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Female Work Status and its Relationship with Fertility and Child Loss in Orissa

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Introduction

In many developing countries, women's activities, traditionally confined to the household, have changed over time. Various factors such as economic necessity, educational and occupational opportunities, and greater decision-making autonomy have all played a part in pushing women to take up various occupations outside the home. In turn, female work participation has changed the socioeconomic as well as demographic structure of populations as the time and cost of work participation influences fertility.

Female work participation has been argued to be inversely related to fertility or the number of children ever born. Gendell and Kneiter [A] reported a positive relationship between female work participation and fertility in their study in Guatemala city, whereas Bhargava and Saxena [B] observed a negative association between women's participation in the work force and fertility in rural India but no significant relationship in urban areas. Women working outside the home or in non-domestic activities have also been reported to have fewer children than those engaged in domestic work and non-workers. However, the fertility of women who worked at home in an income-earning trade or craft was not found to be significantly different from that of non-working women, [C] though Mason [D] observed the period of work to have a greater influence on fertility. Kapoor [E] in her study, found that working women had a slightly higher fertility than non-working women.

The relationship between female work status and child loss has also been examined by many researchers. The modem formal sectors with higher female work participation rates have been observed to exhibit higher child mortality [F]. Faraha and Preston [G], in their study in Sudan, reported that female work

participation was responsible for a 27 per cent increase in infant mortality. Women working outside the house, those who are poorly educated and those who are economically deprived have often been reported to have experienced, greater infant and child loss [H]. In her study of Muslim women, Kapoor E found a higher incidence of child loss among those who were working than those who were not working. However, the nature of work, place of work, conditions under which the woman works, and the economic importance of the work cumulate the effect of work status on all demographic variables.

In Orissa, during 1993, nearly 26 per cent of ever married women were engaged in some form of work or the other, including a fairly high proportion (18 per cent) who were employed outside their homes [I]. Among currently married women, the corresponding percentages were 23.2 per cent and 19.6 per cent. The average ages of the currently married working and non-working women were 29.7 years and 30.3 years respectively. Among the currently married working women, those who belonged to Hindu scheduled castes and tribes formed the majority as compared to those who were non-Hindu and non-scheduled caste/tribe. Rural women were more economically active than their urban counterparts (Appendix 1 gives a profile of the women). Further, illiterate women were more likely to be working than those who were educated thus explaining the fact that the majority of working women were engaged in unskilled jobs. That women from the lower economic strata are more likely to work as compared to those from the middle and higher economic strata was reflected by .the standard of living index; the economic situation of the family acting as a push factor for women to enter the labor force.

Against this backdrop, the present paper seeks to examine the relationship between work status and (a) the number of children ever born, and (b) child mortality in Orissa.

Data and Methodology

The study is mainly based m the National Family Health Survey, Orissa, 1993 A. This study confined to currently married women who had been married only once, numbering 3949. A 'working' woman was defined as one who works either at home in a craft or trade which fetches an in addition to performing the regular household work. The women were classified by work status as "not working", "working at home", and "working away from home". The three categories numbered respectively 3032, 143 and 774 women. The NFHS included only those women who had given birth during the last four years; in our child loss analysis,

among these births, the survival status of only the last birth was related to the mother's work status.

Along with the three main variables of the study namely, female work participation, children ever born and child mortality, certain socioeconomic and demographic variables were also included to make the study more meaningful. Multiple regression and logistic regression techniques were used to analyze the findings.

Discussion

The results are discussed under two sections: the first relates women's work status with the number of children ever born, and the second relates it to the child loss experienced by them.

Work status and children ever born

The findings showed that the large majority of non-working women (77 per cent of the sample) had a mean of 3.1 children (ever born). Those who worked at home and outside the home had an average of 3.4 and 2.8 children respectively. The difference in the mean number of children ever born between non-working women and those who worked at home was not significant. Other workers have also reported such findings, which suggest no significant effect of economically productive work done at home on fertility. However, women who work outside the home have been reported to have comparatively smaller families than both the other two categories of women. This could partly be attributed to their exposure to the outside world, which, in turn, affects their lifestyle and decision-making capabilities. The conflict between the role of the mother and work status has also been found to have a negative influence on the number of the children borne by them.

