

EXAMINING CHANGES IN THE STATUS OF WOMEN AND GENDER AS PREDICTORS OF FERTILITY CHANGE ISSUES IN INTERMEDIATE-FERTILITY COUNTRIES

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The 1994 Cairo Conference on Population and Development (ICPD) focused attention on the role of women's empowerment in influencing reproductive behavior. However, there is no complete agreement on how this concept should be defined and measured (Presser, 1997; Mason, 1997; Mason and Smith, 2000; Kritz and Makinwa-Adebusoye, 2001). Because women's authority can be measured in different ways as well as reproductive attitudes or practices, results of empirical studies are different depending on the indicators used. This has been pointed by the discussion by Kritz and Makinwa-Adebusoye of a Mason and Smith's article (Mason and Smith, 2000).

This debate must be linked to the general debate over the causes and trends of fertility decline in developing countries. In this paper, we propose the introduction of a gender perspective in explaining fertility transitions, as a theoretical point of view that has been missing in the debate. Gender relations have an important role in explaining fertility behavior, a critical and neglected process in explaining fertility transitions. We also present some empirical findings in large intermediate fertility countries as Nigeria, Mexico and India.

EXPLAINING FERTILITY TRANSITIONS

Empirical studies have shown that fertility transitions in many cases differ substantially from what would be expected and that there is a wide variation in the pace and timing of the transitions. The relation between development and fertility is a complex one, and many theoretical frameworks have been proposed to explain it, even if "there is no consensus on an alternative theory to replace demographic transition theory" (Hirschman, 1994).

Over the past four decades, rapid fertility transitions have been observed in developing countries in Asia, North Africa and Latin America. The causes of this trends have been explained by different theories, beginning with the classical statement of the demographic transition theory by F. Notestein (1945) relating fertility reduction with modernization, urbanization, industrialization, education, etc. A debate has arisen on the base of a great deal of empirical research and it has been stated that the decline of fertility started at really different levels of development. The link between indicators of development and fertility has not been proven with existing data in developing countries (Cleland and Wilson, 1987) even if "most contemporary analysts accept development as one of the driving forces of fertility transition, but they vigorously debate the precise variables and processes involved" (Bongaarts and Watkins, 1996). Institutional factors introduced by McNicoll (1981) were able to explain some of the differences in the pace and the timing of many fertility transitions, like for instance in the case of rural China. The arguments of the strong role of the family planning programs and the availability of services by the state accelerating the pace of reproductive change, like for example, in Bangladesh (Robinson, 2001; Cleland and others, 1994) and the role of social development levels—notably educational levels and health patterns as reflected in life expectancy—have also been cited as contributing to the transition in developing areas

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(Caldwell, 1982). These indicators have a strong predictive effect, but in addition, and related to social development, are different familial systems and gender hierarchies that can explain differences in reproductive behaviour (Malhotra and others, 1995; Dyson and Moore, 1983; Jejeebhoy, 2001; Kazi and Sathar, 2001; Visaria, 1996, Kabeer, 1985). Using individual level data, asking men and women about their relations, and using analyses of the prevailing gender systems in each context (Malhotra and others, 1995; Dyson and Moore, 1983; Miller, 1997) leads to a much broader understanding.

Microeconomic theories of Gary Becker (1972), Easterlin (1978), Caldwell (1982) introduced the central role of the models of individual decision-making and the link between generations. The analysis of individual behavior proved to be relevant in understanding fertility decisions. In 1973, A.J.Coale summarized the findings of the Princeton “European Fertility Transition” project in setting three preconditions for the adaptation to a new mode of behavior: *readiness, willingness and ability*. The notion of “readiness” refers to advantages for the actor, i.e. to the micro-economic cost-benefit evaluation of the advantages of reducing fertility at the familial or individual level. “Willingness” refers to normative acceptability and legitimacy of the new behavior. Ability refers to the accessibility of these innovations. Lesthaeghe and Vanderhoeft (1999) presented this model as RWA, a complete theory allowing integrating economic and non-economic paradigms of transitions to new forms of behavior and avoiding the sterile debate “economics versus culture”.

INTRODUCTION OF A GENDER PERSPECTIVE

Harriet Presser underlined in 1997 the lack of analysis of the gender systems prevalent in most demographic researches and she made a warning about the importance of this dimension in explaining female and male reproductive behavior. The concept of a gender system is the most general one because, as Karen Mason (1997) notes, it comprises the entire complex of interactions, roles, rights and statuses that surround being male versus being female in a given society or culture. However, some gender sensitive researches began since the 1980's. One important pioneer research has been a set of surveys in five Asian countries (Mason and others, 1989). The project's aim was to investigate the determinants of women's autonomy and power and their relationship to women's reproductive intentions and behavior. Surveys were conducted in five countries: India, Thailand, Pakistan, Malaysia and the Philippines, with different gender norms. In South India gender norms are somewhat more egalitarian than in North India and family structure less disadvantageous to new brides (Mason, 2000; Dyson and Moore, 1983).

