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Pause and Practice: A Field Experiment on Building Confidence and Competence in Digital Payments

[version 1]

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Abstract

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Financial inclusion is the availability of financial resources, including transactions, payments, savings, credit and insurance, and equal opportunities to access these financial services. Digital financial systems enable financial inclusion by providing accessible, affordable, and secure financial services to underserved populations, reducing barriers such as geographic distance and high transaction costs. However, despite the growing usage of digital payments, many people in India prefer cash-based transactions due to various factors, one of which is likely the low confidence level in navigating the payment apps or the smartphone itself. Here, in a lab-in-the-field experiment with 444 participants from rural Uttar Pradesh, India, we test simple video interventions targeted at smartphone users to perform a QR-code-based money transfer transaction. Participants were asked to practise the transaction while watching the video to learn the task step-by-step. The findings indicate that participants exposed to videos with practice embedded in them demonstrated higher accuracy (82% vs 64% in control) and confidence in QR code transactions, suggesting the effectiveness of these interventions.

Keywords

Digital Financial Services (DFS), Financial Inclusion, active learning, confidence, randomised control experiment, field experiment



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Introduction

Digital financial services (DFS) have emerged as a key component in the global effort to achieve financial inclusion, especially in mid- and low-income countries. The World Bank defines financial inclusion as individuals' and businesses' having access to valuable and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered responsibly and sustainably. The rise of mobile banking, digital wallets, and other forms of DFS has reduced the physical and financial barriers that traditionally excluded vulnerable groups from formal financial systems (Demirgüç-Kunt et al., 2020). Digital platforms such as mobile money and QR code-based payment systems are particularly transformative, offering accessible, affordable, and secure transaction methods for populations previously reliant on cash (Aker & Mbiti, 2010; Jack & Suri, 2014).

Despite these advancements, digital financial inclusion remains a challenge, especially in rural and low-income areas with low technological literacy and limited access to smartphones and the Internet (Asongu et al., 2018). As of 2021, 30% of rural Indians reported using digital payments, as opposed to 40% of urban Indians (Klapper et al., 2021). Research in India, for instance, shows that while digital payments have expanded rapidly, many individuals continue to rely on cash due to their discomfort or lack of familiarity with digital systems (Mazzotta et al., 2023). Prior studies have noted that women often report lower tech confidence, contributing to a digital gender gap (Barboni et al., 2024; Chakradhar & Choudhary, 2024). This gap highlights the need for more targeted interventions that not only make technology accessible but also empower users to engage confidently with it. The 'pause and practice' method, examined in this study, seeks to address these barriers by providing users with structured opportunities to build their confidence while interacting with new digital financial tools.

Self-efficacy, or the belief in one's ability to succeed in specific tasks, is a central determinant of behaviour change and skill acquisition (Bandura, 1997). In the context of DFS, confidence plays a critical role in users' willingness to adopt and effectively use these platforms (Hastings et al., 2013). According to research in a variety of fields, when individuals feel capable of mastering a task, they are more likely to engage with it persistently (Berry & West, 1993; Gist, 1987; Li et al., 2005; Margolis & McCabe, 2004; Vera et al., 2014). Studies have explored the role of psychological traits, such as self-esteem and confidence, that affect financial behaviour after knowledge is accounted for (Abreu & Mendes, 2012; Antonides et al., 2011; Brown & Taylor, 2014; Tang et al., 2015; Tang & Baker, 2016). Thus, building self-efficacy or confidence through structured interventions could be a crucial strategy in increasing the uptake of DFS. Our study explores whether such interventions can enhance users' success in adopting DFS technologies by improving their accuracy and confidence. For our purposes, we treat confidence as domain-specific self-efficacy (akin to Bandura's definition), measured in the context of digital payments. We also measure "general confidence", more of a trait.

