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Abstract

Both men and women make important contributions to the production of children, yet demographic studies of fertility and family planning have tended to focus on women alone. This paper traces the development of demography's emphasis on women and describes how the limitations of its theoretical approaches to reproduction and empirical neglect of men have been mutually reinforcing. The paper is structured around four aims: 1) to describe why men have had a relatively low profile as subjects in demographic research on reproduction; 2) to explain growing interest in studying men's roles; 3) to evaluate existing research on men in developing countries; and 4) to suggest directions for future research on men's reproductive roles. We argue that men, once neglected, now feature prominently in demographic research but principally from a problem-oriented perspective and on a limited range of topics. Our review of existing studies, though, does not fully support a problem-oriented approach. Demographic research should examine men not only as women's partners, but also as individuals with distinct and interesting reproductive histories of their own. As the links between marriage and childbearing continue to weaken around the world, the differences in men's and women's reproductive experiences and their costs and benefits related to parenting will become even more salient for future research.

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Although both men and women make important contributions to the production of children, demographic studies of fertility and family planning have focused on women or have looked at men from a narrow range of approaches. This paper describes how demography's emphasis on women developed, and how it has slowly shifted in recent years. Our contribution is to present the ways in which the limitations of demography's theoretical approaches to reproduction and its empirical neglect of men have been mutually reinforcing. The paper addresses the ways that assumptions about sex roles, the history and motivations of demography, and the limits of the methods it has used to investigate childbearing have circumscribed demography.

The field's difficulty in studying men reflects the fact that it has not dealt consistently or well with the topic of gender (Presser 1997). Demography has not been unique in forming the ideas it did of gender roles and their significance in the study of fertility. These ideas came from a set of socially accepted understandings of gender roles, marriage, and childbearing. These understandings, coincidentally, reflected family structures that were methodologically the simplest to deal with, a point we explore later. Couples were understood to form exclusive lifetime bonds within which all childbearing took place. Men's and women's complementary roles made women exclusively responsible for fertility; thus information could be collected from them alone, their views representing completely those of their male partners.

The assumption of women's primacy in fertility and contraceptive use has led to a general downplaying and often neglect of men's roles in studies of fertility and family planning. While conception necessarily requires two participants, demographic studies of family planning, and especially fertility, historically focused solely on women because of an overarching interest in outcomes, i.e., the actual number of babies, who, after all, emerge only from women's bodies.

A thumbnail sketch of demography shows that the field began with an emphasis on counting mechanisms for biological phenomena such as births and deaths. The women's movement encouraged the examination of issues of power and negotiation, and thus an expansion of demography's focus from individuals to families and households as the contexts in which negotiation takes place. This in turn led to the recognition that reproduction is socially determined and that men are naturally a part of this process.

This slowly changing situation has led to an increasing emphasis by policymakers and program managers on men's responsibilities in reproductive behavior and to an increasing number of studies focusing on men's roles in fertility and family planning behavior. In light of the rising interest in men's roles, it is time for a systematic evaluation of what the prevalent assumptions are about their behaviors, what we actually know about men, and where future studies should be headed. Much as others have assessed how the population community understands women or the family (Lloyd 1996; Watkins 1993), we ask how the population community understands men.

This paper is motivated by an often unspoken debate within the population field about how men should be incorporated into fertility research and, most importantly, what questions should be asked about them. The predominant approach assumes that men might be interesting to study but are not inherently important for understanding childbearing. An explanatory model of fertility that emphasizes proximate determinants such as sexual intercourse, fecundity, and the use of contraceptives does not impel one to collect information from both men and women as a matter of course. Modeling decisionmaking, however, requires data from both women and men that can answer questions about couple communication, negotiation, and the de-

gree of men's influence on fertility or contraceptive outcomes (Blanc et al. 1996; Rosen and Benson 1982). Further, if fertility is to be understood in specific cultural contexts, then including men is essential. If men are considered as something more than "context," they must be included in demographic research to explain fertility and to make predictions about fertility change (Goldscheider and Kaufman 1996).

This paper contributes to the debate about men's place in research on reproduction by clarifying the assumptions and characterizing the findings about men's reproductive roles. The paper is structured around four aims: 1) to describe why men have had a relatively low profile in demographic research on reproduction; 2) to explain growing interest in studying men's roles; 3) to evaluate and characterize the existing research on men, primarily in developing countries; and 4) to suggest directions for future research on men and reproduction.

BARRIERS TO INCORPORATING MEN IN STUDIES OF REPRODUCTIVE BEHAVIOR

Demography as a field arose as an accounting system, a way of enumerating births, deaths, migration, and other population events. The primary purpose of these calculations was to describe and compare populations. As Bogue (1969) pointed out many years ago, demography

has few unique concepts and theories that would explain "why" a particular demographic situation exists at a particular moment or what forces underlie an observed change in demographic status. Most of the variables and theories that "explain" demographic events come from

other social science disciplines, and “demographic theory” is an organized synthesis of inferences and principles extracted from economics, sociology, social psychology, psychiatry, political science, anthropology, and geography. (1969: 5)

Current quantitative demographic models draw more self-consciously on theoretical insights from anthropology, sociology, and economics, and are used to explain and predict behavior. Yet many of the assumptions that guide the descriptive measures and constitute the explanatory models remain unquestioned. The relative lack of knowledge about men’s roles in fertility and family planning thus characterizes theoretical, methodological, and even ideological aspects of demographic research.

Demography’s assumptions (like those of other fields) were informed by the social norms in place at the time in the Western nations in which the field developed, and these norms in large part emphasized women’s exclusive involvement with childbearing. Demography’s role in promoting family planning worldwide further shaped the development of the field and its reliance on assumptions of Western family norms: programs were established with funding from more developed countries, promoting these assumptions on a global scale, and the structure of demographic research was such that the contrasts between these assumptions and local social realities were not always evident. The objective of most research was to point to ways in which women’s contraceptive use could be increased. Men were problematic from the outset because they maintained sexual relationships with women that departed from the Western norm (e.g., polygynous, serial, simultaneous), and because it was understood that their distance from child-rearing made them resist women’s family planning use. Later we show more

fully how this problem-oriented approach to men strongly influenced the way men were perceived and studies were structured.

The social context in which demography arose

The most basic barrier to the inclusion of men in demographic research was normative and reflected the socialization of influential demographers and the way they set a research course. As Whiting et al. (1963) point out, the white middle class of the United States “provides the implicit cultural context for demographic theorizing about fertility” (cited in Townsend 1997: 105). Family structures differing from Western norms may have challenged the way research was formulated, but these structural differences in families were largely set aside.

A useful enumeration of the assumptions about reproduction that have led to the relative exclusion of men from analyses of childbearing is provided by Watkins’s (1993) review article on what we learn about women from the journal *Demography*. In short, we have regarded men as important economically but as typically uninvolved in fertility except to provide sperm and to stand in the way of contraceptive use. As Watkins argues,

modernization [theory] and the New Household Economics share similar understandings of men and women. . . . Men work outside the home, whereas women are responsible for activities associated with the production of children and domestic services. (1993: 561)

The acceptance of women’s close accountability for children has been reflected in the collection of fertility data from women only.

Another aspect of the Western family norm that has contributed to the neglect of men in research has been the assumption of complete consonance between men's and women's interests within marriage. If the workings of marriage and childbearing are seen as the resolution of potentially conflicting interests on the part of husband and wife, an interest in men's as well as women's fertility behavior follows naturally. Yet in the West, where marriage has enormous psychological and romantic significance, marriage has been idealized as the joining together of two into one, and notions of conflict and negotiation have been glossed over. Two may likewise become one in contexts where a husband dominates his wife and marriage is less of a romantic proposition, or where wives' interests are subsumed into those of their husbands through social customs and legal structures. Both notions of unity are problematic, particularly where the links between marriage and fertility are weaker or where husbands and wives have greater economic independence from each other (Lesthaeghe 1989).

In recent years, demographic research has begun to address issues of power and negotiation, making use of theories from economics and anthropology. Corollary to the Western cultural assumption of the coincident interests of husbands and wives is the notion of marriage as a democracy. By routinely excluding men from demographic analyses regardless of cultural context, research has treated husbands and wives as entirely analogous individuals in a dyad. The neglect of power relations both inside and outside the relationship has made it difficult to make sense of reproductive decisions in different contexts. Again, however, it is natural that out of the assumption of coincident or even identical interests would come studies of fertility that simply disregard one of the spouses, since one view represents the position of both.

A Western model of childbearing and childrearing is inappropriate in many settings, even in the West. In their cross-cultural study of childrearing, Whiting and Whiting remarked on the wide range of patterns of parental responsibility, “but also the peculiar focus of parenthood in the United States on an isolated and unsupported mother” (cited in Townsend 1997: 105). It is this focus that made it appear acceptable to associate women exclusively with fertility. This focus and the resultant lack of information on men have contributed to stereotypes about male promiscuity. More important perhaps is that a lack of information on men implicitly overemphasizes female responsibility for contraceptive use, pregnancy, and childbearing (Lloyd 1996). As a result, our policies in this regard focus almost exclusively on girls’ and women’s sexual behavior.

It is important to note here that the assumptions enumerated above persisted in the face of cultural evidence that challenged them. The same assumptions that guided demography’s system of counting were applied to differing systems of marriage, gender relations, and family structures. And as we will see in the literature review, this did not always serve demography well.

The intellectual context in which demographers work

The assumptions outlined above perhaps guided much of the early thinking of demographers, but how did they contribute to the way the field was structured? What did researchers make of these assumptions in developing their research and their discipline? Predisposing demography not to address these shortcomings as quickly as some other fields might have is the field’s lack of its own coherent theoretical grounding. As an interdisciplinary field,

demography is informed by select theories from other fields that do not need to be reconciled and unified. Demography is also exceptional in its focus on a just a few theories: modernization theory, the new household economics, and demographic transition theory. Its theoretical weakness has been be-moaned by many researchers, particularly scholars trained in anthropology and economics (e.g., Greenhalgh 1990; Hodgson 1983; McElroy and Horney 1981; Manser and Brown 1979; Renne 1996; Riley 1997; Robinson 1997). If demography merely documented fertility and made no effort to explain or predict it, the field would not be pulled up short by its theoretical limitations. Its greater ambitions, however, make its treatment of the assumptions described above more problematic.

The simple attribution of children to the women who gave birth to them results not only from the biological realities of fertility but also from the assumptions about the *social* realities of fertility, as we have explained. We have in demography an orientation toward the category of sex, when we are often talking about behaviors that would be more usefully understood as having to do with gender (Riley 1997). While the term gender has gained in popularity, often it is invoked when what is actually being addressed is the biological category of sex. The research focus on women has been interpreted as indicating a sensitivity to gender, which inherently refers to both sexes, and thus implies that men have not been missing at all.

The purportedly biological premises that associate childbearing solely with women on the basis of sexual difference weigh down demographic explanations of fertility patterns and change in spite of the joint nature of conception. Yet had biological models been more fully emphasized earlier, men would have been integrated into demographic studies; instead, the biology

of reproduction was invoked just sufficiently that the underlying premise of women's centrality was not questioned. Ironically, however, biologically oriented theories of reproduction are among those that have more recently inspired demographic interest in "reproductive strategies" and in why men have children at all (e.g., Bergstrom 1996; Kaplan et al. 1996).