The data sets of this project, supported by the Rockefeller Foundation, are one of the first to try to operationalise the concept of autonomy among women from different cultural and religious cultures, and to assess its relationships to reproductive behavior. Similar studies were conducted in five Asian countries, namely India, Pakistan, Malaysia, the Philippines, and Thailand (Mason and others, 1995). Women respondents were asked not only about their education and their work status but also about a variety of dimensions of autonomy within their married lives, including their decision-making authority, their personal freedom of movement, control over economic resources, wife-husband power relations, and other attitudes¹.

DHS surveys were also analyzed using a gender perspective (Kishor, 2000) and beginning with the gender module of the Egyptian DHS survey, husbands and men were asked about their reproductive behavior and attitudes in many DHS surveys like in Nicaragua, Burkina Faso, Mali, Ghana, etc. Using a gender perspective based on DHS surveys of West Africa (Burkina Faso, Ivory Coast, Ghana, Mali), Andro and Hertrich (2001) give some consistent conclusions. They show the evidence of two models of

reproductive behavior. The first model, mostly among the old generations, is linked to the traditional model of high fertility. Demand for contraception comes from a small minority², with a higher educational attainment and residence in urban areas since childhood. It is associated with the idea of male power and weak conjugal links (Andro and Hertrich, 2001). Women are highly dependents and have little or no power of decision, or are limited to some badly appreciated domestic duties (Garcia and Oliveira, 2001). In some cases, women's social roles are much more autonomous than domestic ones (Duarte, 1999).

The second model is observed in the young generations. It has a strong link with socioeconomic characteristics of partners, urban residence and high education. In this case, discussion between husbands and wives about family planning is frequent and also approval of family planning by both partners. In this perspective, spousal agreement on reproductive matters is the best indicator in determining future reproductive behavior, as well as potential contraceptive practice, even when people are too young to already use contraceptive methods to limit family size (Andro and Hertrich, 2001).

Other studies were conducted in Latin America (Garcia and de Oliveira, 2001; Duarte, 1999) focusing mainly on males and females roles in the reproductive work:

“The gender perspective has helped redefine studies on family life by considering as reproductive activities or reproductive work a whole range of tasks undertaken in the domestic sphere or linked to it, that are necessary for the everyday, generational reproduction of households as well as the reproduction of the labor force. As it is known, the development of this perspective has revealed that women are primarily responsible for the organization and/or performance of reproductive work (such as household chores, looking after children, managing the family budget, organizing consumption, etc). Concern over men's participation in the domestic sphere increases when women's growing presence in economic activities is added to their well-known participation in these reproductive tasks, and increasingly accurate information becomes available on the significant overload caused by the double shift. Within this context, there has been a sharp rise in the number of studies on the division of labor within households to determine the varying degrees of participation of their members in the various activities and to establish the degree of involvement of men in the family sphere (Garcia and de Oliveira, 2001).

Since the Cairo and Beijing conferences, as a result of the demands of various women's groups, there has been particular emphasis on the need to examine the degree of men's involvement in family life and in the promotion of their participation in the various stages of socio-biological reproduction (such as the decision to have children, pregnancy, childbirth, post-natal care, and looking after and raising children in general). The absence of men in the analysis of fertility and birth control had been criticized since the mid-1980s from a gender perspective. The role of men in the family, sexuality, and biological reproduction is posited as being crucial, both for the advance of knowledge and for achieving greater equity between men and women (Garcia and de Oliveira, 2001).

After this rapid review, we think that much more research is needed to understand how gender interacts with demographic change, especially with fertility. However, in this paper we address some of these issues by presenting empirical results dealing with how gender systems influence reproductive outcomes in Nigeria, India and Pakistan and Mexico. The aim is to present indicators having a strong

predictive impact on fertility trends. We also use papers presented at the “gender” sessions at the General Population Conference of IUSSP in Bahia, Brazil (August 2001).

