

Individual Perceptions of Providers and Non-Users of Family Planning in Pakistan: A Comparative Analysis

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ABSTRACT

The study compares the perceptions of service providers and non-users on family size preference, sex preference, modern values such as women's rights and roles and on contraception. The bivariate and multivariate (discriminant analysis) analyses suggest differential perceptions between service providers and non-users on these cultural factors, which nullify the assumption that service providers are similar to non-users in their individual perceptions.

Key Words: Family planning; Perceptions; Pakistan

INTRODUCTION

An attempt has been made to compare individual perceptions of family planning providers in Family Welfare Centers (FWCs) with those of the non-users of family planning living in the vicinity of these FWCs. The purpose is to seek for the dissimilarities and similarities in the perceptions of both of the categories of the people. The logic behind this comparison is to find out that whether working in the family planning programme makes a difference in service providers' perceptions from those of the non-users. Another reason for including non-users in the study is that service providers in the family planning programme are also an integral part of the socio-cultural network of Pakistani society that in itself is considered to be an obstacle to adoption of contraceptive use in this society. It seems reasonable to assume that these service providers are not free from the influence of the culture of which they are part but they are working in the programme due to the economic reward (salary) they receive. Therefore, one way to evaluate the influence of social values is a comparison of perceptions of those who are committed (service providers) and those who are not committed to the family planning programmes either as service providers or users. In this study, a deliberate attempt has been made to undertake this comparison. Perceptions considered for comparison are perceptions about family size preference, son preference, modern values and contraception.

MATERIALS AND METHODS

Sampling. At the time of the research, there were 55 FWCs throughout the Faisalabad district of Pakistan. Each FWC was staffed by one Family Welfare

Worker/Family Welfare Counselor, two Family Welfare Assistants (one female and one male), one female and one male helper, so, each center generally had five staff.

A further idea had been to make a comparison of individual perceptions of the non-users of family planning living close to the FWCS and service providers working in FWCs in the study area. Therefore, non-users living in the vicinity of FWCs were included in the sampling frame of this study.

The sample. Once the decision has been made on the type of service delivery points (SDPs) to be selected for research, the whole universe (i.e. all SDPs) or a representative sample of these points can be selected for the study (Fisher *et al.*, 1992). It was decided to include all 55 centres in the district in the study.

All five staff members at every FWC covering the whole district were selected. This made a potential sample of 275 workers. All 55 centres in the district were visited to collect information but one of the centres was found locked on three consecutive visits, so, it was ultimately dropped from the study. Unmarried service providers were not included because service providers' individual perceptions were to be compared with those of the non-users, all of whom were married. As a result, the sample size of the service providers was reduced to 177 in total due to single or absent service providers.

A sample of five non-users (matched to service providers by age and sex) was selected randomly at each FWC. Only one eligible respondent per household was selected. This provided a comparison group of 270 non-users in 54 centres against which the service providers' profile can be compared. In all, 177 service providers and 270 non-users were included in this study, making a total of 447 respondents.

Data collection. Two separate interviewing schedules were designed for this research (one for employees and one for non-users). This was followed by a survey conducted in all the 54 FWCs. A sample of 177 staff members and 270 non-users was interviewed. Two married female post-graduate students from the Department of Rural Sociology, University of Agriculture Faisalabad, were recruited for conducting interviews.

Independent variables used in exploring differences. The following variables were included in both of the questionnaires designed for the service providers and the non-users.

i. Family size preference, ii. Son preference, iii. Modern values, and iv. Perceptions towards contraception.

Factor analysis. All the items in the interview schedules included in the above mentioned variables were computed through factor analysis. All the variables were regrouped into more than one factor except the items comprising perceptions on family size preference (although its name was changed to familism). Therefore, the situation of the independent variables used for comparison was as shown in Table I.

Table I. Regrouping of independent variables

Variables in the questionnaire	Regrouping by factor analysis
Family size preference	Familism
Sex preference	Value of son and daughter's neglect
Modern values	Fatalism, women's rights and women's roles
Perceptions towards contraception	Effects of contraception and permissibility of contraception

The distribution of the variables into different factors was the same as was in the case of using provider's sample although the sample size is more than double in the case of making comparisons. A sample size of 100 is enough for valid application of factor analysis yet the best results are those giving same factors when using the same set of items with two different samples (Bryman & Cramer, 1990). Therefore, this confirms the strength of association between the items which comprised a factor.

