WOMEN'S EMPOWERMENT AND SOCIAL CONTEXT: RESULTS FROM FIVE ASIAN COUNTRIES*

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2 January 2003

*This paper was originally drafted while the senior author was a scholar in residence at the Rockefeller Foundation's Bellagio Study and Conference Center in the Fall of 1997. The data analyzed in the paper were collected under grants from the Rockefeller Foundation and the Andrew W. Mellon Foundation. The analysis and writing of the paper was partly supported by grants RO1-HD33757 and RO1-HD33791 from the National Institute of Child Health and Human Development to the East-West Center and the University of Pennsylvania. We are deeply indebted to all of these sources and to our collaborators in Asia: Zeba A. Sather in Pakistan; Corazon M. Raymundo in the Philippines; Shyamala Nagaraj in Malaysia; Shireen J. Jejeebhoy in India; and Napaporn Chayovan in Thailand. The authors take full responsibility for any shortcomings of the analysis.

ABSTRACT

This paper analyzes multiple measures of married women's empowerment in the domestic sphere in 56 communities spanning five Asian countries (India, Malaysia, Pakistan, the Philippines, and Thailand). At issue is whether community or individual characteristics are better predictors of women's empowerment, and whether different dimensions of empowerment are similarly related to community or individual traits. The analysis shows that, consistent with the theoretical approach employed here, which treats gender relations as heavily influenced by community norms and values, community is a far stronger predictor of women's empowerment than are individual traits. The relationship of both community and individual traits to different measures of empowerment vary, suggesting that "empowerment" is inherently a multi-dimensional phenomenon, with women relatively empowered in some spheres but not in others. The primary policy implication is the importance of changing community norms and values about gender relations for empowering women. The results also suggest that policies to raise women's age at marriage, enhance their educations and open greater employment opportunities will also help to empower them, at least in some respects.

WOMEN'S EMPOWERMENT AND SOCIAL CONTEXT: RESULTS FROM FIVE ASIAN COUNTRIES

Social scientists and development practitioners have long been interested in the conditions that empower women. As the evidence that gender equality is important for economic growth, poverty reduction and enhanced human well-being has grown, interest in the determinants and correlates of women's empowerment has also grown.[1] Unfortunately, confusion over the definition and measurement of this concept remains widespread. Indeed, the tradition that measures women's empowerment by their years of schooling, employment experience or age at marriage remains alive, even if increasingly called into question on both conceptual and empirical grounds (e.g., Balk 1994; Govindasamy and Malhotra 1996; Malhotra, Schuler and Boender 2002).

The current paper takes up this topic anew in the interests of clarifying what we mean by women's empowerment, how it should be measured and what determines it. In particular, after discussing conceptual issues, we turn to a previously unanalyzed data set collected in South and Southeast Asia that permits us to illustrate three key points about the conceptualization and measurement of women's empowerment. The first point is that power within the household—the particular aspect of women's empowerment on which we focus—is strongly influenced by social context (national and community) because it is strongly determined by social institutions rather than by individual characteristics. The second point is that *all* aspects of women's empowerment are multidimensional and the interrelations among different dimensions depend on social context. Finally, the socioeconomic proxies for women's empowerment used in past studies do a good job of indexing only some aspects of women's empowerment and power—and only in some contexts. For this reason, use of direct measures is preferable to the use of proxies. The substantive implication of this finding is that, in the short run, providing women with schooling or other resources may do little to empower them, although the evidence suggests that these investments can have payoffs for particular aspects of empowerment.

CONCEPTUAL ISSUES

The concept of women's empowerment implicitly assumes that in all societies, men control women—or, to be more precise, men control at least some of the women of their social class, particularly those in their households and families. In this view, women are a "class" in the (two-class) gender stratification system, a system that is governed by shared norms and values,

[1] Interest in women's empowerment among demographers and population policymakers was heightened during the 1994 International Conference on Population and Development held in Cairo, at which the empowerment of women was legitimated as a social goal and enshrined as a necessary condition for population stabilization (Hodgson and Watkins 1997). Since then, critiques of demographers' views of gender and women (e.g., Presser 1997; Watkins 1993) have grown apace with the wealth of empirical studies investigating women's empowerment and its demographic consequences (e.g., Amin et al. 1994; Balk 1994, 1997; Basu 1992; Basu and Basu 1991; Chowdhury and Trovato 1994; Das Gupta 1990; Dharmalingam and Morgan 1996; Florez and Hogan 1990; Greenhalgh and Li 1995; Jejeebhoy 1995; Kishor 1993; Kritz and Makinwa-Adebusoye 1995; Lim 1993; Malhotra, Vanneman, and Kishor 1995; Morgan and Niraula 1995; Pedraza 1991; Schuler and Hashemi 1994). What was once viewed as a backwater "women's topic" has moved significantly toward the center of demographic enquiry.

i.e., it has a cultural as well as relational and material component (Smith 1989). This view of women's empowerment is part of a sociological or anthropological conception which recognizes that individuals belong to and are strongly influenced by social collectivities that are integrated by common ideological or normative systems. These ideological systems make prescriptions about many fundamental principles of social life, for example, how to organize families, how to allocate wealth among different groups or individuals, and how to organize relations between males and females. In this view, the perceptions, tastes, and choices of individual decision-makers are strongly influenced by the nature of the ideological or normative systems to which their social collectivity subscribes and into which they have been socialized.

To be sure, human beings are planful and rational. They may rebel against ideological prescriptions, adapt them to their self interests, or work to change them (Hammel 1990). Thus, individual behavior is not automatically determined by group norms, nor are group norms immutable. But individual behavior is strongly influenced by norms, and because of this, large-scale transformations of behavioral patterns, such those that "development" entails, ultimately involve transformations of ideologically-controlled systems, not just an accretion of changes brought about by individual rationality. For those interested in development, then, understanding gender systems—not just the situation of individual women—is critical. We suggest, therefore, that studies of women's empowerment need to focus on the rights, obligations and resources granted to females versus males under different gender systems rather than on the characteristics of individual women.

Although gender systems lend themselves to description in a variety of ways, they are complex and consequently do not admit of simple, quantitative summarization. It is important to recognize this complexity because it renders many generalizations about cross-cultural variation in gender inequality suspect, and requires that we study more than a single quantum if we wish to understand possible causes of social or economic change. Put somewhat differently, gender inequality is multidimensional and the different dimensions can vary independently of one another (Mason 1986). For example, some gender systems give women considerable power in making financial decisions within the family but simultaneously deprive them of sexual independence or of freedom of physical movement within the community or beyond. There is nothing to guarantee that when women have high levels on one dimension of gender stratification they will also have high levels on other dimensions.

The current paper focuses on women's empowerment in the domestic sphere—that is, their freedom from control by other family members and ability to effect desired outcomes within the household. Empowerment has been argued to be important for development because it determines the extent to which women gain access to education, are able to seek employment or health care outside of the family, can acquire contraceptive information, and have the freedom to act on their fertility preferences or on the illnesses of their children, among other dimensions (Caldwell 1986; Dyson and Moore 1983; World Bank 2001). The particular aspects of domestic empowerment we examine are:

(1) women's economic decision-making power—do they participate in the family's major economic decisions and have the freedom to make minor economic decisions on their own?

(2) their family size decision-making power—do they participate in or control decisions about how many children to have?

(3) their physical freedom of movement—can they visit sites such as the local market, health center or fields outside the village without obtaining permission from other family members?

(4) their husband's control of them via intimidation and force, specifically, are they afraid to disagree with the husband for fear he will become angry with them, and does he ever hit or beat them?

