

Changing Family Attitudes to Promote Female Employment[†]

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India's female labor force participation is 26 percent, one of the lowest in the world according to the International Labour Organization. Many women in India who want to work face opposition from family members. The family's concerns sometimes relate to the woman's physical safety on the job or during her commute, or the difficulty of arranging childcare. Other concerns stem from cultural norms about women's roles in society, with family members worried about stigma from the community if the woman works or about her "purity" being jeopardized if she interacts with men at work. Based on 2012 World Values Survey data, 63 percent of men and 48 percent of women in India believe that when jobs are scarce, men should have more right to a job than women (authors' analysis). In the United States, only 7 percent of men and 5 percent of women report that belief.

In this paper we study whether two light-touch, employer-led interventions can increase the support for female employment among young women's family members. Our setting is a private kindergarten provider, Hippocampus Learning Centers (HLC), that operates over 200 kindergarten centers across Karnataka, a state in south India. HLC's teachers are predominantly young women who reside in the same village as the center. HLC offers one of the few nonmanual jobs within the village, so it is an attractive job

option for relatively well-educated women who want to work but also want a short commute.

Social norms that restrict female employment nonetheless represent a challenge for HLC in recruiting, retaining, and training teachers. Our study enrolls current teachers, so retention and training are the relevant challenges we aim to address.

HLC faces a high rate of teacher turnover. For example, in 2016, 33 percent of HLC's teachers departed the organization. Turnover is costly to the organization because of the substantial upfront and ongoing investment in training its teachers, so it has a strong financial motive to increase retention. Some reasons for quitting seem beyond an employer's ability to address. For example, many women migrate to another village after marriage. However, family members' general attitudes about women working could be amenable to change through efforts by an employer.

Gender norms also hinder HLC's ability to train its teachers because of constraints on how much it can ask teachers to travel. To ensure it delivers a quality education, HLC provides extensive ongoing training to teachers and cannot do so cost-effectively if trainings are conducted at the village level. Instead, they are held in a larger town, and teachers from several centers from nearby villages attend. However, families are often hesitant to allow teachers to spend the night outside of the village, so HLC must restrict each training to a single day.

Discussing these challenges with HLC prompted us to study whether firms such as HLC that have financial incentives to alter restrictive gender norms can be effective in doing so, in this case by changing families' attitudes.

I. Intervention Design

We aimed to design and test interventions that were low cost, the type of intervention that our partner or other firms might undertake. Improving gender norms is not the core mission

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of HLC or of most firms that might benefit from and be well-positioned to encourage female employment. Thus, investment in this area by HLC or other employers will likely be in relatively light-touch efforts. We also aimed for scalability, so sought low marginal costs.

To develop the interventions, we attempted to adhere as closely as possible to a process that a typical firm operating in rural India might use. We first conducted focus groups with HLC human resources staff and successful teachers to identify sources of employment-related tension between teachers and their families and brainstormed potential solutions that could be easily scaled and would place minimal demands on firm resources. These discussions led us to design and evaluate two interventions.

First, we created two “family-orientation” videos, one of which highlighted the nonmonetary benefits of employment (e.g., personal growth) and the other of which addressed common concerns, mostly around safety. The videos featured testimonials from experienced teachers and their families, for example a father talking about how his daughter became more self-confident through working or a teacher explaining that she has never felt unsafe while attending trainings. The theory of change for this intervention was that family members would be more supportive if they heard first-hand accounts of the personal growth that employment can confer and had a more concrete picture of what teachers are doing at trainings and, more generally, on the job. To create the videos we hired a local professional videographer who primarily produces videos for clients in the social services sector in Karnataka. One promising feature of this intervention is that its marginal cost of deployment after development is close to zero, as the videos could be incorporated into HLC’s existing recruitment and orientation processes.

Second, we prompted a conversation between the teachers and their family members about the pros and cons of her working. This strategy was inspired by the current practices of HLC’s human resources staff. When they hear from a teacher that her family has concerns about her work (for example about travel for training), they send a staff member to help mediate between the teacher and the family and to provide reassurances that the teacher will be safe. We adapted this idea by having a surveyor guide a conversation by asking open-ended questions,

but otherwise being a bystander and not contributing opinions or facts to the conversation. The theory of change was that if family members were underestimating the benefits of employment to the teacher, or overestimating the physical risk, or have grievances about the impact of the teacher’s employment on the family, then such conversations would give dedicated time to correct misperceptions and come to agreements about how to address sources of discontent before they reached a critical level. While guided conversations have a higher marginal cost of delivery than the videos, we viewed it as still feasible for HLC to include them in their orientation process if such conversations proved sufficiently successful at minimizing future demands on human resource management.