Couple’s agreement on wife autonomy, the case of Nigeria

In a paper studying couple’s agreement on wife autonomy in Nigeria, Kritz and Makinwa-Adebusoye (2001) look at several different measures of women’s authority in order to determine whether some dimensions have stronger and more robust relationships to reproductive outcomes. In addition, they compare how authority indicators based on wives’, husbands’ and couples’ perceptions differ from each other and look at whether women’s authority when based on partner agreement has a stronger relationship to reproductive outcomes than authority measures based on women’s reports alone. Finally, they examine whether women’s authority influences the contraceptive use of husbands and wives when they approve or disapprove of family planning. To study these issues, they use survey data from five Nigerian ethnic groups that have different gender traditions.

In this study, six measures of women’s authority are used. The first two measures assess wives’ involvement in household economic decisions and wives’ contributions towards household expenses. Three measures are used to evaluate women’s decision making power: one measure concerns whether women participated in family decisions related to childrearing and childbearing; the second assesses whether husbands are justified to leave their wives if certain conditions hold; and the third looks at whether husbands and wives talked about family planning in the last year. This is treated as a measure of women’s authority based on reasoning that husbands who are willing to talk with their wives do so because they accord them some respect and want their opinion. Being able to express an opinion in a traditional society implies a certain degree of authority. The sixth measure of authority assesses whether husbands and wives agree that wives have more authority today than they did in their mother’s time, a normative evaluation of husbands’ and wives’ perceptions regarding gender change. Husbands and wives may perceive that gender norms are changing even through a restrictive approach toward gender characterizes their own interpersonal power relations. The most robust relationships occurred for three measures, namely whether wives have more authority today than they did in their mother’s time; authority over family decisions; and communications with husbands about family planning. Wives’ authority on economic matters showed the weakest relationships to the three reproductive measures examined (Kritz and Makinwa-Adebusoye, 2001).

This result recommends the use of different indicators of women’s authority rather than a single one. They also indicate that women’s authority is more closely related to family planning approval and contraceptive use than it is to preferences for no more children. Disagreement between husbands and wives over women’s household authority indicate that levels of couple disagreement are quite high on several of the measures of women’s authority.

Several interesting findings emerge. First, that husbands are more likely than wives to be contraceptive users if they approve of family planning regardless of whether their wife approves of it. There is also a consistent pattern for wives, namely that women’s authority was associated with how couples resolved their disagreements about family planning.

A debate has arisen whether most husbands and wives have or don’t have agreement on reproductive matters and about the influence of authority structures within households in determining reproductive behavior (Mason and Smith, 2000; Bankole and Singh 1998, Kritz and Makinwa-Adebusoye

2001). In her paper with Smith (2000), Mason has focused mainly on one measure of reproductive preferences: the will for no more children. While Kritz and Makinwa-Adebusoye also find relatively low disagreement between husbands and wives on that issue, they find twice as much disagreement on family planning approval and contraceptive use (Kritz and Makinwa-Adebusoye, 2001). Their findings that women's authority is mainly important in shaping how couples resolve their disagreement but becomes weakened at the ethnic group level is consistent with Mason's argument that authority structures are largely attributes of socio-cultural aggregates such as ethnic groups. In many societies, particularly those in Africa, there is considerable heterogeneity within countries and the research literature shows that there are large differences between husband and wives in reproductive outcomes (Becker, 1996 and 1999; Dodo, 1998; Bankole and Singh, 1998; Andro and Hertrich, 2001). The results in Nigeria suggest that husband-wife authority at the individual level is a very important factor in accounting for how couples resolve their disagreements over these issues. Although the effect is weakened when separate analyses are conducted within relatively homogenous ethnic groups, it is still possible to observe the impact of individual differences in wife authority on contraceptive use (Kritz and Makinwa-Adebusoye, 2001). Gender systems are really significant to explain all these results, as we will see in the next cases, in South Asia.

GENDER, REGION, RELIGION AND REPRODUCTIVE BEHAVIOR IN INDIA AND PAKISTAN

Using data at an individual and community level from three sites in South Asia, Zeba Sathar, Christine Callum and Shireen Jejeebhoy (2001) propose the argument that in South Asia, gender systems play a central role in conditioning the pace at which the fertility transition proceeds, and accounts thereby for the variation in the pace of demographic change across the region. They explore the extent to which the autonomy of women accounts for the different paces of fertility change and contraceptive practice in three sites in South Asia – Uttar Pradesh and Tamil Nadu in north and south India respectively, and Punjab in Pakistan. South Asia is generally characterized by the subordinate role of its women and their limited ability to invest in their children's futures and make independent decisions about childbearing (Sathar, Callum and Jejeebhoy, 2001).