Note that these aspects of women's domestic empowerment by no means comprise all that might be studied. For example, also potentially important for development outcomes (but not well measured in our data) are women's say in decisions about the care and medical treatment of children, children's schooling, children's marriages, the migration of family members, and the care of the elderly. Note also that we focus on what women believe their empowerment to be rather than on what they believe their empowerment *should* be or how empowered they actually are.[2] Indeed, a recent analysis of these same data comparing husbands' and wives' reports of the wives' empowerment finds very strong differences in spouses' reports, suggesting that the data for wives indicates only their perceived power (Ghuman, Lee and Smith 2001). Note, too, that we ignore women's empowerment in contexts other than the family and household, for example, their ability to effect desirable outcomes in school, the work place or the community.

We have three goals in studying women's domestic empowerment. First, we want to illustrate the sensitivity of empowerment to variation in gender systems by showing that women who live in contexts having differing gender systems indeed report themselves to have differing levels of empowerment—and not simply because they have differing personal characteristics. Relevant social contexts include the nation-state, which enforces the gender regimes embodied in legal systems, judicial precedent and public policy; the local geographic community, which is the context in which much of the day-to-day interpretation of social norms and informal sanctioning of those who violate them occurs; and communities of identification, for example, religious or ethnic communities. Communities of this last type often share ideologies of gender that, together with local interpretations, judicial or legal precedents and the policies of the nation-state, strongly influence the situation of women vis-à-vis men. We consider all three types of context here.

Second, we want to illustrate the multi-dimensional nature of women's empowerment and show how interrelationships between different aspects of empowerment are themselves affected by social context. In other words, women with a high degree of economic decision-making power do not necessarily have a strong say in family size decisions, a high level of freedom of movement or a low level of coercive control by the husband. Because gender systems may allocate power to women in some spheres while denying them power in others, different aspects of women's empowerment do not invariably rise and fall together.

[2] As Kishor (1995) notes, customary empowerment, or beliefs about women's right to act autonomously, and realized empowerment, or the actual empowerment women enjoy, often differ.

Finally, we also want to explore the issue of whether the socio-demographic indicators used as proxies of empowerment in past studies provide an adequate picture of the phenomena they are intended to index. Among the proxies we consider are women's age, age at marriage, the difference between their age and the husband's age, their educational level, and their employment status. Understanding this issue is important not only for better measurement of women's empowerment, but also to understand how effective policies to raise women's educational levels or ages at marriage are for their empowerment.

In the next section, we describe our data and the settings to which they pertain. Subsequent sections take up the three major topics of the paper. We end with a discussion of research and policy issues.

SETTINGS AND DATA

The data used in this paper were collected in 56 purposively-selected communities in Pakistan, India, Malaysia, Thailand, and the Philippines in 1993 and 1994.[3] The five countries from which the study communities were drawn were selected in part because of their different gender and family traditions. Although generalizations about variation in women's empowerment tend to be oversimplifications, South Asia—especially its northern tier—is commonly depicted as giving women less empowerment in the domestic sphere than does the southern tier of the subcontinent and the cultures of Southeast Asia (Dyson and Moore 1983, Jejeebhoy and Sathar 2001, but for a contrary finding see Rahman and Rao 2002). Traditions in the northern part of South Asia prescribe the seclusion of women (*purdah*) and idealize the multi-generational, patrilineal extended-family household, a family form in which younger wives are relatively powerless and live under the control of their mothers-in-law, who are interested in preserving the loyalty of sons to themselves and who thus try to keep relations between husband and wife relatively distant (Srinivas 1976). In North India, family traditions also prescribe that brides come from villages distant from those into which they marry, something that makes them strangers in their new household and that physically separates them from their natal family.

South India lacks this particular tradition and practices widespread cross-cousin marriage; the emphasis on extended family households is also weaker than in the North. This and the absence of *purdah* among Hindus in South India are believed to give women in the South more empowerment than their sisters in the North (Jejeebhoy and Sathar 2001). The difference between North and South India is represented in our data through the selection of communities in two states of India, Uttar Pradesh (UP) in the North and Tamil Nadu in the South.

In Pakistan, although cross-cousin and uncle-niece marriages are common, the prevalence of feudalism and a strong Islamic ideology of female seclusion put women at a serious

[3]The sample of communities in Thailand was drawn using probability methods, but in the remaining four countries, communities were chosen purposively to represent a range of gender and socioeconomic conditions. For a complete description of sample designs, see Appendix A.

disadvantage when it comes to their domestic empowerment (Sathar and Kazi 1997: chapter 3). This disadvantage is compounded by low school attendance and completion rates. Thus, women in Pakistan and North India are expected to less empowered than women in Tamil Nadu and the other three countries included in this study.

The gender and family systems found in Thailand and the Philippines contrast sharply with those in South Asia. Although there are strong expectations in these countries that wives obey their husbands and submit to their wishes, especially in sexual relations, women are also expected to play important roles in the family economy, both by working outside the home and by managing the family's finances. They also have considerable freedom of movement compared to women who live in *purdah*.

In addition, Southeast Asian family systems typically emphasize the conjugal unit more strongly than the extended family and where the extended family is important, it is often the matrilineal line that dominates rather than the patrilineal one. In Thailand, for example, tradition dictates that the youngest daughter remain in or near her parents' home and that her husband move in with her at marriage (Jones 1995). In the Philippines, women (who are better educated than men, on average) strongly value having daughters and regard them as the most likely source of help in their old age. The extended family on whom Filipinos rely for support throughout life is also as likely to center around the wife's kin as the husband's.

Malaysia represents an intermediate case between the countries of South and Southeast Asia. Although located in Southeast Asia and having a large Malay population whose gender and family traditions are similar to those found elsewhere in the region, Malaysia also has sizeable Chinese and South Indian populations. The Muslim Malay population has also undergone an Islamic revival in recent years that, among other things, has re-emphasized the importance of female modesty. This mixture of ethnicities and religions makes it difficult to generalize about the situation of women in Malaysia. Suffice it to say that the countries represented in our data cover a range of social traditions concerning gender and family relations, with Pakistan and North India hypothesized to fall at the less autonomous end of the range and Thailand and the Philippines at the more autonomous end.

The data analyzed here were collected through household interviews with married women aged 15-39 in the 56 sampled communities.[4] Interviews covered a range of subjects, but a major focus was on women's empowerment. In the analysis presented here, we focus on six specific measures of empowerment. The first is a six-item scale concerned with women's say in household economic decisions. It is based on questions asking whether women have any say and whether they have the most say in two types of household decisions (major purchases such as a TV or refrigerator; whether the woman should work outside the home), plus questions asking about their freedom to make two kinds of purchases without getting permission from other family members (purchase of a dress or sari; of a small item of jewelry). Previous analysis of this scale, which was created after performing principal components analysis of a broader set of items concerned with economic decisions, showed that the scale taps gender conditions, not just

[4]Only 1.4% of the women interviewed were under age 18 and another 7% were between 18 and 20. Thus, the overwhelming majority of women in the sample were over age 20.

the household's socioeconomic status (Mason 1998). The scale ranges from zero, for women with no say the household's economic decisions or ability to make purchases on their own, to six for those who have the most say of anyone in their household on both types of decision and who feel free to make both types of purchases without permission from other family members. Question wording for the underlying items appears in Appendix B.

The second empowerment measure is a three-point scale measuring women's participation in family-size decisions. This scale is based on two questions, one asking whether the woman participates in decisions about family size, and the other asking if she has the most say of anyone in the household in these decisions. Women with scores of three have the most say while those with scores of zero report having no say.

The third measure we consider is a five-item scale of women's freedom of movement. It is based on questions about whether women can go to the village center, the local market, the local health clinic, the fields near the village, or the homes of friends or relatives without first obtaining permission from the husband or a senior member of the family. Women with scores of zero cannot go to any of these places without obtaining permission, while those with scores of five can go to all five places without permission. In Thailand, detailed questions about the places to which women were free to travel were not asked. Instead, only a general question asking whether the woman needs permission to go anyplace outside the home was used (it was also used in the other four countries). Thus, to include Thailand in the analysis, we analyze this single yes–no item along with the five-item scale of freedom of movement available for the other four countries.