II. Research Design

We recruited a sample of 171 teachers to participate in the study. We focused on teachers who had recently started at HLC, specifically between April 2015 and July 2017. Because we were concerned about statistical power, we imposed minimal additional eligibility criteria; the teachers and their family members needed to speak Kannada (in order to understand both our surveyors and the videos), and it had to be possible to survey the teacher and a male family member during daylight hours. After screening the teachers, we asked them to identify the male and, if possible, female family member in their household who was most influential in their decision of whether to work.¹ This resulted in a final sample of 171 teachers, 171 male family members, and 124 female family members. For unmarried teachers, the family members she indicated were usually her parents, while married teachers most often indicated their husbands and mothers-in-law. At baseline, the median age of teachers was 25 years, 57 percent were married, and 49 percent had at least one child. The majority of teachers had neither a mother nor a sister who had ever been employed before.

We then cross-randomized participants to receive the video intervention or not, and to receive the conversation intervention or not. The

¹ We would have preferred to include all family members within this choice set; however, it would have been logistically infeasible to travel to additional villages to survey non-household family members.

video intervention arm was further randomized into two sub-treatments; half watched both videos and half watched only the video about the benefits of working. We pre-specified that we would pool these sub-treatments in the main analysis. Because our focus is on shifting family members' views, and the video might also shift the teachers' views, half of the teachers in the control group for the intervention saw the videos.² We randomized at the center level to avoid potential spillovers; in practice, in most centers there was only one teacher in our sample.

Next, we administered a baseline survey and implemented the interventions during November 2017. Finally, we resurveyed approximately 96 percent of the sample in an endline survey in December 2018.³

III. Regression Specifications

We examine the impact of the interventions on four types of outcomes. The first is the employment status of the teacher. We separately consider whether the teacher is employed anywhere and whether she is employed at HLC because while the former is probably the outcome of interest from a societal perspective, the latter is what provides firms the profit motive to invest in shifting norms.

The other three outcomes are attitudes toward female employment and empowerment, which we measure separately for teachers and family members. In each case, we construct an index based on several survey questions about attitudes. The first index measures support for women's employment in general. For example, it includes the level of agreement with "Parents should encourage their daughters to find jobs." The next assesses support for and lack of concern about the specific teacher's employment. This is distinct from the previous measure because families might agree that female employment is acceptable in principle, but still find the teacher's current situation unacceptable. The last

index assesses support for female empowerment in a general sense. For example, one component is how much influence the respondent believes a wife should have relative to her husband in making household decisions. All indices are generated as the first component of a principal components analysis and then standardized to the endline mean and standard deviation of the respondents that neither saw a video nor had a conversation.

The attitude indices are constructed such that an increase corresponds to greater support for female employment and empowerment. Thus, we hypothesized that the interventions would increase all of the outcomes.

To maximize statistical power in light of the smaller than ideal sample size, we pre-specified that we would pool across treatments rather than also estimating the interaction between treatments. We estimate equations 1 and 2 to measure each intervention's impacts, with the predictions, $\tau_1 > 0$ and $\tau_2 > 0$:

$$(1) \quad y_{ij} = \alpha_1 + \tau_1 \text{Video}_{ij} + \beta_1 X_{ij} + \epsilon_{ij},$$

$$(2) \quad y_{ij} = \alpha_2 + \tau_2 \text{Conversation}_{ij} \\ + \beta_2 X_{ij} + u_{ij}.$$

To further increase power, we use the double Lasso approach of Belloni, Chernozhukov, and Hansen (2014) as implemented by Ahrens, Hansen, and Schaffer (2018) to choose control variables for each equation. This approach allows us to search over a wide range of possible controls without needing to correct for multiple hypothesis testing. Essentially, the method uses Lasso to predict both the outcome and the treatment variable and then includes the variables chosen for either prediction in a final OLS regression. We choose our controls from a large set of baseline variables including demographics, baseline attitudes, and previous employment history, and their interactions with an indicator for whether the teacher was married at baseline.

IV. Results

Due to sample size limitations, the impacts of the intervention are less precisely estimated than would have been ideal; however, the point estimates consistently fail to show a positive effect of the interventions across outcomes.

²Specifically, the control group was divided into three groups with one half of teachers watching no videos, one fourth watching just the benefits of work video, and one fourth watching both videos. We find no evidence of any effect of the teacher watching the videos.

³We successfully resurveyed (and thus the regression analysis is based on) 166 teachers, 165 male family members, and 123 female family members.

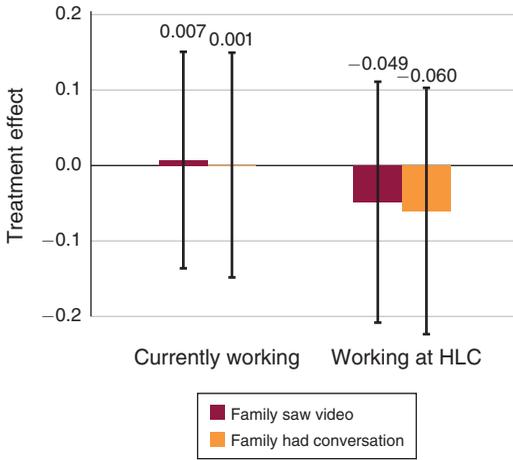


FIGURE 1. EFFECTS OF TREATMENT ON EMPLOYMENT

Notes: The figure shows coefficients from four separate regressions of an outcome variable on a treatment indicator, including controls chosen by double Lasso. The outcome is labeled below the horizontal axis; the bar color indicates the treatment. Error bars show 95 percent confidence intervals with standard errors clustered at the center level.