The objectives of the study are to explore empirically the links between female autonomy and such aspects of reproductive behavior as fertility preferences, and contraceptive behavior in three culturally distinct sites in South Asia, namely Tamil Nadu and Uttar Pradesh in India and Punjab in Pakistan. Sites in Uttar Pradesh in north India and Punjab, Pakistan represent settings that have been slow to experience reproductive change, and continue to experience considerable unmet need; sites in Tamil Nadu in Southern India represent settings that are less gender stratified and in which reproductive behavior is more in line with women's intentions. At the same time, the analysis explores the extent to which region, nationality and religion influence aspects of reproductive behavior and their links to female autonomy. While similar work has compared the north-south cultural difference within India, the discussion is expanded with the inclusion of data from Pakistan as an additional cultural identity in the sub-continent (Sathar, Callum and Jejeebhoy, 2001).

Data are drawn from these three states. A total of over 3000 currently married women aged 15-40 comprises the sample. The inclusion of these dimensions of female status in this data set allows for a better understanding of women's status and the extent to which education and economic activity are reliable proxies for autonomy more generally (Sathar, Callum and Jejeebhoy, 2001). Reproductive and contraceptive behavior – desire for additional children, contraceptive practice, and met need – are examined in respect of three blocks of explanatory variables. First are 'development' variables, notably household possession of modern durables, access to toilet facilities, brick-walled homes and electricity. Also included are measures of the educational levels of women and their husbands. A second set

comprises a series of indices of female autonomy measuring such dimensions as mobility, decision-making, access to and control over resources and freedom of threat from husbands (see Jejeebhoy, 2000; Jejeebhoy and Sathar, 2000). A third block covers region, nationality and religion.

There are considerable differences across communities in several respects. Punjabi women are, by and large, better off than women from both Uttar Pradesh and Tamil Nadu: on average, Punjabi women own a larger number of modern goods. Within India, while Tamil Nadu and Uttar Pradesh appear to be similar in the aggregate, there are large differences by religious group on several economic indicators (Sathar, Callum and Jejeebhoy, 2001). The situation is reversed when educational attainment levels are considered. Economic prosperity in the Punjab is not matched in terms of educational investments, particularly in the case of females. Now it is Tamil Nadu women that are best off, irrespective of religious affiliation, and those from Punjab and Uttar Pradesh who lag behind (Sathar, Callum and Jejeebhoy, 2001).

Levels of autonomy are uniformly higher among women in Tamil Nadu, irrespective of their religious affiliation, than women in either Punjab or Uttar Pradesh. The relative role of religion and region in influencing women's autonomy provides clear evidence of the important role of region over political boundaries and religion (Jejeebhoy and Sathar, 2000). Considerably greater variation is observed in such dimensions of autonomy as decision-making and mobility, than others, particularly freedom from threat. And although female autonomy in Uttar Pradesh and Punjab tends to be largely similar, Punjabi women appear to have considerably more decision-making authority and control over resources, and somewhat more limited mobility than women from Uttar Pradesh.

As in the case of female autonomy, differences in reproductive behavior tend to reflect regional more than national and religious differences. For example, the mean number of children ever born and surviving (standardized for age) remain substantially—almost 50 per cent—lower among Hindu and Muslim women of Tamil Nadu than the other three groups; however, among the three northern groups, fertility levels of Punjabi women fall in between those of Muslim and Hindu women from Uttar Pradesh. Among other socio-demographic indicators, there is little difference in infant and child mortality levels, but considerable variation in marital ages: Punjabi women report the highest age at marriage (18.2), an age largely comparable to Tamilian Hindu women, moderately higher than that recorded by Tamilian Muslims and substantially higher than that recorded by women from Uttar Pradesh. Few proportions of women in all of these sites had a say in the choice of marriage partner or timing (Jejeebhoy and Sathar, 2000).

Reproductive choice is more likely to be reflected in such measures as desire for additional children, contraceptive practice and method choice as reported at the time of the survey. The differences between Muslims and Hindus in Uttar Pradesh are notable. While Muslims and Hindus have similar reproductive intentions in Tamil Nadu, in Uttar Pradesh a greater proportion of Hindu women want no more children, and correspondingly, current contraceptive use is higher among Hindus in both states of India but the difference is starker in Uttar Pradesh (Sathar, Callum and Jejeebhoy, 2001).

“Findings suggest that once age at marriage and especially the number of sons are controlled, each reproductive outcome tend to be explained by a somewhat different set of factors. Neither household economic conditions nor measures of female autonomy (with the exception of mobility) have a significant bearing on desire for no more children. Rather it is a primary, and especially secondary school education that appears to influence preferences for more children. On the other hand, a host of factors, including economic status indicators and education,

as well as most of the autonomy indicators (with the exception of control over resources) variously explain contraceptive use and met need. For contraceptive use, secondary education remains significant, and husband's secondary education and household economic conditions come into play. Of the autonomy measures, mobility, and access to resources are positively associated with the likelihood of contraceptive use.

