

# ICC

## Female entrepreneurship and professional networks

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- Female-owned businesses continue to be smaller and less profitable than male-owned firms.
- We conducted a randomised controlled trial (RCT) in Ghana on a sample of 1,771 growth-oriented female entrepreneurs to investigate the effect of online networking groups on firm performance.
- Access to WhatsApp networking groups leads to greater innovation, better business practices, and higher profits by 26%.
- However, three-year follow-up data reveal limited impacts on long-term firm outcomes.
- Our findings reveal the potential and limitations of low-cost, light-touch interventions in fostering long-term business growth for female entrepreneurs.





#### Gender gap in entrepreneurship

Despite being the only region globally with more female entrepreneurs than men, most female-owned businesses in sub-Saharan Africa are microenterprises. In addition, female-owned businesses earn 34% lower profits than male-owned ones. Therefore, understanding female entrepreneurs' constraints is vital for fostering economic growth.

Across many settings, interfirm relationships and access to professional networks are key determinants of business success (Ashraf et al., 2019; Kanter, 1994; Cai & Szeidl, 2017). Building business networks and forming collaborations can help firms adopt new business practices, expand market reach, innovate, and gain new customers (Kanter, 1994; Cai & Szeidl, 2017). However, due to gender norms and cultural expectations, female entrepreneurs often face social constraints restricting their participation in business-related activities, leading to smaller networks and fewer connections to other firms (World Bank Group, 2019). As a result, women are more likely to rely on their friends and family members when doing business and have limited access to high-quality entrepreneurs with whom to network.

Increasing networking opportunities may be an effective solution to closing the gender gap in entrepreneurial performance. However, past interventions aiming to expand business networks have primarily focused on male entrepreneurs and relied on in-person networking activities. This raises questions about scalability and generalizability to women, given that women likely face additional constraints such as limited mobility and household responsibilities that make it harder for them to engage in traditional networking settings. Online networking offers a potentially flexible, accessible solution, allowing female entrepreneurs to build professional relationships without extensive travel. Yet, evidence is limited on how creating online interfirm networks can support the growth of female-owned businesses and close the gender gap in entrepreneurship.

### Role of networking for female entrepreneurs in Ghana

We conducted a field experiment in Ghana to study how access to online networking opportunities and legal support affects firm performance and business collaborations. We focused on a sample of 1,771 female entrepreneurs who applied to a COVID-19 Stimulus Fund offered by our partner NGOs—the Women's Empowerment and Investment Group (WEIG), Annan Capital Partners (ACP), and GUBA Foundation—to support high-growth femaleowned enterprises. It is important to note that while most of the firms in our

sample are small microenterprises, they are more growth-oriented than the typical small firm due to the application process. Over 30% of the women in our sample hold college degrees, and 80% of the firms are registered.

#### **Details of the intervention**

We randomly assigned female entrepreneurs to two treatment arms and a control group. In the first treatment arm, women are assigned to WhatsApp networking groups of eight. Each week, one member is assigned to meet virtually with another group member. In addition, a directory of all entrepreneurs in the treatment group with their contact information was made available to facilitate the networking process. This treatment aims to expand the business networks of participants and increase their opportunities for business collaborations. In the second treatment arm, we enrich the online networking groups with legal support. The additional legal support aims to reduce contracting frictions, potentially increasing business collaborations between entrepreneurs who meet on the platform. The legal support entails weekly video lessons by a local corporate lawyer that discuss the risks of collaborations and ways of mitigating these risks through the use of written agreements and effective communication. Entrepreneurs can also consult the lawyer individually during the four-month intervention period.

The intervention was implemented between February and June 2021. A post-intervention midline survey was conducted between August and October 2021, and a one-year follow-up survey was conducted between April and July 2022. A final three-year follow-up survey was conducted in July and August 2024.

### Networking groups improve firm outcomes

We find that access to online networking groups significantly impacts firm outcomes. First, one year after the intervention, the treatment groups increased business innovation by 33 to 36%, as measured by the likelihood of introducing changes to their businesses, such as new products or new ways of marketing (Figure 1).

Second, we document an improvement in business practices driven by a positive effect on marketing and financial planning practices. For example, we find increases in firms' use of advertisement and special offers and their likelihood to review financial performance and set sales targets.

Third, the treatment groups also experience a 26% increase in business profits (Figure 2). Quantile estimates show that the effects are not homogeneous across businesses (Figure 3). Instead, a significant increase in profits emerges

above the 60th percentile for both treatment groups, suggesting that firms in the upper tail of the distribution benefited more from the intervention.

