



The Multi-dimensionality of Development and Gender Empowerment: Women's Decision- Making and Mobility in India

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Abstract

The relationship between development and gender empowerment remains unclear, especially in low-income societies where economic growth has not brought about any noticeable change in gender relations. We argue that this is largely due to the multi-dimensional nature of both concepts so that different aspects of development may have quite different relationships with different aspects of empowerment. Further, both development and gender empowerment are dynamic processes which require data and methods that enable us to examine their relationship over time. In this paper, we use longitudinal data from the India Human Development Survey (IHDS) on 20,507 women ages 15-49 who were interviewed at two points in time, 2004-5 and 2011-12, to map the relationships between change in important aspects of India's development with that of women's autonomy over household decision making and their own mobility. Findings from cross-sectional, over time as well as fixed effects methods consistently show that education has an empowering effect while economic advance has a more conservative effect on gender empowerment.

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1. Introduction

Development has often been assumed to promote women's empowerment. Increasing gender equality was assumed to be a natural correlate of economic development by most early modernization theorists (for example, Goode 1963, Inkeles and Smith 1974, Rostow 1963) and hence has become a standard element of the ideology of "developmental idealism" (Thornton 2001). Gender scholars were always more sceptical of any seemingly automatic link, and as modernization theory itself lost favour for ostensibly being too unilinear and deterministic, any linkages with gender empowerment were seen as problematic rather than assumed. Empirical evidence for a linkage between economic development and gender equality has always been mixed (Duflo 2012, Kabeer 2016). There are, in fact, a wide range of gender inequalities across low-income societies, and economic growth has not always brought with it any noticeable changes in gender relations.

Part of the reason for the mixed results is that both development and empowerment are multidimensional constructs. Consequently, different aspects of development may have quite different relationships with different aspects of empowerment. In this paper, we distinguish between educational and economic advances usually associated with development and show that they have different relationships with visible or with private displays of gender performances (Desai and Temsah 2014). In particular, while higher education levels are related to a broad spectrum of enhancements in women's empowerment, economic position often has opposite relationships, enabling families to better enact traditional norms that are quite resistant to women's empowerment.

Besides being multidimensional, both development and empowerment are best conceived as dynamic processes rather than static states. We follow the now conventional practice that understands empowerment as a process by which women over time acquire control over their ability to make choices that affect their own life chances. In this paper, we measure increases in

women's ability to move about freely in their locality and the widening scope of their ability to make important decisions affecting life outcomes.

Development is also best conceived as a process of societal change rather than an end state defined by a certain level of GDP per capita or educational enrolments. Continuing growth and the institutionalization of change are fundamental to the development process. Educational opportunities open up with the expansion of schools and universities. New occupational structures provide new economic opportunities for increasing household incomes, sometimes encouraging more female labour force participation, while at other times obstructing it. We investigate changes in economic levels, holding constant educational attainments, but we also examine the continuing impacts of those educational attainments.

Since gender empowerment and development are both processes of change, it is especially useful to investigate their relationships in a more dynamic framework. Which changes in a woman's life lead to which types of growing empowerment? Do some initial conditions doom some women to live with less control over their lives while others are more fortunate? Do some women manage to overcome initial disadvantages to gain more control over their own lives? The answers to these questions entail the treatment of gender empowerment as a dynamic phenomenon that evolves in the lives of individuals and is affected by the changing circumstances of their own lives, by evolving conditions in the community, and by political and cultural winds. Unfortunately, empirical research in this area has been limited as it has hitherto had to rely mostly on cross-sectional data.

In this paper, we use longitudinal data from the India Human Development Survey (IHDS) for 21,245 women aged 15-49 years at the initial survey, who were interviewed during both rounds of the survey in 2004-05 and 2011-12. This panel design allows us to explore the evolution of the following three separate indicators of empowerment that operate in different settings: 1) Women's control over household decision-making, (2) Women's need for permission from other household members to travel outside the household, and (3) Women's ability to travel alone when they do go outside. We ask the following questions:

(1) How does each of these dimensions of gender empowerment change over time and do they change in equal measures?

(2) If they do change, which women are most likely to increase and which to lose earlier levels of empowerment?

(3) If any changes are seen to occur in women's empowerment, are they systematically related to changes in women's other characteristics, especially those reflecting increasing levels of India's development, such as their employment, household affluence, or position within the household structure?

The answers to these three questions have far-reaching implications for the literature on gender and development, issues we speculate about at the end of the paper.

1.1 Gender Empowerment as a Process

There has been a growing consensus on the conceptualisation of gender empowerment as a multidimensional construct (Kabeer, 1999; Mason, 1995; Narayan, 2006). This recognition has implied the adoption of a more multidimensional approach to its operationalization as well. While initial conceptualizations focused on women's well-being equated with their 'status' along various dimensions such as education and work, recent research has centred on more direct measures of women's 'empowerment' as the agenda for research. Here, power is the operative word, and the focus is on power over choosing from various alternatives, or indeed power over one's own life.

Kabeer (2005), among others, has argued that empowerment is a process, and that it means change. In other words, where women who have less power (over resources, agency, achievements) are concerned, empowerment is the process which brings about an increase in that power to increase women's transformative potential. Accordingly, the empowerment process is expected to result in purposeful behaviour on the part of women, and an increase in their ability to analyse the situation and act on their own behalf within the structures of patriarchal constraint.