The research tools of the demographic trade— methodological aspects

Assumptions made in all fields are reproduced and carried through in research methodology. Although some early demographic studies did look at men's fertility (e.g., Tietze 1938, 1943; Stycos et al. 1956), they were the exception. The widely accepted reasons for not calculating paternal fertility rates have been described in a classic text on demographic techniques (Shryock and Siegel 1976): First, men's reproductive spans are not as clearly defined as women's; second, women are easier to interview as they are more usually at home than men; and third, if they are not living with both parents, children are more likely to be living with their mothers than with their fathers.

To the extent that demography is only about counting, using women as the reference point is indeed sufficient: it is far simpler to collect and analyze information about childbearing from one sex. Mothers usually remember events such as miscarriages and deaths in early childhood more clearly than fathers do, and there is little ambiguity as to whether a child is theirs or not (see Bachrach et al. 1992; Becker 1996; and Watkins 1993 for reviews of these issues). Since demographers do *not* limit themselves to counting but attempt to explain and to predict fertility behavior, this methodological justification is potentially self-defeating.

Another reason we have not been as quick to include men in our models of reproductive behavior is simply that it is methodologically complex to do so. The incorporation of information on husbands and wives into single quantitative models is difficult due to the high collinearity between variables that are the same for each spouse (e.g., their levels of education). Modeling is further complicated by unions that depart from effectively permanent monogamy such as polygyny or extramarital partnerships.

The desire for cross-national (not cross-cultural) comparison has also generated a limited focus on broad categories that make national-level generalizations possible, thus promoting simple measures of fertility and family planning for women only. Because many surveys in developing countries have been externally funded by developed-country consortiums, comparisons at the national level have been emphasized over context-specific studies. More culturally specific research would point directly to the varied roles of men and women in different contexts.

Data collected from men may have certain flaws that differ from the shortcomings of data on women: after all, unlike women, men can potentially know little about their own progeny and may even undercount them (Lloyd and Gage-Brandon 1992). In an article comparing spouses' accounts of their reproductive histories in one US community, Fikree, Gray, and Shah (1993) found that men accurately reported the number and timing of live births, but were less reliable in reporting other events such as spontaneous or induced abortions. Children exist as evidence of live births, while miscarriages and abortions seem to be more personal events for women, perhaps rapidly fading in the memories of men who are told about them. In questions of paternity and recall of information about children, there is indeed more

room for slippage, especially among men who father children out of wedlock or whose ties to the mother are tenuous for other reasons such as divorce (Cherlin et al. 1983; Rendall et al. 1997). Data collected from women are similarly imperfect for many reasons, both unintentional and willful (see, for example, Jones and Forrest 1992 on women's underreporting of pregnancies ending in abortion). Many deeply interesting subjects are indeed difficult to collect data on, yet we push forward with our efforts to learn about them.

A GROWING INTEREST IN MEN'S ROLES

Despite the barriers described above, demographic research on men's roles in reproduction has grown immensely in the 1990s. Indeed, there is an insistent push from within research and policy-oriented circles to include a focus on men in studies on fertility and family planning (Becker 1996; Green et al. 1995; Lloyd 1996; Lockwood 1996; Watkins 1993). Several factors account for this rising interest.

First, feminist thinking has had direct effects on the way demography views men. Feminists of all stripes have written extensively about the social meaning of women's childbearing roles and their exploitation through marriage (e.g., Ehrenreich 1983; Ginsburg and Rapp 1995; Greer 1984; Rich 1986) and this thinking has profoundly affected Western society. As we mentioned earlier and will explore in greater depth in the literature review, demography's atomized treatment of women has neglected the roles of power and negotiation, aspects of reproduction for which the field long lacked the theoretical or methodological tools to examine.

Feminism has, however, had more influence on demography indirectly through its impact on health and population policy and its definition of what

is important to study. By identifying important policy issues such as child support and women's sexual health, among others, feminism called attention to areas neglected in demographic research. As Presser (1997) has argued, demography is ideologically undisposed to absorb and make use of relevant feminist ideas: "Women are given special (and usually exclusive) attention in fertility research, but their wellbeing as compared to the wellbeing of men is not the central issue; rather, the issue is the factors that determine their reproductive behavior" (Presser 1997: 303). One of feminism's contributions, then, has been to promote the study of the sexes in contrast with each other, and not just the study of women's characteristics as determinants of fertility.

Second, the women's health movement specifically has been a force in shifting more demographic attention to men. The movement was especially influential at the 1994 International Conference on Population and Development (ICPD) in switching the focus from family planning programs to reproductive health (see Hodgson and Watkins 1997 for a discussion), a move that has dismayed some demographers concerned with a more exclusive emphasis on reducing population growth (see, for example, Demeny 1994; Westoff 1994). The ICPD's Program of Action and comments from leaders that are based on this document consistently emphasize the need to make men more aware of their responsibilities to the family and the wider community in the matter of family planning and reproductive health (United Nations 1995). Paragraph 4.27 of the Program of Action specifically states:

Special efforts should be made to emphasize men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behaviour, including family planning; prena-

tal, maternal and child health; prevention of sexually transmitted diseases, including HIV; prevention of unwanted and high-risk pregnancies; shared control and contribution to family income, children's education, health and nutrition; and recognition and promotion of the equal value of children of both sexes. Male responsibilities in family life must be included in the education of children from the earliest ages. Special emphasis should be placed on the prevention of violence against women and children. (1995:197)

The women's health movement has asked to what degree men have abdicated reproductive responsibility and in what ways their participation can be supported.

Third, the failure of classic demographic transition theory to explain fertility change across a range of settings is another factor in the increasing interest in men's roles. For decades the centerpiece of demographic research was demographic transition theory, a theory of population change that supported an interventionist perspective in international population work by pointing to a path of mortality and fertility decline that eventually every nation could take. This, in turn, helped to direct millions of dollars to intensely women-oriented fertility control research (Hodgson 1988). Criticisms of the theory have focused on its oversimplification of fertility change; it has been characterized as crude and normative in its efforts to unify the mortality and fertility experience of nations around the globe and to predict the direction in which they are headed (Hodgson 1983; Szreter 1993). Efforts to respond to the criticism of demographic transition theory have sparked more culturally specific research on reproductive behavior and on the varied reproductive roles of men and women in different cultural contexts. Once

transition theory began to be questioned, difficulties in describing particular reproductive circumstances were increasingly interpreted as conceptual shortcomings rather than merely as weaknesses of the data. Marital arrangements that diverge from the Western monogamous ideal provide a good example of sociocultural systems that do not follow the pattern laid out by demographic transition theory and make traditional demographic research on women's fertility alone less appropriate: polygyny (Speizer 1995), marital infidelity (Orubuloye et al. 1992), and marital instability (Rao and Greene 1993) illustrate these points well.

Fourth, recent methodological developments, including the use of models from other disciplines, the combination of qualitative and quantitative data, and a broader definition of the unit of analysis, have also catalyzed an interest in men and the social relations between men and women. The development of analytic models in economics, anthropology, and sociology that successfully encompass more than one actor has been the first major change. Anthropology's analytic clarification of the social and biological components of childbearing and childrearing has shed a great deal of light on fertility (Townsend forthcoming). Econometric models make an effort to incorporate conflict or bargaining into analyses of fertility (see Manser and Brown 1979; McElroy and Horney 1981). Some influential conceptual models that address issues of power and negotiation within couples are those by Beckman (1983), Hollerbach (1980, 1983), and Manser and Brown (1979) (for a review see Folbre 1988); Dwyer and Bruce's (1988) volume focuses on women's management of money in developing countries and their use of fertility as a bargaining tool with their husbands. Lastly, a number of researchers are working on innovative strategies for handling the problems

posed when husband and wife are included in the same model (Smith and Morgan 1994; Speizer and Yates 1996; Thomson 1989; Thomson 1997a).

The combined use of quantitative data and qualitative ethnographic data has become increasingly common, and qualitative data have earned more respect than implied by earlier treatment merely as supportive illustration for quantitative findings. As a result, the more varied social aspects of fertility have come into focus. Indeed, collecting qualitative data broadens our understanding of the social mechanisms of demographic phenomena that are often not amenable to survey measurement (Schneider and Schneider 1996; Caldwell and Caldwell 1987; Greenhalgh 1990).

A desire to understand the broader context of fertility decisionmaking has also led to the expansion of the units of analysis, conceptually if not methodologically. For example, there is evidence that not only couples but also extended families participate in fertility and contraceptive decisions (e.g., Das Gupta n.d.; Zulu 1997) and that spousal interaction and the larger social group influence reproductive decisions (Phillips et al. 1997). Research on social networks has encouraged measures and models of the spread of ideas about fertility and fertility control (Bongaarts and Watkins 1996; Montgomery and Casterline 1996). Furthermore, recent data collection efforts that measure women's status and the wellbeing of children have made the inclusion of male respondents and the study of male roles important components of these endeavors (Mason 1996).

The intellectual and methodological changes described in the previous section have brought men back into the picture, albeit often as accessories to women rather than as the objects of study. Questions about women's status reflect a shift in our understanding of reproductive behavior: from seeing

women as individuals acting alone to seeing them (and men) as part of families and households, where reproductive strategies are based on the preferences of multiple actors. The recent underlying conceptualization of men could be interpreted as a feminist one, involving considerations of power, autonomy, and decisionmaking. With respect to standard analytic frameworks like the proximate determinants framework, this translates into research questions about differentials concerning not only when women marry, for example, but also *whom* they marry and the implications of these men's experiences for later reproductive behavior (Basu 1996).

Demography has a tendency to care about men simply because of their association with women, who continue to be the primary focus; and to care about women simply because of their reproductive role. While studies in many contexts emphasize the empowerment of women, the underlying emphasis continues to be on women as the basic units of reproduction, and the underlying concern continues to be with reducing their fertility rather than with their power and autonomy as significant outcomes (Population Council 1996). Now that there has been fertility decline, do we see improvements in women's status? Who bears the costs of contraception or childbearing, and who are the beneficiaries of the demographic transition? Although many demographers acknowledge women's status, it has not been given the attention it deserves in settings where there has been a fertility decline; moreover, it has often been measured to the complete exclusion of men's circumstances in those settings.

We conclude this section with a comment on the unexpected partnership that has developed between demography and feminism (Hodgson and Watkins 1997). Feminists and demographers interested in population con-

trol have identified men as problems in similar ways: neo-Malthusian demographers see men as potential obstacles to women's exercise of their fertility preferences; and feminists see men as potential obstacles to women's exercise of their rights, one of which could be, of course, the exercise of their fertility preferences. As we have said, the underlying conception of men reflected in demographic research is perhaps a feminist one, although many feminists and demographers might beg to differ. The uneasy alignment of demographic and feminist goals promotes the aims of both groups, potentially allowing some demographers to characterize their work as feminist; the alignment may benefit feminists as well, in some ways, because the financial resources available for population concerns are often much greater than those for women's issues.

WHAT DO WE KNOW ABOUT MEN AND THEIR REPRODUCTIVE ROLES?

As a consequence of this growing interest in men's roles, one can no longer assert that men are missing from the demographic literature on reproduction. The number of articles on men has increased greatly in recent years and much of this growth consists of studies that examine both men and women. A review of the literature on family planning over roughly the past two decades shows consistently about three female references to every male reference, with a very slow annual increase in studies on men alone (Stycos 1996). The number of papers covering *both* sexes, however, increased by nearly half over this same period. Many large-scale data collection projects also make an effort to interview both men and women. While the World Fertility Surveys interviewed men in just a few countries, the Demographic

and Health Surveys (DHS) have made huge strides in this endeavor; the DHS has conducted (or is scheduled to conduct) more than 40 surveys of women and men as of mid-1997, though most of these efforts (32 surveys) have been restricted to sub-Saharan Africa.