Multiple regression analysis was carried out taking the number of children ever born as the dependent variable. Two dummy variables namely, "working at home" and "working away from home' were created with "not working" as the reference category. The other independent variables considered were age, religion, caste, childhood place of residence, education, number of living sons, child loss, and age at marriage. Table 1 presents the findings of this analysis.

Table 1: Results of multiple regression analysis (dependent variable: children ever born)

	Working at home	Working outside the home
b	0.007873	-0.036536
T	0.804	-3.596
Sig. T	0.4216	0.0003
Adjusted R^2	0.62747	

The b value of the variable "working at home" did not show any significant difference in the number of children ever born to women who were economically occupied at home and those who were not, even after controlling for the rest of the independent variables. However, as expected, women who went out to work had significantly fewer children than those who were not working even after controlling for the rest of the background characteristics.

Work Status and Child Loss

Table 2 presents a distribution of the women by their work status and the survival status of the last born child.

Table 2: Women's work status and survival status of the last-born child

Work status of women	% whose child survived	% whose child died
Not working	93.5	6.5
Working at home (earning)	93.9	6.1
Working away from	91.5	8.5

home		

The results indicated that while the survival status of the last born child of women engaged in work within the house and non-working women was not much different; women working outside the home reported a higher child loss. When the mother works away from home, the time required for childcare decreases and can lead to nutritional, physiological and pathological problems in the child resulting in mortality. In contrast, women who work at home for example, by preparing and selling handicrafts, are able to spend time with their children and also to earn some extra money towards childcare. This, in turn, reduces the chances of child mortality. The time factor is particularly responsible for the lower child mortality experienced by non-working women.

In order to substantiate these findings, logistic regression was applied to the data (since the survival status of the child, the dependent variable, is dichotomous). As in case of the mean number of children ever born two dummy variables namely "working at home" and "working away from home" were created. The other dependent variables used for the analysis were education, childhood place of residence, children ever born availability of drinking water, antenatal care received by the mother during her last pregnancy, and immunization status of the last child. The results are presented in Table 3.

Table 3: Results of logistic regression (dependent variable: survival of lost-born child*)

	Working at home	**Working outside the home**
b	-0.1521	0.1573
Significance	0.7757	0.5035
Exp (b)	0.8589	1.1704

***: Survived =1, died = 2**

The findings show that the odds of survival of the last child (ratio of those who lost a child vis-a-vis those who did not) were higher in the case of women who

worked away from home as compared to those who did not work. However, the difference was not statistically significant. Likewise, though the women who worked at home and earned from it, reported lesser child loss than those who did not work, the difference was again not statistically significant. This suggests that variables such as antenatal care and child immunization are more important for the survival of the child than the work status of the mother. Similar findings have been reported by other workers [I].

The results thus indicate that doing economically productive work within the house has a positive influence on the number of children born to a woman. Further, women engaged in work outside the home had fewer children than both those who earned by working at home and non-working women. The relationship between female work status and child loss was not significant when variables such as immunization and antenatal care were controlled.

References

A. Gendell M and Kneiter PC: 'Fertility and economic activity of women in Guatemala city, 1964', Demography, 7(3): 273-286 (1970).

B. Bhargava PK and Saxena PC: 'Female work participation: Its effects on fertility'. Mimeographed, International Institute for Population Sciences, Mumbai (1985).

C. Stycos JM and Weller RH: 'Female working roles and fertility', Demography, 4:210-217 (1967).

D. Mason K O: Women's Labor Force Participation and Fertility, Research Triangle Institute, North Carolina (1974).

E. Kapoor R: 'Women, work and reproduction: A study of Muslim Chikan workers'. Ph. D thesis, International Institute for Population Sciences, Mumbai (1994).

F. Ware Helen: "Effect of maternal education, women's roles and child care on child mortality', Population and Development Review, Suppl. 10, 191-214 (1984).

G. Farah AA and Preston SH: "Child mortality differentials in Sudan", Farah, Osman and Eldwai (ed.) Aspects of Population Change and Development in the Sudan', Khatoum, Sudan: 69-92 (1982).

H. United Nations: Socioeconomic Differentials in Child Mortality in Developing Countries, United Nations, New York, 149-158 (1985).

I. National Family Health Survey: Orissa, 1992-93, International Institute for Population Sciences, Mumbai (1 993).

J. Rao SR and Pandey A: 'Child mortality in Goa: A study of socioeconomic and behavioral factors'. Mimeographed International Institute for Population Sciences, Mumbai (1993).