Participants in rural Uttar Pradesh, India, with smartphones and without DFS experience, were introduced to QR code transactions via video as part of the field experiment. India has adopted UPI (United Payments Interface), a real-time payment system that allows users to send and receive money, pay bills, and make online purchases using a mobile app. QR codes can be scanned to initiate such payments, where the code contains the receiver's UPI ID, a unique identifier linked to a user's bank account. In treatment arm one, they had to pause and do the task alongside, and in the second treatment, they were also given additional information to handle contingencies. The participants were tested on the QR code task shown in the video and the same task in a new app. They were also tested on both tasks two days later to test retention and learning. The results demonstrate improvements in both task accuracy and confidence for participants in both treatment groups across both tasks, with these gains persisting even two days after the intervention. These effects suggest that the interventions could play an essential role in promoting more widespread and effective use of mobile financial tools in diverse populations.

Literature review

Financial knowledge

Financial education and knowledge have been shown to affect behaviour across different studies (Billari et al., 2023; Collins, 2013; Duflo & Saez, 2003; Kaiser et al., 2022). (Field et al., 2021) found that providing women with training on how to use bank accounts, alongside direct deposit of wages, significantly improved their financial autonomy and labour market engagement. Kaiser et al., 2022 review experimental evidence and show the mechanism of financial education leading to better knowledge and behaviour. The effectiveness of such financial education in low-income and low-education settings, such as rural India, is more debatable (Bhutoria & Vignoles, 2018; Fernandes et al., 2014; Holzmann, 2010; Kaiser & Menkhoff, 2017; Walstad et al., 2017). Here, the intensity of education and proving it at the 'right time' becomes more important (Kaiser & Menkhoff, 2017). There is now increasing evidence that behavioural nudges and interventions that combine nudges and education lead to improved financial behaviour (Banerjee & Duflo, 2012; Carpena et al., 2017; Isler et al., 2022; Smith et al., 2020; Thaler & Sunstein, 2008).

Active learning

Active learning pedagogies have been known to improve learning compared to more traditional lecture-style pedagogies (Ballen et al., 2017; Blázquez et al., 2019; Dewsbury et al., 2022; Freeman et al., 2014; Prince, 2004; Røe et al., 2022). The European Commission's recent Digital Education Action Plan (2021–2027) emphasises that digital education should support teaching that is more personalised, flexible, and centred on the needs of students (European Commission, 2021), which deeply resonates with one of the early definitions of active learning “instructional activities involving students in doing things and thinking about what they are doing” (Bonwell & Eison, 1991). In particular, pausing in between lectures improved learning (Bachhel & Thaman, 2014; Richards et al., 2017; Ruhl et al., 1990), and so has hands-on learning (Hartman et al., 2000; Hearn et al., 2009; Parkinson et al., 2003). Thus, we tested if practising the task while watching the videos step-by-step improved learning.

Confidence

Confidence is a psychological trait known to be separate from one's ability to do the task (Allwood & Montgomery, 1987; Dougherty, 2001; Fischhoff et al., 1977; Jackson & Kleitman, 2014; Lichtenstein & Fischhoff, 1977; Stankov & Lee, 2008). It has been established that confidence is separate from other constructs like intelligence, personality, locus of control, and self-efficacy, albeit correlated with them (Jackson & Kleitman, 2014; Stankov, 2000, 2004; Stankov & Lee, 2008). Overall, there is a trend of overconfidence in the population; people are more likely to overestimate their performance (Camerer & Lovallo, 1999; Harvey, 1997; Juslin, 1994; Klayman et al., 1999; McGraw et al., 2004; Svenson, 1981). This overconfidence trend has been known to have positive effects that may be evolutionarily advantageous (Hirshleifer et al., 2012; Johnson & Fowler, 2011; McKay & Dennett, 2009; Trivers, 2000; Weinberg, 2009). Research within the Technology Acceptance Model (TAM) framework consistently highlights perceived self-efficacy as a pivotal factor influencing technology adoption (Navarro et al., 2023; Rosli & Saleh, 2023).

In this study, we incorporate the principles of the pause procedure, hands-on training, and other behaviour science aspects into the intervention to improve DFS learning. We hypothesise that confidence is an important predictor of this learning and study how the intervention and general confidence interact for optimal learning.