Although studies of men's reproductive attitudes and behaviors have increased, they are dominated by a problem-oriented approach. In short, men are a focus of study because they contribute to a particular crisis or social concern. Diverse examples of this approach abound. The AIDS epidemic spurred interest in men's sexual behaviors and condom use; rising rates of single motherhood generated interest in men's lack of economic and time investment in children; and continued high fertility despite family planning program efforts turned attention to fertility decisionmaking and the dominance of men in those decisions. A problem-oriented approach often dictates the questions about men's roles in research studies and the structure of such studies even when men are not explicitly treated as problematic. One of the consequences is that the substantive areas covered on men's reproductive roles are relatively few.

We now review recent studies that focus on men to determine the main questions being asked about men's reproductive roles and whether the empirical evidence bears out a problem-oriented approach to these roles (regardless of the approach adopted by these studies). The review encompasses mainstream studies of fertility and family planning in developing countries, though we point to some studies of developed countries for contrast.¹ We will also note important substantive areas where empirical evidence is still lacking and research attempts have only recently begun. The review is organized by a series of common, problem-oriented statements about men's re-

productive roles, each followed by a brief synopsis of existing studies and the research gaps that remain. The statements roughly encapsulate assumptions about men's varying involvement throughout the reproductive process, beginning with their knowledge of fertility control and ending with their investments in children.

Men are uninformed about fertility control

If we assumed that childbearing and pregnancy prevention were primarily women's concerns, then it would not be surprising to find that men did not know much about contraceptive methods in general (and female-controlled methods in particular). Nor would we expect men to know much about the female reproductive cycle. In fact, men are as knowledgeable as women about contraceptive methods (Ezeh, Seroussi, and Ragers 1996), sometimes better informed than women about male methods (Hulton and Falkingham 1996; Mbizvo and Adamchak 1991) and sometimes less informed than women about female methods (Kalipeni and Zulu 1993). This knowledge is usually defined as men's awareness of contraceptive methods—phrased in surveys as having “heard of” a particular method—and does not refer to how to use a particular method or other aspects of contraceptive knowledge.

There is much less evidence about male views of abortion, an important element in fertility control given that one in four pregnancies worldwide is terminated deliberately (Kulczycki et al. 1996). While one might assume that men, especially unmarried men, do not know about their partners' unwanted pregnancies or abortions, some evidence indicates otherwise. In a comparison of survey results in a number of Latin American countries and

cities where men were asked questions about abortion, 32 to 60 percent of men aged 15 to 24 years reported that their partner had had an abortion (Morris 1993). We remain, though, with an unclear picture of men's knowledge and perceptions of this procedure, one that can involve substantial financial and health costs.

In general, most studies that examine men's views of contraception do so in limited ways, asking about overall approval of contraception or of a few select methods such as the condom or vasectomy (Sarkar 1993). There are extraordinarily high levels of general approval of contraception among men in most developing countries, and differences between men's and women's general approval of contraceptive use tend to be small (Ezeh, Seroussi, and Ruggers 1996). There are far fewer figures on men's perceptions of other aspects of contraceptive use, such as health side effects, efficacy, ease of use, privacy, and so on. One study in the Philippines that focused in more detail on perceived costs of contraception found that men expressed strong views of methods across a number of dimensions and that their views were similar to women's, although the level of disagreement among matched spouses was substantial (Biddlecom, Casterline, and Perez 1997). A study of lower-income Egyptian men's opinions of contraception found that they had specific concerns about the health and sexual side effects of contraceptives for their wives (Ali 1996). Men's views of contraception may vary with the reasons for using contraceptives. For example, a study in Dakar, Senegal found that acceptance of contraception among men was significant, even among men from the most conservative backgrounds, when it was for the purpose of spacing births (Posner and Mbodji 1989).

The numerous studies on whether or not men know of methods are contrasted with very few studies on *how* men acquire this knowledge. Some

efforts have been made to learn about men's general sources of family planning information, including media exposure and their social networks (Adamchak and Mbizvo 1991; Agyeman et al. 1996). Given that in many settings little effort is made to educate men about reproduction and family planning, it is imperative to understand what men are learning and from whom or where they learn it. Judging simply by contraceptive knowledge, it is evident that men are learning about contraceptive methods other than male methods, but the degree to which they are informed about reproductive health matters, especially the experiences of their partners, is relatively unknown.

Men are not responsible for fertility control

The issue of male responsibility underlies the recent emphasis in population policy and programs on encouraging men to be supportive and involved partners (Green 1990; Green, Cohen, and Belhadj-El Ghouayel 1995; Hawkins 1992; United Nations 1995). While we know that men have at least heard of both male and female-controlled methods as often as women, that knowledge may not result in using the methods, supporting partners who do, or seeking treatment when there are health side effects.

One of the simplest indicators that men assume responsibility for fertility control is contraceptive use, especially of methods that directly require men's participation. Married men not only report using contraceptive methods as much as married women do, but they almost always report higher rates of contraceptive use than do married women (Ezeh, Seroussi, and Riggers 1996). This may reflect true differences in contraceptive use between men and women—men may be more likely to have more sexual partners than women—or it may reflect different propensities to report truth-

fully or simply different interpretations of the couple's reproductive behavior. One study found that spousal differences in contraceptive use in five countries were much less likely among couples who were monogamously married or where the wife had a secondary education; and, surprisingly, men's reports of extramarital sexual relations had no effect on differential use (Ezeh and Mboup 1997). In another study of spousal disagreement and contraceptive use, only one-third of couples concurred in their reported use of contraceptives: the lowest agreement was for those using condoms, abstinence, and rhythm, which men typically reported using while their wives did not (Koenig et al. 1984). Explanations for this discrepancy focused on marriage duration and interview context, spousal fertility preferences, spousal interaction, and family planning approval.

Many men are directly assuming responsibility for preventing pregnancy through coital-dependent methods such as condoms, withdrawal, and periodic abstinence. Studies of men's acceptance of vasectomy and condoms are relatively plentiful, especially in light of the public health problem of sexually transmitted diseases (see Bertrand et al. 1989; Grady et al. 1993; Pleck et al. 1990; Ringheim 1993; Ross and Huber 1983). One interesting study in Thailand shows that while men may think that condom use is good in general, their views of using condoms in sexual relations with spouses may be negative because of the association between condoms and promiscuity, disease, and commercial sex (Knodel and Pramualratana 1995). Studies in Uganda and Tanzania also found little support among men for condom use within marriage (Blanc et al. 1996; Pool et al. 1996).

Despite long histories and widespread use of traditional methods, less attention has been devoted to understanding men's use of such methods as

withdrawal, periodic abstinence, and postpartum abstinence. In a number of sub-Saharan African countries, more than 50 percent of current use is of traditional methods, periodic abstinence being predominant (Ezeh, Seroussi, and Raggars 1996). Withdrawal accounts for 9 percent of overall contraceptive use in developing countries and is quite widely used in some countries (e.g., 26 percent of all married women of reproductive age in Turkey report withdrawal as their current method) (Rogow and Horowitz 1995). Given that withdrawal is free and involves no effort to obtain, it may play a role in the sexual activity of adolescents or as a stopgap method when there are no other attractive alternatives. Data from the United States, Spain, and Turkey suggest that high rates of withdrawal are reported by married and unmarried adolescents, particularly at the beginning of sexual relationships (Rogow and Horowitz 1995). Some argue that the use of male-controlled methods is a necessary part of men assuming responsibility for contraception,² and that the programmatic and contraceptive development emphasis on female methods has reinforced men's ability to avoid a connection between sexual behavior and reproductive responsibility. It is no surprise, then, that an emerging refrain in program-oriented research points to the lack of contraceptive choices for men and the need for more alternatives (Chikamata 1996; Marsiglio 1985; Mbizvo and Adamchak 1992; Ringheim 1993, 1996). It is also argued that men at times need to be more *uninvolved* in fertility control since a husband can still veto his wife's use of family planning services in a number of countries (see Cook and Maine 1987 for a cross-national review).

Despite the evidently active role men play in trying to control fertility, there is still not enough evidence of how men themselves view the connection between contraceptive use (for preventing pregnancy or preventing the

spread of disease) and their involvement in other aspects of reproductive responsibility (see Awusabo-Asare and Anarfi 1997; Schneider and Schneider 1991). This link is critical to understand because as societies change from a predominant reliance on traditional methods to modern methods, men will play a diminished role in fertility control and perhaps also take diminished responsibility for the consequences of sexual acts (such as economically supporting children from unwanted pregnancies). In sub-Saharan Africa, for example, the declining practice of postpartum abstinence represents a large part of ongoing fertility change in the region, reflecting changes in marriage regimes and the nature of marital sexual relations. It becomes imperative, then, to understand why men (and women) are interested in stopping and/or substituting for this male-involved method and the consequences this has for men's roles as supportive sex partners and fathers.

Men are barriers to women's contraceptive use

One of the main justifications for including men in demographic studies of reproduction has been that they are barriers to women who want to use contraceptives. This has inspired numerous studies of the reproductive behavior of couples, with a special emphasis on the extent of spousal disagreement. Rarely, though, is the justification posed the other way round — that women block men who want to use contraceptives — and even more rarely that men block women who want to have *more* children. In fact, we know of no studies that examine men's reproductive roles from this last viewpoint. The literature tends to be grounded in the assumption that men block their wives' lower fertility desires. We would do better to work with the more benign but useful assumption that men may have some influence on women's fertility and so we need to determine the degree of influence.

Despite the emphasis on men as pronatalist barriers in reproductive decisionmaking and behaviors, the evidence at first glance is generally unsupportive of this assumption. For example, only a small proportion of women who want to delay or limit childbearing state in survey interviews that their partners' opposition is the main reason that they do not intend to use contraception (Westoff and Bankole 1995). Men's influence is likely to be more nuanced and occur on a greater number of dimensions than one survey question can indicate (see Casterline, Perez, and Biddlecom 1997). We examine the assumption that men are barriers to women's contraceptive use in three main areas of spousal relations: differing fertility preferences (pronatalism of one of the partners), communication, and decisionmaking.

Pronatalism. A longstanding assumption about men's fertility preferences is that men want more children than do women. One argument is that men do not bear the physical or economic costs of repeated childbearing that women bear, thus they are likely to be more pronatalist than women. The evidence is quite mixed with respect to this assumption. The fertility preferences of men as a group are quite similar to those of women. In an oft-cited and thorough review of men's and women's fertility preferences in developing countries, Mason and Taj (1987) found that when gender differences occurred they were typically small—the average difference in ideal family size was less than one-fifth of a child. In a more recent review of 17 Demographic and Health Surveys of men and women, Ezeh et al. (1996) documented as wide a variation in men's fertility preferences as in women's. Men's ideal family size ranged from around 9 children in West Africa to 5 children in East Africa to about 3.5 in North Africa and Asia. Documented gender differences in fertility preferences were very small except in West Africa, where men's ideal family size exceeded women's by 2 to 4 children

(though this is also a region with relatively high levels of polygamy). Of course, differences between men and women in the number of children wanted may not be nearly as critical for subsequent reproductive outcomes as differences in the desired timing of another child.