Due to a paucity of longitudinal data, we have usually investigated the factors that are correlated with empowerment measures at a particular point in time. This cross-sectional approach may lead to the assumption that once empowered, a woman would always remain so. The new IHDS panel survey allows us to assess empowerment as a dynamic process. For instance, there may be women who become empowered, but there may also be women who become disempowered. We can examine social change by studying the empowerment process over a period of time in the same individual woman rather than across women who may be placed in very different situations. This longitudinal perspective is important because as social scientists and gender researchers, we need to be interested in the long-term changes that reduce or increase inequality. The ultimate goal is to achieve long-lasting change, which actually challenges the structures of patriarchy.

A longitudinal perspective also offers the great advantage of holding constant personal characteristics that are stable while investigating the role of those that change. For example, there are many reasons apart from the direct effects of wealth or labour force participation which cause women living in wealthier households or women who are in the paid labour force to enjoy more autonomy than others. We can be more confident of identifying the key influences in the lives of these women by observing changes in their empowerment as their households become wealthier (or poorer) or as they enter (or leave) the labour force.

1.2 Development Effects on Gender Empowerment

Three development dimensions have consistently been studied in the empirical research on empowerment: education, employment, and wealth. This consistent approach has by now built up a modest bank of results that enable us to draw reasonably confident conclusions, at least about the cross-sectional relationships. However, concern with how and why development should be linked to empowerment is often missing from this literature. This is perhaps because the linkages seem so obvious that they do not bear close scrutiny. It could also be due to the fact that the accessibility of secondary data on empowerment has shifted the balance of work too far in the direction of statistical analysis and away from theoretical considerations. But this omission fails

to do justice to the complexity of the possible causal relationships. And when contradictory pathways are overlooked, the literature understates the problematic nature of the development effects.

Education. The usual analysis identifies education effects as cognitive changes. Schools open up new ideas and new possibilities for their students, and the literacy skills that students take away from their education offer them a lifetime of exposure to further possibilities. Sometimes explicit but often implicit is the assumption that these new possibilities include exposure to the liberal *Western* ideas of gender relations. In these treatments, education often becomes a vehicle for Westernization that is assumed to be empowering.

These cognitive accounts of the role of education miss two complexities of the education-empowerment relationship. First, if education exposes women to new ideas, there is no guarantee that those new ideas are necessarily empowering. Schools do not exist apart from the gendered world in which they are situated and they can often reproduce existing gendered inequalities. Das Gupta (1987), for instance, found that the children of educated mothers had even more male-skewed sex ratios than those of less educated mothers because their education equipped them with skills to better manipulate their fertility and mortality. Moreover, patriarchal traditions can also be mobilized in a more literate population, and the "modern" expressions of patriarchy can be more fundamentalist and abusive than past village practices that have been filtered through generations of oral traditions. The RSS and the Taliban are as much products of an educated population as are feminist movements.

Second, cognitive changes are not the only consequence of education that impact gender relations, and they may not be the most important. Schools broaden and intensify the role of peer groups that provide social support for new norms that are far less constrained by adult traditions. Education also confers social status so that educated women can use their enhanced status to strengthen their bargaining position within the household. And schools everywhere, but perhaps particularly in India, function as systems that "teach" their students how to manage bureaucratic

relations; these “lessons” provide valuable skills that empower adult women to more readily manage family and personal affairs in the modern world.

These social skills and supports may be as important in explaining the near-universal positive relationships found between women's education and their reports of empowerment. Educated women have been found to play a larger role in at least some family decisions in a variety of DHS surveys (Hanmer and Klugman 2016, Kishor and Subaiya 2008), in Latin America (Heaton et al. 2005), Africa (Hindin, 2002, Kritz and Makinwa-Adebusoye 1999), and in several Asian countries (Acharya et al. 2010, Allendorf 2007b, Jejeebhoy and Sathar 2001, Mahmud, Shah, and Becker 2012; Malhotra and Mather 1997; Mason 1997, and Morgan et al., 2002). Exceptions are Bloom et al. (2001) in Varanasi and Dharmalingam and Morgan (1996) in Tamil Nadu, but even in multi-country studies, the education relationship is often neither universal nor significant for all types of decisions. Kishor and Subaiya's (2008) comparison of DHS surveys across 23 countries found a surprising range of relationships: “Women's education level per se does not have a consistent net positive influence on their decision-making participation in all countries and for all decisions.” For three of the four decisions they studied, less than half of the countries showed a positive relationship with education, and for the fourth decision concerning daily purchases, the relationship was significant for only 14 of the 23 countries.

Employment. At least since the nineteenth century, observers have identified work outside the home as a key to women's empowerment (Engels [1884] 1972, Blumberg 1984). Visible contributions to family finances by a woman can raise her bargaining power within the household. Nevertheless, caveats have been commonly noted even here. The employment effects on empowerment may depend on whether she controls the income from her work, and labour contributions to a family farm typically yield less empowerment than paid employment outside the household. Moreover, any positive impacts of employment outside the house typically come with the costs of the double burden of housework. And much of the employment that women can find is neither very remunerative nor fulfilling.