Finally, we measure women's exposure to coercive controls by the husband through two items, which we keep separate because of low correlations between them and because only one of them was included in the Malaysian survey. The first item asks whether women are afraid to disagree with their husbands for fear he will become angry with them. This yes–no item thus taps women's feelings of intimidation by their husbands. The other question, which was not included in Malaysia, asks women if their husband ever hits or beats them (yes–no response). It thus measures their experience with domestic violence. We do not know whether the hitting or beating is used deliberately by husbands to control their wives' behavior or whether it instead represents a form of acting out when angry or drunk—or both. Violence, however, is an important and understudied method by which women are controlled by their husbands and other kin, and we therefore include this item in our analysis.

THE IMPACT OF SOCIAL CONTEXT ON EMPOWERMENT

We begin by examining variation in women's empowerment according to country and community. Figure 1 shows means on the empowerment measures by country and, for India only, by state (UP versus Tamil Nadu). Variation by country and state on the first three measures—the economic decision-making scale, the say in family size decisions scale, and the freedom of movement scale—closely matches our expectations. The lowest levels of empowerment are found in Pakistan and UP or in India as a whole and the highest levels are found in Thailand and the Philippines—or, in the case of the freedom of movement scale, in

Malaysia. The freedom of movement item, which is included to enable us to compare Thailand with other countries, is somewhat less well behaved than the scale. On this item, women in Tamil Nadu have the greatest reported freedom of movement with Malaysian women a close second. Thai and Filipino women have only slightly higher means than Pakistani women, and Thai women have a slightly lower mean than UP women. Thus, responses to this item suggest that Thai women do not enjoy particularly great freedom of movement compared to other women included in this study. On fear of disagreeing with the husband, Thai women also turn out to be surprisingly meek, much more so than women from Tamil Nadu and even slightly more than those in UP. On this item, however, Pakistani women are, as expected, the most intimidated. Finally, with regard to being beaten by the husband, women from Pakistan and India are much more likely to report being beaten then are Thai or Filipino women.

[Figure 1 about here]

To give some idea as to whether country and community differences in empowerment would be statistically significant were we dealing with simple random samples of communities, Table 1 presents the probability levels associated with F or chi-square tests performed for the means shown in Figure 1 (see footnote to Table 1 for a fuller explanation of how the tests were performed). As the first row of probabilities in the table indicates, taken as a whole, the country differences in Figure 1 are highly significant. Thus, although we do not have probability samples for countries other than Thailand, our data nevertheless suggest there are large differences among Asian countries in women's empowerment, most of them in the direction one would expect.

[Table 1 about here]

Figure 2 presents means on the empowerment measures for individual communities, which given the design of this study, is a more appropriate level than country on which to focus. Countries are ordered in this figure as they were in Figure 1. Within each country, communities are ordered according to our expectations for women's empowerment, with communities expected to have relatively low levels of empowerment shown to the left and those expected to have higher levels shown to the right.[5] As is evident in this figure, our expectations for within-

[5] In Pakistan, the three communities with the lowest degree of feudalism are shown to the right of the other seven communities; the right-most of these communities has the highest socioeconomic level of the three. For India, the four Tamil Nadu communities are shown to the right of the four UP communities. Within each Indian state, the two higher status communities are shown to the right of the two lower status communities, and within each socioeconomic stratum, the Hindu community is shown to the right of the Muslim community, i.e., the pattern is UP/low SES/Muslim, UP/low SES/Hindu, UP/high SES/Muslim, etc. In Malaysia, the three urban communities are shown to the right of the four rural communities, with Indians shown first, Malays second (there are two Malay groups in the rural portion of the graph but only one Malay group in the urban portion), and Chinese to the right. In Thailand, communities are organized by size of place, with the five urban communities to the right of the 16 rural communities. Within the urban and rural strata, communities are ordered by region (from left to right, South, Northeast, North, and Central). In the South, the first two communities are Muslim, while the second two are Thai Buddhist (as are all of the other communities in the sample). Finally, in the Philippines, the first two communities are Muslim and the last two are from Metro Manila, with the six intermediate ones representing different types of central Philippines agricultural villages.

country variation are often met although not in every instance. For example, higher levels of economic decision-making power are generally found in the right-hand communities in each country than in the left-hand communities, but a U-shaped pattern is found in the Philippines, reflecting the unusually high decision-make power of women in the two Muslim communities sampled in that country. Likewise, women's freedom of movement is higher in the Tamil Nadu communities than in the UP ones, and is higher in the non-Muslim than in the Muslim communities in Tamil Nadu and the Philippines. In Malaysia, however, the biggest difference is between Chinese and other women: Chinese women have particularly high levels of freedom of movement, regardless of whether they reside in the rural or urban area. Intra-country variation in being beaten by the husband is large but does not follow a clear-cut pattern in any of the four countries where the question was asked.

[Figure 2 about here]

The statistical tests presented in Table 1 make clear that in all but one case, community adds significantly more information to our understanding of women's empowerment than does country alone. This is particularly true when all communities in the study are considered together (third line of the table). When inter-community variation is examined for each country separately, community differences as a whole remain highly significant with two exceptions. The exceptions occur in Pakistan, where community differences in women's say in family size decisions are close to non-existent and differences in freedom of movement as measured by the five point scale are weak. Community differences on the single freedom-of-movement item in Pakistan are highly significant, however, primarily because women in two of the least feudal villages in the Pakistani sample report having unusually high levels of freedom of movement. Thus, even though not all community differences meet our prior expectations as to where women's empowerment should be relatively high or low, many of them do, and communities generally show differences in women's empowerment that are large enough to be statistically significant had the communities been sampled using probability methods.

Are the community differences seen in Figure 2 indeed the product of differences across communities in gender or family systems? One hint that the community differences in empowerment are likely to reflect ideologies of gender, at least in part, is that many of these differences involve communities of identification rather than communities that are strictly geographically based. For example, in India, Muslim women tend to have less empowerment than their Hindu neighbors, even though both groups of women often live in the same geographic clusters of villages. For some aspects of empowerment, the Muslim-Hindu differences are particularly pronounced in Tamil Nadu, where Hindu women do not, as a rule, practice *purdah* but Muslim women do (Mason, Morgan, and Smith 1997). Similarly, in Malaysia, Chinese women have strikingly greater empowerment than most of their Malay or Indian counterparts, especially when it comes to their freedom of movement. In the Philippines, women in the two Muslim communities have far lower freedom of movement than women living in the other Philippines communities. Thus, religion and ethnicity are often important for women's empowerment (Jejeebhoy and Sathar 2001; Mason et al. 2002). This is consistent with the idea that gender norms play an important role in determining women's empowerment.

Although the results examined thus far are consistent with the idea that women's empowerment is determined by gender system norms rather than by personal or household characteristics, it nonetheless is possible that community differences arise from variation across communities in women's personal characteristics rather than from different gender and family traditions. In order to test this possibility, we have run a series of multivariate models (ordinary least squares regressions for the first three empowerment measures and maximum likelihood logit models for the last three) in which we first make women's empowerment wholly a function of community (as represented by a dummy-variable classification), then make it wholly a function of a series of individual and household characteristics, and finally make it a function of both sets of variables. We then compare coefficients of determination from the three types of model in order to see whether a dummy-variable classification of community can explain as much, more, or less variation in women's empowerment as can their personal and family characteristics.[6] The predictors included in the personal and household characteristics models are a woman's age, age at first union, her education, whether she owns any land in her own right, whether she was employed for cash or in-kind payment during the previous year, whether she is the wife of the head of the household or holds some other position such as daughter-in-law, whether she was related to her husband before marrying him, and three variables that index the household's socioeconomic status, namely, the husband's education, the number of major consumer durables owned by the household, and the household's total income in the previous year measured relative to the mean for all households in each country and trichotomized into high, medium, and low. All models were estimated for the entire sample rather than within countries, a decision justified by the fact that country as well as community constitutes a theoretically and empirically important social context for women's empowerment. Coefficients of determination and pseudo-R^2s from the logit models are shown in Table 2.