Finally, met need is explained by household economic status, namely ownership of goods and, to a lesser extent, husband's education. It is also explained by such measures of autonomy as access to resources, mobility, economic decision-making and freedom from threat. In this case women living where they were born who want no more children are more likely to be current users suggesting that proximity to natal kin may indeed play a role in enhancing women's ability to realize contraceptive decisions" (Sathar, Callum and Jejeebhoy, 2001).

Some important conclusions may be drawn from this study. First, the region of South Asia distinguishes powerfully the autonomy and reproductive levels of South Asian women. Tamilian women—irrespective of their religion—are significantly different from women from Uttar Pradesh or Punjab—they not only experience considerably higher levels of autonomy, but also are considerably more likely to want no more children, practice contraception, and have met their family planning needs. Second, female individual autonomy levels play an important role in determining patterns of reproductive and contraceptive behavior in South Asia. However, these influences are not uniform. The relative influences of individual autonomy indicators and the more structural factors vary over the different reproductive and contraceptive behavior and choice indicators, and further research is needed to probe these differences (Sathar, Callum and Jejeebhoy, 2001).

“Third, there is strong evidence that gender systems—as measured by region of South Asia—persist in playing a strong role in explaining reproductive and contraceptive behaviors and choice, even after controlling for women's autonomy. For the most part this influence surpasses that either nationality or religion. Women from Tamil Nadu—largely irrespective of religion are significantly more likely than those from Uttar Pradesh or Punjab to practice contraception, and have met their need for family planning, even after a host of socio-demographic and autonomy indicators are controlled. Patterns experienced by women in the two northern sites of South Asia resemble each other, despite national and religious differences. The results of the multivariate analysis do suggest that religion and nationality have a significant influence on predicting reproductive behavior (both intentions and action upon those intentions), however these influences are considerably weaker than that exerted by region. They also suggest that being a Muslim or a Hindu has quite different ramifications for reproductive behavior depending on the region of residence” (Sathar, Callum and Jejeebhoy, 2001).

WOMEN'S AUTONOMY AND POWER AND USE OF CONTRACEPTION IN MEXICO

The rate of fertility's reduction and the spread of contraception use have been very rapid in Mexico in the last three decades. It is possible to evaluate the role of women's decision-making power in this process by using a national survey of family planning (ENAPLAF, 1995). This survey included questions related to wife's autonomy and decision-making power in the family and its relation with the use

of contraceptives. Wife's decision-making refer to women's ability to express their opinion and influence on family decision processes, while indicators for wife's autonomy are referred to married women's capacity of taking initiatives and actions without asking for their partner's approval. A decision-making power index was estimated by adding five variables of each woman. By adding information concerning women's autonomy in nine dimensions, an index of women's autonomy provided a proxy of her general level of autonomy relative to her husband. The results show that on average most women reported making decisions jointly with their husbands but that Mexican married women do very poorly in terms of autonomy (Casique, 2001).

The results of this study confirm that women's empowerment (autonomy and decision-making power) is positively associated to women's use of contraception in Mexico, but the two indicators have different effects. Women's autonomy index shows a stronger effect on women's likelihood of being in need of contraception as well as on women's likelihood of using a modern-temporal method than decision-making power does. A quite heavy effect on women's likelihood of using contraception is related to husband's agreement with contraception, except for women with high decision-making power and high autonomy. Women's likelihood of using a definitive method (sterilization) does not show a significant relationship with any of the women's empowerment indicators included. Finally, the proportion of women in need of contraception but not using any contraceptive methods, related to husband's will against fertility control and women's lack of knowledge regarding contraceptive methods, show a significantly reduced prevalence among more empowered women (Casique, 2001).