Nevertheless, almost all the past cross-sectional research reports positive relationships of paid employment with women's decision-making. Kishor and Subaiya's (2008) review found women's employment for cash remuneration to be one of the strongest, most consistent relationships with decision-making. The near uniformity of these results despite women's low pay, their double burden, and the frequent difficulty in controlling their own incomes testifies to how socially transformative women's employment can be.

The difficulty with the employment pathway for the development-empowerment relationship is not with the employment-empowerment relationship but with the development-employment relationship. Economic growth leads to increased women's employment only sometimes depending upon the type of development (for example, import substitution vs. export-led), the industries that grow (for example, heavy manufacturing vs. garments), the stage of development (for example, the transition out of an agrarian economy vs. the growth of a post-industrial service economy), and the historical legacy of women's past employment. Given all these contingencies, women's employment may play only a minor role in the development-empowerment relationship despite its well-documented importance for women's empowerment.

Wealth. No consensus exists in the empirical literature for a wealth-empowerment relationship as is found in the case of the education-employment relationship. While some results do show a positive relationship, more of the results show nothing statistically significant, and some, in fact, show negative relationships. Different studies can find opposite relationships for the same country. Thus Archarya et al. (2010) find a negative relationship for Nepal while Allendorf (2007b) finds a positive relationship for a different DHS survey in Nepal. Kishor and Subaiya's (2008) review of 23 DHS surveys finds that any relationship between wealth and women's decision making is largely spurious and disappears after controls for other household and personal characteristics. The lack of a consistent wealth relationship is especially problematic when development is defined as growth in GDP per capita. If higher incomes or more wealth do not lead to women's empowerment, then what is the significance of a development-empowerment relationship?

The theoretical argument for a positive effect of wealth on empowerment is also not any clearer. Kabeer (2016) notes that market-oriented models would expect competition to reduce gender discrimination. Duflo (2012) reasons that it is poverty that often leads families to allocate limited resources to the males in the family so that development should reduce gender inequalities. However, there is no reason why moderate or even abundant resources might not be allocated disproportionately to males. In fact, historically in India, restrictions on women have been more marked in upper-caste households while Dalit (formerly untouchables) and Adivasi (tribal) women have enjoyed both greater freedom of movement and more say in family life. Restricting women's autonomy has thus become a primary vehicle for a display of rising social status within the family. New wealth thus often leads to Sanskritization (Srinivas 1962) and a re-assertion of patriarchal gender relations. The desire to turn new wealth into enhanced social status is a near-universal human urge (Weber [1921] 1978, Milner 1994), whether for the bourgeois nouveau riche in high-income settings or rural government servants in developing countries. When patriarchy is the dominant culture, more wealth enables more families to enact cultural ideals of female subordination.

Thus, we expect the effects of wealth and income to depend on the dominant cultural norms of gender relations. In much of India, this means that we should expect a negative relationship of wealth and women's empowerment, especially for those dimensions of empowerment that are most visible to the local community such as women's freedom to move about the locality unescorted. Family decision-making, on the other hand, being less visible to the outside world, may be less influenced by family wealth, especially the new wealth that has come with the recent rapid development in India.

2. Hypotheses

1. More educated women will have more say in family decisions and greater freedom of movement outside the home.

2. Employed women will have more say in family decisions and greater freedom of movement outside the home than will women who are not in the labour force. This effect depends

somewhat on the extent to which a woman's work is subject to family supervision. The effect will be strongest for women working for pay (that is, those employed by someone outside the family), somewhat weaker for women working in a family business, and weaker still for women working on a family farm.

3. Wealth, especially increases in wealth, will have negative effects on women's empowerment, especially on a woman's ability to move outside the home unescorted though perhaps less so for the extent of her say in family decisions.

3. Data and Methods

The data for this paper have been taken from the two rounds of the India Human Development Survey (IHDS) undertaken in 2004-05 and 2011-12 under the aegis of the University of Maryland and the National Council for Applied Economic Research (NCAER), New Delhi. The IHDS1 is a nationally representative survey that covered 41,554 households in 1,503 villages and 971 urban neighbourhoods (Desai et al. 2005). IHDS2 re-interviewed 83 per cent of the original households as well as split households residing within the same locality. The sample is spread across 33 (now 34) states and Union Territories and covers both rural as well as urban locations. IHDS collected extensive data on education, health, livelihoods, marriage, fertility, social capital and gender relations at two points in time, making it a rich data set for studying dynamic processes such as empowerment.

In both IHDS1 and IHDS2, ever-married women aged 15-49 years were interviewed about their education, employment, health, family history, and gender relations. For IHDS1, one woman was sampled in each household with at least one eligible woman, resulting in a sample size of 33,480 women. In IHDS2, up to two women were interviewed in each household, resulting in a sample size of 35,283 women. Our analyses focus on women who were interviewed in both the surveys, a sample of 25,478 women, some of whom were no longer in the 15-49 age range at the time of the second interview. We further limit the sample to women who were mothers by the time of the interview and were currently married with husbands present in the household. This left a sample of 20,507 women.

Our three measures of empowerment attempt to capture some of its multi-dimensionality: decision-making within the household, no need for permission from family members to move about outside the household, and the ability to do so alone and without accompaniment. Recently, Desai and Temsah (2014) proposed a distinction between two dimensions of empowerment that may have different determinants: gender as enacted privately within the family and gender displays that are visible to the community. Decision-making and the need for taking permission to leave the house reflect more private, within-family, gender relations while moving about alone reflects a gender performance that is visible to the community.