[Table 2 about here]

The amount of variance explained by community and country as opposed to individual and household characteristics varies according to the measure of empowerment selected. In most instances, however, community and country are able to explain more variation in empowerment than are personal and household characteristics. (The only exception to this generalization is for the domestic violence item, where the explanatory power of community and individual variables is approximately the same.) These results are particularly striking given that we are predicting the empowerment scores of individual women in these equations, rather than the mean empowerment scores of communities. That a woman's community can better explain her score on a particular empowerment measure than can her own age, education, age at first union or economic experience, suggests how powerful an influence on a woman's empowerment her community is.

One might criticize the statistics presented in Table 2 on the grounds that the list of individual and household variables used to predict women's empowerment is incomplete. Were

[6]For the OLS regressions, the coefficient of determination is the R^2. For the logit regression, we present a pseudo-R^2 that is based on the log likelihood for the equation (StatCorp 2001).

other individual traits included in these regressions, the explanatory power of the models might rise. Although this is theoretically possible, we have explored most of the individual-level predictors of women's empowerment available in our data and have included all that were found to be important in the models underlying Table 2. Also, it is important to recognize that the characteristics of women living in a given community are themselves at least partly the product of the community's gender system. For example, communities that keep women secluded also tend to deny them full educational and employment opportunities. For this reason, the coefficients of determination associated with the models based on individual characteristics may *overstate* the ultimate causal significance of women's personal and household characteristics for their empowerment. We therefore conclude that community is more important than individual characteristics for most of the forms of empowerment considered here. The exception is experiencing domestic violence, which is strongly influenced by the household's socioeconomic status as well as by social setting.

Even if community differences in women's empowerment are in most instances greater than individual differences, the possibility remains that what is important about communities or countries is not their gender systems but rather some other aspect of their social or economic organization, for example, how developed they are, the kinds of infrastructures they provide or the type of political system that characterizes them. To explore the importance of gender systems, we have taken individual responses to five gender-role attitude questions and have created community-level measures by computing the mean response to each item across women in the community.[7] (The wording of the individual items and information about the calculation of the aggregate measures are described in Appendix B.) Because the five attitude questions are normative—they ask the respondent to agree or disagree with statements about what men and women *should* do—it is reasonable to assume that community averages on these items measure gender system norms, at least roughly. After creating these measures, we re-estimated the models shown in Table 2, substituting for the dummy-variable classification of communities each community's value on the five aggregate gender-role attitude measures. We did this not only for the sample as a whole, but also within each of the five countries. The ability of the normative measures to explain a substantial portion of total inter-community variation in women's empowerment provides *prima facie* evidence about the extent to which inter-community differences in women's empowerment reflect the gender systems of communities or countries rather than some other aspect of their organization. Coefficients of determination from both the original and the new equations are shown in Table 3.

[Table 3 about here]

The results for the models estimated for all five countries combined differ sharply from those for the within-country models. In the results for the total sample, only on women's economic decision-making power can the attitude models explain as much as 70% of total inter-community variation. For the other measures of empowerment, the range is around 40%-60%.

[7] Because the average number of women per community in our data is relatively large—134, with a minimum of 62 and a maximum of 341—we did not bother to compute means minus each woman's contribution as, for example, Balk (1994) did. Results would not have been changed appreciably had we done this, given the narrow range of answers permitted on each item (agree, uncertain, disagree).

Thus, when looking at all five countries together, although gender systems appear to be able to explain some of the inter-community differences in women's empowerment, they are unable to explain anywhere near all of them.

When we look within countries, however, the picture changes dramatically. In Pakistan, although none of the models can explain more than 9% of the variation in women's empowerment, the models that use the attitude measures do as well, on average, as those using the dummy variable classification of communities. The same is true in India, where the explanatory power of some models is much greater than in Pakistan. Divergence between attitude and dummy variable models is somewhat greater in Malaysia—for example, the attitude models can explain 24%-26% of the variation in women's freedom of movement compared to 29%-31% explained when the dummy-variable classification is used—but the attitude measures are still capable of explaining at least 80% of the variation that the dummy variables can explain. In Thailand, the coefficients of determination generally are low, but when they reach 8% or more, the attitude measures can explain at least 70% of the variation that the fully-specified model can explain. Finally, in the Philippines, too, most equations containing attitude measures can explain at least 70% of the variation that the dummy-variable models are capable of explaining.

Thus, when we look within countries rather than across them, we find that the aggregate measures of women's gender-role attitudes usually can explain a substantial proportion of total inter-community variation in women's domestic empowerment. This suggests that one important reason for community variation in women's empowerment within countries is indeed the nature of gender systems and their norms. Inter-country variation is not so readily explained in this way. We suspect this may reflect a relatively weak connection between women's gender-role attitudes and aspects of national context that are important for women's empowerment such as laws, judicial precedents and policies regarding the education, employment, and legal rights of women. We therefore view the total sample models as a less telling test than the within-country models for the idea that community variation in women's empowerment reflects gender system norms.

In sum, then, the analysis presented here suggests the importance of gender systems for women's empowerment. The aspects of women's empowerment examined here vary sharply by country and community, more so than they do by women's personal characteristics such as employment or education. Moreover, models that measure communities' gender-role norms by aggregating the normative attitudes of women within each community can explain at least two-thirds of the total inter-community variation in women's empowerment that exists in most of the countries covered by this study. Female empowerment is thus more appropriately considered a reflection of social systems than an atomized, individual trait.

THE MULTI DIMENSIONALITY OF WOMEN'S EMPOWERMENT

The second point we wish to emphasize is that women's empowerment is multidimensional, meaning that different aspects of empowerment do not necessarily covary together. The data presented in Figures 1 and 2 give a foretaste of this point. In Figure 1, for example, we saw that

Thai women are quite independent when it comes to economic and fertility decisions and are relative free from domestic violence, but at the same time have only moderate levels of freedom of movement and high levels of fear about disagreeing with their husbands.[8] A more formal picture of the interrelationships among the different aspects of women's empowerment considered here can be seen in Table 4, which shows Pearsonian correlations between empowerment measures. In order to control for design effects, these correlations were calculated while controlling for community of residence, i.e., they are partial correlations. The top panel in the table shows correlations among empowerment measures for the total sample, while the remaining panels present within-country correlations.

[Table 4 about here]

Two things are evident from Table 4. First, correlations among items generally are low, especially when one looks within countries. The freedom of movement scale has a moderately high correlation with the freedom of movement item, but these measures are closely related conceptually and are appropriately considered substitute measures, rather than measures of distinct aspects of women's empowerment. In Pakistan, women's say in economic decisions is also moderately correlated with their say in family-size decisions ($r = .3$), but in the other countries the correlation, although positive, is quite low, in the .1-.2 range. Interestingly, expressed fear of disagreeing with the husband and experience with being beaten by him are not very strongly correlated with each. Apparently, being beaten does not intimidate some wives, and not all wives who are intimidated are beaten by their husbands.

The second point to be noted from Table 4 is that correlations between different dimensions of women's empowerment vary in magnitude across countries. In other words, social context not only affects *levels* of women's empowerment, but also the extent to which different aspects of empowerment are interrelated. Interrelationships are particularly weak in Thailand and the Philippines when compared to Pakistan. Does this mean that gender regimes that are highly repressive in some areas tend to constrain women in *all* respects, whereas more liberal regimes are more liberal precisely because they tend to constrain women only in some areas, not in all of them? This is a plausible interpretation of the results for Thailand and the Philippines versus Pakistan, but the results from within India are not consistent with it. In India, correlations are, on average, lower in the more gender repressive state of Uttar Pradesh than in Tamil Nadu, although the reverse is the case for correlations involving being afraid to disagree with the husband. The point remains, however, that there is indeed variation among social contexts in how strongly different aspects of women's empowerment are interrelated. Gender regimes create distinct *patterns* of empowerment for women, not just a high or low average level of empowerment.