In general, most studies show little difference between men's and women's fertility preferences at the aggregate level, that is, comparing men as a group to women as a group. This can obscure often substantial disagreement between men and women at the couple level (Mott and Mott 1985). For example, studies in Malaysia and Taiwan showed that congruence between men and women overall on family-size preferences and even sex preferences was high, but agreement was low among couples (Coombs and Chang 1981; Coombs and Fernandez 1978). In an extensive review of couple studies, Becker (1996) evaluated the correspondence between husbands and wives on a variety of reproductive measures across surveys in developing and developed countries. Spousal agreement on subjective matters ranged from 60 to 70 percent (e.g., there was a median level of concordance among couples of 68 percent on the desire for more children).

What may be important for our understanding of fertility is the direction of spousal disagreement rather than the level alone. Moreover, spousal differences do not always mean that husbands are more pronatalist. For example, couples for the most part shared preferences for additional children and the ideal number of sons in a study in India, and when there was disagreement husbands tended to be less pronatalist than wives, mainly due to men's lesser dependence on sons for old-age support (Jejeebhoy and Kulkarni 1989). This study also illustrates the obvious but often neglected fact that husbands and wives have critically different vested interests in childbearing decisions.

Preferences for children of a certain sex, usually boys, are also argued to make men more pronatalist than women. There is a tendency for men to prefer sons over daughters (Mason and Taj 1987), but this varies across countries. Pebley et al. (1980) found that the predominant preference among both men and women in Guatemala was for equal numbers of sons and daughters. Differences between men and women on sex preferences of children may also be more in degree than in kind. One study in Nepal (Stash 1996) found that while husbands and wives did *not* differ significantly in their preference for sons (based on a standard survey question about ideal number of sons), when asked to consider hypothetical situations of family size and gender composition, more husbands than wives were willing to pursue larger family sizes than their ideal in order to reach their desired number of sons.

Spousal communication. Spousal disagreement on reproductive matters is directly related to how men and women communicate their preferences. In fact, spousal disagreement may be more related to the lack of communication between spouses rather than being a meaningfully articulated opposition of one spouse to the other's desires (see Omondi-Odhiambo 1997). The result is that men may have a more "benign" influence on reproductive decisions than is usually assumed.

In West Africa nearly three-quarters of men reported that they had never discussed family planning with their wives; in East Africa less than 40 percent of men said they had never discussed it; and in North Africa the percentage was even lower (Becker 1996; Ezeh et al. 1996). Communication can also be nonverbal, especially where there is no tradition of discussion between spouses about sexual intercourse, contraception, or sexual play (Balmer et al. 1995). Failure to communicate about sex and other reproduc-

tive matters can lead to a failure to act on commonly held preferences (van de Walle and Maiga 1991). Depending on how decisions are made, this can also mean that no change in behavior is made as a result, and that the status quo persists. Numerous studies do indeed show a positive association between spousal communication and contraceptive use, though this association involves problems of causality when cross-sectional data are used, as they often are (Lasee and Becker 1997; Omondi-Odhiambo 1997; Oni and McCarthy 1991; Salway 1994).

Where there is a negative association between communication and agreement on reproductive behavior, it becomes apparent how little we really understand about couple communication. For example, in one Malaysian study, agreement between husbands and wives on fertility preferences was higher among couples who, according to the wife, had never discussed the number of children they wanted (Coombs and Fernandez 1978). The authors speculated that with more basic agreement between spouses there is implicit agreement and thus less need to discuss. Alternatively, discussion may bring differences of opinion into the open, reinforcing those differences rather than reconciling them.

A recent study in Uganda went beyond basic measures of couple communication to examine the ways that negotiating occurs within sexual unions (Blanc et al. 1996). Detailed questions were asked about communication and how disagreements were resolved, and comparisons were made between partners. The authors found that both communication and open disagreement between spouses were uncommon: roughly one-third of respondents had ever discussed family size or child spacing with their partner, although most respondents believed they had a clear understanding of their partner's desires. Moreover, each partner tended to claim responsibility for decisions,

and women were more likely than men to perceive disagreement with their partner over reproductive issues.

Decisionmaking. One of the most common motivations for research on men is that they hold a dominant role in reproductive decisionmaking. Many studies of decisionmaking concentrate on the extent of spousal agreement and its association with a particular outcome and then infer men's relative influence in reproductive decisionmaking from this (Dodoo 1993). Another approach has been to examine the reciprocal influence of spouses on each other's attitudes or preferences (Ezeh 1993).

Theoretical models of reproductive decisionmaking are numerous, but most applications use data from the United States (see e.g., Beckman 1984; Beckman et al. 1983; Hollerbach 1980, 1983; Smith and Morgan 1994; Thomson 1990, 1997a; Thomson et al. 1990). This type of literature focuses less on whether men dominate decisionmaking and more on how spousal disagreement gets resolved and the specific mix of spousal characteristics and desires that affects the couple's reproductive behavior. Couple disagreement may lead to a continuation of ongoing behavior (Beach et al. 1982) or it may be resolved in favor of the spouse with more power in effecting his or her desires. There is little empirical evidence for developing countries that adequately tests these propositions using longitudinal data. One exception is a study in Nigeria that found that if there were four or fewer children, a subsequent birth was likely if the husband wanted it, and if there were five or more children, another birth was likely if the wife wanted it (Bankole 1995). The author argued that a woman was better able to defend her desires (and, conversely, a man was less likely to bully for his desires) once she amply demonstrated her ability to bear children.

Other studies of decisionmaking are more descriptive and draw on specific survey questions such as who is the main decisionmaker, who initiated the decision to use contraception, or who has final say on a specific matter. These kinds of questions have become standard fare in a number of nationally representative surveys of men and illustrate for the most part that men perceive reproductive decisions to be made jointly, though when they deviate from this they more often claim responsibility for decisions themselves. For example, 55 percent of men interviewed in a 1992 survey in Egypt said that they and their wives together decided on the use of family planning methods, while 37 percent said that they alone had the last word (El-Zanaty et al. 1993). A study in Sudan found that 45 percent of ever-married men said family planning decisions should be made jointly by couples, while only 34 percent said it was the husband's right alone (Khalifa 1988). Even in the United States, where fertility is low and where more than three-quarters of men (aged 20 to 39 years of age) believe that men and women share equal responsibility for decisions about contraception, men are twice as likely to feel that they have a greater responsibility in contraceptive decisions as they are to say that women do (15 percent versus 7 percent) (Grady et al. 1996).

Several provisos need to be stated with respect to research on men and reproductive decisionmaking. First, the picture conveyed about men's relative dominance of reproductive decisionmaking assuredly varies by the kinds of questions asked. "Final say," "last word," "who initiated," and "main influence" capture different stages and aspects of decisionmaking and are certainly affected by respondents' attempts to present a certain face to the interviewer. Second, taking responsibility for making decisions is not the same as taking responsibility for implementing them. A survey of Zimbabwean

men, for example, showed that although 54 percent said the husband should have the major say in the decision to use contraceptives, the majority said that the responsibility for obtaining family planning information and supplies rested with their wives (Mbizvo and Adamchak 1991). Third, having a husband who dominates in decisionmaking or opposes using contraception does not preclude women's use of contraception. Women often use contraceptives without their husbands' knowledge. In one Ugandan study, about 15 percent of women who were using contraception said they were doing so without their partner's knowledge (Blanc et al. 1996). This could be a permanent practice to circumvent a husband who staunchly disagrees with using contraception, or it could be a short-term strategy to persuade an ambivalent husband that contraceptive use is not a disruptive practice – so much so that she could do it without his noticing a difference. A number of studies describe the justifications *both* men and women give for secret use: that the husband is not doing his share to support the children economically, that women alone have to bear the health consequences of frequent pregnancies and births, and that open disagreement between spouses has high social costs (Blanc et al. 1996; Renne 1993; Rutenberg and Watkins 1996). It is important to point out that men, too, feel there are circumstances that warrant wives taking action without husbands' knowledge (again, this is with respect to preventing pregnancy — rarely have we come across discussion of a wife covertly trying to become pregnant despite a husband's opposition).

Men are sexually promiscuous

Sexually transmitted diseases, particularly HIV/AIDS, have radically transformed demography's conceptualizations of reproduction by broaden-

ing the focus from fertility alone to include reproductive health, a shift from counting women's reports of births to counting women's and men's reports of sexual behavior (Mbizvo and Bassett 1996; Mundigo 1995).³ Programmatic research has followed suit to encompass broader objectives such as encouraging supportive sexual partnerships and responsible sexual behavior (Green, Cohen, and Belhadj-El Ghouayel 1995; Johns Hopkins Center for Communication Programs 1997).

A number of studies have examined men's sexual behavior, especially sexual networks and commercial sex, and these tend to be concentrated in countries or regions where HIV/AIDS has had a noticeable impact on the population (Caldwell et al. 1993; Cleland and Way 1994; Dyson 1992; Knodel et al. 1996; Morris et al. 1996; Orubuloye et al. 1995; VanLandingham et al. 1993). In general, men have a stronger cultural prerogative than women in initiating and negotiating sexual relationships (Balmer et al. 1995; Mason 1994). Multiple partnering is much more common among men than among women. In Tanzania almost one-half of unmarried men had multiple partners (compared to about 20 percent of unmarried women) (Rutenberg et al. 1994). In a recent survey in Kenya, 32 percent of sexually active men and 11 percent of sexually active women had had casual or commercial sex in the preceding 12 months with someone other than their regular partner (Carael et al. 1992). A study in Nigeria found that 54 percent of married men and 39 percent of married women have had extramarital sexual relations (Isuigo-Abanihe 1994). Both men and women often acknowledge that men will take alternative sexual partners when their wives are abstinent postpartum or are breastfeeding (Olukoya and Elias 1996; Orubuloye, Caldwell, and Caldwell 1991). In one study in Ghana, more than two-thirds of men said they were having sex with girlfriends while their wives were lactating (Anarfi 1993).

In general, men are indeed more sexually active than women, judging by a host of indicators such as premarital sexual experiences, multiple partnering, and use of commercial sex. While a higher level of sexual activity itself does not support a problematic approach to men's reproductive roles, the fact that these sexual behaviors are connected to unwanted pregnancies and the spread of sexually transmitted diseases and, more specifically, the spread of diseases to female partners who do not engage in risky sexual behaviors, lends credence to a problematic portrayal of men's roles (see Brandt 1985 for a discussion of the links between sexual behavior and venereal disease; Mason 1994). One oft-cited example is the situation where women, potentially at risk of HIV infection from their partners, are unable or do not attempt to persuade their partners to use condoms (Worth 1989).

The fact that in many countries men have greater sexual prerogatives than women, as well as the right to enforce these prerogatives, leads to the relatively neglected topic of sexual coercion and violence. This has begun to receive some attention in demographic research and data collection in developing countries, although many of the studies either are small-scale or focus on the experience of violence rather than relating it to specific outcomes such as unwanted pregnancy or abortion (see Dixon-Mueller 1993; Heise, Moore, and Toubia 1995; Rao 1997). Some studies have made headway in calculating nationally representative estimates of violence and sexual coercion. While one might suspect underreporting of violence, especially in a survey interview, one out of three ever-married women reported in the 1995 Egypt Demographic and Health Survey that they had been beaten at least once since marriage, and nearly all said it was the husband who administered the beating (El-Zanaty et al. 1996). Of those who had been beaten and who had a birth, nearly one-third reported being beaten during pregnancy

(El-Zanaty et al. 1996). Men themselves will admit to violence against their partners. In an in-depth study of couple negotiation in Uganda, about 40 percent of male partners reported that they had physically harmed their partner during a misunderstanding (Blanc et al. 1996).

