13

Note: Figures in parenthesis indicate the number of women in each category.

[1]Currently married women under the age of 50 who gave numeric responses.

[2] Fecund women only.

[3] Fewer than 20 cases.

Education levels of women and husbands are indicated to be inversely related to the ideal and desired family size in both urban and rural areas, but the differentials in family size preference, when seen by the work status of women, indicate different patterns for the two sub-populations. While for urban areas the women who ever worked are indicated to have reported a relatively lower ideal and desired family size than those who never worked, the reverse seems to be the case for rural areas. For rural areas, the indicated differentials by work status of women can be attributed to the traditional involvement of women in agriculture-related activities. As the latter, along with the continuous predominance of the joint family system, does not necessarily demand their full-time involvement in looking after the children, there is perhaps no consideration for the women to report a relatively lower ideal or desired family. For urban areas, it is indicated that at least some working women realize the need for a relatively smaller family size preference.

The estimates of mean ideal and desired family size for the women with a varied number of living children show an increasing trend, with a reversal in pattern similar to the one observed for the differentials by age. In this case, the estimates of mean desired family size are indicated to be lower than the average ideal family size for the women with 4 or fewer living children. This observation is similar to the results observed in Table 1, which showed that, on the average, responses of the women regarding ideal family size are based on a rationalized reflection of their actual family size. Although the estimates of ideal and desired family size (given in Table 3) for the women with varied number of living sons are consistent with the pattern observed in the case of the number of living children, the issue regarding the role of male-child expectancy as a factor to influence the desire for additional children is examined from the results provided in Table 4.

The desire of additional children for the women having a certain number of living children with no living sons or with one or more living sons has been examined in Table 4 by working out ratios of women who do not want more children. Thus, a ratio of more than one indicates a higher proportion of those who want additional children than of those who do not want so. The table shows that this ratio is much higher when there is no living son, implying that the indicated demand of additional children in fact is the desire for a son. Although the figures show a decreasing trend in this desire when the number of children (in this case, daughters) goes up, yet the proportion of such women remains more than two times the women who did not wish to have more children, even at the highest parity.

For the women who had one son, the desire for additional children is indicated to become substantially lower than for those who did not have a son, even when such women have one or more daughters. Table 4 further indicates that among such women who had two sons only, those desiring additional children are of a larger proportion than the women with a one-son-and-one-daughter combination. This,

Table 4

Ratios of Women who Want Additional Children to those who do not Want Additional Children, by Number of Living Sons and Number of Living Children

Number of Living Sons	Number of Living Children								
	0	1	2	3	4	5	6	7+	Total
				All Pakistan					
0	264.20	23.17	13.85	10.33	6.11	10.00	9.00	2.67	31.17
1	–	21.80	4.30	2.41	0.92	0.50	0.60	0.57	3.12
2	–	–	6.49	1.31	0.53	0.38	0.21	0.14	0.88
3	–	–	–	1.93	0.46	0.33	0.28	0.20	0.43
4+	–	–	–	–	0.54	0.24	0.16	0.12	0.16
Total	264.20	22.41	5.85	1.97	0.65	0.38	0.25	0.16	1.62
				Urban					
0	281.00	14.22	16.25	4.71	3.75	4.00	2.00	2.00	18.96
1	–	12.54	2.84	1.49	0.87	0.41	0.80	0.43	2.12
2	–	–	2.87	0.72	0.29	0.21	0.13	0.05	0.50
3	–	–	–	1.71	0.28	0.15	0.19	0.11	0.27
4+	–	–	–	–	0.13	0.19	0.12	0.07	0.10
Total	281.00	13.35	3.69	1.23	0.43	0.23	0.20	0.08	1.03

Continued –

Table 4 – (*Continued*)

				Rural					
0	208.00	28.47	13.19	15.17	8.00	16.00	–	6.00	38.31
1	–	27.16	4.96	2.96	0.93	0.58	0.46	0.64	3.60
2	–	–	9.83	1.65	0.65	0.48	0.23	0.22	1.10
3	–	–	–	1.98	0.53	0.41	0.33	0.25	0.51
4+	–	–	–	–	0.73	0.27	0.18	0.15	0.20
Total	208.00	27.73	7.00	2.39	0.75	0.46	0.27	0.20	1.92

alongwith the other similarly higher ratios for the women having male children, only indicates the desire for having at least one daughter in the family.

It is further observed from the table that the proportion of such women who do not want additional children becomes higher when they have more than three children, with at least one son.

Similarly, worked out ratios for urban and rural areas, provided in Table 4, show that in general the demand for additional children is conspicuously higher in the rural areas as compared to the urban areas. The urban-rural differentials with two living children indicate that the demand for additional children, when both the living children are males, is much higher in the rural than in the urban areas. In other words, the desire for at least one daughter is more clearly indicated in the rural areas.