Methods

Experimental design overview

We conducted a randomised control experiment. Primary owners of smartphones who have never used any form of DFS from the districts of Benaras and Chandauli in Uttar Pradesh (most populous state in India) were eligible. Primary is defined as the phone being with them the majority of the time. Participants were assigned randomly to one of three experimental groups: one control and two treatment arms. The control arm included a video explaining the QR-code-based monetary transaction on the PhonePe app (one of the most used apps for DFS in rural India). The first treatment (Pause & Practice) included pausing and practising the task while watching the control video. The second treatment (Pause & Practice Plus) included additional information to handle contingencies.

In-person baseline surveys included measures of digital literacy, financial literacy, and experience accessing financial products. This was followed by the intervention, an immediate test of the QR code transaction task, and the participants' confidence. Participants were also asked to do the same transaction on a different app, Gpay. The endline survey was conducted 2–4 days later, including the primary outcome measure of completing QR code transactions without assistance on PhonePe and Gpay, standard demographics, and general confidence measures. Figure 1 shows the overall experiment structure. The study was approved by the Ashoka University Institutional Review Board (22-X-10002-Bijoyetri Samaddar).

Treatment components

Participants were shown a short video explaining the QR code transaction process on the PhonePe App. Each group got slightly different video content, but the overall style was the same. A local content creator made the videos to ensure they were in the proper Hindi dialect, giving participants a sense of familiarity. Videos were designed to be cognitively simple, with relevant visuals of the app shown. The QR code process was described in simple language and narrated by a relatable person who was visible on the screen. Table 1 highlights the differences between the three videos, thus, the three arms. The two treatment arms' videos included an instruction to pause the video and do the task alongside on a separate device. These instructions came five times to demarcate the major steps of this process. The second treatment arm *also* included information on managing contingencies *and* confidence-building messages, making the video longer by 2 min 30 sec.