[8]This is consistent with other studies showing that gender expectations in Thailand give women considerable economic independence but demand sexual submissiveness by enforcing a strong sexual double-standard (*Asian Marriage Survey*, unpublished tabulations).

PROXY VARIABLES AND INDIVIDUAL-LEVEL DETERMINANTS OF WOMEN'S EMPOWERMENT

Until recently, the surveys used to study demographic and other development phenomena rarely included relatively direct measures of women's empowerment of the kind used here. Analysts were therefore forced to rely on proxy measures. Among the most commonly used proxies were women's age, age at first marriage or first union, the age difference between husband and wife, women's education, and their employment status (Mason 1986). Although these proxies are sometimes used at an aggregate level—average female age at marriage, for example, has been used to index the level of female empowerment of countries (Berelson and Mauldin 1978)—the justification for selecting a particular proxy has usually been given in terms of individual-level processes. For example, older women are argued to have more independence and empowerment than younger women because they have more experience with life, a better understanding of how to get what they want or need, a closer relationship with the husband, or because they have fulfilled certain social obligations to the husband and his family (for example, bearing children or sons) and thus are more trusted than are young wives, over whom tighter controls are maintained.

Some of the same reasons are given for why women who marry at older ages should have greater empowerment and for why a smaller age gap between husbands and wives should enhance women's empowerment. The experience and self-confidence that result from marrying at an older age are said to make older-marrying women more autonomous than those married during adolescence. The husband's greater experience and self confidence compared to the wife is similarly argued to deprive women of empowerment when the husband-wife age gap is large (Cain 1993; Presser 1975).

Education, too, is often argued to increase women's empowerment by increasing their self-confidence and understanding of how to operate in the world (Cochrane 1979). In addition, one of the most important products of education, literacy, is said to increase women's independence from other family members by giving them the means to learn about the outside world on their own (Jejeebhoy 1995). Education has also been argued to enhance women's value on the labor market and hence their income, which is in turn said to decrease their dependency on other family members and hence increase their empowerment (Cochrane 1979, Safilios-Rothschild 1980). Employment is argued to improve women's empowerment for similar reasons, i.e., because it gives women access to their own earnings or contributions to family income that in turn increase their understanding of money, right to participate in financial decisions, or financial independence.

Although the logic behind the use of particular proxies sounds reasonable, the evidence presented above suggests that proxies are unlikely to provide a clear picture of women's empowerment, for two reasons. First, because women's empowerment is multidimensional and because not all dimensions rise and fall together, a single proxy variables such as female education or age at marriage cannot, logically, index all aspects of female empowerment equally

well. This leaves the question of whether a particular proxy will index any one aspect of female empowerment well.

Second, although proxies are often conceptualized and used at an individual level, the evidence that female empowerment is more heavily determined by community institutions than by individual characteristics suggests that past thinking about proxies has been conducted largely at the wrong level (although Cain 1993 is an exception). Proxies need to be justified in terms of how well they index particular aspects of gender stratification systems, not in terms of how well they provide individual women with particular social, psychological or material resources. For example, instead of justifying the use of the age difference between husbands and wives in terms of the differential experience and self-confidence of the marital partners, it would be more appropriate to argue that gender systems that promote a large age discrepancy between husbands and wives also deny certain forms of empowerment to women, though not necessarily simply by forcing them to marry men who are older than themselves (Cain 1993). Recognition that female empowerment is a property of social or cultural systems rather than of individuals thus raises the question of whether proxies for female empowerment are not more appropriately conceptualized *and* measured at an aggregate level than at the individual one.

In order to explore the differing relationships of individual and aggregate proxies to the direct measures of women's empowerment considered in this paper, we have run a series of ordinary least squares regression and maximum likelihood logit equations that estimate relationships of proxies to empowerment. Each equation treats a woman's level of empowerment as a function of her value on one particular individual-level proxy *and* her community's aggregate value on that same proxy. For example, women's economic decision-making power is considered as a function both of their age and of the average age of women in their community. (These equations do *not* contain other controls for community.) In examining the results from these models, we are interested in learning how well individual versus aggregate proxies predict a given aspect of female empowerment, and whether there are particular individual or aggregate proxies that consistently predict that aspect of empowerment. Regression and logit coefficients for models estimated over the total sample are shown in Table 5. Results estimated within countries will be examined below.

[Table 5 about here]

The coefficients in Table 5 give an initial impression that many of the proxy variables work quite well. For the economic decision-making scale, for example, all of the individual-level proxies have a significant relationship with the exception of the difference between the woman's own age and her husband's age. At the community level, however, the husband-wife age difference works well, that is, the bigger the average age gap between spouses in a woman's community, the lower is her economic decision-making power. Most of the proxies also predict women's family size decision-making power and freedom of movement as one would expect, although at the individual level, neither age at first union nor the husband-wife age difference is important for these variables, nor is individual education important for women's freedom of movement.

Results are more variable for the interpersonal coercion items and not always in the expected direction. For example, although fearing to disagree with the husband is inversely

related to both the individual- and community-level measures of age, age at first union, and education (as one would expect), it is *positively* related to the community-level measurement of women's paid work, just the reverse of what one would expect were one to assume that a high level of female employment also means a low level of feeling intimidated by the husband. Likewise, with regard to being beaten by the husband, older women are *more* likely to be beaten than are younger women, even though the average age of women in the community is inversely related to being beaten. Likewise, women who worked for pay in the previous year are more likely to be beaten than are their non-employed counterparts, even though *communities* in which paid female employment is more common have lower rates of beating. (This result is, however, consistent with the finding that borrowing from the Grameen Bank in Bangladesh tends to raise domestic violence against women—see Rahman 1999) Nevertheless, at least for the first three aspects of female empowerment, many of the individual and community proxies appear to predict the direct measures of empowerment as one would expect them to.

This relatively sanguine picture of the proxies for women's status changes appreciably when one turns to results computed within each of the five countries in our study (Table 6). Here, there is considerable variability across countries in the relationships between the proxies and the direct measures of women's empowerment. To be sure, a few of the proxies have consistent relationships to particular aspects of women's empowerment across all five countries. Both a woman's age and her paid employment are associated with higher levels of economic decision-making power in all five countries, and age at first union and education are both inversely related to being beaten by the husband in all of the countries that asked about beatings. Age at first union is also positively related to decision-making power with regard to family size in all countries except Malaysia, where the relationship is close in form to that seen in the other four countries but does not achieve statistical significance under conventional assumptions. Likewise, women in communities with a higher age at first union tend to have greater freedom of movement in all countries except Pakistan. Other than these instances, however, neither the individual-level nor aggregate proxies of women's empowerment have consistent relationships to the direct measures of empowerment. This suggests that it is risky to employ either individual-level or aggregate proxies for women's empowerment in many settings in the world.

Why are the results for the total sample so much more encouraging for those wishing to use proxy measures than are the results within countries? The answer lies in part in the greater variability in both the proxies and the direct empowerment measures across countries than within them. For example, the standard deviations of means on education and the economic decision-making scale are generally much larger across countries than within them:

	Countries	Pakistan	India	Malaysia	Thailand	Philippines
Education	3.09	0.60	1.34	1.46	1.73	2.32
Economic scale	1.36	0.31	0.45	0.76	0.40	0.45

Thus, when countries are compared, extreme differences on both the proxies and the direct measures of empowerment result in relatively strong statistical relationships between the two.

For example, because Filipino women are so much better educated than Pakistani women and also have so much more economic decision-making power, the statistical relationship between women's schooling and empowerment is far stronger when it involves comparisons between Filipino and Pakistani women than when it is restricted to women who live in a single country.