Multiple Classification Analysis

The study of differentials in family size preferences is further extended to examine the relationships between some selected independent variables, and the two dependent variables, namely ideal family size and desired family size, by using the Multiple Classification Analysis (MCA) technique. MCA is one of the multivariate techniques to look at the relationships between several predictor variables and a dependent variable. This technique, which controls simultaneously a number of variables within the framework of an additive model fitted by the method of least squares, can be used for displaying the results of the analysis of variance where significant interaction effects are absent.

As mentioned earlier, the statements of the respondent women in the PLM survey, regarding their views on the ideal size of a family and about the number of children they additionally wanted to have, were made by keeping in consideration their existing number of children. The existing number of children, of course, is the outcome of children ever-born to them and the number of children who died. Similarly, the two variables of family size preference, viz., the ideal and desired family size, are also found to be closely linked with the age of the women. Thus, to study the relationship between the selected predictor variables and the dependent variables of family size preference, the women's age (at the time of interview), the number of her living children, and the number of children who died were taken as the covariates or intermediate variables, while the woman's education, her age at marriage, and the number of her living sons were taken as the main predictor (independent) variables. However, in order to see whether the three selected independent variables (for main effects) fulfilled the condition of insignificant interactions between them, an analysis of variance exercise was done for each of the two dependent variables, the results of which are provided in Appendix Tables 2 and 3. Since the results given in the two tables showed the interaction effects of the predictor variables to be insignificant, the Multiple Classification Analysis was carried out to see how much of the variation

in the ideal and desired family size was explained by the predictor variables, after controlling for the effect of the covariates.

In Tables 5 and 6, which provide the results of the Multiple Classification Analysis, an inverse relationship between women's education and the two dependent variables of family size preferences is clearly apparent. The age at marriage of women also indicates an inverse relationship with the two dependent variables. The 'Eta' and 'Beta' coefficients for both, woman's education and her age at marriage, are relatively higher in urban areas than in rural areas, which means that in urban areas each of these two predictors explains a relatively higher proportion of variation in the dependent variables.

The number of living sons as a predictor variable, which is an index of son preference phenomena, shows some interesting results. The Beta coefficients for this variable are substantially reduced when an adjustment for the covariates is also made to explain the variations in ideal family size (Table 5). In fact, after these adjustments, the role of the wife's education alone remains conspicuous in explaining the variations in the dependent variable, especially in the urban areas.

In comparison to ideal family size, the role of living sons as a predictor variable of desired family size is more conspicuous for both urban and rural segments of population, but with a slight edge for the estimates relating to urban areas (Table 6). From the results provided in Table 6 there is a clear indication that the desired number of children remains higher when there is no living son in the family. With one living son, the negative effect on the desired number of children is indicated to be more prominent in the urban areas than the rural areas. With two living sons, the desire becomes further low in both urban and rural areas of Pakistan. The role of male-child expectancy as an important determinant of the stated family size preferences is thus apparent, especially for those who do not have at least one surviving son.

The multiple R^2 values without adjustment for the covariates (in Tables 5 and 6) indicate that three selected predictor variables explain 32 percent of the variations in desired family size, but only 9 percent in the ideal family size, for the urban areas. In the rural areas, the corresponding percentages of the two dependent variables are 21 percent and 7 percent respectively. The estimates of R^2, when adjustments for the covariates are taken into account, become substantially higher but much more prominent in the case of desired family size. It is about 68 percent in the urban and 51 percent in the rural areas. For ideal family size, the urban and the rural estimates, after adjustments, are about 13 percent and 12 percent respectively.

CONCLUSION

The foregoing suggests large family size preferences. Increases in the preferred

Table 5

Multiple Classification Analysis (MCA) of Ideal Family Size and Selected Variables, Controlling for Age of Women, Number of Living Children, and Children who Died: 1979-80 PLM Survey

