Improving Financial Inclusion through Mobile Banking in Bangladesh

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Sector(s): Finance, Gender

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Location: Gaibandha and Dhaka, Bangladesh

Target group: Rural population Urban population Women and girls Families and households Migrants Workers

Outcome of interest: Empowerment Remittances Savings/deposits Take-up of program/social service/healthy behavior

Intervention type: Digital and mobile Financial literacy Training Tailored instruction

AEA RCT registration number: AEARCTR-0003149, AEARCTR-0005722

Research Papers: Narrowing the Gender Gap in Mobile Banking

Partner organization(s): bKash

Mobile banking has the potential to increase the affordability and accessibility of financial services in lower-income countries. However, gender discrepancies exist in the adoption of these services. To address this issue, researchers partnered with bKash, one of the leading mobile money providers in Bangladesh, to conduct a randomized evaluation of the impact of targeted training programs on mobile banking uptake among migrant households. Training increased migrants' and their families' adoption of mobile banking, with women adopting the technology at similar rates to men, shrinking the gender gap. However, men used the technology to send more remittances to their rural families, creating downstream benefits from financial inclusion.

Policy issue

Access to financial products can enhance women's empowerment and improve their livelihoods. However, women tend to use digital finance less than men across many low- and middle-income countries. Although recent financial inclusion efforts have aimed to improve access to financial services through technological solutions like mobile banking, the challenge of reducing the gender gap in financial inclusion remains. Limited knowledge about mobile banking technology and limited use within family networks may also hinder people's adoption of digital financial services. Can targeted training and strategic marketing increase mobile banking adoption and usage rates for women and men, thereby improving their economic outcomes and reducing the gender gap in these services?

Context of the evaluation

Although Bangladesh has a fast-growing mobile banking sector and has made efforts to promote financial inclusion, the gender gap in the use of digital financial services in the country is wider than the average across low- and middle-income countries. In 2017, only 17 percent of women had sent a digital payment in the past year, compared to 43 percent of men. In contrast, 32

percent of women and 40 percent of men on average used digital payment services in other low- and middle-income countries.

Mobile banking technology enables customers to transfer, deposit, and withdraw funds from their electronic accounts using their mobile phones, regardless of their location or proximity to a physical bank. This innovative solution enables financial services to penetrate new markets and is especially convenient for families living in remote locations. For the many rural families in Bangladesh who rely on remittances from their migrant relatives, mobile banking presents a promising opportunity. Despite its potential benefits, adoption and usage rates for this technology remain low in the country.

Gaibandha is one of the poorest regions in Bangladesh and home to many families of migrants working in the nation's capital city, Dhaka. These migrants move to the city for job opportunities and often support their families in Gaibandha via remittances. Prior to this study, mobile banking providers made little effort to encourage migrants in Dhaka and their families to adopt mobile banking technology, despite the potential financial benefits. Financial inclusion is limited in Gaibandha, with only 9 percent of women and 12 percent of men in the evaluation having a bank account at the start of the study, though 99 percent of households had a mobile phone.



Man looks at his phone on a farm in Bangladesh.

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Details of the intervention

Researchers partnered with bKash, one of the leading mobile banking providers in Bangladesh, to investigate the impact of targeted training programs on mobile banking uptake among migrant households. Eligible participants were households in Gaibandha with a migrant family member located in Dhaka, referred to as "household-migrant pairs." Researchers began by

randomly assigning 815 migrant-household pairs to participate in one of two groups:

1. *Training group* (413 household-migrant pairs): Households and migrants learned how to enroll in the bKash program, activate their account, and perform tasks such as cashing in, cashing out, and transferring funds in a 30- to 45-minute training session. Migrants and households received identical assistance.
2. *Comparison group* (402 household-migrant pairs): Household-migrant pairs in the comparison group did not receive any training, enrollment assistance, or specific marketing messages for bKash.

In addition to the impact of the training program itself, researchers sought to better understand the impact of family networks on program uptake. Researchers varied the order in which migrants and their families participated in the training to assess if it mattered whether families or migrants took the training first. Researchers randomly assigned each of the 413 pairs from the training group above into one of two additional groups:

1. *Migrant-first training group* (216 of the 413 household-migrant pairs): Migrants in Dhaka participated in training and received marketing about bKash before their families in Gaibandha.
2. *Family-first training group* (197 of the 413 household-migrant pairs): Families in Gaibandha participated in training and received marketing about bKash before their migrant relatives in Dhaka.

In addition to the order in which migrant-household pairs participated in the training, researchers varied the marketing materials they gave to the migrants to understand how knowing their family's reception of bKash affected the migrant workers' adoption and use of mobile banking. Researchers once again randomly assigned each of the 413 pairs from the training group into one of two groups:

1. *Family-centric marketing group* (216 of the 413 household-migrant pairs): Migrants received marketing material from bKash suggesting their rural-based family was interested in opening a bKash account. Since this group was randomly selected from the whole training group, researchers did not account for whether migrants in this group were part of the migrant-first or the family-first training group. Gaibandha-based families in this group received neutral marketing messages.
2. *Family-neutral marketing group* (197 of the 413 household-migrant pairs): Both migrants and their families received neutral marketing and information about using bKash.

In early 2016, approximately one year after the study began, researchers conducted a follow-up survey to assess the effectiveness of the training program, order, and marketing materials in increasing financial inclusion. They collected data on active use of accounts, mental and physical health, and remittances by both migrants and their households. Although the training did not have a gender-specific component, the researchers disaggregated their findings by gender to assess whether the program had a positive impact on reducing the gender gap in digital financial inclusion.

Results and policy lessons

Training in mobile banking increased adoption of the bKash app among migrants and their families, with similar rates across men and women, shrinking the gender gap. Migrants also increased their digital remittances, leading to a reduction in extreme poverty and an increase in consumption for their rural families, driven by increased remittances among male migrants.

Adoption and use of mobile banking technology: Men and women migrants who participated in the training increased their adoption of bKash at similar rates and the gender gap in usage shrank. Overall, 71 percent of men and 61 percent of women adopted the program, compared to 26 percent of men and 9 percent of women in the comparison group. The ratio of female-to-male active users increased to 85 percent in the training group compared to 35 percent in the group without training.

Family networks: Changing the order migrants, and their families, participated in the training or the type of family-centric marketing materials migrants received did not impact adoption rates or other outcomes beyond the impact of training alone.

Remittances: Migrants who participated in mobile banking training sent more remittances to their families based in Gaibandha than those who did not participate in the training, sending on average 316 more taka (12 percent of the baseline mean) than the comparison group. The average migrants' family members consequently experienced a reduction in extreme poverty and increase in consumption. However, the increase in remittances was driven by male participants who sent home remittances at 11 times the rate of female participants. Societal and economic constraints, including marital status and lower wages, could account for the different rates of remittances.

Lee, Jean N., Jonathan Morduch, Saravana Ravindran, and Abu S. Shonchoy. "Narrowing the gender gap in mobile banking." Journal of Economic Behavior & Organization 193 (2022): 276-293.