

Do Traditional Institutions Constrain Female Entrepreneurship? A Field Experiment on Business Training in India

By ERICA FIELD AND SEEMA JAYACHANDRAN AND ROHINI PANDE*

What constrains the entrepreneurial choices of poor women? Do traditional institutions pose unique barriers to business growth and profitability for female-run enterprises?

The explosion of microfinance programs, which typically target poor female entrepreneurs, has drawn attention to these questions. Indeed, one view is that inadequate access to credit prevents women from undertaking high-return business activities. However, one recent empirical study finds low returns to capital in female-run micro-enterprises (Suresh De Mel, David McKenzie and Christopher Woodruff 2008).

Thus, another view is that the primary barrier to female entrepreneurial success is limited demand for rather than supply of credit, with poor women lacking high-return means of expanding their businesses. For instance, due to gender differences in education or business networks, women might be relatively uninformed about investment opportunities and untrained in basic cost-benefit analysis (Dean S. Karlan and Martin Valdivia 2008). A second possibility is that norms governing women's roles in society limit women's perceptions about what is achievable in the workplace.¹ Even differences

in knowledge might be rooted in social norms about what females are taught.

This paper explores how traditional religious and caste institutions in India that impose restrictions on women's behavior influence their business activity. Our analysis makes use of a field experiment in which a randomly selected sample of poor self-employed women were trained in basic financial literacy and business skills and encouraged to identify concrete financial goals. The sample is relatively homogeneous in terms of socio-economic status (e.g., education). However, differences in religion and caste mean that they face very different traditional restrictions on mobility and social interactions. Muslim women face the most restrictions. Among Hindu women, upper castes (hereafter, UC) face significantly more restrictions than scheduled castes (hereafter, SC), the lowest group in the caste hierarchy.

In general, the returns to entrepreneurship should be highest for those least fettered by conservative social norms. However, this need not be the case for an intervention that primarily influences women's knowledge of business practices and aspirations. If traditional norms about gender roles can be challenged, or if they mainly work to limit women's exposure to and knowledge of business opportunities, then returns from training may be higher for women from more restrictive social groups.

Our results provide some support for both theses: Among Hindu women, training increased borrowing and business income for those facing more restrictions, i.e., UC women. However, Muslim women failed to benefit from the training program. We interpret these patterns as suggestive of a non-monotonic relationship between social restrictions and the ability to benefit from business training.

* Field: Harvard University, efield@latte.harvard.edu. Jayachandran: Stanford University, jayachan@stanford.edu. Pande: Harvard University, rohini_pande@harvard.edu. We thank Manasee Desai, Katherine Durlacher, Sarah Moshary, Natalia Rigol, Mallika Thomas, and Divya Varma for excellent research assistance, the staff of SEWA for collaboration and the Exxon Mobile Educating Women and Girls Initiative (administered through WAPP/CID at Harvard), Center for Microfinance and ICICI for logistical and financial support.

¹Another possibility is that women are unable to pursue high-return activities because low bargaining power in marriage limits their control over finances.

I. Gender norms in India

The Hindu caste system developed as an extremely hierarchical social system. Its defining principles include the ideas of purity and pollution. UCs maintain purity by avoiding sexual relations, marriage and, in extreme cases, contact with lower castes. Premised on men being a source of pollution, restrictions are placed on women to limit contact with men other than their husbands. Requirements include that a married woman remain veiled, not remarry if widowed, not interact with older men, and have restricted mobility outside of her house. These norms – particularly the latter two – significantly restrict female labor force participation.

Maintaining purity by minimizing contact with lower castes is less relevant for SCs, who rank low in the hierarchy. In addition, greater poverty implies increased reliance on female wage-earning (Karin Kapadia 1997). As a result, SC women face fewer social restrictions and, by virtue of being independent earners, enjoy greater financial autonomy and increased control over household financial decisions relative to UC women (Joan P. Mencher 1988). Notably, these restrictions on female autonomy among UCs are not limited to the wealthy (Mukesh Eswaran, Bharat Ramaswami and Wilima Wadhwa 2009).