Predictor Variables	All Areas				Urban Areas				Rural Areas			
		Grand Mean = 4.64				Grand Mean = 4.34				Grand Mean = 4.75		
			Deviation Adjusted for				Deviation Adjusted for				Deviation Adjusted for	
	N	Deviation Unadjusted	Independent Variables	Independent Variable and Covariates	N	Deviations Unadjusted	Independent Variables	Independent Variable and Covariates	N	Deviations Unadjusted	Independent Variables	Independent Variables and Covariates
Women's Education												
No Schooling	6911	0.10	0.09	0.08	1501	0.22	0.18	0.16	5411	0.04	0.03	0.03
Primary and Less	464	–0.44	–0.39	–0.37	231	–0.26	–0.24	–0.20	233	–0.43	0.34	–0.31
Secondary and Above	541	–0.89	–0.78	–0.75	428	–0.62	–0.51	–0.44	113	–0.88	–0.75	–0.72
Eta		0.18	–	–		0.23	–	–		0.11	–	–
Beta		–	0.16	0.15		–	0.19	0.16		–	0.09	0.08
Age at Marriage (in Years)												
⩽ 15	2841	0.20	0.11	0.05	696	0.28	0.13	0.05	2145	0.16	0.11	0.05
16 –18	2696	–0.08	–0.05	–0.06	788	–0.03	–0.03	–0.04	1907	–0.09	–0.05	–0.05
19 +	2380	–0.15	–0.08	–0.00	676	–0.25	–0.10	–0.00	1704	–0.10	–0.08	–0.01
Eta		0.10	–	–		0.14	–	–		0.09	–	–
Beta		–	0.06	0.03		–	0.06	0.03		–	0.06	0.03

Continued –

Table 5 – (*Continued*)

Number of Living Sons												
0	2108	–0.37	–0.35	0.05	510	–0.32	–0.25	0.11	1599	–0.41	–0.39	0.05
1	1974	–0.17	–0.15	–0.03	504	–0.16	–0.11	0.00	1470	–0.18	–0.18	–0.05
2	1671	0.03	0.04	–0.07	499	–0.09	–0.09	–0.14	1172	0.10	0.10	–0.04
3+	2163	0.49	0.45	0.04	647	0.44	0.36	0.02	1515	0.53	0.51	0.02
Eta		0.23	–	–		0.20	–	–		0.25	–	–
Beta		–	0.21	0.03		–	0.16	0.06		–	0.24	0.03
Multiple R			.288	.355			.294	.367			.271	.349
Multiple R Squared			.083	.126			.087	.135			.074	.122

Table 6

Multiple Classification Analysis (MCA) of Desired Family Size and Selected Variables, Controlling for Age of Women, Number of Living Children, and Children who Died: 1979-80 PLM Survey

Predictor Variables	All Areas				Urban Areas				Rural Areas			
		Grand Mean = 4.88				Grand Mean = 4.94				Grand Mean = 4.86		
			Deviation Adjusted for				Deviation Adjusted for				Deviation Adjusted for	
	N	Deviation Unadjusted	Independent Variables	Independent Variable and Covariates	N	Deviations Unadjusted	Independent Variables	Independent Variable and Covariates	N	Deviations Unadjusted	Independent Variables	Independent Variables and Covariates
Women's Education												
No Schooling	6469	0.07	0.04	0.05	1412	0.26	0.14	0.09	5056	0.02	0.01	0.01
Primary and Less	432	–0.25	–0.15	–0.15	216	–0.22	–0.16	–0.06	215	–0.32	–0.11	–0.11
Secondary and Above	486	–0.67	–0.44	–0.49	389	–0.82	–0.43	–0.31	97	–0.30	–0.09	–0.19
Eta		0.11	–	–		0.22	–	–		0.05	–	–
Beta		–	0.07	0.08		–	0.12	0.08		–	0.02	0.02
Age at Marriage (in Years)												
⩽15	2643	0.26	0.11	0.02	672	0.55	0.21	–0.00	1971	0.17	0.07	–0.04
16 – 18	2559	–0.09	–0.03	–0.03	727	–0.10	–0.04	–0.05	1832	–0.08	–0.02	–0.03
19 +	2184	–0.22	–0.10	0.07	618	–0.48	–0.17	0.06	1565	–0.12	–0.07	0.08
Eta		0.11	–	–		0.21	–	–		0.07	–	–
Beta		–	0.05	0.03		–	0.08	0.02		–	0.03	0.03

Continued –

Table 6 – (*Continued*)

Number of Living Sons												
0	2012	–0.80	–0.78	0.70	466	–0.98	–0.91	0.91	1545	–0.73	–0.72	0.62
1	1818	–0.53	–0.52	0.01	451	–0.79	–0.74	–0.01	1367	–0.43	–0.43	0.01
2	1518	–0.14	–0.14	–0.50	454	–0.36	–0.35	–0.55	1064	–0.05	–0.05	–0.46
3+	2039	1.36	1.33	–0.33	646	1.51	1.42	–0.26	1392	1.28	1.27	–0.34
Eta		0.48	–	–		0.54	–	–		0.46	–	–
Beta		–	0.47	0.26		–	0.51	0.27		–	0.45	0.25
Multiple R			.491	.749			.566	.823			.458	.717
Multiple R Squared			.241	.561			.320	.677			.210	.514

family size during 1975–85 appear to be due partly to a data problem, and partly to a validation of the actual reproductive outcome. More refined measures such as I – scales developed by Coombs (1974, 1979), if included in the future surveys, can help in understanding the reproductive norms and family size preferences.