In summary, then, although the results here suggest there are risks associated with the use of proxy measures of women's empowerment, the insight provided by the results for the total sample as opposed to each country taken alone suggests that these risks are lower the higher the level of aggregation, at least if one is dealing with a sample of high-level aggregates that spans significantly different gender systems. The use of direct measures of women's empowerment remains far preferable to the use of proxies, however, because no proxy predicts all aspects of women's empowerment equally well, even when used at a high level of aggregation. Conceptually, however, it may be more appropriate to employ direct measures of women's empowerment at an aggregate level, rather than the individual level, when attempting to understand the significant of empowerment for demographic behaviors because, as this paper has illustrated, women's empowerment is ultimately a property of social systems rather than of individuals.

In terms of individual-level determinants of women's empowerment, this analysis suggests that some individual-level characteristics subject to policy manipulation tend to enhance certain aspects of women's empowerment across a wide range of settings. These include women's employment, which tend to enhance their economic decision-making power; a higher age at first union, which both protects against domestic violence and enhances fertility decision-making power; and education, which is associated with lower levels of domestic violence. Our analysis does not permit us to draw conclusions about indirect effects—for example, does education enhance employment, which our results suggest increases women's economic decision-making power? But our results are consistent with policy recommendations concerning women's empowerment that emphasize raising the female age at marriage, investing in the schooling of girls, and enhancing women's employment opportunities.

CONCLUSIONS

In this paper, we have explored three issues concerning the conceptualization and measurement of women's domestic empowerment. First, consistent with a sociological approach that views women's empowerment largely as a property of social systems—in particular, of gender stratification systems and their ideologies—we have shown that across the 56 communities represented in our study, community can explain more variation in the empowerment of individual women than can their personal and household characteristics. Moreover, within countries at least, gender norms can explain two-thirds or more of all the variation in women's empowerment that occurs across communities. Thus, gender norms appear to be an important feature of communities that determines the levels of empowerment enjoyed by the female members of these communities.

Second, we have also shown that female empowerment in the domestic sphere is multidimensional, both conceptually and empirically. For example, the extent of a woman's say

in the household's economic decisions does not necessarily match her freedom of movement in the community or the extent to which she is subjected to coercive interpersonal controls by her husband. Moreover, how strongly one dimension of empowerment is related to other dimensions is itself variable across social contexts. In some settings, different dimensions of empowerment tend to rise and fall together more much closely than in other settings.

Finally, we have also shown that proxy measures of women's empowerment commonly used in past studies tend to be problematic except when employed at very high levels of aggregation over a wide range of countries—and then only for certain proxies in relation to particular aspects of women's empowerment and power. For example, at high levels of aggregation, women's age at first union and employment both predict their participation in household economic decisions fairly consistently, even though they do not necessarily predict their say in fertility decisions or freedom of movement. Given the multidimensional nature of women's empowerment, it is clearly preferable to employ direct measures of empowerment.

The main implication for research of the results presented in this paper is the importance of conceptualizing development as social transformations rather than as the result of millions of uncoordinated and unrelated individual responses to changing "constraints." Our attention here has focused specifically on the ability of women to effect particular outcomes in their day-to-day lives within their families and households. That this ability is heavily determined by a normatively-governed gender stratification system has, we believe, broad implications for theories of development. To the extent that women's empowerment is important for the social transformations that development involves, development, by implication, results from social and normative transformations, not just from shifts in individual decision-making. This point is often forgotten or ignored by those who work in the tradition of microeconomic or rational action theory.[9]

The main lesson for policy of the results presented in this paper is that empowering women ultimately involves changing the gender stratification system and its normative underpinnings. This finding is consistent with recent work on gender and development that suggests that changing institutions is a key element for empowering women and girls (World Bank 2001). The findings of this analysis also suggest that some of the policies traditionally used to empower women—higher ages at marriage for girls, greater levels of schooling and better employment opportunities for women—may indeed contribute to women's empowerment across a wide range of settings. Obviously, the analysis in this paper ultimately pertains to 56 communities in five Asian countries, not to all settings in the world. But the results are consistent with the

[9] The failure to fully incorporate social and normative transformations into theories of the demographic transition may help to account for the relatively poor performance of these theories in forecasting demographic change and explaining the changes of the past. More scrutiny needs to be given to normative transformations and the social interactions that create them if we are to understand demographic transitions (Bongaarts and Watkins 1996).

conclusions of other work on gender and development and suggest the need to alter gender stratification system both through direct institutional action and through investments in women and girls.

APPENDIX A

COMMUNITY SELECTION

Pakistan: Ten communities (villages or clusters of nearby villages) from Punjab province were chosen to represent the three main agro-economic zones in that province and different development levels. Zones 3a and 3b are areas of sandy desert with highly feudal traditions; Zone 4a is the country's northern irrigated plain, the heart of Punjab's agriculture and industrial development; Zone 5 is the northernmost birani area of the province, hilly, reliant on rainfall for watering crops, and having the least feudal traditions. Wives' independence is expected to be highest in Zone 5 and lowest in Zone 3. Each zone is represented by three communities having different levels of development, as indicated by household income, ownership of possessions, and men's education. In Zone 4a, there is also a peri-urban community located on the outskirts of Gujranwala city. Fieldwork was conducted in late 1993 and early 1994.

India: Employing a 2x2x2 design, eight communities (clusters of nearby villages) were chosen to represent the north (Uttar Pradesh) versus the south (Tamil Nadu) of the country, Muslims versus Hindus, and relatively well developed, higher-SES conditions versus poorly developed, lower-SES conditions. Fieldwork was conducted in late 1993 and early 1994.

Malaysia: Seven communities were chosen to represent the three major ethnic groups that compose the population of Malaysia (Malays, Chinese, and Indians) living in rural versus urban conditions. (For the latter, a small city, Port Klang, approximately 1 hour's drive from the capital city of Kuala Lumpur, was chosen.) Originally, rural Malay women working as market sellers in the east coast city of Kota Bharu were sampled; later an additional sample of Malay women living in these women's home villages was drawn. The two samples are kept separate in the analysis because there is no way to ascertain the relative weights that should be attached to each of them. The rural Indian community is from a palm oil plantation located on an island near Port Klang; the rural Chinese community is from a more isolated island off the coast near Port Klang on which almost all inhabitants support themselves through fishing. Most of the fieldwork was conducted in April–May 1993; the rural Malay follow-on was conducted in October 1993.

Thailand: Twenty-one communities were chosen using probability sampling methods (Demographic and Health Survey sample frame): four rural village clusters consisting in most cases of two villages from each of the four major regions of the country (South, Northeast, North, and Central), one urban community from each region, plus a sample of Bangkok, the capital. Two of the rural communities in the south were predominantly Muslim; two were predominantly Thai Buddhist (as were all other sampled communities; the Muslim population is heavily concentrated in the south). Fieldwork was conducted in March–June 1993.

Philippines: Ten municipios were chosen, two each from five provinces of the country. Two Muslim municipios subsisting on fishing and trade were selected from Zamboanga, the province with the greatest concentration of Muslims; two villages subsisting on tobacco and garlic farming were selected from La Union, an Ilocano-speaking province in the northern part of the country; two villages subsisting on coconut farming and cottage industry were selected from Camarines Sur, a Bicol-speaking province; two villages subsisting on fishing and farming were

selected from Mindoro, a Tagalog-speaking province; plus two areas from Metro Manila were selected. Fieldwork was conducted in April–December 1993.

APPENDIX B

ITEM WORDINGS

Economic Decision-Making Empowerment

1. Please tell me who in your family decides the following: whether to purchase major goods for the household, such as a TV/refrigerator/etc.? (Wife participates = 1, does not = 0; note that the item mentioned varied from country to country.)

2. Please tell me who in your family decides the following: whether you should work outside the home? (Wife participates = 1, does not = 0.)

