ADDRESSING GENDER-BASED OCCUPATIONAL SEGREGATION: EXPERIMENTAL EVIDENCE FROM THE REPUBLIC OF CONGO

Authors: Marine Gassier, Rachael S. Pierotti, Léa Rouanet and Lacina Traore

KEY MESSAGES

- Gender-based occupational segregation — the fact that men and women are typically concentrated in different occupations and economic sectors — contributes to gender gaps in earnings. Women face several constraints, including unconscious biases, social norms, lack of exposure to and information on sectors, and time and capital constraints that hold them back from entering male-dominated sectors.

- In an experiment in the Republic of Congo, we examine whether addressing informational constraints around returns from male-dominated sectors could encourage young women to apply for training in more profitable male-dominated sectors. We find that young women are 28.6% more likely to apply to a traditionally male-dominated trade when receiving information on trade-specific earnings.

- There is high potential for interventions that pair information on returns and trade exposure. In our study, the impact of earnings information on women’s trade choices is almost four times larger among women who had prior technical experience or knowledge and three times larger among women with a male role model.

- However, there are gender gaps in access to early opportunities, mainly relevant technical experience and network connections. Women are less likely to have prior relevant technical experience and less likely to have network connections with people who work in male-dominated trades. When women have network connections to people in male-dominated trades.

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GENDER INNOVATION LAB

The Gender Innovation Lab (GIL) conducts impact evaluations of development interventions in Sub-Saharan Africa, seeking to generate evidence on how to close gender gaps in earnings, productivity, assets, and agency. The GIL team is currently working on over 70 impact evaluations in more than 25 countries with the aim of building an evidence base with lessons for the region.

The impact objective of GIL is increasing take-up of effective policies by governments, development organizations, and the private sector to address the underlying causes of gender inequality in Africa, particularly in terms of women’s economic and social empowerment. The Lab aims to do this by producing and delivering a new body of evidence and developing a compelling narrative, geared towards policymakers, on what works and what does not work in promoting gender equality.
trades, these contacts are less likely to translate into technical experience, indicating constraints in interpersonal exchange.

- **Providing information on earnings is a low-cost intervention that can encourage young women to crossover to more lucrative trades, thereby reducing the gender gap in earnings.** In addition, complementary interventions which provide women with technical experience and knowledge or match them with role models might be needed to enhance the impact of such interventions.

**THE PROGRAM**

In 2018, the government of the Republic of Congo implemented a vocational training program, for youth aged 17-30, in the two largest cities of the country, Brazzaville and Pointe-Noire. Interested candidates attended an information and application session which included watching an informational video of the types of training being offered, including both male- and female-dominated trades.

**HERE’S WHAT WE DID**

The World Bank’s Africa Gender Innovation Lab launched two studies within the context of the vocational training program to assess the effect of supply-side constraints on gender-based occupational segregation.

In the **first study**, we examined the effect of providing trade-specific earnings information on trade choice among applicants to the vocational training program. Upon arrival, applicants were randomly assigned to either a control group that watched an informational video describing the training program for each trade, or a treatment group that watched another version of the video that also included trade-specific earnings. Immediately after watching the video, applicants selected the trade they wanted to pursue, with two ordered choices.

The **second study** added questions to the above-mentioned survey to examine supply-side explanations for gender-based occupational segregation. The questions were designed to measure, i) gender differences in opportunity structures (access to trade information, relevant network connections and role models, and previous exposure to relevant skills), ii) perceived social norms regarding women and work, and anticipated discrimination in male-dominated trades, and iii) internalized gender biases.

**FIGURE 1: FIRST CHOICE IS A MALE-DOMINATED TRADE**

![Figure 1: First choice is a male-dominated trade](image-url)
**HERE’S WHAT WE FOUND**

Receiving trade-specific earnings information significantly increased the likelihood of women choosing a male-dominated trade. Women who received the information intervention are 7.7 percentage points more likely to select a male-dominated trade, a 28.6% increase compared to the control group. Both men and women receiving information on trade-specific earnings are more likely to opt for the three higher-return male-dominated trades: air conditioning, machine operator, and topography (see Figure 2 below). The probability of choosing one of the high return trades increases by 76.8% for men and 185.8% for women. The women most impacted by the intervention were those who had characteristics that correlate with crossing over to male-dominated trades, such as having a role model, technical knowledge, or technical experience.

Among women who did not crossover to male-dominated trades, the information increased the likelihood of selecting more lucrative female-dominated trades. Women in the treatment group were more likely to opt-out of lower-return traditional trades, such as tailoring and hospitality, and to choose traditionally female-dominated trades with higher returns.

Training attendance and completion rates were equal for men and women, as well as for those who received the earnings information and those who did not.

More so than men, women’s willingness to select a male-dominated trade depends on their having prior technical experience, yet women are less likely to have such experience. A one-point increase in technical score is associated with an 18.9 percentage point increase for women and a 4-percentage point increase for men in their likelihood of selecting a male-dominated trade. However, women scored lower on technical experience and knowledge than their male counterparts, suggesting that men have a considerable advantage in exposure to relevant skills.

Women are disadvantaged in access to people working in male-dominated trades, and they do not benefit from the connections they have. Women are disadvantaged in non-family connections to people working in male-dominated trades, and unlike men, women do not gain technical experience from their network contacts.

**FIGURE 2: EFFECT OF THE INFORMATION TREATMENT ON APPLICANTS’ CHOICE OF TRADE**

- **Men - Information**
- **Women - Information**
- **Men - No Information**
- **Women - No Information**

*** p<0.01, ** p<0.05, * p<0.1 for the test of equality of coefficient between the control group not receiving information on earnings (light color bars) and the treatment group receiving the information (full color bars).
CONCLUSIONS

Our findings show that providing trade-specific earnings information could attract women to higher-return trades and encourage more women to enter male-dominated trades. However, the effect of the information intervention encouraging women to crossover to male-dominated trades is concentrated among women who already have meaningful technical knowledge, experience, or role models. Our findings from both studies amplify the importance of providing women with technical knowledge and experience to encourage crossover to male-dominated trades. These findings indicate that an information intervention could be most effective when combined with complementary interventions providing women with technical experience and knowledge or matching them with role models.

Our studies focused on the Republic of Congo but as our report, Breaking Barriers: Female Entrepreneurs Who Cross Over to Male-Dominated Sectors, also demonstrates, gender-based occupational segregation is a global issue that prevents economies from making the best use of their workers’ skills. Evidence-based programs and policies could support women to cross over into more profitable male-dominated sectors and increase their profits while also contributing to economic growth. Providing information on sector-specific earnings could be one intervention to consider in a broad range of tools to reduce occupational segregation. However, more research is needed, especially in countries with low levels of formal sector employment, on other effective programs and policies to encourage women’s entry and success in male-dominated trades.

For more information on the first study, see the Policy Research Working Paper: https://openknowledge.worldbank.org/handle/10986/36974