

# IUSSP Seminar on “Poverty, Programs and Demographic Outcomes”

*Universidad Iberoamericana, Mexico City, Mexico 21-22 November 2003*

Organized by the IUSSP Panel on Poverty and Population

## REPORT

The IUSSP Committee on Poverty and Population held a seminar on “Poverty, Programs and Demographic Outcomes”, hosted by the Department of Economics at Universidad Iberoamericana in Mexico City, November 21-22, 2003. Financial support for the seminar was provided by the UNFPA.

There were 34 participants, including one supported by an IUSSP Junior Demographer travel award. The participants were a mix of economists, demographers and sociologists from Latin and Central America, North America and Asia, Africa and the Middle East. All career stages were represented, from senior researchers to PhD students. Fully half of the participants were women.

The seminar had as its underlying theme the impact of social programs --broadly defined to include health, family planning, schooling and other programs -- on demographic outcomes, as mediated by poverty or factors underlying poverty. A major focus was on the differential impacts of social programs on demographic outcomes for the poor and non-poor. For example, better educated adults may make more effective use of maternal and child health programs. Or, conversely, immunization programs may have a larger effect on the survival of children in low-income households, who are less likely to become immunized without the program. A related issue that the seminar considered was the impact of social programs on the distribution of key demographic outcomes. Are disparities in these outcomes increased or decreased by such programs?

The demographic outcomes covered included fertility, marriage, health and household composition. The programs of interest were ones that plausibly might have meaningful effects on these demographic outcomes. Naturally health and family planning programs were of central interest, but so too were schooling programs and feeding or food subsidy programs and even an urban land titling program.

Among the types of programs that were examined were “conditional grants” or “targeted subsidies”. These are programs that provide a payment or in-kind grant conditional on certain behavior, such as school attendance by children. The *Progresa* program in Mexico is one well-known example of such a program, and three out of the twelve papers focused on that program.

## Papers

The program consisted of twelve papers. The full program is attached, and the papers are posted in pdf on the IUSSP website. During the two-day seminar, an hour was devoted to each paper: 30 minutes for the author(s) to present, 10 minutes for a discussant, and 20 minutes for general discussion.

A paper by Behrman et al. examines the correlates of early childhood development (ECD) in the Philippines. The researchers have a very rich data base on many ECD outcomes, including several related to social and motor development, that are not usually incorporated in socio-economic data. This paper had available only a baseline cross-section, with additional rounds of data still to be collected. This paper makes the point that family background, particularly parental human and physical assets, are strongly positively associated with EDC outcomes, but that their influence is overstated when controls for community programs are not included. Interestingly, interactions between parental background variables (such as education, height or physical assets) and community-level program variables were found to be weak.

Dow, Gonzales and Rosero-Bixby examine at the micro level (using census data) a major decline in child mortality in Costa Rica in the 1970s. They ask how much of this decline can be attributed to the large expansion in health insurance coverage -- from 46% to 74% of the population -- that occurred over the same time period. The researchers find that insurance expansion was significantly related to a reduction in child mortality, but the magnitude of the estimated effects are quite small, explaining less than 5 percent of the total mortality decline. An interaction between maternal schooling and insurance emerged, with insurance having a larger effect on child mortality among mothers with less schooling. Mother's schooling and good household sanitation are strongly associated with lowered child mortality.

Huerta examines the impact of the *Progres*a health sub-program on child nutritional status (as indicated by child height, conditional on child age). To date there has been little exploration of the effect of *Progres*a on child health, although it is plausible that such effects exist. Huerta identifies some data-quality problems that qualify her results, which must be regarded as preliminary. But these early results do suggest a small effect of the *Progres*a program on child height.

Two papers consider the impact of food, or food-related, programs on health outcomes. Yamano, Alderman and Christeansen examine the effects of receipt of food aid within the village on child growth (as indicated by height) in rural Ethiopia. The authors find that a village's receipt of food aid is associated with faster growth of children, holding several other factors constant and controlling for the possibility that villages receiving food aid are selective of villages with initial conditions of food shortage. Ethiopia has been among the largest recipients of food aid since the famine year in 1984/85, and yet child heights are among the most stunted in the world. Yamano et al's results are among the first to show an effect of food aid on child growth.