3. Who of these people usually has the greatest say in this decision: major purchases? (Wife = 1, others = 0.)

4. Who of these people usually has the greatest say in this decision: whether you should work outside the home? (Wife = 1, others = 0.)

5. If you wanted to buy yourself a dress/sari, would you feel free to do it without consulting your husband (or a senior member of your family)? (Yes = 1, no or undecided = 0.)

6. If you wanted to buy yourself a small item of jewelry, such as a bangle/beads/etc., would you feel free to do it without consulting your husband (or a senior member of your family)? (Yes = 1, no or undecided = 0; note that specific item of jewelry mentioned varied from country to country.)

The scale was created by summing the six items. Range: 0 – 6.

Family Size Decision-Making Empowerment

1. Please tell me who in your family decides the following: how many children to have? (Wife participates = 1, does not = 0.)

2. Who of these people usually has the greatest say in this decision: how many children to have? (Wife = 1, others = 0.)

The scale was formed by summing these two items. Range: 0 – 3.

Freedom of Movement

Do you have to ask your husband or a senior family member for permission to go to:

1. The local market? (No = 0, yes = 1.)

2. The local health center? (No = 0, yes = 1.)

3. Fields outside the village? (No = 0, yes = 1.)

4. A community center, park, or plaza in the village? (No = 0, yes = 1.)

5. The home of relatives or friends in the village? (No = 0, yes = 1.)

The scale was formed by summing these five items. Range: 0 – 5.

Interpersonal Coercive Controls

1. Are you afraid to disagree with your husband for fear he may become angry with you? (Yes = 1, no = 0.)

2. Does your husband ever hit or beat you? (Yes = 1, no = 0.)

Community-Level Gender Attitude Measures

1. Most of the important decisions in the family should be made by the man. (Agree = 1, disagree or undecided = 0.)

2. There is some work that only men should do, and some that only women should do, and they should not be doing each other's. (Agree = 1, disagree or undecided = 0.)

3. If the wife is working outside the home, then the husband should help her with the children and household chores. (Agree = 1, disagree or undecided = 0.)

4. A husband should spend any free time with his wife and children. (Agree = 1, disagree or undecided = 0.)

5. A mother should not work outside the home while her children are young. (Agree = 1, disagree or undecided = 0.)

Community means on each item were computed and attached to the records for individual women. These variables were then used in place of the community dummy variables in models predicting the empowerment measures (see text). In Thailand, the third item was asked as two separate questions, one referring to help with the children, and the other to help with household chores. Women who agreed with either item were given a score of 1 on the combined item.

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Table 1: Probability levels for statistical tests of significance assessing the importance of country and community for six measures of women's empowerment.[a]

Test of:	Economic decision-making scale	Say in family size decisions	Freedom of movement scale	Freedom of movement item	Fears to disagree with husband	Husband hits or beats wife
Country differences	0	0	0	0	0	0
Community differences	0	0	0	0	0	0
Community adds information to country	0	0	0	0	0	0
Differences among Pakistani communities	0	0.7946	0.045	0	0.0129	0
Differences among Indian communities	0	0	0	0	0	0
Differences among Malaysian communities	0	0	0	0	0	—
Differences among Thai communities	0	0.005	—	0	0.0028	0
Differences among Philippines communities	0	0	0	0	0	0

a-- Models for the economic decision-making and freedom of movement scales were estimated with OLS regressions, hence, tests are F-tests. Models for say in family size decisions were estimated with ordered logits, hence, tests are chi-squares or likelihood ratio tests. Models for the remaining variables were estimated with logits, hence, tests are chi-squares or likelihood ratio tests.

Table 2: Coefficients of determination, or approximations thereof, for regression and logit models of women's empowerment.[a]

Empowerment measure	Community only	Individual variables	Full model	N
Economic decision-making scale	.45**	.34**	.50**	7287
Family size decision-making	.22**	.12**	.22**	7298
Freedom of movement scale	.40**	.17**	.42**	4895
Freedom of movement item	.22**	.03**	.22**	7302
Fears to disagree with husband	.12**	.03**	.13**	7291
Husband beats or hits wife	.08**	.07**	.12**	6013

a--The first three empowerment measures were modeled using OLS regressions; the last three were modeled using MLE logits. The first column shows the R-squared or pseudo-R-squared for models that predict the dependent variable from the dummy variables representing community. The second column shows R-squareds for models that predict the dependent variable from age, age at first union, education, husband's education, household possessions, income, whether the wife owns land, whether she work for pay in the past year, whether she is the wife of the household head, and whether she is related to her husband. The third column shows R-squareds from models that include both sets of predictors.

Table 3: Coefficients of determination, or approximations thereof, for models that use aggregate attitude measures versus community dummy variables: Total sample and by country.[a]

Empowerment measure	Community only		Full model		N
	Attitudes	Dummies	Attitudes	Dummies	
			Total sample		
Economic decision-making scale	0.32	0.45	0.43	0.5	7287
Family size decision-making scale	0.13	0.22	0.16	0.22	7298
Freedom of movement scale	0.16	0.4	0.24	0.42	4895
Freedom of movement item	0.09	0.22	0.11	0.22	7302
Afraid to disagree with husband	0.05	0.12	0.06	0.13	7291
Husband beats or hits wife	0.03	0.08	0.08	0.12	6013
			Pakistan		
Economic decision-making scale	0.04	0.04	0.15	0.15	993
Family size decision-making scale	0.01	0.01	0.02	0.02	997
Freedom of movement scale	0.01	0.02	0.08	0.09	837
Freedom of movement item	0.03	0.04	0.06	0.07	995
Afraid to disagree with husband	0.02	0.02	0.03	0.03	994
Husband beats or hits wife	0.02	0.03	0.07	0.09	989
			India		
Economic decision-making scale	0.08	0.08	0.17	0.17	1842
Family size decision-making scale	0.03	0.04	0.04	0.05	1842

Table 3, continued.

Empowerment measure	Community only		Full model		N
	Attitudes	Dummies	Attitudes	Dummies	
Freedom of movement scale	0.37	0.37	0.42	0.42	1842
Freedom of movement item	0.19	0.19	0.24	0.24	1842
Afraid to disagree with husband	0.04	0.05	0.05	0.06	1839
Husband beats or hits wife	0.01	0.03	0.07	0.07	1833
Malaysia					
Economic decision-making scale	0.14	0.17	0.2	0.23	1270
Family size decision-making scale	0.06	0.08	0.07	0.09	1270
Freedom of movement scale	0.24	0.29	0.26	0.31	1225
Freedom of movement item	0.08	0.11	0.1	0.12	1274
Afraid to disagree with husband	0.04	0.05	0.06	0.06	1276
Thailand					
Economic decision-making scale	0.03	0.06	0.15	0.17	2190
Family size decision-making scale	0	0.01	0.01	0.02	2198
Freedom of movement item	0.02	0.04	0.03	0.05	2198
Afraid to disagree with husband	0	0.01	0.01	0.02	2198
Husband beats or hits wife	0.01	0.04	0.05	0.08	2198

Table 3, completed.

Empowerment measure	Community only		Full model		N
	Attitudes	Dummies	Attitudes	Dummies	
	Philippines				
Economic decision-making scale	0.07	0.08	0.12	0.15	992
Family size decision-making scale	0.05	0.07	0.06	0.08	991
Freedom of movement scale	0.37	0.42	0.39	0.43	991
Freedom of movement item	0.22	0.25	0.23	0.25	993
Afraid to disagree with husband	0.16	0.17	0.19	0.19	993
Husband beats or hits wife	0.04	0.09	0.1	0.14	993

a--Models labeled “community only” predict the empowerment measure shown on the left of the table solely from community-level variables, while those labeled “full model” also include the individual-level predictors described in footnote a of Table 2. In the models labeled “attitudes” the community-level variables are the community means on five sex-role attitude questions. In the models labeled “dummies,” the community-level variable is a dummy-variable classification of all communities in the sample.