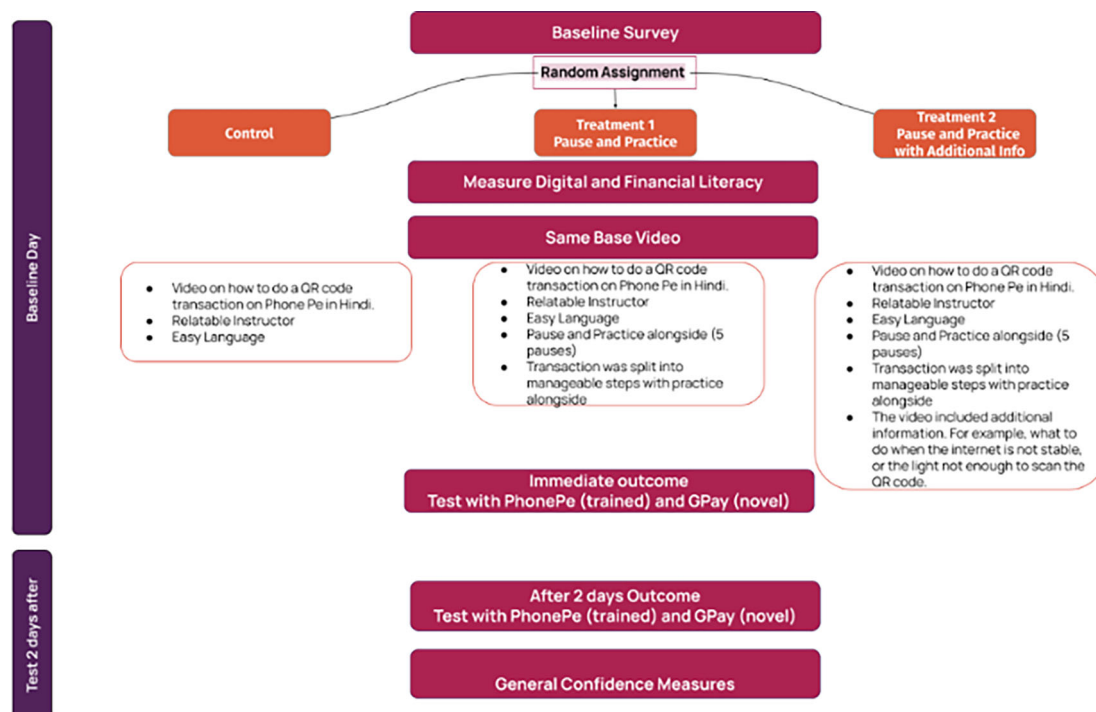


Figure 1. The Figure shows the overall study structure. People were randomly assigned to treatment and control groups. On the first day, they were shown a video explaining QR code transactions in the PhonePe app. Immediately afterwards they were tested on QR code transactions in PhonePe and GPay. Two days later, at endline they were tested again on the same tasks.

Five steps of pause and practice:

Step 1: Locate the PhonePe app and open it. Pause and practice alongside.

Step 2: Find the scan icon on the app and click it. Pause and practice alongside.

Step 3: Scan the QR code. Pause and practice alongside.

Step 4: Enter the amount and select the account to pay from. Pause and practice alongside.

Step 5: Enter the UPI ID. Pause and practice alongside.

Data collection

The districts were selected through convenience sampling as our field team there had previously interacted with the frontline health workers in that area. We leveraged these relationships for recruitment. We informed frontline workers a few days before to invite eligible participants to Anganwadi Centers (rural child care centres) on the day of the study, and they were recruited on a first-come, first-serve basis. Upon reaching the desired target of 20 participants, recruitment was closed. Participants were asked screening questions to determine if they had used DFS before, and enumerators verified that there were no DFS apps on their phones at baseline. We continued data collection by visiting Anganwadis in different villages in these districts until we reached our desired sample of 100 participants per arm. Enumerators were spread out around the Centres so that participants could neither see nor hear one another.

The baseline and endline surveys were conducted in person, with on-ground enumerators administering the survey on tablets, using licensed software Qualtrics on their offline app. 10% of the surveys were recorded and were around 45 minutes long. Only complete surveys were used for analysis, and no participants with partial surveys were contacted again to resume the survey. The survey and intervention were administered in Hindi. While the enumerators were familiar with the broad outline of the study, they were not made aware of the details of the treatment groups to reduce potential bias. All participants were compensated with Rs. 100 for baseline and Rs. 150 for Endline. Prior to the start of each survey,

Table 1. A brief description of the videos in each of the arms.

Video	Description of message	Duration
Control	The video explains the reasons for using UPI transactions and then explains QR code transactions using the PhonePe app, from finding the app to entering the UPI ID and completing the transaction.	3 min 47 sec
Pause and Practice	The same video as above has additional instructions to pause the video and do the step alongside on a different device at five different intervals.	4 min 25 sec
Pause and Practice with additional info	The same video as T1 with five pause-and-practice instructions and a few additional pointers to make the task easier and inspire confidence and trust in this DFS process. Additional info: 1. Video prompts users to ensure internet and location services are enabled before launching the app 2. Explains what a QR code is and how it's more robust than manually entering an account or phone number 3. Explains that the phone may ask permission to use the camera on the first try and what to press when they see such a window 4. Mentions that scanning will not happen without the internet 5. Mentions that internet is needed to proceed from the amount page UPI ID page 6. Same UPI ID is used across apps, and there is a limit of 10 transactions a day with a given UPI ID Motivational/Confidence building: 1. Only the amount specified by you can be transferred 2. How to keep the UPI pin safe (not to share/write it down) 3. Entering the wrong PIN will not lead to any additional problems, just that there won't be any transactions 4. In case the phone is lost, no one can use your account as they won't have access to the UPI ID 5. If someone tries to use your account and enters the wrong ID 3 times, the account is locked for 24 hours Grievance Redressal: 1. Mutually agree on the amount sent to the beneficiary and sort out any changes in the amount. In case of extra money is sent, one can also approach the beneficiary's bank	6 min 55 sec

participants were asked for their consent, which was marked on the app. They were informed, they could withdraw consent at any point. The consent was verbal in keeping with the rest of the survey, to accommodate people with low literacy levels. A formal acknowledgement of participation and receipt of payment was taken by signature at the end of each session.