Admittedly, the relevance of responses on ideal and desired family size to the study of actual reproductive behaviour appears impaired; yet their analysis promises to increase understanding of fertility behaviour.

The analysis carried out in this paper indicates that family size preferences are more or less insensitive to age at marriage. Female education, however, emerged to be an important factor moulding the behaviour towards small family size norms.

Although son-preference is borne out by the data-where-in having one or more sons in a family was found to be the principal predictor of desired family size yet it must be noted also that there appears to be some sort of sequential decision-making in pursuit of having a sex composition of children with one daughter at least. Counselling services similar to the ones in Singapore, which enable parents to achieve their desired sex composition of children, may have a productive future role in Pakistan.

Appendix Table 1

Precentage Distribution of Currently Married, Fecund Women,[1] according to Desired and Ideal Family Size and Age, 1979-80 (All Pakistan)

Ideal Family Size	Desired Family Size								
	1	2	3	4	5	6	7+	Total	Number of Women
Age < 25 Years									
1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1
2	0.2	2.3	1.0	0.2	0.0	0.0	0.0	3.8	75
3	0.2	1.4	8.4	2.5	0.4	0.1	0.0	12.9	250
4	0.4	1.4	11.3	23.8	5.7	1.0	0.6	53.1	1033
5	0.1	0.1	1.4	4.3	6.8	1.4	0.2	14.3	278
6	0.1	0.1	0.4	1.7	3.0	4.8	0.6	10.7	209
7+	0.0	0.1	0.2	0.5	0.9	1.2	2.2	5.1	100
Total	1.1	5.3	22.6	42.1	16.8	8.5	3.6	100.0	1946
Number of Women	22	104	440	819	326	165	70		
Age 25 – 34 Years									
1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	5
2	0.3	1.7	0.7	0.4	0.4	0.3	0.2	3.9	99
3	0.0	0.7	5.2	1.8	1.1	0.6	0.3	9.6	245
4	0.3	1.1	7.0	22.2	6.7	3.5	2.7	43.5	1106

Continued –

Appendix Table 1 – (*Continued*)

Ideal Family Size	Desired Family Size							Total	Number of Women
	1	2	3	4	5	6	7+		
5	0.1	0.2	1.1	4.8	8.9	1.9	1.3	18.3	465
6	0.0	0.1	0.6	2.1	4.5	7.1	2.9	17.3	439
7+	0.0	0.0	0.1	0.3	0.8	1.5	4.4	7.1	181
Total	0.7	3.8	14.7	31.7	22.4	14.9	11.8	100.0	2540
Number of Women	18	97	373	806	568	377	301		
	Age ⩾ 35 Years								
1	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.3	6
2	0.2	1.4	0.6	0.6	0.5	0.4	0.6	4.2	92
3	0.2	0.7	3.5	0.8	0.7	0.8	1.2	8.0	175
4	0.5	1.3	4.8	10.9	6.0	5.6	8.5	37.6	826
5	0.0	0.4	0.8	2.4	5.8	2.6	4.0	16.0	352
6	0.0	0.1	0.7	2.1	3.6	7.5	7.7	21.8	479
7+	0.0	0.0	0.4	0.6	1.4	2.1	7.7	12.2	269
Total	0.9	4.0	10.8	17.4	18.0	19.1	29.9	100.0	2199
Number of Women	19	88	237	382	396	419	657		

Source: PML Survey, 1979-80 original analysis of data tape.

Notes : The outlined diagonal cells indicate those women who gave the same responses for both questions. These totalled 57.5 percent for women under age 25, 49.5 percent for women aged 25 – 34, and 36.8 percent for women aged 35 and over.

[1]Women who gave numeric responses.

Appendix Table 3

Analysis of Variance Results for Desired Family

Source of Variance	All Areas		Urban		Rural	
	F	Significance	F	Significance	F	Significance
Main Effects	579.553	.001	283.988	.001	330.796	.001
a. Women's Education	39.391	.001	39.114	.001	1.298	.05
b. Age at Marriage	19.962	.001	17.758	.001	6.522	.00
c. Number of Living Sons	1231.942	.001	507.858	.001	745.288	.001
Covariates	1796.185	.001	739.723	.001	1119.346	.001
d. Women's Age	262.752	.001	76.872	.001	186.460	.001
e. Number of Living Children	5025.248	.001	2011.184	.001	3157.451	.001
f. Number of Children who have Died	30.854	.001	0.670	.05	34.640	.001
2-Way Interaction	1.501	.05	0.870	.05	1.395	.05
a x b	0.955	.05	0.390	.05	0.803	.05
b x c	1.565	.05	0.557	.05	1.915	.05
b x c	1.906	.05	1.553	.05	1.278	.05

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