The items were combined and categories were made according to the method mentioned below:

Aggregating factorial items. The items combining a factor were aggregated by using the pattern matrix output. The items having value of less than 0.5 were dropped (Mensch *et al.*, 1994). The remaining items were combined by the following way for all the variables.

$$F1=L1*I1 + L2*I2 + L3*I3 + L4*I4 + L5*I5$$

Where L1 is loading value for Item 1 (I1) in Factor 1 (F1) and in the similar way for other items comprising factor one in this case. The example from the actual output is shown in Table II. The statements given in Table II were included in the interviewing schedule to measure the idea of son preference.

Though these seven items were hypothesised to represent the idea of son preference, the pattern matrix output of the factor analysis shows that the first five

Table II. Distribution of items composing 'son preference' variable

Value of son	Loading values
A son is a source of pride and support for brothers (SSOS25)	0.77891
Sons are the strength of the family (SSOF23)	0.76498
Sons carry on the family name (SCFN21)	0.75172
Sons are insurance against old age (SIOA22)	0.74279
A son is a source of pride and pleasure for sisters (SSOP24)	0.68964
Daughters' Neglect	
A daughter may bring marriage-related problems in the house (DBP26)	0.81821
It is difficult socially and culturally to rear up a girl (DTRG27)	0.81353

items were tapping a different concept from the remaining two. These are reflected through the pattern matrix as shown in Table II.

The items for each factor were added in the following way:

$$\text{Value of Son (Factor 1)} = \text{SSOF23} * 0.78856 + \text{SIOA22} * 0.78584 + \text{SSOS25} * 0.77529 + \text{SSOP24} * 0.73591 + \text{SCFN21} * 0.66889.$$

This gives us an output ranging from the lowest score to the highest score on the value of son which was divided into two categories using the following formula:

$$\text{Categories of Scores} = \frac{\text{Highest score} - \text{Lowest score}}{2} + \text{Lowest score}$$

The same method of aggregation and categorisation was used for all the variables included in the bivariate analysis for this study.

Exploring difference. One objective of the study was to confirm whether service providers in FWCs were different in their perceptions from the non-users living near the centres. A comparison is presented here after combining the statements which were tapping the same ideas identified using factor analysis and renaming some factors. The reliability of single-item analysis is doubtful, so index-variables will be used throughout the paper. The phi and chi square tests

were used to see the levels of association and significance. The values of phi and chi square were the same, so only chi square values are shown in the table.

Dependent variables used in exploring differences. In terms of making a comparative analysis between the perceptions of service providers and non-users, the status of the respondents as itself (service providers vs non-users) was used as dependent variables that fulfils the objectives of the comparison.

RESULTS AND DISCUSSION

Dependent variable: sample (service providers vs non-users). The data presented in Table III indicate a significant difference in perceived benefits of large families (panel i) between service providers and non-users. The values of phi and chi square were the same.

The percentage of service providers who agreed that large families are beneficial was much lower (5.6 only) compared with non-users (29.3%). There was a significant difference between their perceptions (panel ii) but the majority of both groups had favourable perceptions of importance of a son. The values of phi

and chi square were the same. The percentage of non-users who agreed with the benefits attached to having a son was higher (90.0%) compared with service providers (80.8%). There was however no difference in the perceptions of both groups concerning daughters' neglect (panel iii). The value of phi and chi square were the same and nonsignificant. Both groups had perceptions that to have daughters is socially and culturally problematic. The reasons for the prevalence of son preference among both groups is likely to be found in the society's socio-familial structure which requires parents to look for a socially and morally good husband for their daughter. This imposes the burden of dowry and the need to support their daughters even after marriage. Again, it is with the son that parents are going to spend their old age life because a daughter has to go to the house of her in-laws and stay there with her husband and children.