The entire questionnaire was piloted in 2 villages. The same enumerators collected the pilot data to ensure the data quality and address any concerns faced in the field. 10% of the participants were chosen for an additional short survey across treatment and control groups and enumerators. A week after the primary data collection, these surveys were conducted by a separate set of enumerators via a phone call. It included questions about the previous survey length and comfort rating. These were matched with the original survey to estimate the data quality.

Treatment was watching QR code transaction explanation videos. The control group watched the video once and could request to watch it again. In the treatment arms, the participants watched it once, and during the second time, they paused and practised alongside. All arms were asked to do the transaction independently (without any assistance from the enumerator or reference to the video) at the end of the intervention on the day of baseline on the PhonePe app (Task 1 immediate outcome) and a new Gpay app (Task 2 immediate outcome). At Endline, they again performed the transaction without seeing the video, completely from memory, on PhonePe (Task 1 after 2 days) and Gpay (Task 2 after 2 days). The accuracy of the tasks was calculated as a percentage of the total steps (5) completed successfully. Steps included opening the app, finding the scan icon, scanning the QR code, entering the amount, and entering the UPI ID. Each correctly executed step earned 1 point, so a perfect transaction scored 5. A participant might open the app and scan but then fail to enter the amount correctly, thus scoring 2/5. For each task, participants were asked to rate their confidence before starting the task (pre-confidence) and after finishing the five steps (those that did not finish the five steps were assigned 0), but before knowing the outcome (post-confidence). Once they entered the UPI ID (A unique number relating to the sender's account), the enumerators asked the participants to stop and the confidence question was

asked. Post that, they pressed enter to show if the transaction was successful or not. The confidence question was: How confident are you that you can (have) complete this task accurately? Ratings were provided on a Likert scale of 1-5.

Digital and financial literacy

We estimated digital and financial literacy at the Baseline before the intervention. Participants were asked questions about smartphone use through pictures. They had to point to the location they would touch for specific functions. Five such questions probed the use of browsers, WhatsApp, YouTube, torch, and bars showing network signals. A digital score was calculated based on the number of correctly answered questions.

Participants were asked about financial services, and their interest, loans, and insurance knowledge was tested (3 questions). Participants were also asked how they access financial services, withdraw money from the ATM, and deposit cheques. They pointed to specific parts on a relevant image to answer how they perform these tasks. There were three such questions. A composite financial literacy score was computed on the total number of correct answers to these six financial literacy questions.

General confidence

General Confidence was measured using three general/non-financial tasks, presented in the same order to all participants. These tasks were done at Endline at the end of the QR code tasks and other survey questions. The trials were predefined for each task, and the same set of trials was presented to each participant in the same order. The first was the esoteric analogies test (Jackson & Kleitman, 2014). The task contained 20 items of the following type: CHICK is to HEN as CALF is to _____. The options were BULL, COW, COAT, ELEPHANT (answer = COW). The enumerator read out the words and entered the option the participant chose. After each trial, the participants were asked to rate their confidence in their previous answer on a scale of 1-5.

The second task was panamath (Halberda et al., 2008), a non-symbolic task that measures a person's approximate number system abilities. Participants judged whether more green or pink dots were presented on a grey screen. Each image is shown for 1.5 seconds. The difference between dots ranged from 3-10. The probability of the difference being 3 to 12 decreased by half with every increase in difference by 1, until 7. The probability of the difference being 3 was 49%, 4 was 24%, 5 was 12%, 6 was 6%, and 7-10 was 2% each. The number of dots in each colour ranged from 5 to 20. The size of the dots remained constant in all trials, but their position was jittered across a 6X8 grid. There were 24 trials; the respondents answered and gave confidence ratings for each trial.