Relative to Hindus, Muslims in India place more restrictions on women’s contact with people outside but not within the sphere of kinship. Because Muslim women are entitled to a share in family real estate, controlling their relationships with males outside the family can be crucial to the maintenance of family property and prestige.

II. Intervention and study design

We conducted a business training intervention in conjunction with SEWA Bank, which is based in the city of Ahmedabad in western India. Its 170,000 member-clients are primarily poor women who work in the informal sector (for example as incense-stick makers, tailors, and vegetable vendors). SEWA Bank offers these women a wide array of financial products. All clients are required to have a savings account, and roughly a quarter of clients have ever taken out a loan from SEWA Bank.

For several years, SEWA Bank has run a five-day financial literacy training. The curricu-

lum, developed by Freedom from Hunger and used widely around the world, covers basic accounting skills, interest rates and life-cycle planning. It emphasizes financial prudence and encourages women to avoid excess debt, save more and reduce “frivolous” spending. More recently, SEWA Bank started a second five-day course that teaches business skills such as cost reduction, investment, and customer service.

In collaboration with SEWA Bank, we designed a streamlined two-day training module that combined elements of their financial literacy and business skills curricula, and added new material focused on aspirations. The aspirations component included a short film showcasing successful SEWA members who used good financial practices to bring themselves out of poverty. As homework after the first day of training, participants filled out a worksheet identifying a financial goal they wanted to achieve over the next six months, and on the second day broke it down into smaller short-run steps.

For the experiment, 636 women were randomly drawn (in two phases) from the pool of SEWA Bank customers ages 18 to 50 who were both active savers within the past two years and employed. Two thirds of these women were randomly assigned to the treatment group.²

Women assigned to the treatment group were approached in their homes and recruited to attend a particular training session with seven other participants at the SEWA branch nearest to them. For data collection and analysis purposes, women in the control group were also assigned but not recruited to a particular training session at their nearest SEWA branch, allowing us to cluster standard errors by session.

Our analysis sample comprises the 597 women who were successfully surveyed at follow-up and could be categorized into sub-castes based on surname.³ We categorized women into three broad social groups: Muslims, Hindu SCs, and Hindu UCs (non-scheduled castes including other backward castes). In addition, we scored how restrictive each Hindu and Muslim

²The randomization was stratified by sampling phase and SEWA branch.

³The survey attrition rate (5.3%) is similar across experimental groups. We were unable to assign caste to seven women.

sub-caste was in regard to five norms governing women's behavior: ability to socialize alone, requirements to cover the face or wear a veil, ability to speak directly to elders, ability to leave the house or neighborhood alone, and ability to remarry. We created an index ranging from 0 to 5 equal to the number of norms for which the sub-caste was highly restrictive.

Figure 1 shows the value of this index across the three social groups in our sample. SC women face the fewest restrictions, followed by UC and Muslim women. UCs are 50% more likely to face severe social restrictions as SCs, and Muslims, in turn, have over twice the rate of severe restrictions as UCs.

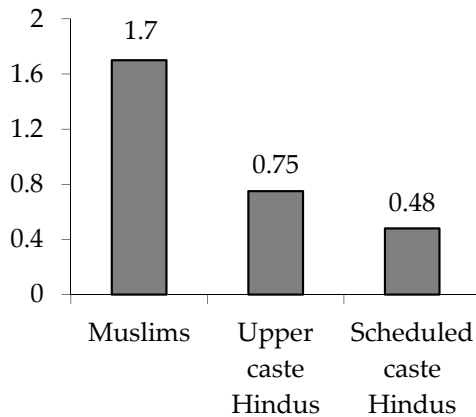


FIGURE 1. NUMBER OF SOCIAL RESTRICTIONS

The intervention trained 289 women in 57 two-day training sessions conducted from September 2006 to April 2007. Program take-up was high, with over 70% of those invited choosing to attend. SCs, the least restricted group, were nearly one third more likely to attend the training than Muslims and UCs. The results on take-up, which are also the first stage of our treatment-on-the-treated (TOT) results, are reported in the online appendix.

Baseline characteristics are balanced across the control and treatment groups (see online appendix). Table 1 compares baseline characteristics across social groups. Women in our sample are strikingly homogenous across social groups:

Average education and family size are almost identical for Muslims, UCs and SCs, and SC women have higher household income and are slightly *more* likely to own a business, though the differences are statistically insignificant.