A final point is that since many of these studies on sexual behavior are of adult men, we know little about the nature of sexual activity in adolescence in developing countries, perhaps the stage where some problematic behaviors develop in the first place.⁴ One study of 12 Latin American countries and cities showed that more adolescent boys had premarital sexual experience than girls, ranging from 30 to 78 percent of 15-19-year-old boys (Morris 1993). Of course, the levels of sexual behavior do not in themselves say much about male sexuality. For example, a more in-depth study of young adults in Cameroon found that young men as well as young women expressed financial interests in sexual relationships (Calves et al. 1996). Usually only young women are described as engaging in a sexual relationship for material or financial benefits. In short, adolescent awareness of fertility, disease risks, and sex role expectations are still relatively unexplored in developing countries (see Mensch, Bruce, and Green 1997).

Men underinvest in their children

One further aspect of men's reproductive roles is fatherhood, which raises the question of men's investments in their children. Demographic trends such as rising levels of divorce and childbearing outside of marriage have meant that more men are not living with their biological children. This has inspired studies that apply a "deficit" model to studying fatherhood; that is, how much the absence of a biological father negatively affects the wellbeing

of a child via financial support, social interaction, and so on. Numerous studies and ongoing research in the United States adopt this approach (see Amato 1996; Garfinkel, McLanahan, and Robins 1994 among the many studies in the United States). There is growing evidence in developing countries that this approach is relevant as well (Bruce, Lloyd, and Leonard 1995). In sub-Saharan Africa, for example, the proportion of school-age children who live in households without their biological fathers is fairly substantial: about two-fifths of school-age children in Ghana, Kenya, and Malawi and about one-third in Tanzania, Cameroon, and Zambia (Lloyd and Gage-Brandon 1994; Lloyd and Blanc 1996).

Studying fatherhood is complicated by these same demographic trends of divorce and nonmarital childbearing. First, many men have biological children from more than one sexual union. For example, in a 1988 survey of adult men in Zaire, where polygamy is illegal (though about 8 percent of married men reported having more than one wife), 36 percent of men currently in union had fathered at least one child with women other than their current wives or partners, and these men had an average of 2.8 children with other partners (Magnani et al. 1995). In a study of paternity over the life course in Canada, more than 20 percent of men experienced fatherhood outside of marriage (Juby and Le Bourdais 1997). Second, since the emphasis is overwhelmingly on biological fathers, we tend to miss men's investments in other children. Men actively father children who are not their own biological children, through fosterage, informally parenting family members' children, or marrying women with children from other unions (i.e., becoming stepfathers) (Bernhardt and Goldscheider 1997; Juby and Le Bourdais 1997; Townsend 1997, forthcoming).

Men's investments in children are certainly affected by the nature of the tie between the biological father and mother. If a father has no sexual access to the mother of his child, he may be less willing to invest in that child (Kaplan et al. 1996). This has made child support policies in a number of countries difficult to implement successfully. For example, a review of child support laws in southern Africa and their effectiveness showed that men were not opposed to the laws, but approval became more complicated among both men and women once children from extramarital sexual unions and children from previous marriages were considered (Armstrong 1992). Of course, the direction of the relationship can run the other way. A child can be used to enforce or legitimate the claims of one biological parent on the resources of the other parent. In other words, having children may have less to do with investing in those children than in ensuring access to resources of one parent by the other (Lockwood 1996).

The deficit model of fatherhood as applied in developing countries is usually tied to a population growth argument; that is, if the financial burden of children were more equally shared between men and women, men would have a financial stake in controlling their fertility in ways that would lead to a fertility decline (Bruce 1994; Bruce, Lloyd, and Leonard 1995). There is some support for this argument. One study in Nigeria found a negative relationship between the proportion of child support expenses a husband paid and the number of children ever born (Fapohunda and Todaro 1988). The focus on men's proportionate contribution negates the assumption that the husband is the primary economic provider and gives some idea about the relative cost of children to each spouse. A Ghanaian study found that a more egalitarian marriage (i.e., flexible division of domestic tasks) and a reduc-

tion of shared responsibilities with kin meant more costly parenting for men and hence a greater desire among men for fewer children (Oppong 1987). The author argued that policies should take into account the allocation of child costs and responsibilities and who manages to avoid shouldering them (i.e., a “free-rider effect” among men) (Oppong 1987: 178). Regardless of the fertility consequences of differing investments in children, the empirical gap concerning the value of children for men and how it has changed is still relatively large in developing countries (see Engle and Leonard 1995 for a review of the scant empirical record). Moreover, we need to know what responsibilities men are actually assuming for the wellbeing of children (biological children and other children under their care) and to bear in mind the legal frameworks that specify the degree of obligation men have toward their biological children.

In conclusion, a problem-oriented approach provides useful insights into men’s reproductive roles but is limited on several counts. First, this approach usually ignores how men view their own reproductive roles and how they perceive these roles as they relate to women’s concerns. The literature on men’s investments in children highlights this point well. Second, much emphasis is placed on how men differ from women (negatively so), although the weight of empirical evidence suggests that on a host of indicators men and women have much in common. In some cases, the differences among men, whether by age or other factors, in reproductive attitudes may be greater than differences between men and women (Basu 1996; Renne 1993). Third, this approach neglects to examine male behavior within the broader constraints and obligations that characterize men’s lives, such as changes in the wage economy and men’s abilities to provide economically

for their families. While many men do engage in problematic behaviors, as statistics on domestic violence illustrate, they also assume more benign roles, as some studies of spousal communication seem to suggest. Men may not be merely unwavering opponents of women's preferences, as they are often depicted, but may be as well-informed (or ill-informed) as their female partners and as reluctant to talk about sensitive issues such as unwanted pregnancy, sexually transmitted diseases, or reproductive health matters.

FUTURE DIRECTIONS FOR RESEARCH ON MEN

As we see it, two demographic trends will become increasingly salient for future research on men's roles in fertility and family planning. The first is the loosening link between marriage and childbearing, which requires knowing more about men to explain childbearing and reproductive behavior. The second is the cumulative divergence in the reproductive experiences of men and women over their lifetimes, which requires studying men and women as individuals, not just as members of current sexual unions. The delinking of marriage and fertility and the lack of symmetry in the lifetime marriage and fertility experiences of men and women should make us consider carefully the unit of analysis (i.e., couples or individuals) that best suits our research questions.

Much of the literature we reviewed assumes that the couple constitutes the only partnership for each member and is a lasting union within which people's statements of fertility preferences and contraceptive use are definitive and meaningful. Many unions fail to meet one or both of these assumptions: for example, polygamous unions in Africa and fluid consensual unions in the Caribbean and much of Latin America (Pebley and Goldman

1986; Rao and Greene 1993; Speizer and Yates 1996). Moreover, rising trends in divorce and migration are forcing the analytic separation of committed sexual partnerships from childbearing.

It is not just that unions are unstable, but that reproductive and sexual partnerships are not lifelong. For example, in blended families, which include stepchildren as well as biological offspring, calculations of parents' and stepparents' fertility preferences reflect multiple unions and nonresident children (see Thomson 1997b). In many developing countries, economic changes have led to increases in migration, separating spouses and encouraging alternative or parallel sexual partnerships (Anarfi 1993). In light of these social trends, the fertility histories of men will increasingly diverge from those of their female partners.

The motivation for individual-level studies of men's reproductive roles is to acquire the same basic knowledge of men's attitudes and behaviors that we have of women. By focusing only on couples, we ignore the role of multiple or serial relationships in influencing men's and women's fertility preferences. A couple-oriented approach to men's reproductive behavior also tends to reduce men's varying roles in families to social interaction with their wives, and often does not pay enough attention to exogenous structural factors such as labor market conditions.

It is not that men and women must be studied *only* as individuals—their interactions are vitally important for reproductive outcomes, as is illustrated by studies on spousal communication and decisionmaking. While marriage and fertility may be increasingly separated due to divorce and out-of-wedlock childbearing, they are also increasingly re-linked in new ways through rising remarriage and step-family formation. Far from asserting that the couple context is unimportant in studies of reproductive behavior, we

argue that our understanding of the negotiations between men and women over reproduction, as bargaining models well illustrate (Fapohunda and Todaro 1988), depends fundamentally on understanding their individual motivations and experiences.

As Watkins (1993) has argued, “The core issue in research on fertility differentials and trends is what leads women to abandon their domestic activities such that they delay marriage, [and] bear fewer children...” (1993: 562). Researchers are now beginning to ask some of the same questions about men and their motivations for having children (Axinn 1992). As a first step, we need to understand men’s commitment to parenting in time and money, how this varies across the life course, and how this compares to what women are experiencing; and we need to incorporate this information more directly into analyses of childbearing and contraceptive use. Studies based on individual men and women are one of the most promising ways to generate the kind of information we need.

Men as well as women are at the center of policy and programmatic concerns about the family and the costs of raising the next generation (Bruce et al. 1995; Burggraf 1997; Folbre 1994). In light of conditions and changes in marriage and family, research should examine the differing expectations men and women have about parenthood — the reasons *why* men enter into fatherhood and women into motherhood — and should measure men’s and women’s actual investments in children. Lastly, we should address the real benefits of changing and expanding parenting and partnering roles for men (see Shepard 1996). Little research explicitly examines these benefits for men as individuals or as a group.

Fertility declines around the world have called attention to changes in childbearing preferences and parental roles and have brought demographers

closer to looking at the costs and benefits of fertility for men as well as for women. Without a better grasp of what children mean to men and women separately, and how this meaning has changed over time, we can say little about changes in men's and women's reproductive strategies. Even if the proximate determinants of fertility do not differ between members of couples, the links between each individual and the larger context certainly do. The inclusion of men both as individuals and as members of couples will be richly rewarded: efforts to do so will enable demography to transcend some of the current assumptions about marriage and fertility and to interpret more effectively the dramatic changes taking place throughout the world in reproductive behavior and family formation.

Notes

1. The reader is referred to a collection of US-based research studies on men published by the Alan Guttmacher Institute (1996), a review by Goldscheider and Kaufman (1996), and the wide literature on fatherhood (see Coltrane 1996 and Lamb 1987).
2. Prior to the 1960s, most of the available contraceptive methods were male-controlled, namely the condom, vasectomy, and coitus interruptus or withdrawal. Contraceptive technology has advanced with respect to female-controlled methods, but the available modern male methods remain: 1) the latex condom, which is vastly underutilized in the face of AIDS and STD risks and 2) vasectomy (including the non-scalpel technique, which reduces complications) (Csillag 1996; Ringheim 1993, 1996). While the call for more investment in male contraceptive methods is not new (Diller and Hembree 1977), only

about 8 percent of the world's contraceptive research budget is allotted for the development of new male contraceptives (Sachs 1994). The debate is still lively as to whether contraceptive development should switch toward an emphasis on male-controlled methods. For example, the Institute of Medicine recently stated that resources should be devoted to a woman-centered approach to contraceptive technology, mainly because of the need for more female-controlled methods to prevent the spread of STDs (Harrison and Rosenfield 1996).