For each of the three dimensions, we build scales to reflect the scope of empowerment. For decision-making, we count whether the woman is the main decision-maker about making major purchases in the family, how many children to have, what to do when a child falls ill, and to whom a child should be married. A fifth question about what to cook was not included in the scale because of its low correlation with the other four measures. For the two mobility scales, we count how many locations that the woman needed permission to go to or could go alone to. The survey asked about both the permissions and the ability to go alone for trips to the local health centre, to the home of a friend or family member, and to a local shop.

We are primarily interested in how these three empowerment scales are related to the development variables of education, paid employment, and household wealth. Education is measured in terms of the number of years of school that the woman has completed. We construct three dummy variables reflecting employment: if the woman earns a wage or salary, if she works in a family business, or if she works on the family farm. Household wealth is measured by an index that counts how many of 31 consumer durables and housing amenities are owned by the household. Our models also include controls for other variables that were found to be related to empowerment in past studies: the woman's age; her position in the household as the only married woman, as the most senior married woman, or as a younger woman; whether the family owns or cultivates their own land; her caste and religion; urban or rural residence; and dummy variables for 23 states or clusters of states.

We analyse the three empowerment scales in four separate analyses, taking full advantage of the panel structure of our data. First, we compute conventional cross-sectional regressions for each IHDS1 scale on a set of background factors, focusing especially on their associations with education, employment, and wealth. Second, we provide descriptive statistics for each separate question and ask how the responses changed from IHDS1 to IHDS2. Then we look at how these IHDS1 factors predict changes in the scales between the two surveys, holding constant their score on the scale in the first survey. These analyses ask what kinds of women are most likely to become more or less empowered over time. Finally, we compute individual fixed effect regressions that regress changes in each empowerment scale on changes in the women's circumstances. We are especially interested in exploring how increases in the household's wealth or changes in a woman's employment status affect her empowerment. We believe that this *combination* of panel methods is most likely to provide insights into the multidimensional dynamics of the development-empowerment relationship.

4. Findings

4.1 Cross-sectional Analyses of the IHDS-I Survey

We begin with simple cross-sectional associations of a woman's position with her responses on the three empowerment scales in IHDS1. Better educated women make more decisions in the household and are able to go to more places on their own; however, there is less evidence that they can go without asking for permission from someone in the household. Similarly, women working for pay or working in a family business can make more household decisions and can go to more places on their own, but again there is no significant relationship with whether they can go out without taking permission to do so. In contrast to these positive development relationships, there is only weak and contradictory cross-sectional evidence to indicate that women living in wealthier households are more empowered.

----- Table 1 about here -----

Other significant relationships suggest that women living in more traditional households are less likely to be empowered. Rural women are more likely to have to ask for permission to go

out and are less likely to be able to go alone when they do get permission. Women who have married into farm families also have to ask for permission more often and are responsible for fewer decisions in their households; there is only weak evidence to show that they cannot go to local places on their own.

Perhaps most important for a woman's empowerment are measures of her position within her household. Women living with a mother-in-law or older sister-in-law make fewer decisions and are less able to go outside on their own. It is not so much living in a joint family (senior women are no more nor no less empowered than women in a nuclear family) but a woman's relative position within that joint family that makes a difference with regard to her empowerment. Consistent with these relationships is a woman's age, which is a strong correlate of her empowerment across all the three scales. Older women make more decisions, less often need permission to leave the household, and can go alone more often when they do leave. Each of these is more common with each advancing year, though a woman's ability to go out alone may reach a ceiling level by her late thirties.

Finally, there are surprisingly few differences among women in different social groups. Dalit and OBC women do have more freedom to leave the household by themselves, as might be expected, though more surprisingly, this freedom of movement does not extend to Adivasi women. There are no measureable differences between Hindu, Muslim, and minority religion women; and caste differences are not found in the case of the more private household empowerment measures of decision-making and the woman's having to ask permission to leave the house.

4.2 Changes in Empowerment between the Two Surveys

In spite of the strong age correlations observed in the cross-sectional analyses of IHDS1, the two waves of IHDS data show little consistent change between 2004-05 and 2011-12 in women's decision-making authority or in their not having to ask permission to go to places outside the house (see the first two columns of Table 2). Some items changed towards more

empowerment, while others changed towards less. Because of the large sample sizes, several of the changes are statistically significant, but the differences are small and the lack of a consistent pattern suggests that there is little change of substantive significance for these aspects of women's empowerment within the household.

----- Table 2 about here -----

The exception to this lack of change is women's ability to move about alone—the only dimension that shows consistent, if modest, empowerment between the two periods. Freedom of movement was also the measure showing the strongest cross-sectional correlations in Table 1. For each of the three destinations, that is, to the health centre, to a relative's or friend's home, and to a shop, higher proportions of women reported that they were able to go alone in 2011-2012 than in 2004-05. The increases range from six to nine percentage points—not large but consistent across the three measures and perhaps especially noteworthy because they were starting from relatively higher levels in the first place.