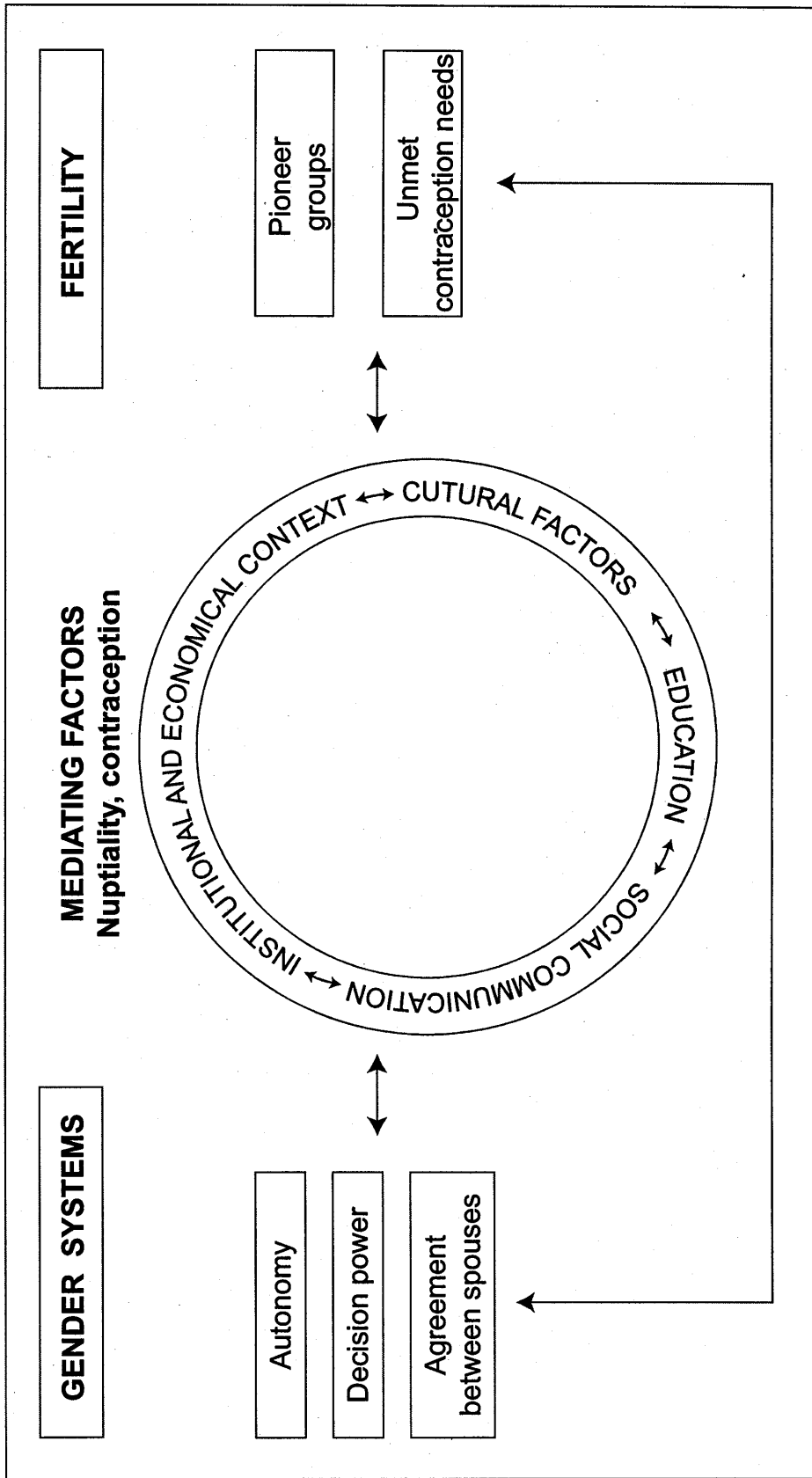
In another study, in some large urban areas, Garcia and de Oliveira (2001) show that despite women's growing labor force participation in Mexico, being a provider continues to have an extremely symbolic connotation for men and women alike. It is associated with the idea of male power, and the notion of support, protection, representation of the family (wife and children), responsibility and the defense of one's honor. It is also valued as an indicator of masculinity.

SOME TENTATIVE CONCLUSIONS

Using a gender perspective is an important enrichment of the theoretical framework in predicting reproductive behavior for developing countries. Some of the indicators proposed by the different studies reviewed in this paper are very useful in providing explanations, like communication between spouses and agreement (or disagreement) of husband and wife on reproductive decisions (size of the family, contraceptive use...). Some indexes of women's empowerment have been tested and they show a strong link with fertility intermediate variables. In addition, they have a strong link with socio-economic factors like education. Revealing "pioneer" attitudes in men, women and spouses has a high predictive value for future use of family planning methods in couples (figure 1).

However, most studies examine only contraceptive intentions or use, the desire of more children or the size of desired family. They don't make a difference between two patterns of fertility's reduction: the first one, by postponing age at marriage, an important age difference between spouses (like in North Africa), and/or no individual choice of the partner (like in South Asia); the second one, by the spread of contraceptive use, though sometimes accompanied by a rise or a stable level of adolescent fertility rates (like in some Latin American countries). Gender perspectives have to be used for understanding and analyzing both patterns.