3. Another oft-cited reason to examine men's sexuality, apart from HIV/AIDS, is that it has an impact on women's risk of becoming infected with other sexually transmitted diseases and with reproductive tract diseases, such as cervical cancer, caused by sexually transmitted diseases. For example, the number of new cases of cervical cancer worldwide each year is approximately the same as the total number of new AIDS cases among men and women each year. About 80 percent of cervical cancer cases in developing countries are incurable at the time of detection. The World Health Organization cites male dominance and ignorance as problems associated with cervical cancer in developing countries (World Health Organization 1996). While men may be woefully ignorant of signs of reproductive morbidity in women, as many would expect, women may be equally ignorant about signs of reproductive morbidity in men (Olukoya and Elias 1996)
4. In contrast, the research literature on sexual activity among adolescents in the United States is well developed (see among others, Ku, Sonenstein, and Pleck 1993 and Marsiglio 1993).

References

- Adamchak, Donald J. and Michael Mbizvo. 1991. "Family planning information sources and media exposure among Zimbabwean men," *Studies in Family Planning* 22(5): 326-331.
- Agyeman, Dominic K., Peter Aglobitse, John B. Casterline, and Mark R. Montgomery. 1996. *Social Structure and the Diffusion of Fertility Behavior*. Final Report submitted to the Rockefeller Foundation. New York.
- Alan Guttmacher Institute. 1996. *Readings on Men: From Family Planning Perspectives, 1987-1995*. New York: Alan Guttmacher Institute.
- Ali, Kamran Asdar. 1996. "Notes on rethinking masculinities: An Egyptian case," in Sondra Zeidenstein and Kirsten Moore (eds.), *Learning About Sexuality: A Practical Beginning*, pp. 98-109. New York: Population Council.
- Amato, Paul R. 1996. "More than money? Men's contributions to their children's lives," paper presented at the National Symposium on Men in Families, 31 October- 1 November, Pennsylvania State University.
- Anarfi, J. K. 1993. "Sexuality, migration and AIDS in Ghana — A socio-behavioral study," *Health Transition Review* 3 (Supplement): 45-67.
- Armstrong, Alice. 1992. "Maintenance payments for child support in Southern Africa: Using law to promote family planning," *Studies in Family Planning* 23(4):217-228.
- Awusabo-Asare, Kofi and John K. Anarfi. 1997. "Postpartum sexual abstinence in the era of AIDS in Ghana: Prospects for change," *Health Transition Review* 7:257-270.
- Axinn, William G. 1992. "Family organization and fertility limitation in Nepal," *Demography* 29: 503-521.

- Bachrach, Christine A., V. Jeffrey Evans, Sylvia Ann Ellison, and Kathy S. Stolley. 1992. "What price do we pay for single sex fertility surveys?" paper presented at the Annual Meeting of the Population Association of America, 30 April - 2 May, Denver, CO.
- Balmer, D. H., M. K. E. Gikundi et al. 1995. "The negotiating strategies determining coitus in stable heterosexual relationships," *Health Transition Review* 5: 85-95.
- Bankole, A. 1995. "Desired fertility and fertility behavior among the Yoruba of Nigeria: A study of couple preferences and subsequent fertility," *Population Studies* 49: 317-328.
- Basu, Alaka Malwade. 1996. "Women's education, marriage and fertility: Do men really not matter?" Population and Development Program Working Paper Series No. 96.03. Ithaca, NY: Cornell University.
- Beach, L. R., A. Hope, B. D. Townes, and F. L. Campbell. 1982. "The expectation-threshold model of reproductive decision making," *Population and Environment* 5:95-108.
- Becker, Stan. 1996. "Couples and reproductive health: A review of couple studies," *Studies in Family Planning* 27(6): 291-306.
- Beckman, L. J. 1983. "Communication, power, and the influence of social networks in couple decisions on fertility," in Rodolfo A. Bulatao and Ronald D. Lee (eds.), *Determinants of Fertility in Developing Countries*, Volume 2, pp. 415-443. New York: Academic Press.
- Beckman, Linda J. 1984. "Husbands' and wives' relative influence on fertility decisions and outcomes," *Population and Environment* 7: 182-197.
- Beckman, Linda J., Rhonda Aizenberg, Alan B. Forsythe, and Tom Day. 1983. "A theoretical analysis of antecedents of young couples' fertility decisions and outcomes," *Demography* 20(4): 519-533.

- Bergstrom, Theodore C. 1996. "Economics in a family way," *Journal of Economic Literature* 34: 1903-1934.
- Bernhardt, Eva M. and Frances Goldscheider. 1997. "Family change and the value of children: Child qualities preferred by biological and informal fathers in the U.S. and Sweden," paper presented at the Annual Meeting of the Population Association of America, 27-29 March, Washington, DC.
- Bertrand, Jane T., Nellie Mathu, Joseph Dwyer, Margaret Thuo, and Grace Wambwa. 1989. "Attitudes toward voluntary surgical contraception in four districts of Kenya," *Studies in Family Planning* 20(5): 281-288.
- Biddlecom, Ann E., John B. Casterline, and Aurora E. Perez. 1997. "Spouses' views of contraception in the Philippines," *International Family Planning Perspectives* 23(3):108-115.
- Blanc, Ann K., Brent Wolff, Anastasia J. Gage, Alex C. Ezeh, Stella Neema, and John Ssekamatte-Ssebuliba. 1996. *Negotiating Reproductive Outcomes in Uganda*. Calverton, MD: Macro International Inc. and Institute of Statistics and Applied Economics [Uganda].
- Bogue, Donald J. 1969. *Principles of Demography*. New York: John Wiley and Sons.
- Bongaarts, John and Susan Cotts Watkins. 1996. "Social interactions and contemporary fertility transitions," *Population and Development Review* 22(4): 639-682.
- Brandt, Allan M. 1985. *No Magic Bullet: A Social History of Venereal Disease in the United States Since 1880*. New York: Oxford University Press.
- Bruce, Judith. 1994. "Reproductive choice: The responsibilities of men and women," *Reproductive Health Matters* 4:68-70.

- Bruce, Judith, Cynthia B. Lloyd, and Ann Leonard. 1995. *Families in Focus: New Perspectives on Mothers, Fathers, and Children*. New York: Population Council.
- Burggraf, Shirley P. 1997. *The Feminine Economy and Economic Man: Reviving the Role of Family in the Post-Industrial Age*. Reading, MA: Addison-Wesley.
- Caldwell, John C. and Pat Caldwell. 1987. "The cultural context of high fertility in sub-Saharan Africa," *Population and Development Review* 13(3): 409-437.
- Caldwell, John C., Gigi Santow, I.O. Orubuloye, Pat Caldwell, and John Anarfi (eds.). 1993. *Sexual Networking and HIV/AIDS in West Africa: Health Transition Review Supplement*. Volume 3.
- Calves, Anne-Emmanuele, Gretchen T. Cornwell, and Parfait Eloundou Enyegue. 1996. "Adolescent sexual activity in Sub-Saharan Africa: Do men have the same strategies and motivations as women?" Population Research Institute Working Papers in African Demography No. AD96-04. State College, PA: Pennsylvania State University.
- Carael, M., J. Cleland, J.-C. Deheneffe, and L. Adeokun. 1992. "Research on sexual behaviour that transmits HIV: The GPA/WHO Collaborative Surveys — preliminary findings," in Tim Dyson (ed.), *Sexual Behaviour and Networking: Anthropological and Socio-Cultural Studies on the Transmission of HIV*, pp. 65-87 Liège, Belgium: Editions Derouaux-Ordina.
- Casterline, John B., Aurora E. Perez, and Ann E. Biddlecom. 1997. "Factors underlying unmet need for family planning in the Philippines," *Studies in Family Planning* 28(3): 173-191.
- Cherlin, A., J. Griffith, and J. McCarthy. 1983. "A note on maritally-disrupted men's reports of child support in the June 1980 Current Population Survey," *Demography* 20(3): 385-389.

- Chikamata, Davy M. 1996. "Male needs and responsibilities in family planning and reproductive health," *Planned Parenthood Challenges* 2:8-10.
- Cleland, John and Peter Way (eds.). 1994. *AIDS Impact and Prevention in the Developing World: Demographic and Social Science Perspectives: Health Transition Review Supplement*. Volume 4.
- Coltrane, Scott. 1996. *Family Man: Fatherhood, Housework, and Gender Equity*. New York: Oxford University Press.
- Cook, Rebecca J. and Deborah Maine. 1987. "Spousal veto over family planning services," *American Journal of Public Health* 77(3): 339-344.
- Coombs, Lolagene and Dorothy Fernandez. 1978. "Husband-wife agreement about reproductive goals," *Demography* 15: 57-74.
- Coombs, Lolagene C. and Ming-Cheng Chang. 1981. "Do husbands and wives agree? Fertility attitudes and later behavior," *Population and Environment* 42(2): 109-127.
- Csillag, Claudio. 1996. "Male contraceptive pill to start trial in Brazil," *The Lancet* 348: 608.
- Das Gupta, Monica (no date). "Kinship systems and demographic outcomes," unpublished paper.
- Demeny, Paul. 1994. "Two proposals for the agenda at Cairo," *International Family Planning Perspectives* 20(1): 28-30.
- Diller, L. and W. Hembree. 1977. "Male contraception and family planning: A social and historical review," *Fertility and Sterility* 28(12): 1271-1279.
- Dixon-Mueller, Ruth. 1993. "The sexuality connection in reproductive health," *Studies in Family Planning* 24(5):269-282.
- Dodoo, F. Nii-Amoo. 1993. "A couple analysis of micro level supply/demand factors in fertility regulation," *Population Research and Policy Review* 12:93-101.

- Dwyer, Daisy H. and Judith Bruce (eds). 1988. *A Home Divided: Women and Income in the Third World*. Stanford, CA: Stanford University Press.
- Dyson, Tim (ed.). 1992. *Sexual Behaviour and Networking: Anthropological and Socio-Cultural Studies on the Transmission of HIV*. Liège, Belgium: Editions Derouaux-Ordina.
- Ehrenreich, Barbara. 1983. *Hearts of Men: American Dreams and Flight from Commitment*. Garden City, NY: Anchor Press.
- El-Zanaty, Fatma, Hussein A.A. Sayed, Hassan H.M. Zaky, and Ann A. Way. 1993. *Egypt Demographic and Health Survey 1992*. Calverton, MD: National Population Council [Egypt] and Macro International Inc.
- El-Zanaty, Fatma, Enas M. Hussein, Gihan A. Shawky, Ann A. Way, and Sunita Kishor. 1996. *Egypt Demographic and Health Survey 1995*. Calverton, MD: National Population Council [Egypt] and Macro International Inc.
- Engle, Patrice L. and Ann Leonard. 1995. "Fathers as parenting partners," in Judith Bruce, Cynthia B. Lloyd, and Ann Leonard, *Families in Focus: New Perspectives on Mothers, Fathers, and Children*, pp. 49-69. New York: Population Council.
- Ezeh, Alex Chika. 1993. "The influence of spouses over each other's contraceptive attitudes in Ghana," *Studies in Family Planning* 24 (3): 163-174.
- Ezeh, Alex Chika, Michka Seroussi, and Hendrik Raggars. 1996. *Men's Fertility, Contraceptive Use, and Reproductive Preferences*. Calverton, MD: Macro International Inc.
- Ezeh, Alex Chika and Gora Mboup. 1997. "Estimates and explanations of gender differentials in contraceptive prevalence rates," *Studies in Family Planning* 28(2):104-121.