Figure 1 plots the estimated treatment effect of each intervention on the teacher’s employment status with 95 percent confidence intervals. Neither intervention seems to have affected total employment, and the point estimate for being employed at HLC is actually negative.

It might be especially difficult to detect changes in employment because it is a binary measure influenced by many factors. To assess whether the interventions had impacts on more continuous inputs into the employment decision, we next examine the teachers’ and family members’ attitudes. Figure 2 shows that the intervention does not seem to have had an effect on these outcomes for teachers, male family members, or female family members. While imprecisely estimated, most of the coefficients in fact suggest a negative effect.

V. Conclusion

We find no evidence that the two interventions we study had the desired effects of increasing female employment or teachers’ and family members’ support for female employment and empowerment. With the caveat of wide confidence intervals, these results cast some doubt on the effectiveness of shifting female employment

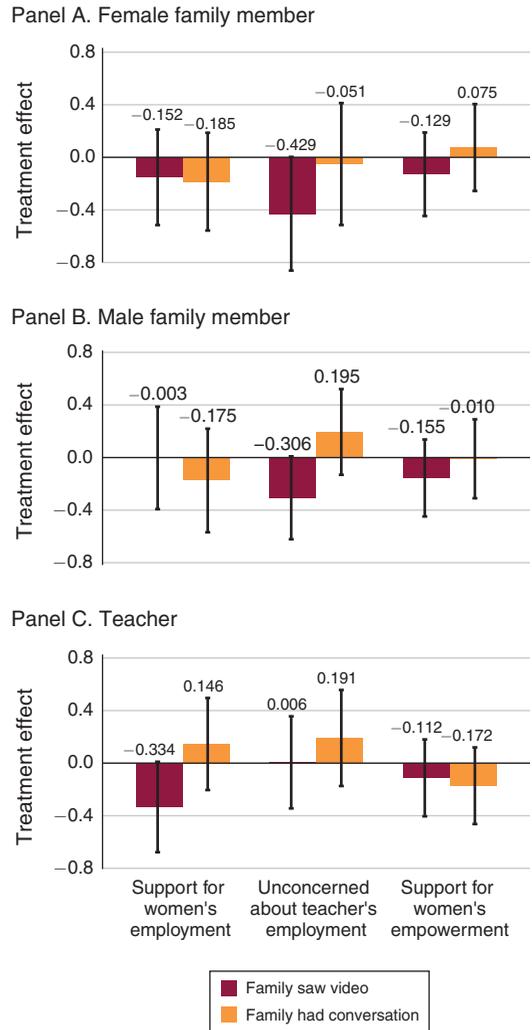


FIGURE 2. EFFECTS OF TREATMENT ON ATTITUDES

Notes: Bars show coefficients from regressions of the outcome labeled on the horizontal axis on the treatment indicator indicated by the bar color, including controls chosen by double Lasso. Error bars show 95 percent confidence intervals with standard errors clustered at the center level. Treatment effect units are endline standard deviations of the control group.

norms through light-touch, employer-led interventions. Even if firms have financial incentives to shift these norms, they might not be best placed to do so.

Shifting norms might require more sustained, community-level action. It is almost surely not the comparative advantage of employers to

undertake intensive interventions to change gender norms. Another consideration is that a firm would not capture all of the benefits of such an intervention; its efforts might have a lifelong impact on someone who only stays with the firm for a short time.

This reasoning does not mean we should completely discard the possibility of a role for employers in shifting gender norms. For example, there are several organizations in the United States that encourage a greater presence of women in STEM fields, funded by multiple firms that employ STEM workers. This approach allows firms with a profit motive to expand the STEM-capable labor force to overcome their collective action problem. It is possible a similar model could be effective in shifting norms about female employment in areas with low female labor force participation.

It is also possible that the most effective way these firms can shift norms is simply by pursuing their core missions. Providing employment opportunities for women in areas with low female labor force participation could be doing more to shift norms than the firms could achieve through a direct campaign. The additional women their jobs draw into the labor force

might serve as role models for other women and de-stigmatize female employment. The experience of being employed could also help a woman and her family members realize that working is compatible with a satisfying family life and brings unanticipated benefits. Indeed, there seems to be some evidence for this in our sample. While the majority of teachers reported that when they accepted the job their families were concerned about their working, they also reported that these concerns had diminished over time.

REFERENCES

- Ahrens, Achim, Christian B. Hansen, and Mark E. Schaffer.** 2018. "PDSLASSO: Stata module for post-selection and post-regularization OLS or IV estimation and inference." Statistical Software Components, S458459, Boston College Department of Economics.
- Belloni, Alexandre, Victor Chernozhukov, and Christian Hansen.** 2014. "Inference on Treatment Effects after Selection among High-Dimensional Controls." *Review of Economic Studies* 81 (2): 608–50.