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EFFECT OF FEMALE FINANCIAL EMPOWERMENT ON CONTRACEPTIVE AND FERTILITY BEHAVIOUR: WOMAN CONTROL ON HOUSEHOLD EXPENDITURE

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Numerous studies documented that improvement in women financial power improve their assertive position in family and few explored its effect on contraceptive behaviour. Rare efforts have been made to find the effect of women control on household expenditures on their fertility and contraceptive behaviour. Besides exploring this new dimension of fertility, the current study move a step forward and attempted to identify the minimum level of women control on monthly household expenditure required to influence their fertility and contraceptive behaviour. A random sample of 1051 married women was studied through cross-sectional survey. The study concluded that woman's control on household monthly expenditures was directly associated with the contraceptive use and inversely with family size. It further identified that women minimum financial control on monthly household expenditures worth more than Rs.3000 per month proved effective to promote contraceptive use and in reducing family size.

Keywords: Household expenditures, contraceptive use, children ever born, family size

INTRODUCTION

The control on income and expenditures is an emblem of authority and manifests one's influence in family. It is especially important for women's effective participation in family and non-family matters. Female social autonomy and financial authority is determined through the extent to which they exercise control over their own and their household economic resources (Qadir, 2001; Sathar and Kazi, 2000). Such empowerment enables to build resistance to cultural pressures and enhance female's effective control on their fertility (Ahmed and Perveen, 2002). In Asia and particularly in South Asia, house care and management is considered as the prime responsibility of women in addition to their fundamental role of childbearing and child rearing. Their active participation in family decision-making and adequate financial authority are vitally important to fulfill these obligations. Evidence suggests that financial empowerment is pre-requisite for empowering woman socially at domestic level and for their success at societal level (Siddiqui *et al.,* 2000). It enables them to buy better health for themselves and for their children and especially for timely management of any emergent situation (Jalil and Sathar, 2000). Such mothers pour more resources on children education and health as well as efficiently meet the nutritional requirements of family (Abbasi, 2006; Agha, 2000). However, lack of financial authority put them in subordinate position in family. This may deprive them from power and influence in family matter and adversely effect their participation in decision-making. It consequently reduces the contraceptive use and compels women to perform higher fertility (Zafar, 1995). The resulting higher population growth adds to socioeconomic and demographic problems for the individual family as well as the society. The discussion convincingly argues the importance of female financial authority for the improvement of their socioeconomic status and empowerment at domestic and societal level.

Numerous empirical evidences exist about the positive effect of female financial authority on their empowerment and mainly focused on women control on assets and their participation in income generating activities. The current study while exploring this new dimension of women fertility and empowerment at household level, move a step forward and attempted to quantify the minimum level of women control on monthly household expenditure needed to influence the family planning and fertility behavior of Pakistani women.

MATERIALS AND METHODS

A random sample of 1052 respondents was studied from the district Faisalabad, Pakistan through formal survey. The district was randomly selected from the seven major districts of Punjab - the most populated province of the country. At the second stage of

sampling, eighteen villages and fifteen urban localities were selected from four of the six tehsils (sub-divisions) to draw the study unit at third stage. Married females 20-45 years living with husbands and having at least one surviving child were eligible respondents. Pre-designed questionnaire was used to collect the information from the respondents through formal survey. During data analysis, one questionnaire was dropped due to incomplete information on major variables. Chi-square, Lambda, Gamma Statistics, and Pearson's Correlation, was used to examine the relationship between predictor and response variables. The Multiple Linear Regression was employed to identify the relative significance of independent variables in predicting the dependent variables.

RESULTS AND DISCUSSION

Table 1 shows the childhood background and education of the respondents and their husbands, their family income.

Table 1 revealed that sixty two percent of the women and 65 percent of husbands remained in rural areas in the first 12 years of their life as indicated in Table 1. Fifty two percent women and 67 percent of their husbands were literate. Majority of both had more than 10 years of educational attainments. Thirty nine percent reported their family income in middle-income group (Rs.5000-10000) and little less than this fell in lower income band (i.e. less than Rs.5000). The analysis of responses also indicated that 19 percent of women entered into marriage agreement at less than 18 years and more than seven percent of them experienced first birth within this age group.

Table 2 indicates the women control of their monthly household expenditures and its influence on their contraceptive behaviour.