The last was a vocabulary task (Jackson & Kleitman, 2014). A word was presented on the screen, and four options were shown below. The enumerator read out the word and the options and asked which of the options was the closest in meaning to the target word. The enumerator entered the answer and the confidence rating for each of the 20 items. The analogy and vocabulary words included common words used in everyday language that did not exceed the 7th-grade reading level. Participants were not expected to read, which allowed participants without literacy to participate.

An average reaction time was computed across all the tasks to measure processing speed. Average accuracy across all tasks provided a proxy for IQ (intelligence quotient) or general ability. Note, this was not used to look for IQ effects but to understand what covaried with task-specific measures. General confidence was the average confidence across the three tasks. Bias was computed as the difference between average subjective confidence measures and objective accuracy for each task and averaged across tasks. It indicates whether an individual was able to match their confidence levels with their level of accuracy (Stankov et al., 2012). Bias scores range between +1 to -1. High (positive) and low (negative) scores indicate over- and under-confidence.

Sample size determination

Based on pilot data, we arrived at a sample size of 100 per group. With 100 per group and a 74% completion rate in the control group, we can detect a relative improvement of 20%. As sampling was convenience-based, we continued data collection till we completed at least 100 in each group.

Model specifications

We used three outcomes (accuracy, pre-confidence, and post-confidence) for each of the two tasks (Task 1 – PhonePe; Task 2 – Gpay) and two time points (Immediate outcome – immediately after the intervention; After 2 days – at Endline). Ordered Logistic Regression was used for all outcomes as accuracy based on discrete steps (5) and confidence on Likert scale ratings (1-5). Randomisation was at the individual level, and the intervention and tasks were performed in isolation, so errors were not clustered at any level. A dummy variable was created for the treatment with pause & practice, pause &

practice plus, and Control levels. A digital literacy score and a financial literacy score were added as covariates. Further, the model controlled for demographic information: age, gender, education, employment, household income, number of people in the household, number of teenagers in the household, religion, caste, and duration of owning the smartphone. We then repeated the regressions for the outcome variables, looking for an effect of average reaction time and accuracy of the three independent tasks used to compute general confidence, as well as general confidence and bias. The same demographic values and digital and financial literacy scores were added as controls.

Lastly, to test if the average measures (reaction time, accuracy, confidence or bias) had a significantly greater effect on one outcome compared to another, we used an interaction method. For example, to test if average accuracy had a greater effect on PhonePe task accuracy Immediate outcome (Y1) or Gpay task accuracy Immediate outcome (Y2), we constructed a new variable (Y3), a concatenated version of the two outcome variables and a dummy variable for outcome type (1 for Y1 and 2 for Y2). A new interaction term was created: the multiplication of average accuracy and outcome type. Ordered logistic regression was run on the concatenated outcome variable Y3, with treatment levels, average accuracy, digital and financial literacy scores, demographic controls and the two new factors of outcome type and the interaction between average accuracy and outcome type. If the interaction term is significant, it would suggest that the effect of average accuracy on Y1 and Y2 are significantly different. All pairwise differences in its effect on outcome measures were computed for a given average measure.

Transparency and openness

We described our sampling plan, all data exclusions (there were none), all manipulations, and all measures in the study. All analyses, including randomisation and data checks, were conducted using custom-made MATLAB (The MathWorks, Inc.) scripts and scripts in [StataCorp. \(2023\)](#). The study hypothesis and analysis plan were pre-registered, but no masked link is available, and they will be shared after the review. All data, analysis code, and research materials are available in a masked link [https://osf.io/m527c/?view_only=c97e39ee58214e2a8a8aab6dfcd5c131].

Results

Sample demographics

We collected a sample of 444 participants who were surveyed on two days, the day of the intervention and two days later, to measure recall. 91% of participants who completed the first session also completed the second (444 out of 490). 148 people were part of the control group that watched the video of how to do the QR transactions (33%), 171 were part of pause & practice - P&P (39%), and 125 were part of pause & practice plus - P&P plus (28%). The difference in numbers in the treatment arms is due to the second treatment not working the first two days of data collection due to a technical glitch. The compliance with the treatment was close to 100% as the enumerators enforced it.

