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Gender, Community Context and Children's Activities in Rural India

Introduction

In India, like in many other developing countries, the goal of universal primary and secondary education has not been achieved. Net enrolment rate in India for primary schools is around 77 per cent and in secondary schools around 60 per cent (rates for girls are still lower). Out of the millions of children not attending school a small but sizable minority are engaged in child labor while the vast majority are neither working nor in school. With 205 million children below the age of 14, and childhood activities setting the path for rest of the adult life, examining how children spend their time is of vital importance.

While there is an extensive literature on childhood activities in developing countries, much of it has been narrowly focused on either schooling or child labor. The implicit assumption in these studies is that the categories in school and not in school are homogenous (for instance, it is generally assumed that children not in school are child laborers). Though such assumptions have uses in certain analysis, they betray a lack of analytical clarity. Recent works by Lieten (2002) and Venkatanarayana (2004) have drawn attention to the divisions that exist within these categories: in India, for instance, less than half of those not attending school are working; and many attending school are working. Combing those who are not in school and working with those neither working nor in school clouds our understanding of children's activities because the determinants for belonging to these categories are not the same. Asides from analytical clarity such a distinction is necessary for guiding policy formulation: a policy to abolish child labor, while worthy in its own respect, is not necessarily going to increase school enrolment if the determinants of school enrollment or different from those of child labor. We build our analysis based on this important distinction and use a fourfold classification for children's activities: in school, working, doing neither, both working and in school.

Gender difference in literacy levels is well established in India. In some of the large northern states the proportion of girls age 6-14 out-of-school is as high as 54% (Dreze and Kingdon 2001). For any significant reduction in child labor or attainment of universal education, narrowing of the gender differences in school enrollment and child work is essential. This gender gap is the consequence of the differential treatment of girls by parents who value sons more than daughters (the prevalent patriarchal system places low value on girls) or it could be due to the low returns to girls' education compared to boys. It could also reflect the norms regarding girls' role in relation to work: in many communities, it may be normative that girls do household work. In such contexts, girls are more likely to combine work and school or engage solely in work.

In this paper, we postulate that the type of activities children are involved in is not only influenced by parents' characteristics but also by the community context; and this community influence is gendered. The community influence on childhood activities has seldom been explored. The basic premise of community influence is that parents' decision about children's activities is influenced by the community they live in (the ways in which community context can influence children's activities are described below). For instance, we examine how living a developed village is going to affect the children's activities irrespective of their parents' or household characteristics.

Conceptual Model

A simplified representation of the conceptual model is presented in Figure 1. Children's activities besides family characteristics are also influenced by community factors including school characteristics, labor demand and conditions, cultural norms about education and work, and community social development. In addition to these factors, in India children's activities, unlike in many other contexts, is entwined by the gendered and caste-bound social order. In this paper, we focus on two major factors that influence children's activities – school characteristics and community factors – and, importantly, we examine how these relationships are mediated by gender.

First we look at how school factors, sometimes referred to as supply-side factors, influence children's activities. The school factors can be classified under three categories: quality of the schools, cost of schooling and school accessibility (distance to the nearest schools). We expect to find that school accessibility will be a greater impediment for enrollment of girls, as parents will be more concerned about the safety of girls; and the girls who are thus prevented from attending school are more likely to be not working as what prevented them from attending school was not an economic factor.

Though public schooling in India is free, parents nevertheless bear incidental expenses such as buying textbooks, and in the case of private schools, they provide tuition. Parents may be willing to spend the extra money on boys but not on girls education in a context where returns to education for girls are low. So in households that face economic constraints, girls are more likely to be pulled out of schools and more likely to involved in full-time work; and boys in a similar household will be more likely to combine both school and work. Similar considerations apply to the relationship between school quality and enrollment: poor school quality may dissuade parents from sending their children to schools as the value of education received in such schools is questionable. In a setting like in India where the motivation to send girls to school is already low, any issues concerning school quality or access or cost is going to be far more detrimental to girls than boys.

Second, we look at how community development influences children's activities. One way through which community factors could influence childhood activities is by changing the utility that could be gained from schooling. For instance, living in a prosperous village where returns to schooling are high, families regardless of their own economic status may choose to send children to school. Besides the returns to schooling, community factors could influence parents decision through a process of social learning (transmission of attitudes and knowledge from others) and social adaptation (imitation of others attitudes in the community). Through either or both of these processes parents' decision may be influenced in ways that cannot be explained by their own characteristics. Thus we expect to find that living in a prosperous community would increases the chances of school enrollment for both boys and girls or at least reduce the prevalence of children engaged in work only.