TABLE 1—BASELINE CHARACTERISTICS

	UC	SC	Muslim
Education	6.33	6.62	6.36
Income	4852.6	5694.6	5189.5
Household size	5.25	5.25	5.42
Owens business	0.27	0.31	0.26
N	346	70	181

Notes: Asterisks denote significant differences in means between the group and UCs. In all tables * denotes significant at 5% level ** significant at 1% level *** significant at 0.1% level.

III. Effects of business training

Our estimation strategy exploits the random assignment to treatment, i.e., being invited to a training session. We examine the impact of attending the training on economic outcomes, instrumenting for attendance with whether the participant was in the treatment group. This IV specification provides TOT estimates. We separate out the differential effect of training by social group by interacting the training dummy with indicators for being a SC and a Muslim. Outcome variables come from a survey conducted on a rolling basis four months post-training.

The results in Table 2 reveal that training led to a significant increase (13 percentage points) in the likelihood of taking out a loan within four months of training (*Borrowed*) among UCs, who are the omitted category. UCs who attended training took out loans at nearly twice the rate as UCs in the control group. Meanwhile, we cannot reject that there was no effect on borrowing among SC or Muslim women.

When we estimate the training effect on the likelihood that a woman reported problems managing her debt, we find no overall effect and no differential effects across social groups (see appendix). Administrative bank data on loan default confirm this result. Thus, the training

does not seem to have induced UC women to borrow beyond their means.

TABLE 2—TREATMENT EFFECTS ON FINANCES

	Borrowed	Savings
Trained	0.13*	-315.32
	(0.07)	(492.83)
Trained×SC	-0.16	444.71
	(0.14)	(540.02)
Trained×Muslim	-0.14	317.51
	(0.11)	(630.07)
SC	0.04	-298.12
	(0.10)	(301.87)
Muslim	0.04	-46.50
	(0.06)	(333.99)
Mean of dep. var.	0.17	277.59

Notes: Standard errors clustered by training session. Regressions include SEWA branch, treatment month, and sampling phase fixed effects. Mean of dependent variable is for UCs in the control group. N=597. See the appendix for further details. These notes also apply to Table 3.

Savings during the past month (*Savings*, measured in rupees) show no significant differences across treatment and control, though the point estimates again go in opposite directions for UCs compared to SCs and Muslims, with UCs substituting away from saving, consistent with their increased borrowing.

To more directly measure the effect of training on business activity, in Table 3 we examine the women's personal business activity, including an indicator of whether she reports any personal labor income over the past week (*Any Income*) and an indicator of whether she reports talking to family about business plans. Although we sampled on being employed, many of the women do not report regular earnings: in the control group, only 80% of women report any earning in the past week.

We observe a positive and significant effect of the training on business income among UCs only, suggesting that the new loans were put toward business investments. The estimated effect of training on earning any business income is highly significant among UCs, indicating a 25% increase in the likelihood that a woman engages in labor market activity. When we look at

amount of income earned over the past week, the point estimates suggest an increase of around 30%, but the results are too imprecise to draw conclusions. Together with the loan results, this pattern suggests that the training encouraged UCs to start or expand their microenterprises. Further supporting these results, we find that training led UCs but not other women to talk more frequently with family members about business plans (*Talk Business*).

TABLE 3—TREATMENT EFFECTS ON BUSINESS

	Any Income	Talk Business
Trained	0.19**	0.17*
	(0.09)	(0.10)
Trained×SC	-0.37***	-0.51***
	(0.14)	(0.15)
Trained×Muslim	-0.22*	-0.35***
	(0.12)	(0.12)
SC	0.25***	0.35***
	(0.08)	(0.09)
Muslim	0.09	0.18**
	(0.07)	(0.08)
Mean of dep. var.	0.79	0.69

IV. Discussion

Given the similarity in education, household wealth and types of businesses across social groups, the difference across groups in their response to training is stark. It is made even more striking by the fact that data collected during training reveal identical patterns of business and financial goals across social groups.