In order to explore the influence of women's financial control on their contraceptive and fertility behaviour, the respondents were asked to indicate whether their husbands gave them a specific amount each month for household expenditures. The question was followed by a supplementary question about the amount they receive each month from their husbands for such expenditures. The reported control on such expenditure was then categorized. Table 2 shows that 39 percent of the respondents had no financial control whereas 61 percent exercised control on various categories of such expenditures. Among women who possessed such authority, majority (51 percent) reported financial control of Rs.3000 or above and 27 percent were empowered to spend Rs.2000-3000 per month. The part analysis conducted on the basis of area of residence revealed that 66 percent of the women from urban areas exercised such control as against 59 percent of those from rural areas. The percentage of women with control in higher categories of expenditures i.e. more than Rs.3000 was much higher in urban areas (44 percent) as compared to their rural counterparts (21 percent). The mean financial control among the respondents who exercised such control was calculated as Rs.2748/- per month. It dropped to Rs.1926/- for the respondents living in rural areas and rose to Rs.3796/- for women from urban areas. In order to explore the influence of women financial control on their contraceptive behaviour, at first step, all the respondents with or without control on monthly household expenditures were included in the analysis. It revealed that the women's lack of control on family expenditures adversely affected family planning use and in limiting family size. In order to identify the specific level of women control on household expenditure, a second analysis was carried wherein only the respondents having financial control were included. It was found that higher control on monthly household expenditures increased the contraceptive use. The lower or no control resulted in never use. Table 2 shows that 40 percent of the respondents with no control on monthly family expenditures ever used contraceptives while 60 percent of them never used such preventive measures. It further indicates that 30, 49, and 69 percent of the respondents who were ever users of contraceptives reported control in the lower, middle and higher categories of monthly family expenses, respectively. The ever use increased by 19 percent from lower category of control on expenditures to middle and further by 20 percent from the middle category to the high category of expenditures. In total EUC increased by 39 percent from lower to higher category of expenditures. Thus the contraceptive use increased with the increase in the level of women financial control on monthly household expenditures. However, the significant effect of such control on family planning use was noticed in case of the respondents who exercised control of more than Rs.3000 per month. An association has emerged between the predicting and response variables. Chi-square and Lambda statistics were applied to confirm statistically the existence of such association.

The value of both the statistics at one-percent significance level verified the existence of such association. This upheld study hypothesis stating that "higher the respondents control on monthly household expenditures, higher will be the ever use of

Table 1. Socioeconomic characteristic of the respondents

Variables	Number	Percentage
Childhood background of the respondents		
i. Urban	399	38.0
ii. Rural	652	62.0
Total	1051	100.0
Childhood background of the husbands		
i. Urban	365	34.7
ii. Rural	686	65.3
Total	1051	100.0
Education of the respondents (years of schooling)		
i. No Schooling	502	47.8
ii. Less than 9	110	10.5
iii. 9 – 10	178	16.9
iv. Above 10	261	24.8
Total	1051	100.0
Education of the husbands (years of schooling)		
i. No Schooling	348	33.1
ii. Less than 9	101	9.6
iii. 9 – 10	258	24.5
iv. Above 10	344	32.7
Total	1051	100.0
Mean Education: 7.52 Standard Deviation: 5.79		
Family income from all sources (Rs. Per month)		
i. Less than 5000	367	34.9
ii. 5000– 10000	406	38.6
iii. Above 10000	278	26.5
Total	1051	100.0
Respondents age at ruksati (marriage) in completed years.		
i. Less than 18	199	18.9
ii. 18 – 22	534	50.8
iii. Above 22	318	30.3
Total	1051	100.0

Table 2. Ever use of contraceptives by respondents control on monthly household expenditures

Respondents control on household expenditures (Rs./month)	Ever use of contraceptives		
	Yes % (Number)	No % (Number)	Total % (Number)
i. No*	39.6 (162)	60.4 (247)	38.9 (409)
ii. Less than 2000	29.9 (43)	70.1 (101)	22.4 (144)
iii. 2000 - 3000	48.8 (83)	51.2 (87)	26.5 (170)
iv. 3000+	68.9 (226)	31.1 (102)	51.1 (328)
Sub-Total	54.8 (352)	45.2 (290)	61.1 (642)
Total	48.9 (514)	51.1 (537)	100. (1051)
Chi-square: 64.952 DF: 3	Significance level (SL): 0.000		
Lambda: 0.103 Standard error: 0.027	t value: 3.533 SL: 0.000		

*No indicates lack of financial control

contraceptive. During separate analysis conducted on basis of areas of residence more influence of financial control on ever use of contraceptive was observed in case of the respondents residing in urban areas as compared to those living in rural areas. The result has support from Ahmed and Parveen (2002) who reported that the extent of women control over household incomes and expenditures strongly influenced their attitude towards family size and adoption of safe motherhood practices. Similarly, Mahmood (1998) argued that weak position of women in economic spheres inhibits them to make choices about family size and family planning use.

Table 3 presents the level of women control on their monthly household expenditures and its influence on their fertility performance in terms of children ever born.

