Online Customer Discrimination against Female Workers in Sub-Saharan Africa

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Sector(s): Firms, Gender, Labor Markets

Sample: 2,655 online customer interactions from 70 countries (87% of customers come from Africa, and 13% come from abroad) with six female travel agents who were based primarily in East Africa

Target group: Women and girls Adults Workers

Outcome of interest: Discrimination Productivity

Intervention type: Behavioral economics Information

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Research Papers: Customer Discrimination in the Workplace: Evidence from Online Sales

In the service industry, workers are often evaluated on how well they deal with customers. However, if customers discriminate against workers of a certain gender or race this can negatively impact a worker's performance and productivity. Researchers conducted a randomized evaluation to evaluate the impact of gender-based discrimination on female teleworkers' productivity in online sales interactions with customers from seventy countries mostly in sub-Saharan Africa. Researchers found that when a customer chat representative had a female-sounding name, it led to significantly fewer purchases, and slower and more reserved reactions from customers.

Policy issue

While women's share in service sector jobs is growing in low- and middle-income countries, gender inequality remains high. In Sub-Saharan Africa, the share of women working in full-time positions for a formal sector employer is less than 15 percent. Nevertheless, the share of working-age women in service jobs in Sub-Saharan Africa rose by 16 percent from 2011 to 2019 to reach 39.7 percent. Thus, service sector jobs are increasingly critical for poverty alleviation and income improvement.

In sales and many other service jobs, workers are often evaluated on their ability to engage well with customers. However, if certain groups of workers (e.g., women, other marginalized groups) face discrimination from customers, it can lead to lower productivity for those affected workers. Bias from customers could also be a contributing factor to women's persistently low labor force participation by deterring women from taking jobs, staying in jobs, or pursuing job advancement opportunities. There is little evidence on the scale and extent of customer discrimination against female workers, but shedding light on this phenomenon may help address subtle and unconscious sources of gender inequality in labor markets.

Context of the evaluation

Customer-facing roles are increasingly common in sub-Saharan Africa, where this evaluation took place. From 2011 to 2019 the percent of working-age individuals employed in the service sector increased by 12 percent. In this study researchers partnered with an established online travel agency with offices across sub-Saharan Africa. This company sold flights and hotels across Africa and employed a local workforce of sales agents to assist customers. These online sales agents serve as an example of customer sales roles typical in the service industry. Online sales interactions have become common in the aftermath of the Covid-19 pandemic as well as the recent rapid digitalization of Africa. The customers were diverse: the firm's customers originated from 70 countries (87 percent from Africa, 13 percent from outside of the continent).

The majority of sales agents at the company were women, and they were responsible for 83 percent of chats with customers. According to the company's administrative records, female and male sales agents appeared equally successful in terms of sales track record based on observed performance, and being a female worker did not seem to negatively affect sales performance, at least in correlational analysis.



A woman works at call center in customer service

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Details of the intervention

Researchers partnered with an online travel agency to conduct a randomized evaluation to test the impact of varying the name of the sales agent on gender-based discrimination. These names were gender-specific and signaled the agent's gender identity to the customer only; workers themselves did not see which names they were assigned. Since the same sales agents were assigned male or female-sounding names at random, and the assignment of names changed nothing else, this allowed the researchers to isolate the effects of customer bias arising from the worker's gender identity.

Researchers developed a protocol to randomly assign a gendered name to 2,655 online customer interactions with six female sales agents. On a daily basis from January to October 2019, sales agents were randomly given "female" or "male" treatment status, which meant that their chat interface showed a randomly chosen female or male-sounding first name. The names were drawn from local school yearbooks and coded by the local research team, and only first names appeared in the chats. The

average chat lasted 22 minutes. As outcome measures, researchers measured data including customers' travel purchases, which were a key measure of productivity in the studied job. The research team also examined the intervention's effects on customer-agent chat interactions in terms of chat response, tone and topic (by coding the chat transcripts), whether customers bargained with or harassed agents, and chat purpose to gain additional insights into customer behavior.

Results and policy lessons

Researchers saw large negative effects when the worker had a female-sounding name, compared to a male-sounding name. When agents randomly received a female-sounding name, it reduced the likelihood of customers making a purchase of a flight or hotel within 48 hours by 3.8 percentage points (from 7.6 percent in the comparison group to 3.8 percent in the intervention group). This represented a 50 percent drop. All agents in the study experienced negative effects after being assigned a female-sounding name; the least affected agents still experienced a 25 percent reduction in purchases – a significant cut in a key measure of productivity in the studied job. Researchers found supporting evidence that these results were driven by a lag in response from customers, implying that customers were less engaged when interacting with female sales agents. The researchers did not find evidence that customer disengagement led to harassment or differences in terms of how customers tried to bargain.

This randomized evaluation suggested that female agents in this firm were likely more productive than male agents but for the penalty on their productivity due to customer bias. Overall, data from this study suggested that gender-based customer bias could impact women's work productivity in low-income countries. In the study, customer bias negatively affected all workers, implying that the discrimination the researchers found did not depend on individual workers' different characteristics other than their gender. In addition, customer bias was found in similar rates from customers across different parts of Africa and from outside of Africa. These patterns imply that women in service jobs may be suffering widely from consequences of customer bias, both in online sales and African contexts, and in contexts beyond this specific evaluation. Researchers suggest that customer discrimination may act as an obstacle to women's labor market success. More research on changing the social norms around women in the workplace might help to reveal the different policy tools available to effect change.