In spite of these negligible or modest national changes, the IHDS panel data also show more substantial changes of women between the two periods, with some women becoming disempowered and others becoming empowered. The empowerment process is thus dynamic with individual women changing in either direction over time, but national cross-sections only register the net changes across the two processes. The final four columns of Table 2 report these dynamic changes for women interviewed in both the surveys. Columns 4 and 5 of Table 2 report changes for women between the two periods, either towards more empowerment or disempowerment; together, these changes are seen to be experienced by over 30 per cent of the women for most of the items. Understanding the process of empowerment, thus, necessitates an analysis of both changes towards disempowerment as well as changes towards empowerment.

4.3 Who Changes?

The next question we ask about these contrasting processes of empowerment and disempowerment is: Who changed? Are there characteristics of women in Wave 1 that help predict whether they became more empowered or disempowered in Wave 2? Table 3 reports the

results from the regressions of differences between the two waves for the three empowerment scales, holding constant a woman's starting point in Wave 1.

----- Table 3 about here -----

More educated women become even more empowered by Wave 2: they made more decisions and were able to go alone to more places. However, the increases in their being able to go out without asking permissions were not significantly greater than for less educated women

In contrast, women from wealthy households made *less* progress in empowerment than women from poorer households. Poorer women increased their decision-making and their ability to leave the house without permissions between the two waves. These two aspects of development, education and wealth, have opposite effects on changes in empowerment. Not only are more educated women more empowered in Wave 1, but on an average, they are seen to have become even more empowered by Wave 2. Their human capital is a resource that continues to pay dividends in household relationships. However, wealth impedes progress towards more empowerment over the next seven years up to Wave 2. Since most of these household goods derive from income earned by male household members, they reinforce the existing male dominance in the household.

Work has fewer benefits for gains in empowerment than it did for initial levels in Wave 1. Women working for pay in Wave 1 enjoyed greater freedom to move about by themselves than and this freedom increased over the next seven years. However, there is no evidence to show that they increased their decision-making authority over their initially higher levels in Wave 1, and they did not make any new progress in being able to leave the house without permission. Women working in family businesses or on the family farm changed no more nor less than women who were not working outside the home.

Farm households show much the same resistance to women's empowerment as do wealthier households. Women in land-owning households already made fewer decisions and needed more permission to leave the household in Wave 1, and they made less progress on these

dimensions over the next seven years. Rural women, in general, had lower prospects of empowerment than their urban counterparts. Increased mobility was especially concentrated among urban women: they increased their ability to go out without asking for permission and when they did go out, they were more likely to go alone than they did seven years earlier.

Age and household position have similar relationships to gains in empowerment as they did with initial differences. Older women are more likely to have become empowered in the next seven years on all the three dimensions. Women living with mothers-in-law or older sisters-in-law are the least likely to become more empowered. Unlike in the case of the cross-sectional results, some advantages are found for more senior women who have younger sisters-in-law or daughters-in-law; as compared to women in nuclear families, these matriarchs gain more freedom to leave the house without asking for permission and may increase the frequency of their going out alone. Social groups again have small and varied effects across changes in the three types of empowerment though the patterns are different from the previously reported cross-sectional results.

4.4 Fixed Effects Models

Our final set of analyses examines how changes in women's situations are related to changes in their empowerment. We are especially interested in how changes in the economic position of their households are related to empowerment: is it true, as it was for predicting changes in empowerment, that increases in household wealth are associated with less empowerment? In the fixed effects models, we are no longer comparing wealthier women with poorer women, but comparing over time whether for an individual woman when her household became wealthier (or poorer), does she become less (or more) empowered?

The fixed effects design can also investigate the correlates of her entering or leaving the labour force. We cannot, however, look at the role of education since schooling had been completed by the first wave and thus does not change between the two surveys. Age does change, of course, but it changes more or less uniformly across the whole sample, so we are unable to test whether larger age changes are associated with more empowerment. Similarly, social groups are

unchanging, and, for this non-migrant sample, women did not change urban or rural locations or the state of residence.

The results in Table 4 confirm the disempowering effect of household wealth that we saw first in Table 3. In households that became wealthier by the second wave (that is, wealthier than the average increase since the model holds constant the survey wave), women made fewer of their own decisions, more often needed permission to go out, and were less able to go by themselves; in contrast, in households with less than average gains in wealth or whose households actually lost assets between the two surveys, women were more likely to become empowered in the intervening seven years. The negative relationship between changes in wealth and changes in empowerment holds for all three measures of empowerment.

----- Table 4 about here -----

Entering or leaving the labour force shows positive effects on women's empowerment. Entry into paid work is associated with more decision-making power and less need for permission to go outside, but there is no relationship with going alone to places. The association with a larger role in decision-making is similar to both the cross-sectional relationships in Table 1 and the results for who changed as reported in Table 2. Similarly, entry into a family business is associated with increases in decision-making and not needing permission to go out. However, beginning work on the family farm does not show the same positive effects on empowerment as paid employment or work in a family non-farm business. In fact, all three coefficients are negative though only the relationship with needing permission to go out is statistically significant.

Changes in household structure are also associated with empowerment. Women in newly formed households that split off from the 2005 household ended up with greater say in family decisions, were less likely to need permission to leave their new homes, and were especially more able to go by themselves. If, in addition, a woman was no longer a subordinate female in the household, she was especially not likely to need permission.