Among the arguments explaining the different patterns of the fertility transitions, economic development levels are highly questionable, given the low levels of economic development in many of the regions where fertility declined sharply (India, Nigeria, Mexico, etc.). Using individual level data and asking men and women about their relations between them and between all the members of the family and household, and replacing these analysis in the context of each specific gender system, is a promising method to arrive to a much broader understanding of fertility trends, though few studies exist, with some debate between them (Kritz and Makinwa-Adebusoye, 2001; Mason and Smith, 2000). We need more research before attaining definitive conclusions. After this rapid review, we think however that there have been substantial progress in the way of understanding how gender interacts with demographic change, especially with fertility.



REFERENCES

- Andro, A., and V. Hertrich (2001). La demande contraceptive au Sahel : les attentes des hommes se rapprochent-elles de celles de leurs épouses? *Population*, 5 (September-October), pp. 721-771.
- Bankole, A., and S. Singh (1998). Couples's fertility and contraceptive decision-making in developing countries: Hearing the man's voice. *International Family Planning Perspectives*, vol. 24, No. 1, pp. 15-24.
- Becker, G. (1972). *A theory of marriage, I et II*. University of Chicago and National Bureau of economic research.
- Becker, S. (1996). Couples and reproductive health: A review of couple studies. *Studies in Family Planning*, vol. 27, No. 6, pp. 291-302.
- Becker, S. (1999). Measuring unmet need: Wives, husbands or couples. *International Family Planning Perspectives*, vol. 25, No. 4, pp. 172-180.
- Bongaarts, J., and S. Cotts-Watkins (1996). Social interaction in contemporary fertility transition. *Population and Development Review*, vol. 22, No. 4 (December), pp. 639-682.
- Caldwell, J., and others (1982). Demographic Change in Rural South India. *Population and Development Review*, vol. 8, No. 4.
- Casique I. (2001). Women's autonomy and power and use of contraception in Mexico: What difference does it make? IUSSP, XXIV General Population Conference, Salvador, Brazil, 18-24 August 2001.
- Cleland, J., and others (1994). *The Determinants of Reproductive Change in Bangladesh: Success in a challenging environment*. Washington D.C.: World Bank Regional and Sectoral Studies.
- Cleland J., and C. Wilson (1987). Demand theories of the fertility transition: An iconoclastic view. *Population Studies*, vol. 41, No. 1, pp. 5-30.
- Dodoo, F. Nii-Amoo (1998). Men matter: additive and interactive gendered preferences and reproductive behavior in Kenya. *Demography*, vol. 35, No. 2, pp. 229-242.
- Duarte, I., and R. Brea (1999). *Entre la calle y la casa, las mujeres dominicanas y la cultura política a finales del siglo XX*. Profamilia, Participación ciudadana, USAID, 168 p.
- Dyson, T., and M. Moore (1983). On Kinship Structure, Female Autonomy and Demographic Behaviour in India. *Population and Development Review*, 9 (March), pp. 35-60.
- Garcia, B., and O. de Oliveira (2001). Fatherhood among middle and low income sectors of Urban Mexico. IUSSP, XXIV General Population Conference, Salvador, Brazil, 18-24 August 2001.
- Hirschman, Ch. (1994). Population and society in twentieth century South Asia. Working paper. Seattle Population Research Centre, University of Washington, pp. 11-94.