- Fapohunda, Eleanor R. and Michael P. Todaro. 1988. "Family structure, implicit contracts, and the demand for children in Southern Nigeria," *Population and Development Review* 14(4): 571-594.
- Fikree, F.F., R.H. Gray, and F. Shah. 1993. "Can men be trusted? A comparison of pregnancy histories reported by husbands and wives," *American Journal of Epidemiology* 138(4):237-242.
- Folbre, Nancy. 1988. "The black four of hearts: Toward a new paradigm of household economics," in Daisy H. Dwyer and Judith Bruce (eds.), *A Home Divided: Women and Income in the Third World*, pp. 248-264. Stanford, CA: Stanford University Press.
- Folbre, Nancy. 1994. "Children as public goods," *American Economic Review* 84(2):86-90.
- Garfinkel, Irwin, Sara S. McLanahan, and Philip K. Robins (eds.). 1994. *Child Support Reform and Child Well-Being*. Washington, DC: Urban Institute Press.
- Ginsburg, Faye D. and Rayna Rapp (eds.). 1995. *Conceiving the New World Order: The Global Politics of Reproduction*. Berkeley: University of California Press.
- Goldscheider, Frances K. and Gayle Kaufman. 1996. "Fertility and commitment: Bringing men back in," in John B. Casterline, Ronald D. Lee, and Karen A. Foote (eds.), *Fertility in the United States: New Patterns, New Theories*. Supplement to Volume 22, *Population and Development Review*, pp. 87-99. New York: Population Council.
- Grady, William R., Daniel H. Klepinger, John O.G. Billy, and Koray Tanfer. 1993. "Condom characteristics: The perceptions and preferences of men in the United States," *Family Planning Perspectives* 25(2): 67-73.
- Grady, William R., Koray Tanfer, John O.G. Billy, and Jennifer Lincoln-Hanson. 1996. "Men's perceptions of their roles and responsibilities

- regarding sex, contraception and childrearing,” *Family Planning Perspectives* 28(5): 221-226.
- Green, Cynthia P. 1990. *Male Involvement Programs in Family Planning: Lessons Learned and Implications for AIDS Prevention*. Global Programme on AIDS. Geneva: World Health Organization.
- Green, Cynthia P., Sylvie I. Cohen, and Hedia Belhadj-El Ghouayel. 1995. *Male Involvement in Reproductive Health, Including Family Planning and Sexual Health*. Technical Report 28, United Nations Population Fund. New York: United Nations Population Fund.
- Greenhalgh, Susan. 1990. “Toward a political economy of fertility: Anthropological contributions,” *Population and Development Review* 16(1): 85-106.
- Greer, Germaine. 1984. *Sex and Destiny: The Politics of Human Fertility*. New York: Harper and Row.
- Harrison, Polly F. and Allan Rosenfield. 1996. *Contraceptive Research and Development: Looking to the Future*. Washington, DC: National Academy Press.
- Hawkins, K. (ed.). 1992. *Male Participation in Family Planning: A Review of Programme Approaches in the Africa Region*. London: International Planned Parenthood Federation.
- Heise, Lori, Kirsten Moore and Nahid Toubia. 1995. *Sexual Coercion and Reproductive Health: A Focus on Research*. New York: Population Council.
- Hodgson, Dennis. 1983. “Demography as social science and policy science,” *Population and Development Review* 9(1): 1-34.
- Hodgson, Dennis. 1988. “Orthodoxy and revisionism in American demography,” *Population and Development Review* 14(4):541-569.

- Hodgson, Dennis and Susan Cotts Watkins. 1997. "Feminists and neo-Malthusians: Past and present alliances," *Population and Development Review* 23(3):469-523.
- Hollerbach, Paula. 1980. "Power in families, communication, and fertility decision-making," *Population and Environment* 3: 146-173.
- Hollerbach, Paula. 1983. "Fertility decision-making processes: A critical essay," in Rodolfo A. Bulatao and Ronald D. Lee (eds.), *Determinants of Fertility in Developing Countries*, Volume 2, pp. 797-828. New York: Academic Press.
- Hulton, Louise and Jane Falkingham. 1996. "Male contraceptive knowledge and practice: What do we know?" *Reproductive Health Matters* 7: 90-100.
- Isuigo-Abanihe, U. C. 1994. "Extramarital relations and perceptions of HIV/AIDS in Nigeria," *Health Transition Review* 4: 111-125.
- Jejeebhoy, Shireen J. and Sumati Kulkarni. 1989. "Reproductive motivation: A comparison of wives and husbands in Maharashtra, India," *Studies in Family Planning* 20(5): 264-272.
- Johns Hopkins Center for Communication Programs. 1997. "Reaching men worldwide: Lessons learned from family planning and communication projects, 1986-1996." Working Paper No. 3. Baltimore, MD: Johns Hopkins Center for Communication Programs/Population Information Program.
- Jones, E. F. and J. D. Forrest. 1992. "Underreporting of abortion in surveys of U.S. women: 1976 to 1988," *Demography* 29(1):113-126.
- Juby, Heather and Celine Le Bourdais. 1997. "The growing complexity of the paternal life course," *Population Studies* 51(3): (forthcoming).
- Kalipeni, E. and E.M. Zulu. 1993. "Gender differences in knowledge and

- attitudes toward modern and traditional methods of child spacing in Malawi," *Population Research and Policy Review* 12(2): 103-121.
- Kaplan, Hillard S., Jane B. Lancaster, and Kermyt G. Anderson. 1996. "Human parental investment and fertility: The life histories of men in Albuquerque," paper presented at the Men in Families Conference, 31 October - 1 November, Pennsylvania State University.
- Khalifa, Mona A. 1988. "Attitudes of urban Sudanese men toward family planning," *Studies in Family Planning* 19(4): 236-243.
- Knodel, John and Anthony Pramualratana. 1995. "Prospects for increased condom use in marital unions in Thailand," Population Studies Center Research Report No. 95-337. Ann Arbor, MI: University of Michigan.
- Knodel, John, Mark VanLandingham, Chanpen Saengtienchai, and Anthony Pramualratana. 1996. "Thai views of sexuality and sexual behavior," *Health Transition Review* 6:179-201.
- Koenig, M. A., G. B. Simmons, and B.D. Misra. 1984. "Husband-wife inconsistencies in contraceptive use responses," *Population Studies* 38: 281-298.
- Ku, Leighton, Freya L. Sonenstein, and Joseph H. Pleck. 1993. "Neighborhood, family, and work: Influences on the premarital behaviors of adolescent males," *Social Forces* 72(2): 479-503.
- Kulczycki, Andrzej, Malcolm Potts, and Allan Rosenfield. 1996. "Abortion and fertility regulation," *The Lancet* 347: 1663-1668.
- Lamb, Michael E. 1987. *The Father's Role: Cross-Cultural Perspectives*. Hillsdale, NJ: Lawrence Erlbaum.
- Lasee, Ashraf and Stan Becker. 1997. "Husband-wife communication about family planning and contraceptive use in Kenya," *International Family Planning Perspectives* 23(1):15-20, 33.

- Lesthaeghe, Ron J. 1989. "Social organization, economic crises and the future of fertility control in Africa," in Ron J. Lesthaeghe (ed.), *Reproduction and Social Organization in Sub-Saharan Africa*, pp. 475-505. Berkeley: University of California Press.
- Lloyd, Cynthia B. 1996. "Family and gender issues for population policy," in *Population and Women: Proceedings of the United Nations Expert Group Meeting on Population and Women*, pp. 65-80. New York: United Nations.
- Lloyd, Cynthia B. and Anastasia J. Gage-Brandon. 1992. "Does sibsize matter?: The implications of family size for children's education in Ghana," Research Division Working Paper No. 45. New York: Population Council.
- Lloyd, Cynthia B. and Anastasia J. Gage-Brandon. 1994. "High fertility and children's schooling in Ghana: Sex differences in parental contributions and educational outcomes," *Population Studies* 48(2): 293-306.
- Lloyd, Cynthia B. and Ann K. Blanc. 1996. "Children's schooling in sub-Saharan Africa: The role of fathers, mothers, and others," *Population and Development Review* 22(2):265-298.
- Lockwood, Matthew. 1996. "Institutional and cultural determinants of demand for reproductive health services in sub-Saharan Africa: A review and implications for research," unpublished paper.
- Magnani, R. J., J. T. Bertrand, B. Makani, and S.W. McDonald. 1995. "Men, marriage and fatherhood in Kinshasa, Zaire," *International Family Planning Perspectives* 21(1): 19-25.
- Manser, M. and M. Brown. 1979. "Bargaining analyses of household decisions," in C. B. Lloyd, E. S. Andrews, and C. L. Gilroy (eds.), *Women in the Labor Market*, pp. 3-26. New York: Columbia University Press.

- Marsiglio, William. 1985. "Husbands' sex-role preferences and contraceptive intentions: The case of the male pill," *Sex Roles* 12(5-6): 655-663.
- Marsiglio, William. 1993. "Adolescent males' orientation toward paternity and conception," *Family Planning Perspectives* 25(1): 22-31.
- Mason, Karen Oppenheim. 1994. "HIV transmission and the balance of power between women and men: A global view," *Health Transition Review* (Supplement) 4: 217-240.
- Mason, Karen Oppenheim. 1996. "A comparative study of the status of women in five Asian countries," paper presented at the International Symposium: Life and Earth in the 21st Century, March, Tokyo, Japan.
- Mason, Karen Oppenheim and Anju Malhotra Taj. 1987. "Differences between women's and men's reproductive goals in developing countries," *Population and Development Review* 13(4): 611-638.
- Mbizvo, Michael T. and Donald J. Adamchak. 1991. "Family planning knowledge, attitudes, and practices of men in Zimbabwe," *Studies in Family Planning* 22(1): 31-38.
- Mbizvo, M.T. and D.J. Adamchak. 1992. "Male fertility regulation: A study on acceptance among men in Zimbabwe," *Central African Journal of Medicine* 38(2): 52-57.
- Mbizvo, M.T. and M.T. Bassett. 1996. "Reproductive health and AIDS prevention in Sub-Saharan Africa: The case for increased male participation," *Health Policy and Planning* 11(1):84-92.
- McElroy, M. B, and M. J. Horney. 1981. "Nash bargained household decisions," *International Economic Review* (22): 33-50.
- Mensch, Barbara, Judith Bruce, and Margaret Greene. 1997. "The wave of the future: Social conditions and demographic implications of the largest ever generation of girls," unpublished report. New York: Population Council.

- Montgomery, Mark R. and John B. Casterline. 1996. "Social learning, social influences, and new models of fertility," in John B. Casterline, Ronald D. Lee, and Karen A. Foote (eds.), *Fertility in the United States: New Patterns, New Theories*. Supplement to Volume 22, *Population and Development Review*, pp. 151-175. New York: Population Council.
- Morris, L. 1993. "Determining male fertility through surveys: Young adult reproductive health surveys in Latin America," paper presented at the General Conference of the International Union for the Scientific Study of Population, 24 August - 1 September, Montreal, Canada.
- Morris, Martina, Chai Podhisita, Maria J. Wawer, and Mark S. Hancock. 1996. "Bridge populations in the spread of HIV/AIDS in Thailand," *AIDS* 10:1265-1271.
- Mott, Frank L. and Susan H. Mott. 1985. "Household fertility decisions in West Africa: A comparison of male and female survey results," *Studies in Family Planning* 16(2): 88-99.
- Mundigo, Axel I. 1995. *Men's Roles, Sexuality, and Reproductive Health*. The John D. and Catherine T. MacArthur Foundation.
- Olukoya, Adepeju A. and Christopher Elias. 1996. "Perceptions of reproductive tract morbidity among Nigerian women and men," *Reproductive Health Matters* 7: 56-65.
- Omondi-Odhiambo. 1997. "Men's participation in family planning decisions in Kenya," *Population Studies* 51:29-40.
- Oni, G. A. and J. McCarthy. 1991. "Family planning knowledge, attitudes and practices of males in Ilorin, Nigeria," *International Family Planning Perspectives* 17(2): 50-54, 64.
- Opong, C. (ed.). 1987. *Sex Roles, Population and Development in West Africa: Policy-Related Studies on Work and Demographic Issues*. Portsmouth, NH: Heinemann.