5. Discussion

While at times there are interesting variations across the three analytic methods and the three measures of empowerment, the overall picture is quite clear. More education, paid employment or even work in a family business, and urban residence tend to be associated with women's greater empowerment. Despite these relationships, greater household affluence by itself is rarely associated with greater women's empowerment. In fact, especially in analyses over time, increased household affluence is more often associated with declining empowerment for women. The purely economic wealth dimension of development appears to act in the opposite direction of the education dimension of development, at least in contemporary India. Since both greater education and greater wealth are what most observers consider to be integral parts of development, the overall effect of development on empowerment is indeterminate.

These results re-affirm the importance of recognizing the multidimensionality of development. There is no single effect of "development" on gender relations. There are, instead, often contradictory effects whose resolution depends on the separate strengths of the various influences.

While we also expected the different dimensions of gender empowerment to react somewhat differently to the different dimensions of development, the results did not provide clear support for any consistent differences across types of empowerment. It seemed reasonable to expect that new wealth would be more closely associated with the more outwardly visible dimensions of empowerment such as the freedom to walk about the village or neighbourhood unescorted. Increasing affluence might provide the capability for more families to realize the traditional norms of female seclusion as families sought to translate their increasing economic status into increasing social status associated with higher caste positions. However, the results do not find wealth effects to be stronger for more visible dimensions of empowerment and caste differences were, in general, quite small.

5.1 Measuring Change

The results for the more outwardly visible measures of moving alone in the village and neighbourhood did differ in one important way from the results for decision-making and permissions to leave the house. Only women's ability to move independently outside the home showed consistent net changes between the two surveys. Women had reported greater empowerment on this freedom of movement dimension even during the first wave; nevertheless, it was the only dimension to consistently increase by the second wave.

However, even the empowerment measures that showed little overall change in levels between the two surveys showed substantial movement between more and less empowerment for different women. The small net changes for decision-making or not having to take permission for leaving the house masked larger changes for some women who did become more empowered while others became less empowered. Those results confirm the oft-stated position that gender empowerment is a dynamic process, but they also remind us that some women who had been relatively more empowered can lose some of their control over time. Panel data are ideal for examining such processes and for identifying changes along the empowerment dimensions that cross-sectional data cannot detect.

5.2 Methods

Some of the results are quite similar across the three analysis methods irrespective of whether we use a cross-sectional, over time, or fixed effects design. The consistency of the results strengthens our confidence that in India, education has an empowering effect while economic advancement has a more conservative effect. Our confidence derives from a conventional reliance on multiple methods as the most effective research strategy for studying causal processes. Although limited to a single panel survey, we believe that this consistency confirms the advantages of multiple analyses for understanding development effects.

For example, the negative effects of household wealth in the fixed effects design helps rule out the alternative interpretation that some unmeasured but enduring characteristic of the household is determining both its economic prosperity and its restrictions on women's autonomy.

Richer households, for instance, may be able to recruit daughters-in-law who better fit the traditional model of subordinate wives. This scenario would be more plausible to explain cross-sectional associations or the over-time results in Table 3, but are less useful for understanding why changes in wealth are associated with changes in women's empowerment.

Conversely, a fixed effects design is open to questions about what is the cause and what is the effect. As women become more empowered, are they freer to engage in outside employment? Or once they become employed, does their increased economic importance enable them to play a larger role in household decisions? The panel analyses of Table 3 use the time difference in the two surveys to show that women who were employed in paid work in the initial survey were more likely to increase their empowerment in the subsequent years.

Although we believe that our results demonstrate the oft-stated advantage of the accumulation of knowledge across a variety of methods, this conventional wisdom has sometimes been questioned by advocates of a preferred "gold standard" who disdain the use of alternative approaches by others. These narrow approaches championing one particular method seem to arrive in fads as one new approach supplants another as the new "gold standard" (Bedecarrats, Guerin, and Roubaud 2015, Deaton 2010). But any belief in some "gold standard" can be unnecessarily limiting since the introduction of new methods should expand rather than restrict research opportunities. In order to better understand the process of empowerment, we would welcome approaches that exploit natural experiments of increased education or incomes, or designs using randomized control trials to test the impacts of the different dimensions of development. Additionally, more qualitative approaches could help us better understand the household processes by which increased wealth disempowers women. These more intensive studies would be especially useful if, like the surveys analysed here, they followed women over time to observe how women's empowerment ebbs and flows with changes in family circumstances.

Each of these techniques, however, has its own limitations. Development economists seem to have discovered the virtues of randomized control trials just as experimental

psychologists, who have confined themselves to the use of these methods for decades, have realized their limitations (Open Science Collaboration 2015). We believe these new techniques should supplement rather than supplant the survey methods developed in this paper. We see the special advantage of national surveys such as the IHDS for testing the relationships of development and empowerment across the broadest range of actually existing social contexts, reflecting how much each development dimension currently matters for empowerment.

5.3 Long-term Change

The multidimensionality of development effects underscores the need to disaggregate those dimensions if we want to understand how women's ability to control their lives will change in keeping with changes in the society and economy. Nevertheless, the contrasting variety of development effects leaves open the question of long-term change. Will increasing economic resources be used to reinforce traditional patriarchal gender relationships? Or will the more liberating winds of higher education and urban life open up spaces for women to assert their rights? Any long-term outcomes are harder to uncover in a panel design of only seven years. But clues can be found even in the IHDS data. And observations from research on other dimensions of gender equality suggest a more optimistic long-term conclusion.