Finally, we look at how parents' caste and caste composition of the community affect childhood activities. It is well know that school enrolment among low castes children is lower than other groups, but it has not been investigated if this is because of economic reasons. One of the non-economic reasons for not attending schools among the low castes is that in a society where work is organized on rigid caste lines education offers little mobility and because of this parents from low castes may not be motivated to send their children to school. The caste composition of the village may also play a role in determining children's activities. In a community plagued by caste division there would be little collective action needed to ensure proper working of schools and for lobbying for better facilities. We expect to find caste composition to have a non-linear

relationship with schooling: communities with the least and most diverse caste composition would be more conducive to schooling than communities in the middle of the distribution.

Data

We use LSMS (Living Standard Measurement Study) data collected by World Bank in rural areas of two states (Uttar Pradesh and Bihar) during 1997-98. The survey collected detailed information on various aspects from 2250 households spread across 120 villages and 25 districts. In this analysis, we focus on children age 10-14. Though there is schooling information for children below the age of 10, questions about work where asked only for children age 10-14. The sample used in the estimation consists of 1239 children aged 10-14 years.

Dependent variable:

The dependent variable has 4 categories: working; in school; both working and in school; not working and not in school. A child is considered to be working, if he or she worked in the preceding 12 months. Work includes both household work (as most of the girls would be involved in such type of work – of all the parents who included domestic work in children's activities none choose "does not work") and work outside the home (including farm activities, casual labor, employment in petty or major business/trade/manufacturing).A child is considered to be in school if enrolled in school in the previous year.

Community caste composition:

For measuring village caste composition, we adapt a measure used by Dostie and Jayaraman (2006). The measure, named community fractionalization index (CFI), is defined as follows-

$$CFI = 1 - \sum_{c=1}^{C} \left(\frac{n_c}{N}\right)^2,$$

where C is the number of different castes in the village, Nc is the number of households that belongs to caste, and N are the total number of households in the village. This index can be interpreted as the probability that two randomly selected families within a given village belong to different castes.

Method

We use multilevel multinomial logistic regression for the analysis. While multinomial analysis is suited for unordered dependent variable with more than two outcomes (Borooah 2001), multilevel approach is needed for analyzing community effects (Goldstein 1995).The combined multilevel multinomial approach used in this paper has been successfully applied in research in other areas by Magadi (2003) and by Berrington (2000).

Preliminary Results

Descriptive analysis reveal, as expected, that higher percentage of boys are enrolled in school than girls; and more girls than boys are neither working nor studying; and more girls than boys are working. In the multivariate analysis, we expect to find that determinants of children's activities differ by gender and are influenced by the community context. Differential treatment of girls reflects the prevailing norms about girl's activities and the low returns to girls' education. To change the current pattern of children's activities, there is need not only to improve schooling factors but also to change social attitudes and enhance the value of education for girls. Also, children's activities depends on the community circumstances (infrastructure, electrification, basic amenities etc.), and development of the community has a positive effect in discouraging child labor for boys and girls.

References

Berrington, A., and I. Diamond. 2000. "Marriage or cohabitation: a competing risks analysis of first-partnership formation among the 1958 British birth cohort." *Journal of the Royal Statistical Society Series A-Statistics in Society* 163:127-151.

Borooah, V.K. 2001. *Logit and Probit: Ordered and Multinomial Models.* Sage University Paper Series on Quantitative Applications in Social Sciences, 07-138. Thousand Oaks, CA: Sage.

Dostie, Benoit, and Jayaraman Rajshri. 2006. "Determinants of School Enrollment in Indian Villages." *Economic Development and Cultural Change* 54:405.

Dreze, J., and G. G. Kingdon. 2001. "School Participation in Rural India." *Review of Development Economics* 5:1-24.

Goldstein, Harvey. 1995. Multilevel Statistical Models, 2nd edition. London: Edward Arnold.

Lieten, G. K. 2002. "Child Labour in India: Disentangling Essence and Solution." *Economic and Political Weekly* 37:5190-95.

Magadi, M. A. 2003. "Unplanned childbearing in Kenya: the socio-demographic correlates and the extent of repeatability among women." *Social Science and Medicine* 56:167-78.

Venkatanarayana, M. 2004. "Out-of-School Children: Child Laborers or Educationally Deprived?" *Economic and Political Weekly* 18:4219-4221.

Figure 1: Conceptual model