FIGURE 1: Effects on innovation

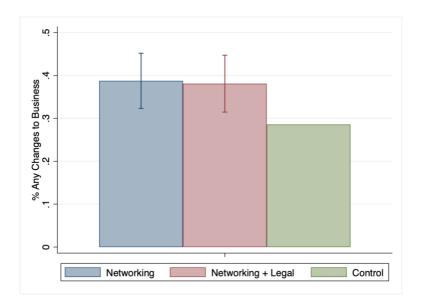


FIGURE 2: Effects on monthly profits

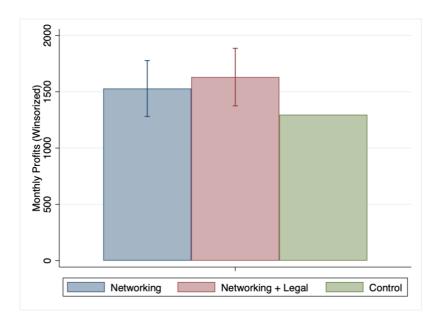
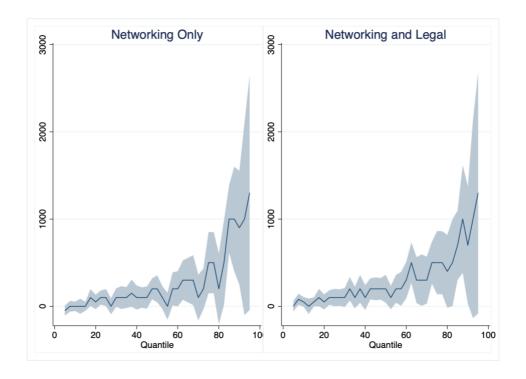


FIGURE 3: Distributional effects on monthly profits



### The role of business collaborations and peers

Why did access to online networking groups lead to an improvement in business outcomes? We find that changes in business ambitions, entrepreneurial self-efficacy, get-ahead attitudes, or measures of female empowerment cannot explain the results. Instead, we show that two important channels can explain the results.

First, we find that the intervention changed the nature of business collaborations. Entrepreneurs in the treatment group reduced collaborations with friends and family, choosing instead to work with business network members. This shift comes from a change in beliefs about the quality of potential collaborators, with treated entrepreneurs perceiving a higher return to collaborating with someone external to their friends and family network.

Consistent with the change in beliefs, the treatment group also exerted greater search effort and are more likely to contact and meet firms external to their existing friends and family network.

Second, we show that peer effects play a key role. Participants randomly assigned to WhatsApp groups with more college-educated entrepreneurs with better baseline business practices and higher baseline sales and profits are more likely to innovate, improve business practices, and have higher profits. We also find that the entrepreneurs' businesses in groups with a larger share of peers from the same industry are less likely to show improvement, suggesting

that networking with high-quality entrepreneurs with diverse experiences can accelerate firm growth and innovation.

#### Did the effects persist?

Three years after the intervention, we find limited long-run positive impacts on firm innovation, business practices, or profitability. We also do not find any impacts on firm survival or collaborations. In fact, after three years, the shift in the business network of treated entrepreneurs towards people outside their immediate circle of friends and relatives does not persist, and only 3% of the treated entrepreneurs are still in touch with those they met through the intervention. While a light-touch intervention can be effective, these results suggest that the benefits of the intervention may not persist without sustained support or ongoing engagement, and entrepreneurs revert to relying on their pre-existing networks, which may be less conducive to new business ideas or practices.

### **Policy implications**

Our cost-benefit analysis reveals that the intervention was highly cost-effective. On average, treated entrepreneurs saw a one-year profit increase of 4,140 GHS (approximately USD 690). Given the limited long-term effects observed in the three-year follow-up, we conservatively assume that these profit gains last only one year. The intervention's costs totalled 283 GHS (approximately USD 47) per participant, resulting in a cost-benefit ratio of 14.6, meaning that every dollar spent generated USD 14.60 in profits. Despite the short-term impact, these findings highlight the substantial return on investment from a low-cost, light-touch networking intervention.

Our study highlights the important role of business relationships in closing the gender gap in business outcomes. The findings suggest several important considerations for interventions:

- Promoting Networking Opportunities: Our findings show that
  expanding professional networks for growth-oriented female
  entrepreneurs can improve business outcomes such as innovation,
  business practices, and profits.
- Online, Scalable Interventions: The high cost-benefit ratio of our intervention highlights the potential for low-cost, light-touch programs to significantly improve female-owned business performance in low- and middle-income countries. Governments and organisations should consider leveraging digital platforms to facilitate networking opportunities, making these resources more accessible to a larger

number of entrepreneurs. The fact that such interventions can be carried out remotely can also enable reach to women entrepreneurs in rural or remote areas, thus potentially addressing regional disparities in access to business resources.

- The Need for Sustained Engagement: Our findings emphasise that
  while short-term gains can be substantial, these benefits often diminish
  over time without ongoing support. Future interventions should consider
  incorporating follow-up activities, refresher programs, or sustained peer
  engagement platforms to ensure that the connections made through
  such programs continue to deliver value over the long run.
- Incorporating Diversity: The results indicate that a diverse network
  contributes to business success, especially when it includes highquality entrepreneurs with different experiences. Policies and programs
  should be developed to foster interfirm relationships and collaborations
  between diverse entrepreneurs.

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