First, educational changes are generational changes. This makes them both slower and more enduring. Much of the underlying dynamics in cultural changes about gender or sexuality result from cohort replacement effects. Our ideas about proper gender roles and sexual impropriety are mostly formed in adolescence and early adulthood. Schooling provides both exposure to a broader range of ideas and the attraction of strong peer groups who enable new generations to free themselves from the usual influence of elders. The entire population changes as younger cohorts with new ideas replace older cohorts who have been the repositories of traditional gender relations.

The influence of increased affluence may be more transitory in the face of these generational shifts even if it is more immediately noticeable. If general affluence increases everybody's abilities to realize their values, it may reinforce both an older generation's

patriarchal commitments as well as a younger generation's rising liberalism. As long as elders remain in control of society's institutions, patriarchy may even be reinforced by economic growth, but as new generations assume greater control, the result could be more dramatic shifts towards gender equality.

This historical dynamic can be seen in the pattern of shifts in sex ratios in several Asian societies. Long-standing, but in fact, fairly marginal differences in sex ratios can suddenly explode as economic development makes available technologies of sex selection at birth that are more intentional and more effective than earlier methods. However, with time, we can see the slower but more enduring effects of educational growth, generational replacement, and urban individualism as sex ratios return to more biological norms (DasGupta, Chung, and Shuzhuo 2009, Guilmoto 2009).

Similar transitions may be underway in the case of women's empowerment within the household. The IHDS results show that education, urbanization, and women's employment all erode patriarchal gender relationships. Each of these may be only slow, historical transitions as compared to the now rapid growth in material wealth. In India, education is finally expanding rapidly after decades of unfulfilled promises; urbanization continues at a surprisingly slow pace; and women's employment has yet to show significant signs of expansion. Thus, for now, the forces representing greater gender equality may be more easily contained by the growth of material wealth that reinforces traditional patriarchal institutions. We should thus not be surprised by the lack of much change between IHDS1 and IHDS2 as seen in Table 2 in the overall levels of women's decision-making or their need to take permission for moving about freely. Education effects are more generational but panel studies reflect period changes more than cohort changes. Nevertheless, the slow egalitarian shifts unleashed by education, urbanization, and women's employment, taken together, could be revealed in the coming decades.

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Table 1. Cross-sectional regression of empowerment scales on woman's background, IHDS-I (2004-05).

	Decision-making		No permission to leave		Can go alone	
	coef (1)	se (2)	coef (3)	se (4)	coef (5)	se (6)
Education	0.0061**	(0.00291)	0.0037	(0.00334)	0.0188***	(0.0045)
Assets	0.0057*	(0.00301)	-0.0057*	(0.00322)	-0.0058	(0.0048)
Work (ref= none)						
paid	0.1190***	(0.0286)	0.0314	(0.0351)	0.1330***	(0.0427)
family business	0.0932*	(0.0533)	0.0504	(0.0650)	0.1900***	(0.0674)
family farm	0.0479*	(0.0281)	-0.0133	(0.0351)	0.0482	(0.0650)
Owns farm land	-0.0881***	(0.0289)	-0.1030***	(0.0371)	-0.0936*	(0.0493)
Social Group (ref= Forward)						
OBC	-0.0064	(0.0298)	0.0043	(0.0430)	0.1280**	(0.0529)
Dalit	0.0405	(0.0321)	-0.0709*	(0.0382)	0.1270**	(0.0558)
Adivasi	0.0159	(0.0446)	-0.0569	(0.0625)	0.0833	(0.0806)
Muslim	0.0548	(0.0500)	-0.0830	(0.0573)	-0.0919	(0.0593)
Other minority religion	0.0042	(0.0797)	-0.0303	(0.0852)	0.1120	(0.0729)
Position (ref= only married woman)						
junior woman	-0.1020***	(0.0207)	-0.1730	(0.0235)	-0.2270***	(0.0354)
senior woman	0.0281	(0.0512)	-0.0868	(0.0673)	-0.0739	(0.0624)
Age (ref= under 25)						
25-29	0.0613**	(0.0281)	0.0784**	(0.0313)	0.302***	(0.0522)
30-34	0.0980***	(0.0297)	0.195***	(0.0294)	0.560***	(0.0556)
35-39	0.1200***	(0.0332)	0.257***	(0.0381)	0.613***	(0.0586)
40+	0.1570***	(0.0304)	0.290***	(0.0390)	0.602***	(0.0571)
Urban	0.0228	(0.0374)	0.126***	(0.0413)	0.135***	(0.0451)
State dummies	yes		yes		yes	
Constant	1.369***	(0.110)	1.165***	(0.121)	1.759***	(0.106)
Observations	20,482		21,675		17,997	
R-squared	0.162		0.125		0.191	

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 2. Changes in empowerment between IHDS-I and IHDS-II.