- Jejeebhoy, Shireen J. (2001). Women's autonomy and reproductive behaviour in India. In *Fertility transition in South Asia*, J. Phillips and Z. Sathar, eds. Oxford: Oxford University Press.
- Jejeebhoy, S., and Z. Sathar (2000). Women's autonomy in India and Pakistan: A question of religion or region? Mimeographed paper.
- Juárez, F., J. Quilodrán, M. E. Zavala de Cosío (1996). *Nuevas pautas reproductivas en México*. El Colegio de México, 232 p.
- Kabeer, N. (1985). Do women gain from high fertility? In *Women, work and ideology in the Third World*, H. Afsar, ed. London: Tavistock Publications.
- Kazi, S., and Z. Sathar (2001). Explaining fertility in rural Punjab: The relative roles of gender and development. In *Fertility transition in South Asia*, J. Phillips and Z. Sathar, eds. Oxford: Oxford University Press.
- Kishor, S., and K. Neitzel (2000). Etude du statut des femmes à partir des données de base des enquêtes. In *Femmes et familles : l'évolution du statut des femmes comme facteur et conséquence de changements dans les dynamiques familiales*, M. E. Cosio-Zavala, ed. CICRED, pp. 377-429
- Kritz, M., and P. Makinwa-Adebusoye (2001). A Couple Agreement on Wife's Autonomy and Reproductive Dynamics in Nigeria. IUSSP, XXIV General Population Conference, Salvador, Brazil, 18-24 August 2001.
- Lesthaege, R., and C. Vanderhoeft (1999). Conceptualisation des transitions vers de nouvelles formes de comportement. Actes de la Chaire Quetelet 1997, Théories, paradigmes et courants explicatifs en démographie, Louvain-la-Neuve, 279-306.
- Malhotra, A., R. Vanneman and S. Kishor (1995). Fertility, dimensions of patriarchy, and development in India. *Population and Development Review*, **21**, pp. 281-305.
- Mason, K., and others (1995). Determinants of Women's Power and Autonomy in Five Asian Countries. Paper presented to the Annual Meeting of the Population Association of America, April, San Francisco.
- Mason, K. O. (1997). Gender and demographic change : What do we know? In *The continuing demographic transition*, G.W. Jones and others, eds. Oxford: Clarendon Press, pp. 158-182.
- Mason, K. O., and H. L. Smith (2000). Husbands' versus wives' fertility goals and use of contraception: The influence of gender context in five Asian countries. *Demography*, vol. 37, No. 3, pp. 299-311.
- Miller, B. (1997). *The Endangered Sex: Neglect of female children in Rural North India*, New Delhi: Oxford University Press.
- Notestein, F. W. (1945). Population –the long view. In *Food for the World*, T. W. Schultz, ed. Chicago: University of Chicago Press, pp. 36-57.

- Presser, H. (1997). Demography, feminism and science – policy nexus. *Population and Development Review*, 2 (June), pp. 295-332.
- Robinson, W. (2001). Common Beginnings but different outcomes: The family planning programmes of Pakistan and Bangladesh. In *Fertility transition in South Asia*, J. Phillips and Z. Sathar, eds. Oxford: Oxford University Press.
- Sathar, Z., C. Callum and S. Jejeebhoy (2001). Gender, region, religion and reproductive behaviour in India and Pakistan. IUSSP, XXIV General Population Conference, Salvador, Brazil, 18-24 August 2001.
- Visaria, L. (1996). Regional variation in female autonomy and fertility and contraception in India. In *Girls' Schooling. Women's Autonomy and Fertility Change in South Asia*, Roger Jeffery and Alaka M. Basu, eds. New Delhi: Sage Publications.

NOTES

¹Women in these surveys were asked a battery of questions concerning their autonomy and power within the household. From these responses, five dimensions of autonomy have been selected, and indices for each created: (i) economic decision-making; (ii) mobility; (iii) freedom from threat from husband; (iv) access to economic resources; and (v) control over economic resources.

Economic decision-making authority: is represented by information on the participation of women in three economic decisions: the purchase of food, major household goods and jewellery. The index sums the number of these three purchases in which the woman participates, assigning a score of 1 if she only participates in the decision and 2 if she also has the major say. The index thus ranges from 0 to 6.¹

Mobility: The mobility index sums the number of five places -- the health center, community center, the home of a relative or friend, a fair and the next village -- to which the woman can go unescorted. The index thus ranges from 0 if the woman must be escorted to every place, to 5 if she can move about unescorted to every place.

Freedom from threat: The index of freedom from threat ranges from 0 to 3: a zero is assigned if women both fear their husbands and are beaten by them; 1 if they are beaten but do not fear their husbands; 2 if they fear but are not beaten; and 3 if they neither fear nor suffer beating at the hands of their husbands.¹

Access to economic resources: The index of access to economic resources sums responses to four questions: (a) having a say in how household income is spent; (b) getting cash to spend; (c) being free to purchase small items of jewellery; and (d) being free to purchase gifts. The index ranges from 0 to 4.

Control over economic resources: Fewer questions were asked about women's actual control over economic resources. The index ranges from 0 to 3 and includes (a) whether any of the family's valuables (land/jewellery/vessels) belong to the woman (that is, are in the woman's own name) and are controlled by her; (b) whether she has or had some or the major say (assigned a value of 0.5 and 1.0 respectively) in the disbursement of her dowry; and (c) whether she expects to support herself in old age through her own savings (Sathar, Callum, Jejeebhoy, 2001).

² See also a study on the pioneers of reproductive change in Mexico in Juarez, (Quilodr n, Zavala de Cos o, 1996).