

The Effects of Individual Level Autonomy and Community Context on the Desire for Additional Children and Contraceptive Use in the 1998/1999 India DHS.

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This research builds on advanced empirical measurement models of women's autonomy in India, testing whether individual level autonomy or community level effects are most pronounced in influencing women's fertility outcomes. Data on over 40,000 married women in the 1998/1999 India DHS are used to construct and test appropriate individual latent class measurement models of women's autonomy using indicators of household decision making, freedom of movement and acceptability of spousal abuse. Desire for additional children, current and ever use of modern contraceptives in interaction with husband's beliefs about the acceptability of contraception are modeled on predicted class membership and probabilities derived from these models and additional controls using hierarchical linear modeling techniques, specifying fixed effects at the village level.

Women's empowerment and autonomy has been hypothesized to play an important part in fertility declines even from the earliest formulations of demographic transition theory. It has only been in the last 20 years, however, that concentrated attention has been paid to the status of women relative to men and in society more generally and its relation to fertility. Early work in this period indicated that women's status within families and communities as structured by kinship systems (Dyson and Moore 1983) or patriarchal control over resources (Cain 1981; Caldwell 1976) could be of specific importance in determining fertility. In a seminal piece in the field, Mason emphasized the necessity of a broader multi-dimensional theoretical approach to understanding women's status that accounts for gender inequality through prestige, power and access to resources but also simultaneously the social context under which this inequality is played out (1987). Mason outlines specifically how status may influence fertility through its proximate determinants by structuring the supply of children, the demand for children and fertility regulation and decision making.

Following this theoretical literature, women's autonomy in less developed areas has been conceptualized as having a number of distinct dimensions. These include freedom of movement and association, power over decision making, and freedom from domestic abuse. Higher levels of individual autonomy have been hypothesized to be associated with lower fertility, increased contraceptive adoption and use, and decreased infant and child mortality. A growing consensus from empirical research on the subject however is that individual level autonomy as conventionally measured through survey instruments is only weakly and inconsistently related to fertility outcomes and poorly captures gendered structures of power (Mason and Smith 2001; Ghuman Lee and Smith 2004). As such, it is seen a poor indicator of demographic change (Mason and Smith 2001).

Further, it is commonly believed (and in some instances empirically supported) that the majority of the effects related to women's status are not attributable to individual differences in autonomy, but to community level differences in autonomy (Mason and

Smith 2001). Simply put, it is believed that the level of autonomy manifest through the social organization of communities influences fertility much more than individual level variation.

Though the consensus arising from these results has tended to dampen enthusiasm for research concerning autonomy, recent work on which this research is based has questioned whether such negative results may not be caused by poor measurement of individual level autonomy (Sandberg 2005; Williams 2005). It has been shown, for example, that simple assumptions commonly made concerning the measurement of individual level autonomy using the constructs for household decision making, freedom of movement and acceptability of spousal abuse are in the case of current day India (and by extension potentially in other contexts) likely untenable. These include the assumptions that dimensions of autonomy represented by involvement in decision making, freedom of movement, and freedom from spousal abuse are empirically distinct, and that the manifest variables used to operationalize the dimensionality of autonomy are equivalent. Specifically, it has been found using data from the 1998/1999 India DHS that a two dimensional model of autonomy fits the data best with acceptability of spousal abuse on one dimension and household decision making and freedom of movement on the other. It has also been found that models which allow the effects of individual indicators to be estimated freely fit better than ones which assume that all manifest variables are equivalent indicators of their underlying dimension of autonomy and that the distance between categories of polytomous indicators is equal (Sandberg 2005).

The empirical literature with regards to the primacy of community level effects is also potentially flawed. Two frequently cited studies involve only limited comparisons between a few communities (Dharmalingam and Morgan 1996; Morgan and Niraula 1995), while another is based on data from a purposively selective sample of communities (Mason and Smith 1999) from which estimates of individual and community effects may be biased due to the particular specification used.

This research uses previously developed measurement models of women's autonomy in India (Sandberg 2005) to test for the relative impact of individual and community level factors on currently married fecund women's desire for additional children, current and ever use of modern contraceptives in interaction with husband's beliefs about the acceptability of contraception. This latter interaction is important, because we expect to see the strongest effects of autonomy to take place where husbands and wives disagree about the appropriateness of contraceptive use. Data come from the 1998/1999 India DHS, and hierarchical linear models are specified for over 300 villages (in the case of rural areas) and census enumeration blocks (for urban areas) at the community level and 40,000 women at the individual level within these communities to test for the relative effects of each. Thus, this research represents a two fold advance over previous empirical work in the area. First, more accurate measurement models of individual level autonomy are used. Second, wider generalizability of the relative effects of individual and community characteristics is attained using a large, nationally representative sample.

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