Three-fourths of our participants were women, and roughly one-third (34%) belonged to the OBC (other backward classes or caste) category. 30% had not completed more than 10th-grade education, 32% listed household duties as their primary employment, and 26% had an average monthly household income of less than INR 5,000 (\$60). Respondents' ages ranged from 18-58 years, with a mean age of 26.75 (SD = 7.64). Most participants were Hindus (94%). The mean household size was 8 (SD = 4.64), with 40% of households having more than two teenage members.

We compared the proportions attrited across the three groups using a two-tailed Fisher's exact test. There was a marginal increase in the proportion attrited in P&P (12%) compared to the Control group (5.7%) at the 5% level (odds ratio = 0.43, and $p = 0.043$). No difference existed between P&P plus (9.4%) and other arms.

Accuracy

Our survey included two primary outcomes: accuracy and confidence. Accuracy was measured by the number of correctly completed transaction steps. Enumerators observed and marked steps as the participants attempted the two tasks: QR code transactions in PhonePe and GPay. Both treatment arms had significantly higher accuracy in the PhonePe task immediately after the intervention (P&P: coeff = 1.225, $p < 0.001$; P&P plus: coeff = 1.218, $p < 0.001$). The treatments also showed an increase in the GPay task, the same task in a novel platform (P&P: coeff = 0.606, $p < 0.05$; P&P plus: coeff = 0.629, $p < 0.05$). The average accuracies for pause and practice, pause and practice plus, and control for the PhonePe task were 82%, 82%, and 64%, and for the GPay task, they were 73%, 75%, and 62% (Table 2). In terms of relative benefit, for PhonePe, accuracy increased by 18.2 percentage points for the P&P group and 18.4 points for the P&P plus group compared to control. On the unfamiliar GPay app, accuracy still improved by 10.6 and 12.8 points respectively, immediately after the intervention.

Participants attempted the same tasks 2 days later (Table 2). Treatment groups were more accurate in the PhonePe task (P&P: coeff = 0.698, $p < 0.001$; P&P plus: coeff = 0.484, $p < 0.1$), but not the GPay task (coeff < 0.09, $p > 0.1$). The

Table 2. Results from Regression. The outcome variables are accuracy for PhonePe and GPay tasks immediately after intervention and two days later. The treatment effects indicate coefficients and standard errors for ordinal logistic regressions followed by mean and standard deviation for each outcome variable. Regressions include digital and financial literacy and demographic controls (not shown).

	Task 1 Accuracy Immediate outcome		Task 2 Accuracy Immediate outcome		Task 1 Accuracy After 2 days		Task 2 Accuracy After 2 days	
	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]
Pause and Practice	1.225*** [0.255]	0.820 [0.024]	0.606* [0.245]	0.725 [0.031]	0.698** [0.231]	0.758 [0.026]	0.0116 [0.243]	0.656 [0.033]
Pause and Practice Plus	1.218*** [0.278]	0.822 [0.028]	0.629* [0.262]	0.747 [0.034]	0.484+ [0.256]	0.709 [0.035]	0.093 [0.259]	0.683 [0.037]
Control	- [0.032]	0.638 [0.032]	- [0.035]	0.619 [0.035]	- [0.032]	0.616 [0.032]	- [0.036]	0.626 [0.036]

+ $p < 0.10$,
 * $p < 0.05$,
 ** $p < 0.01$,
 *** $p < 0.001$.

PhonePe tasks' accuracies were higher (P&P: 76%, P&P plus: 71%, Control: 62%) than GPay (P&P: 66%, P&P plus: 68%, Control: 63%). The P&P group maintained a 14.2 percentage-point improvement in accuracy over the control group, while the P&P plus group retained a 9.3-point edge. On the untrained GPay app, the improvements were more modest—3 and 5.7 points, respectively. There were no significant differences between the two treatments.