- Orubuloye, I.O, John C. Caldwell and Pat Caldwell. 1991. "Sexual networking in the Ekiti District of Nigeria," *Studies in Family Planning* 22(2): 61-73.
- Orubuloye, I. O., John C. Caldwell, and Pat Caldwell. 1992. "Diffusion and focus in sexual networking: Identifying partners and partners' partners," *Studies in Family Planning* 23(6): 343-351.
- Orubuloye, I.O., John C. Caldwell, Pat Caldwell, and Shail Jain (eds.). 1995. *The Third World AIDS Epidemic: Health Transition Review Supplement*. Volume 5.
- Pebley, A. R., H. Delgado, and E. Brineman. 1980. "Family sex composition preferences among Guatemalan men and women," *Journal of Marriage and the Family* 42(2): 437-447.
- Pebley, Anne R. and Noreen Goldman. 1986. "Legalization of consensual unions in Mexico," *Social Biology* 33(3-4): 199-213.
- Phillips, James F., Fred N. Binka, Martin Adjuik, Alex Nazzar, and Kubaje Adazu. 1997. "The determinants of contraceptive innovation: A case-control study of family planning acceptance in a traditional African society," Policy Research Division Working Paper No. 93. New York: Population Council.
- Pleck, J. H., F. L. Sonenstein, and L. C. Ku. 1990. "Contraceptive attitudes and intention to use condoms in sexually experienced and inexperienced adolescent males," *Journal of Family Issues* 11:294-312.
- Pool, Robert, Mary Maswe, J. Ties Boerma, and Soori Nnko. 1996. "The price of promiscuity: Why urban males in Tanzania are changing their sexual behaviour," *Health Transition Review* 6: 203-221.
- Population Council. 1996. *The Unfinished Transition*. Population Council Issues Papers. New York.

- Posner, J. K. and F. Mbodji. 1989. "Men's attitudes about family planning in Dakar, Senegal," *Journal of Biosocial Science* 21(3): 279-291.
- Presser, Harriet B. 1997. "Demography, feminism, and the science-policy nexus," *Population and Development Review* 23(2): 295-331.
- Rao, V. 1997. "Wife-beating in rural South India: A qualitative and econometric analysis," *Social Science and Medicine* 44(8):1169-1180.
- Rao, V. and M. E. Greene. 1993. "Marital instability, inter-spousal bargaining, and their implications for fertility in Brazil," Population Research Center Working Paper, University of Chicago.
- Rendall, Michael S., Lynda Clarke, H. Elizabeth Peters, Nalini Ranjit, and Georgia Verropoulou. 1997. "Retrospective and panel underreporting of male fertility in the United States and Britain," paper presented at the Annual Meeting of the Population Association of America, 27-29 March, Washington, DC.
- Renne, Elisha P. 1993. "Gender ideology and fertility strategies in an Ekiti Yoruba village," *Studies in Family Planning* 24(6): 343-353.
- Renne, Elisha P. 1996. "Shifting boundaries of fertility change in Southwestern Nigeria," *Health Transition Review* 6: 169-190.
- Rich, Adrienne Cecile. 1986. *Of Woman Born: Motherhood as Experience and Institution*. New York: W.W. Norton.
- Riley, Nancy E. 1997. "Similarities and differences: Anthropological and demographic perspectives on gender," in David I. Kertzer and Tom Fricke (eds.), *Anthropological Demography: Toward a New Synthesis*, pp. 115-138. Chicago: University of Chicago Press.
- Ringheim, Karin. 1993. "Factors that determine prevalence of use of contraceptive methods for men," *Studies in Family Planning* 24(2): 87-99.

- Ringheim, Karin. 1996. "Whither methods for men? Emerging gender issues in contraception," *Reproductive Health Matters* 7: 79-89.
- Robinson, Warren C. 1997. "The economic theory of fertility over three decades," *Population Studies* 51: 63-74.
- Rogow, Deborah and Sonya Horowitz. 1995. "Withdrawal: A review of the literature and an agenda for research," *Studies in Family Planning* 26(3):140-153.
- Rosen, R. H. and T. Benson. 1982. "The second class partner: The male role in family planning decisions," in G.L. Fox (ed.), *The Childbearing Decision*, pp. 97-124. Beverly Hills, CA: Sage Publications.
- Ross, John A. and Douglas H. Huber. 1983. "Acceptance and prevalence of vasectomy in developing countries," *Studies in Family Planning* 14(3): 67-73.
- Rutenberg, Naomi, Ann K. Blanc, and S. Kapiga. 1994. "Sexual behavior, social change, and family planning among men and women in Tanzania," *Health Transition Review* 4 (Supplement): 173-196.
- Rutenberg, Naomi and Susan Cotts Watkins. 1996. "Conversation and contraception in Nyanza Province, Kenya," paper presented at the Annual Meeting of the Population Association of America, 9-11 May, New Orleans, LA.
- Sachs, A. 1994. "Men, sex, and parenthood," *World Watch* 7(2): 12-19.
- Salway, S. 1994. "How attitudes toward family planning and discussion between wives and husbands affect contraceptive use in Ghana," *International Family Planning Perspectives* 20(2): 44-47, 74.
- Sarkar, N.N. 1993. "Sterilisation: Characteristics of vasectomy acceptors in Delhi," *Journal of Biosocial Science* 25(1): 45-49.
- Schneider, Jane C. and Peter T. Schneider. 1991. "Sex and respectability in

- an age of fertility decline: A Sicilian case study,” *Social Science and Medicine* 33(8):885-895.
- Schneider, Jane C. and Peter T. Schneider. 1996. *Festival of the Poor: Fertility Decline and the Ideology of Class in Sicily, 1860-1980*. Tucson: University of Arizona Press.
- Shepard, Bonnie. 1996. “Masculinity and the male role in sexual health,” *Planned Parenthood Challenges* 2: 11-14.
- Shryock, Henry S., Jacob S. Siegel, and Associates. 1976. *The Methods and Materials of Demography*. San Diego, CA: Academic Press.
- Smith, H. L. and S. P. Morgan. 1994. “A response model for agreement and disagreement between husbands and wives regarding fertility intentions,” paper presented at the Annual Meeting of the Population Association of America, 5-7 May, Miami, FL.
- Speizer, I. S. 1995. “A marriage trichotomy and its applications,” *Demography* 32(4): 521-532.
- Speizer, I. S. and A. J. Yates. 1996. “Couples as innovators in Sub-Saharan Africa,” paper presented at the Annual Meeting of the Population Association of America, 9-11 May, New Orleans, LA.
- Stash, Sharon. 1996. “Ideal-family-size and sex-composition preferences among wives and husbands in Nepal,” *Studies in Family Planning* 27(2): 107-118.
- Stycos, J. Mayone. 1996. “Men, couples, and family planning: A retrospective look,” Cornell University Population and Development Program Working Paper Series No. 96.12. Ithaca, NY: Cornell University.
- Stycos, J. Mayone, Kurt Back, and Reuben Hill. 1956. “Problems of communication between husband and wife on matters relating to family limitation,” *Human Relations* 1: 207-215.

- Szreter, Simon. 1993. "The idea of demographic transition and the study of fertility change: A critical intellectual history," *Population and Development Review* 19(4): 659-701.
- Thomson, E. 1989. "Dyadic models of contraceptive choice, 1957 and 1975," in D. Brinberg and J. Jaccard (eds.), *Dyadic Decision Making*, pp. 268-285. New York: Springer-Verlag.
- Thomson, E. 1990. "Two into one: Structural models of couple behavior," in T. Draper and A. Marcos (eds.), *Family Variables: Conceptualization, Measurement and Use*, pp. 129-142. Newbury Park: Sage Publications.
- Thomson, Elizabeth. 1997a. "Couple childbearing desires, intentions, and births," *Demography* 34(3):343-354.
- Thomson, Elizabeth. 1997b. "Hers, his and their children: Influences on U.S. couple childbearing decisions," paper presented at the Annual Meeting of the Population Association of America, 27-29 March, Washington, DC.
- Thomson, E., E. McDonald, and L. Bumpass. 1990. "Fertility desires and fertility: His, hers, and theirs," *Demography* 27(4): 579-588.
- Tietze, Christopher. 1938. "The measurement of differential reproduction by paternity rates," *Eugenics Review* 30(2):101-107.
- Tietze, Christopher. 1943. "Differential reproduction in the United States: Paternity rates for occupational classes among the urban white population," *American Journal of Sociology* 49(3):242-247.
- Townsend, Nicholas. 1997. "Reproduction in anthropology and demography," in David I. Kertzer and Tom Fricke (eds.), *Anthropological Demography: Toward a New Synthesis*, pp. 96-144. Chicago: University of Chicago Press.
- Townsend, Nicholas W. forthcoming. "Male fertility as a life time of relationships: Contextualizing men's biological reproduction in Botswana,"

in C. Bledsoe, S. Lerner, and J. Guyer (eds.), *Fertility and the Male Life Cycle*. London: Oxford University Press.

United Nations. 1995. "Program of Action of the 1994 International Conference on Population and Development (Chapters I - VIII)," *Population and Development Review* 21(1):187-213.

van de Walle, Francine and Marian Maiga. 1991. "Family planning in Bamako, Mali," *International Family Planning Perspectives* 17(3): 84-90, 99.

VanLandingham, M.J., S. Suprasert, W. Sittitrai, C. Vaddhanaphuti, and N. Grandjean. 1993. "Sexual activity among never-married men in Northern Thailand," *Demography* 30(3):297-313.

Watkins, Susan Cotts 1993. "If all we knew about women was what we read in *Demography*, what would we know?" *Demography* 30(4): 551-577.

Westoff, Charles F. 1994. "What's the world's priority task? Finally, control population," *New York Times Magazine* (6 February): 30, 32.

Westoff, Charles F. and Akinrinola Bankole. 1995. *Unmet Need: 1990-1994*. DHS Comparative Studies No. 16. Calverton, MD: Macro International.

Whiting, Beatrice B. (ed.). 1963. *Six Cultures: Studies of Child Rearing*. New York: John Wiley and Sons.

World Health Organization. 1996. "Cervical cancer control in developing countries: Memorandum from a WHO meeting," *Bulletin of the World Health Organization* 74(4): 345-351.

Worth, Dooley. 1989. "Sexual decision-making and AIDS: Why condom promotion among vulnerable women is likely to fail," *Studies in Family Planning* 20(6): 297-307.

Zulu, Eliya. 1997. "Men's role in childbearing decisions relating to modern versus traditional contraceptives: A look at evidence from Malawi," paper presented at the Annual Meeting of the Population Association of America, 27-29 March, Washington, DC.

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