A paper by Kochar examines the impact of the Indian food subsidy system in the late 1990s. At the time the Indian government was in the process of modifying their food distribution system, from one universally available to one that was targeted towards the poor. Kochar finds that the amounts of cereals actually distributed to the poor under the targeted system were small, and resulted in only a very small increase in per capita calories available to the poor. This is partly explained by low program participation, even among the eligible poor. Kochar hypothesizes that there is stigma associated with going to the ration shops, and hence if the value of the ration subsidy is low people are less likely to go. The value of the ration subsidy is low, for example, in cereal-growing states of India where market cereal prices are low. Indeed those are the states where participation rates of eligible households are low.

Kochar also suspects that there were distribution problems in getting supplies of cereals to villages, but she does not have the necessary data to explore that possibility in depth.

A paper by Todd and Wolpin uses data on *Progresa* to model program effects jointly on fertility and child schooling. One of their main objectives is to demonstrate how empirically-based models can be employed, via simulation, to evaluate proposed changes in program design. The experimental design of *Progresa* permits a more rigorous validation of their estimation of program effects than is ordinarily the case. The authors use the baseline data to estimate a model of fertility and child schooling, and then use the experimental estimates of the schooling impact to validate their model. Having done this, the authors then conduct simulations of effects of various program modifications. They find that the conditional subsidies given under the *Progresa* program have a sizable effect on school attendance rates. This contrasts with the simulated effects of a number of alternative policies, such as a policy that would prohibit children from working until age 16 or one that would just build schools in areas where they are scarce. The authors also explore ways in which the subsidy program could be improved, in particular by increasing the amounts given for attendance in secondary school and reducing the amounts given for attendance in primary school, which most children are likely to complete in any case. The authors find very little in terms of fertility impact.

A third paper on the *Progresa* program by Teruel and Rubalcava examines whether the program affects household composition, i.e. whether it provides incentives for people to move in or out of households. One hypothesis, for example, is that the program induces children who would be eligible for the payments to move into eligible households in villages where the program is operating. Early results show that there is a small impact of the program in retaining individuals with little schooling, i.e. reducing outmigration.

Two papers by Angeles, Guilkey and Mroz and by Sinha assess the effect of family planning programs on fertility in Indonesia and Bangladesh, respectively. The Angeles et al. paper finds little impact of maternal schooling after modeling unobserved dimensions of the mother's background, but does find substantial family planning program effects. Using survey data from the late 1990s, the Sinha paper revisits the intensive program of doorstep family planning services offered in Matlab that have been the subject of previous analyses in the 1980s and early 1990s. Sinha finds a fertility reduction of 13% in program villages compared to non-program villages (which received the government's standard program). This program effect is weaker for women with more schooling. She does not find any family planning program effect on child school enrollments, but does find a positive impact of the program on the labor force participation of boys (but not for girls). Exploring the reasons for this somewhat surprising impact on boys' labor force participation rates remains for future work.

The program contained a second paper on Bangladesh by Arends-Kuenning and Amin that explores whether strong programs to encourage school enrollments affect age at first marriage of girls. The data were collected in a rural area where age at first marriage is relatively young. The data show that girls from poor families marry later than girls from wealthier families. This research is at an early stage and will be pursued much further with the authors' mix of survey data and qualitative interview materials.

Two other papers consider whether programs that were not designed or intended to affect fertility nevertheless had a fertility impact. Field examines an urban land titling program in Peru and finds a substantial short-term negative effect on fertility (larger effects than

attributed to the intensive family planning services in Matlab, for example).. The titles were given to women, and Field's analysis suggests that the fertility effect may have been due in large part to shifts in intra-household bargaining to the benefit of the women who received titles. Another explanation for the large effect would be reduced credit market constraints for those receiving titles, reducing the old-age support rationale for having children. One possibility, which Field is unable to explore due to data limitations, is that the fertility impact consists mainly of postponement of births, not a decline in the eventual number of births per woman. This would make the large magnitude of the fertility impact more understandable.

In contrast to Field's analysis in Peru, Rios-Neto and Oliveira do not find fertility effects of a labor market training program in the state of Minas Gerais, Brazil (*Planfor*). Like *Progres*a in Mexico, participation in *Planfor* in Minas Gerais was allocated randomly (in this instance through the selection from the larger number of applicants than slots). The authors conclude that *Planfor* had a positive impact on training, but not on demographic outcomes.

As is evident from this summary, the twelve papers presented in Mexico City collectively demonstrate the need for rigorous research that evaluates program impact. Program impact is often confounded with the impact of other variables, necessitating strong (and sometimes creative) research designs. Intended effects of programs sometimes do not materialize and frequently are of a different magnitude than expected. And unintended effects on demographic processes – fertility, mortality, and migration – are occasionally observed. As the demographic research community gives far more attention to linkages between population and poverty, the role of social programs must be a central concern.