Table 3 shows that 34, 34 and 43 percent of women who had small size family reported control on monthly household expenses in the lower, middle and higher category of expenditures, respectively. The small family size increased by 16 percent from no control on household expenditure to control of Rs.2000 and by 25 percent when the women exercised control of more than Rs.3000 per month. It indicates that with the increase in the level of financial control on family monthly expenses, the number of children ever born decreased. The most important point to note is the financial control of above Rs.3000 on monthly family expenditures which emerged as more effective to limit the family size. Chi-square and Gamma statistics value at one percent and five percent significance level verified the existence of association between the independent and dependent variables. This confirmed the study hypothesis that children ever born are associated with the level of respondents' control on monthly household expenditures.

The first part of analysis mainly discussed that financial control on household expenditures improves women authority and influences on family matters and consequently the contraceptive use (Table 2). These women try to rationalize their behavior and justify their actions so that the financial authority remains intact. This element of rationality combined with improved decision-making reasonably influenced their family formation strategies through contraceptive use. The financial control also helps women to seek timely and better healthcare during pregnancy and after delivery. It directly and indirectly increases women mobility outside home. The frequent interactions with health professional and pregnant women during visit to clinic increase their level of awareness and knowledge about safe motherhood practices. It motivates them to prefer lower family size. The results in table reported similar type of results wherein the respondents control on monthly household expenditures proved more effective in limiting family size.

The part analysis also revealed that the respondents' control on monthly family expenditures had more fertility inhibiting influence in urban areas as compared to rural areas. The prevalence of joint family system, desire for more children and the element of sex preference shows that women financial control alone could not improve their control on their fertility unless it is backed by attitudinal changes towards family formation in rural settings. The factors like improvements in women mobility outside home, access to health and family planning services and educational opportunities may prove fruitful in this regard. The evidence also reported that in societies, where women have limited or no financial authority and are dependent on men tends to place greater significance on security from children (Fawcett, 1983).

Table 4 explains the level of association between two dependent variables namely ever use of contraceptive and children ever born with socioeconomic and socio-demographic variables used in the analysis.

The results in table 4 confirmed the relationship obtained through the other three statistics between independent and dependent variables. The values of correlation coefficient indicate that woman education and age at rukhsati extend more influence on children ever born as compared to husband education and age at rukhsati. Women financial control on household expenditures and family income appeared as second most important set of variables which influenced women contraceptive behaviour and their fertility performance.

Table 5 presents the results of three regression model (M-1, M-2, and M-3) wherein children ever born was regressed on social, economic and demographic variables.

Table 5 reveals that that socioeconomic variables such as couples education, family income, women employment outside home, husband profession and women control on monthly household expenditures; demographic variables like respondents and husband age at rukhsati, husband age at rukhsati, and cultural variable husband and wife childhood background emerged as major variables contributing towards family size at varying degree in three types of analyses conducted on three data sets as indicated in Table 5. A comparative observation of the predictors' coefficient (Beta's values) shows that women education and age at rukhsati exerted more influence on the dependent variable representing children ever born or family size. The increase in educational attainments and age at rukhsati adversely influence the response variable. The

Table 3. Children ever born by the respondents control on monthly household expenditure

Respondents control on household expenditures (Rs./month)	Family size (Number of children ever born)			
	Small family (< 3)	Medium family (3)	Large family (4 +)	Total
i. No*	18.3 (75)	17.4 (71)	64.3 (263)	38.9 (409)
ii. Less than 2000	34.0 (49)	20.1 (29)	45.8 (66)	22.4 (144)
iii. 2000 - 3000	34.1 (58)	15.3 (26)	50.6 (86)	26.5 (170)
iv. 3000+	43.0 (141)	24.4 (80)	32.6 (107)	51.1 (328)
Sub-Total	38.6 (248)	21.0 (135)	40.3 (259)	61.1 (642)
Total	30.7 (323)	19.6 (206)	49.7 (522)	100.0 (1051)
Chi-square: 18.119 DF: 4 Significance level (SL): 0.005				
Gamma: 0.049 Standard Error: 0.022 t-value: 2.16 SL: 0.030				

*Indicates % of the respondents with no control on monthly household expenditures

Table 4. Pearson correlation coefficients

Sr. No.	Independent Variables	Dependent Variable	
		Ever use of contraceptive 1. Yes. 2. No.	Children ever born (No. of live births)
	N = 1051	Correlation Coefficients	
1.	Respondent education (Years of schooling)	-0.381**	-0.550**
2.	Husband education	-0.296**	-0.466**
3.	Respondent age at rukhsati (years)*	-0.154**	-0.417**
4.	Husband age at rukhsati (years)	-0.058**	-0.229**
5.	Husband profession (1.Agri. 2.Non-agri.)	0.079**	-0.082**
6.	Family income (Rs./month)	0.275**	-0.201**
7.	Women income from paid job(Rs./month)	-0.078*	-0.088*
8.	Do your husband give you specific amount each month for household expenditures (1. Yes 2. No)	0.148**	0.289**
9.	Women control on monthly HH expenditures (Rs./month)	0.315**	-0.382**
10.	Husband childhood background (1-Urban 2-Rural)	-0.275**	0.326**