Table 4: Partial correlation coefficients among empowerment measures, controlling for community: total sample and by country.

Total	econpowr	kidscale	movement	permissn	fearhusb
kidscale	0.20**				
movement	0.17**	0.04**			
permissn	-0.11**	-0.03*	-0.45**		
fearhusb	-0.10**	-0.05**	-0.08**	0.08**	
husbbeat	-0.01	-0.01	0.02	0.00	0.18**

Pakistan	econpowr	kidscale	movement	permissn	fearhusb
kidscale	0.33**				
movement	0.25**	0.13**			
permissn	-0.19**	-0.11**	-0.69**		
fearhusb	-0.17**	-0.11**	-0.06+	0.04	
husbbeat	0.03	0.02	0.06+	-0.02	0.18**

Uttar Prad	econpowr	kidscale	movement	permissn	fearhusb
kidscale	0.13**				
movement	0.11**	0.01			
permissn	0.03	0.05	-0.29**		
fearhusb	-0.15**	-0.12**	-0.02	-0.03	
husbbeat	-0.09*	-0.09**	-0.01	-0.06+	0.43**

Tamil Nadu	econpowr	kidscale	movement	permissn	fearhusb
kidscale	0.22**				
movement	0.30**	0.09**			
permissn	-0.16**	-0.10**	-0.40**		
fearhusb	-0.05	-0.16**	-0.01	0.02	
husbbeat	0.01	-0.00	0.05	-0.05	0.15**

Malaysia	econpowr	kidscale	movement	permissn
kidscale	0.21**			
movement	0.12**	-0.00		
permissn	-0.07*	-0.00	-0.48**	
fearhusb	-0.11**	0.01	-0.14**	0.11**

Thailand	econpowr	kidscale	permissn	fearhusb
kidscale	0.16**			
permissn	-0.15**	-0.04+		
fearhusb	-0.08**	0.02	0.13**	
husbbeat	-0.01	0.00	0.06**	0.13**

Philippine	econpowr	kidscale	movement	permissn	fearhusb
kidscale	0.13**				
movement	0.06+	-0.01			
permissn	-0.08*	0.01	-0.44**		
fearhusb	-0.12**	-0.06+	-0.12**	0.11**	
husbbeat	-0.01	-0.01	-0.03	-0.01	0.05+

+Significant, .10 level. *Significant, .05 level. **Significant, .01 level.

Table 5: Regression or logit coefficients predicting empowerment measures from individual- and community-level proxies: Total sample.[a]

Proxy	Economic decision-making scale	Family size decision-making scale	Freedom of movement scale	Afraid to disagree with husband	Husband beats or hits wife
Age	.047**	.006**	.040**	-.013**	.012*
Community age	.494**	.109**	.610**	-.233**	-.391**
Age at first union	.019**	0.004	-.006	-.030**	-.100**
Community age at first union	.507**	.116**	.511**	-.125**	-.162**
Husband-wife age difference	-.004	-.000	0.006	-.000	-.003
Community age difference	-.682**	-.183**	-.319**	0.015	.201**
Education	.029**	.007**	-.005	-.029**	-.114**
Community education	.311**	.074**	.279**	-.093**	-.044**
Paid work last year	.645**	.085**	.257**	-.021	.375**
Community paid work	2.872**	.741**	2.151**	.288**	-1.570**

+Significant, .10 level. *Significant, .05 level. **Significant, .01 level.

a--Each pair of individual- and community-level proxies was included in a separate equation predicting the empowerment measure shown in the column heading. OLS regressions were used for the first three empowerment measures and MLE logits for the last three. The equations for the freedom of movement scale omit Thailand; those for husband best wife omit Malaysia.

Table 6: Regression or logit coefficients predicting empowerment measures from individual- and community-level proxies: By country.[a]

Proxy	Pakistan	India	Malaysia	Thailand	Philippines
			Economic decision-making scale		
Age	.045**	.040**	.037**	.063**	.040**
Community age	0.004	.373**	0.064	0.035	-.198**
Age at first union	-.031**	-.030+	.026*	.048**	0.018
Community age at first union	0.051	.510**	.602**	.117**	-.158**
Husband-wife age difference	0.008	0.012	-.006	-.010	-.019*
Community age difference	.088+	.304**	-1.285**	-.096**	0.101
Education	.042*	0.006	.032*	.041**	.026+
Community education	.126+	.194**	.088*	.065**	-.130**
Paid work	.293**	.600**	.812**	.969**	.469**
Community paid work	-.893**	1.023**	-.017	-2.874**	-.967+
			Family size decision-making scale		
Age	.009**	.006*	0.004	.005*	.008*
Community age	-.003	0.019	.197**	-.005	-.059*
Age at first union	-.008	0.003	0.006	.009**	0.002
Community age at first union	0.019	.061**	.261**	-.003	-.070**
Husband-wife age difference	-.002	0.001	0.001	-.000	-.001
Community. age difference	-.004	0.017	-.706**	-.009	.095**
Education	0	.010*	0.003	.010*	0.005
Community education	-.008	.061**	-.066**	-.011	-.046**

Table 6, continued.

Proxy	Pakistan	India	Malaysia	Thailand	Philippines
Paid work	.089+	0.059	.113*	.085+	.085*
Community paid work	-.109	0.084	0.006	0.061	-.488*
			Freedom of movement scale or item		
Age	.052**	.052**	.033**	0.002	0.012
Community age	-.000	1.010**	.239+	0.009	.850**
Age at first union	-.007	-.015	-.001	.037**	-.005
Community age at first union	0.07	1.031**	1.070**	.263**	.747**
Husband-wife age difference	0.008	.020+	0.007	-.029**	-.005
Community age difference	0.021	.653**	-2.530**	-.181**	-.469**
Education	-.023	-.021+	0.003	.042**	0.014
Community education	0.15	.476**	-.073	.086**	.494**
Paid work	.353**	.472**	.228+	.275+	-.067
Community paid work	-.650*	3.695**	-1.340**	-4.725**	8.138**
			Afraid to disagree with husband		
Age	0.002	-.011	-.036**	-.019*	0.005
Community age	0.065	-.547**	-.137	-.129*	-.490**
Age at first union	-.036	-.015	-.019	-.042**	-.049*
Community age at first union	-.038	-.381**	-.472**	-.021	-.400**
Husband-wife age difference	0.019	-.021	-.002	0	0.002
Community. age difference	-.398**	-.330**	.976**	-.113*	.557**

Table 6, continued.

Proxy	Pakistan	India	Malaysia	Thailand	Philippines
Education	-.065*	-.030+	-.009	-.032*	-.048*
Community education	-.209	-.230**	0.02	-.026	-.283**
Paid work	-.051	0.089	-.265*	-.106	0.186
Community paid work	.874*	-1.533**	.859**	1.967*	-7.540**
			Husband beats or hits wife		
Age	.037**	0.013	—	0	-.002
Community age	-.112+	-.329**	--	-.041	-.603**
Age at first union	-.073**	-.136**	--	-.109**	-.099**
Community age at first union	-.098	0.029	--	.286**	-.047
Husband-wife age difference	0.008	0.008	—	-.014	-.026
Community. age difference	-.339**	-.180**	--	-.101+	-.434**
Education	-.134**	-.132**	--	-.087**	-.116**
Community education	0.016	-.011	--	.131**	.132*
Paid work	.734**	.572**	--	-.090	-.261
Community paid work	0.158	-.880**	--	-1.874+	0.662

+Significant, .10 level *Significant, .05 level **Significant, .01 level

a--Each pair of individual- and community-level proxies is from a separate equation predicting the empowerment measure shown in the column heading. OLS regressions were used to predict the first three empowerment measure and MLE logits to predict the last three. In Thailand, the freedom of movement item was used in place of the scale, which was used in all other countries.

Figure 1: Means on empowerment measures by country.

Figure 2: Means on empowerment measures by community.