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Sample Size 300 female entrepreneurs

Research Implemented by IPA Yes

Entrepreneur Well-Being and Firm Outcomes in Urban Bangladesh

Abstract

Female entrepreneurs in developing countries often face significant stress from the combination of long working hours, family responsibilities and barriers to work that requires being away from home^{1,2}. This randomized evaluation studied whether targeting women's ability to cope with such daily stresses could help improve well-being and business outcomes. Results show short-term effects from cognitive-behavioral therapy on stress levels among female entrepreneurs, and a more pronounced effect among entrepreneurs operating in sectors with a low concentration of female entrepreneurs.

Policy Issue

Female entrepreneurs in the developing world own a third of all small and medium sized enterprises (SMEs), but their firms tend to grow more slowly than men's and are more likely be concentrated in low value-added sectors, such as sales, retail and other services^{3,4}. Prior research suggests that anxiety and depression reduce work productivity, but the impact of well-being improving interventions on female entrepreneurship is not well understood^{5,6}. Recent studies have shown that cognitive-behavioral counseling programs can improve economic outcomes in working environments⁷. This study evaluated if offering female entrepreneurs cognitive behavioral therapy (CBT) focused on priority-setting exercises and relaxation techniques could help lower stress levels and business outcomes.

Context of the Evaluation

In Bangladesh, more than 97 percent of enterprises employ less than ten workers, with nearly 79 percent employing three workers or less⁸. Across the country, women own less than



half a percent of all businesses. Even in Dhaka, the city with the highest concentration of educated and working women, the percentage of female-owned firm is less than one percent. This project targets female owners of SMEs selling or trading fashion-rich, personal effects, wear and consumption goods in Dhaka Division. A recent census showed that one out of three female-owned firms in the country belonged to this sector⁹.

Details of the Intervention

Researchers partnered with the Bangladesh Women Chamber of Commerce and Industry (BWCCI) to evaluate whether a CBT program had any effects on female entrepreneur wellbeing and on firm performance. The research team measured the immediate and the sixmonth effects on entrepreneurs' well-being (self-reported levels of stress) and business outcomes (business assets, profits and hours worked). 300 female entrepreneurs were randomly offered one of two programs:

- 1. **CBT Program:** This program covered priority-setting, time-allocation exercises, problem-solving skills, mediation and relaxation exercises.
- 2. **EL Program (Active comparison group):** An equal number of therapy sessions were offered to EL trainees. This type of counseling consisted of listening and repeating the situations and feelings shared by the patient in different words, both factual and emotional, without providing an interpretation.

Both programs took place over ten weeks, during five two-hour sessions, and were hosted by BWCCI. Prior evaluations of the efficacy of CBT have used active comparison groups based on EL.

Results and Policy Lessons

- *Short run effects*: CBT led to a significant reduction in stress levels (or a reduction of .33 standard deviations in the stress index) compared to the EL group.
- *Long run effects*: Six months after the treatment, entrepreneurs in the CBT group still showed lower levels of stress relative to baseline, but this longer-term effect was smaller than immediately after treatment.
- *Effects on firm inputs and outcomes*: Neither program led to significant effects at the firm level, whether in the long or short run. Similarly, neither intervention led to differences in the number of hours worked or number of employees.

Among entrepreneurs in sectors with a low concentration of women (e.g., electronics, food processing), CBT participants reported even lower stress levels immediately after treatment, compared to their peers in the EL group, and to other CBT recipients operating in female-dominated industries. Six months later, firm profits also increased among the CBT recipients operating in sectors with low concentration of women.

These results support the notion that encouraging entrepreneurs to devote more attention to their goals and operations can have effects on firm performance in select sectors.



Nonetheless, it remains difficult to pinpoint the exact personality traits and skills necessary to elevate firm performance among female entrepreneurs.

Sources

1. Asian Development Bank. *Desk review of women's time poverty and infrastructure in Asia and the Pacific*. Mandaluyong City, Philippines: Asian Development Bank, 2015

2. UN Women 2015. Progress of the World's Women 2015-2016. Transforming Economies, Realizing Rights. New York, US. UN Women

3. IFC "Strengthening Access to Finance by Women-Owned Enterprises in Developing Countries." A report prepared by IFC on behalf of the Global Partnership of Financial Inclusion (2011) Page 3

4. Cirera, Xavier; Qasim, Qursum. 2014. *Supporting growth-oriented women entrepreneurs : a review of the evidence and key challenges*. Innovation, technology and entrepreneurship policy note; no. 5. Washington, DC ; World Bank Group. P.

4 http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2016/05/18/09 0224b08434114f/2_0/Rendered/PDF/Supporting0gro0e0and0key0challenges.pdf

5. Gender differences in anxiety disorders: Prevalence, course of illness, comorbidity and burden of illness." Journal of Psychiatric Research. Pp 1027-1035

6. Chopra, Prem. "Mental health and the workplace: issues for developing countries." International Journal of Mental Health Systems 3, no. 1 (2009) Page 4

7. Richardson, Katherine M., and Hannah R. Rothstein. "Effects of occupational stress management intervention programs: a meta-analysis." Journal of occupational health psychology 13, no. 1 (2008). Page 72

8. The Bangladesh District Economic Governance Index (GEI 2010). Asia Foundation, 2010. P. 6

9. Women Entrepreneurs in SMEs: Bangladesh Perspective. SME Foundation 2015 (Forthcoming)

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