	Panel Totals		Panel Sample			
			Not empowered in 2011-12		Empowered in 2011-12	
	2004-05	2011-12	Remained	Became	Became	Remained
			disempowered	disempowered	empowered	empowered
(1)	(2)	(3)	(4)	(5)	(6)	
Has most say in the household on:						
whether to buy an expensive item	7.6%	7.9%	85.5%	6.6%	6.9%	1.0%
how many children to have	17.9%	21.8%	64.9%	13.3%	17.2%	4.6%
what to do when a child is ill	27.7%	25.1%	54.7%	20.2%	17.6%	7.5%
to whom a child should marry	7.0%	10.2%	83.8%	6.1%	9.3%	0.9%
what to cook on a daily basis	73.3%	70.8%	10.2%	19.0%	16.5%	54.4%
Does not need permission to go to:						
the local health center	22.8%	18.0%	63.9%	18.0%	13.3%	4.8%
relatives or friends in the village	22.9%	27.8%	55.8%	16.4%	21.3%	6.5%
the <i>kirana</i> shop	46.6%	41.3%	32.4%	26.3%	21.0%	20.4%
Can go alone to:						
the local health center	64.8%	71.7%	13.1%	15.2%	22.2%	49.6%
relatives or friends in the village	67.4%	78.4%	8.1%	13.6%	24.5%	53.9%
the <i>kirana</i> shop	74.4%	82.0%	6.3%	11.7%	19.3%	62.7%

Table 3. Changes in empowerment regressed on Wave I characteristics.

	Decision-making		No permission to leave		Can go alone	
	coef (1)	se (2)	coef (3)	se (4)	coef (5)	se (6)
Education	0.0126***	(0.0035)	0.0053	(0.0034)	0.0227***	(0.0038)
Assets	-0.0083**	(0.0035)	-0.0096***	(0.0035)	-0.0078	(0.0052)
Work (ref= none)						
paid	0.0410	(0.0310)	0.0568	(0.0351)	0.0752**	(0.0326)
family business	0.0298	(0.0502)	0.0343	(0.0541)	0.0679	(0.0481)
family farm	-0.0026	(0.0366)	0.0239	(0.0395)	0.0462	(0.0548)
Owns farm land	-0.0690*	(0.0356)	-0.0977***	(0.0361)	-0.0454	(0.0435)
Social Group (ref= Forward)						
OBC	0.0185	(0.0319)	0.1280***	(0.0336)	0.0671	(0.0566)
Dalit	0.0207	(0.0397)	0.0705*	(0.0397)	0.0866	(0.0556)
Adivasi	-0.0378	(0.0590)	0.0917	(0.0619)	0.1770**	(0.0774)
Muslim	0.0267	(0.0467)	-0.0023	(0.0497)	0.0330	(0.0682)
Other minority religion	0.0933	(0.0755)	0.1640**	(0.0816)	-0.1140	(0.0836)
Position (ref= only married woman)						
junior woman	-0.0869***	(0.0249)	-0.0633**	(0.0250)	-0.0516*	(0.0304)
senior woman	-0.0276	(0.0589)	0.126**	(0.0603)	0.118*	(0.0605)
Age (ref= under 25)						
25-29	0.0459	(0.0379)	0.0372	(0.0386)	0.0900*	(0.0538)
30-34	0.0705**	(0.0326)	0.102**	(0.0416)	0.158***	(0.0411)
35-39	0.0896**	(0.0405)	0.105**	(0.0429)	0.225***	(0.0399)
40+	0.1220***	(0.0447)	0.176***	(0.0530)	0.168***	(0.0473)
Urban	0.0586	(0.0399)	0.103**	(0.0421)	0.149***	(0.0408)
Empowerment 2004-05	-0.9880***	(0.0141)	-0.9600***	(0.0163)	-0.9020***	(0.0156)
State dummies	yes		yes		yes	
Constant	0.675***	(0.111)	0.151*	(0.0810)	1.555***	(0.133)
Observations	19,253		21,656		17,670	
R-squared	0.473		0.546		0.542	

Note: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4. Fixed effects regressions of changes in empowerment on changes in family characteristics.

	Decision-making		Permission to leave		Can go alone	
	coef (1)	se (2)	coef (3)	se (4)	coef (5)	se (6)
Assets	-0.0190***	-0.0027	-0.0144***	;(0.0028)	-0.0136***	(0.0031)
Work (ref= none)						
paid	0.0623***	(0.0199)	0.0530**	(0.0209)	0.00456	(0.0223)
family business	0.1190***	(0.0390)	0.0707*	(0.0407)	0.0421	(0.0443)
family farm	-0.0072	(0.0212)	-0.0866***	(0.0221)	-0.0083	(0.0244)
Owns farm land	0.0597**	(0.0246)	0.0105	(0.0256)	-0.0584**	(0.0276)
Position (ref= only married woman)						
junior woman	-0.00490	(0.0262)	-0.0900***	(0.0274)	-0.0320	(0.0297)
senior woman	0.0252	(0.0273)	0.0307	(0.0286)	-0.0452	(0.0303)
Household split	0.0621**	(0.0281)	0.1500***	(0.0293)	0.2560***	(0.0318)
Survey (IHDS2=1)	0.0685***	(0.0142)	-0.00647	(0.0149)	0.2230***	(0.0166)
Constant	0.7470***	(0.0346)	0.9730***	(0.0362)	2.216***	(0.0389)
Observations	41,922		44,607		40,361	
Number of households	22,123		22,318		22,227	
R-squared	0.005		0.007		0.035	

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1