The information in Table III further reveals that service providers were differentiated from non-users in terms of their perceptions about fatalism, women's rights and roles (panels iv, v & vi). The values of phi and chi square were the same and significant. The percentage of service providers who were against fatalism was almost double (84.2%) that of the non-users (44.1%). The percentage of service providers who favoured women's rights was higher (58.8%) than that of the non-users (49.3%). The percentage of non-users who approved women's modern roles was less (67.8%) than for service providers (86.4%). It is interesting to note that the difference was more significant in the case of women's roles than women's rights. The explanation may be found hidden in the items composing these two factors. The items: "A woman should get a divorce if she cannot live with a man", and "a woman should also take part in the decision of selecting her mate", which comprised the variable named 'women's rights,' seem very sensitive and are less favoured socially and culturally. The items: "A woman should participate in public life like politics", "a woman should be able to work outside the house in a paid job", and "a woman should get a university education", composing the factor called 'women's roles' are not very sensitive. The argument is that service providers are more educated and have greater external exposure than non-users who are mostly engaged in house jobs as was found from data on their socio-demographic characteristics.

The data presented in the table also show a significant difference between service providers and non-users concerning their perceptions towards the effects of contraception (panels vii and viii) and permissibility of contraception. The values of phi and

Table III. Service Providers and non-users by their individual perceptions, Faisalabad, Pakistan, 1992

Perceptions	Sample		P value
	Providers (n=177;%)	Non-users (n=270;%)	
1 Familism			
Agree	5.6	29.3	
Disagree	94.4	70.7	0.00000
2. Value of son			
Agree	80.8	90.0	
Disagree	19.2	10.0	0.00554
3. Daughter neglect			
Agree	67.8	74.1	
Disagree	32.2	25.9	N.S.
4. Fatalism			
Favour	15.8	55.9	
Against	84.2	44.1	0.00000
5. Women's rights			
Favour	58.8	49.3	
Against	41.2	50.7	0.04910
6. Women's roles			
Approve	86.4	67.8	
Disapprove	13.6	32.2	0.00001
7. Effects of Contraception			
Positive effects	91.0	51.1	
Negative effects	9.0	48.9	0.00000
8. Permissibility of contraception			
Permissible	73.4	51.1	
Not permissible	26.6	48.9	0.00000

chi square were similar. Non-users were more likely to have perceptions against contraception than were service providers, due to the belief that contraception has negative impacts and is not permissible in their culture and society.

Discriminant analysis. Discriminant analysis is a statistical technique which is used to examine the influence of exploratory variables when the dependent variable is binary. Multiple linear regression is the most widely used method to estimate the relative importance of predictor variables when the dependent variable is continuous. The use of linear regression is not appreciated to locate the independent contribution of predictor variables in relation to a nominal outcome variable.

Discriminant function analysis is closer to logistic regression. The reason may be found in the principle that both of the techniques should have binary outcome variables. Standardised discriminant coefficients are used to assess the relative importance of independent variables to classify the dependent variable.

The data in Table IV are presented in a hierarchical order according to the importance of the variables in making a classification between the two groups (service providers and nonusers).

Table IV. Standardised canonical discriminant function coefficients

Variables	Function 1
Permissibility of conception	0.57331
Fatalism	0.49040
Women's roles	0.45182
Value of son	-0.22220
Familism	-0.22003

The data show that perceptions towards the permissibility of contraception was the most important factor to discriminate service providers from non-users. Perceptions on fatalism and women's roles were the second and third most important factors to make a differentiation between service providers and non-users. Perceptions towards value of son and familism were the least important factors to make a classification between the two groups. Another advantage attached to discriminant analysis is that it

enables the analyst to decide whether the outcome groups are different or similar in terms of their predatory properties. Predicted classification of groups against actual group membership is the most important and reliable criteria to reach a conclusion.

The data shown in Table V pointed out that more than three-fourths (79.1%) of service providers were classified correctly as compared to only 20.9% of service providers who were misclassified into the non-users' group. Alternatively, 71.5% of non-users were classified in their own group as compared to 28.5% of them who were misclassified. On the basis of this classification, it can be said that service providers were different from non-users in their individual perceptions.

Table V. Group classification (confusion matrix)

Actual groups	No. of cases	Predicted group membership	
		Providers	Non-users
Providers	177	140 (79.1%)	37 (20.9%)
Non-users	270	77 (28.5%)	193 (71.5%)

75% of "grouped" cases were correctly classified)

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