One possibility is that imbalances in treatment assignment *within* social groups are responsible for the observed patterns. However, while there is higher baseline business ownership among UC treated relative to control women and the opposite is true for Muslims and SCs, treatment differences persist even when we control for this (and/or other) observables (see appendix).

Another possibility is that differential treatment effects reflect higher program take-up among SCs. The training may have attracted a selected sample of UCs who were especially responsive to training. However, observable char-

acteristics appear to be equally balanced across caste among the subset of women who were treated relative to the ITT sample, indicating that heterogeneity in take-up does *not* seem to explain the heterogeneous treatment effects (though we cannot rule out unobservable differences across groups). Furthermore, take-up cannot explain observed differences between UCs and Muslims, who had similar attendance rates.

If the explanation for UC women being especially responsive to training is that social restrictions caused them to have knowledge deficits or the training allowed them to challenge social norms that were distorting their business practices, then an important question is why Muslims, who face the highest degree of restrictions, did not respond more to the training than SCs did. One possibility is that, although restrictions are greater for the average Muslim woman than the average SC woman in Ahmedabad, there is little difference in restrictions across Muslim and SC members of SEWA Bank. Unfortunately, without individual-level data on restrictedness, we cannot test this story.

Another possibility is that Muslims in Ahmedabad, which has a history of religious tension, face considerable discrimination in the marketplace, which business training could not undo. Alternatively, religious restrictions on interest-bearing loans might explain why demand for credit did not increase among Muslims. However, this explanation is unlikely given that the rate of borrowing is similar across Muslims and Hindus in the control group.

A final possibility worth mentioning is that, although Muslim women in this setting face a high degree of social restrictions, for the norms that most directly affect business activity – ability to leave the home alone and talk to strangers – we find that the rate of being *highly* restricted is in fact lower for Muslims than UCs. However, for these two norms, only about 5% of women in our sample were coded as highly restricted, and *average* restrictedness is still considerably higher among Muslims than UC or SC Hindus.

Bearing in mind these caveats, a *prima facie* explanation for our results is non-monotonicity in the effect of social restrictions: The training helped women whose businesses had been held down by social restrictions, but women subject to extreme restrictions had too little agency

to easily change their aspirations or activities. Even with more knowledge or higher aspirations, the most restricted women might face too many social strictures to avail themselves of entrepreneurial opportunities.

Our business counseling program significantly reduced the business income gap between social groups. Thus, another reading of our results is that modernization – in the absence of interventions that counteract traditional norms – may yield greater benefits for women lower in the caste hierarchy, a point also made by Kaivan Munshi and Mark R Rosenzweig (2006). This view, however, assumes that gender norms for lower castes will continue to be less restrictive. If, instead, modernization heightens *sanskritization* – the desire of lower castes to emulate upper castes – and SCs increasingly adopt the gender norms of UCs, then economic growth may fail to emancipate women to the same extent.

REFERENCES

- De Mel, Suresh, David McKenzie, and Christopher Woodruff.** 2008. “Returns to Capital in Microenterprises: Evidence from a Field Experiment.” *Quarterly Journal of Economics*, 123(4): 1329–1372.
- Eswaran, Mukesh, Bharat Ramaswami, and Wilima Wadhwa.** 2009. “Status, Caste, and the Time Allocation of Women in Rural India.” mimeo, University of British Columbia.
- Kapadia, Karin.** 1997. “Mediating the Meaning of Market Opportunities: Gender, Caste and Class in Rural South India.” *Economic and Political Weekly*, 35(52): 3329–3335.
- Karlan, Dean S., and Martin Valdivia.** 2008. “Teaching Entrepreneurship: Impact Of Business Training On Microfinance Clients and Institutions,” mimeo, Yale University.
- Mencher, Joan P.** 1988. “Women’s Work and Poverty: Women’s Contribution to Household Maintenance in South India.” In *A Home Divided*, ed. Daisy Dwyer and Judith Bruce. Stanford, CA:Stanford University Press.
- Munshi, Kaivan, and Mark R Rosenzweig.** 2006. “Traditional Institutions Meet the Modern World: Caste, Gender and Schooling Choice in a Globalizing Economy.” *American Economic Review*, 96(4): 1225–1252.