Level of significance: 1% – 5%

*In societies where marriage agreement is made earlier and couple starts living together at much later stage. In such cases age at marriage is a proxy measure, whereas age at rukhsati (departure of bride to bride groom house and live together as husband-wife) actually influence the marital fertility. The study collected information both on age at marriage and age at rukhsati but use the later during analysis to document the real effect

coefficient of variations for women control on monthly household expenditure was significant in all the three models. However, its higher value in Model (M-3) indicates its higher contribution in explaining women fertility among the rural respondents. The effect of the respondents childhood background appeared both in urban and rural areas whereas the influence of husband childhood emerged only in the urban areas. The value of coefficient of determination (R^2) shows that variables included in the model (M-1) constructed for urban areas captured only 48% variations in the dependent variable. Similarly, the overall model and the one for rural areas explained 35 percent and 34 percent variations, respectively in explaining women fertility performance. The explanatory power of model constructed for urban areas is 14 percent higher than overall model and 13 percent than rural regression model. Education exerted higher influence, followed by family income, women childhood background and women control on monthly household expenditure. The above explanation is based upon the values of partial regression coefficients and the contents and

Table 5. Multiple regression analysis with children ever born as dependent variable

Sr. No.	Variables	Three models		
		All areas (M-1)	Urban (M-2)	Rural (M-3)
		Standardized Beta Standard Error	Standardized Beta Standard Error	Standardized Beta Standard Error
1.	Respondent education	-0.309*** 0.013	-0.384*** 0.016	-0.294*** 0.020
2.	Husband education	-0.160*** 0.012	-0.145** 0.015	-0.214*** 0.017
3.	Respondent age at rukhsati	-0.175*** 0.017	-0.196*** 0.023	-0.171*** 0.026
4.	Husband age at rukhsati	-0.009*** 0.012	-0.084* 0.000	-0.056^{NS} 0.016
5.	Family income	0.116*** 0.000	0.087* 0.000	0.080* 0.000
6.	How much amount do your receive each month for household expenditures (Rs./month)	-0.103** 0.010	-0.451** 0.010	-0.281** 0.000
7.	Are you working for paid employment (1-Yes 2-No)	0.032^{NS} 0.102	0.0.07^{NS} 0.179	0.050^{NS} 0.256
8.	Husband childhood background 1-Urban 2-Rural	0.083*** 0.012	0.107** 0.032	0.027^{NS} 0.229
9.	Respondent childhood background 1-Urban 2-Rural	0.141*** 0.013	0.196*** 0.037	0.105* 0.192
	Model prediction (adjusted $R^{2)}$	0.45	0.53	0.41

Level of significance = 1% ** 5% * Non-significant = ^{NS}

arrangements of response categories in the measuring instruments.

CONCLUSION

The multiple linear regressions have been used to find out the predicting power of explanatory variables in predicting the response variable. The regression coefficient (beta) has been used to identify the relative importance of the independent variable in explaining the dependent variable while coefficient of variation (R^2) is worked out to establish the goodness of fit of the model. The results presented in Table 5 demonstrate that the respondents education with regression coefficient of -0.309, -0.384 and -0.294 for all areas, urban areas and rural areas, all are significant at 1% level which clearly demonstrates the importance of education in determining the family size i.e. children ever born. Similarly, husband education, respondent age at rukhsati, husband age at rukhsati, family income, husband childhood background emerged as significant variables with regression coefficient ranging from 0.08 to 0.19. The second most important variable is respondent education. The variable which emerged as the most important variable in explaining the children ever born is women financial control on household expenditures. This variable produced the highest values of regression coefficient; -0.315, -0.451, -0.281 for all three types of analysis. This variable also produced the maximum variation in R^2 is 45% for all areas, 53% for urban areas, and 41% for rural areas really indicate that the model is best fit model and explanatory variables in the regression models are suitable, and appropriate in explaining variation in children ever born. Zafar (1993) identified that in social sciences if the value of R^2 is around 40% that model is regarded as the best fit model. In the light of above discussion, it can be concluded that financial empowerment or women financial autonomy in managing and handling the family matters has been seen as the most important aspect of women life in shaping their fertility behaviour and in regulating their intentional contraceptive use.

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