Confidence

Before each task, participants were also asked to rate their confidence in their ability to do the task correctly (pre-confidence). Both treatment arms showed significantly higher confidence before attempting the PhonePe task, immediately after the intervention (P&P: coeff = 0.408, $p < 0.1$; P&P plus: coeff = 0.721, $p < 0.01$), as would be expected given that they had a chance to practice. Interestingly, they also showed higher confidence before attempting the GPay novel task (P&P: coeff = 0.527, $p < 0.05$; P&P plus: coeff = 0.510, $p < 0.05$). Pause and Practice showed some effect in both tasks after two days (PhonePe: coeff = 0.351, $p < 0.1$; GPay: coeff = 0.376, $p < 0.1$), while pause and practice plus did not (coeff < 0.36, $p > 0.1$). The regression values and averages are listed in Table 3. In terms of percentage points, pre-task

Table 3. Results from Regression. The outcome variables are pre-confidence (confidence before doing the tasks) for PhonePe and GPay tasks immediately after intervention and two days later. The treatment effects indicate coefficients and standard errors for ordinal logistic regressions followed by mean and standard deviation for each outcome variable. Regressions include, digital and financial literacy, demographic controls (not shown).

	PhonePe Pre-Confidence Immediate outcome		GPay Pre-Confidence Immediate outcome		PhonePe Pre-Confidence After 2 days		GPay Pre-Confidence After 2 days	
	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]
Pause and Practice	0.408+ [0.209]	0.462 [0.028]	0.527* [0.212]	0.443 [0.027]	0.351+ [0.211]	0.579 [0.027]	0.376+ [0.237]	0.541 [0.028]
Pause and Practice Plus	0.721** [0.228]	0.526 [0.033]	0.510* [0.232]	0.450 [0.035]	0.364 [0.231]	0.596 [0.032]	0.079 [0.249]	0.546 [0.031]
Control	- [0.030]	0.399 [0.030]	- [0.029]	0.361 [0.029]	- [0.031]	0.527 [0.031]	- [0.032]	0.486 [0.032]

+ $p < 0.10$,
 * $p < 0.05$,
 ** $p < 0.01$,
 *** $p < 0.001$.

Table 4. Results from Regression. The outcome variables are post-confidence (confidence after doing the tasks) for PhonePe and GPay tasks immediately after intervention and two days later. The treatment effects indicate coefficients and standard errors for ordinal logistic regressions followed by mean and standard deviation for each outcome variable. Regressions include digital and financial literacy, and demographic controls (not shown).

	PhonePe Post-Confidence Immediate outcome		GPay Post-Confidence Immediate outcome		PhonePe Post-Confidence After 2 days		GPay Post-Confidence After 2 days	
	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]	OLogit Treatment Effect [SE]	Mean [SD]
Pause and Practice	1.184*** [0.243]	0.496 [0.032]	0.704** [0.234]	0.436 [0.034]	0.304 [0.252]	0.390 [0.034]	0.448 [0.348]	0.834 [0.027]
Pause and Practice Plus	0.980*** [0.260]	0.492 [0.040]	0.600* [0.255]	0.448 [0.040]	0.275 [0.272]	0.394 [0.040]	-0.023 [0.366]	0.773 [0.040]
Control	-	0.306 [0.034]	-	0.326 [0.029]	-	0.328 [0.036]	-	0.777 [0.042]

* $p < 0.10$,
 ** $p < 0.05$,
 *** $p < 0.01$,
 **** $p < 0.001$.

confidence for PhonePe increased by 6.3 points in the basic treatment and 12.7 points in the plus variant; for GPay, both treatments led to an identical 8.2–8.9 percentage-point increase. Two days later, pre-task confidence on PhonePe was 5.2 points higher in the P&P group and 6.9 points higher in the Plus group; on GPay, the gains were 5.5 and 6 points.

Participants were also asked about their confidence in having done all the steps correctly before they found out the outcome of the task (post-confidence). Participants in both treatment arms were more confident in having done the PhonePe task accurately at step 5, immediately after the intervention (P&P: coeff = 1.180, $p < 0.001$; P&P plus: coeff = 0.980, $p < 0.001$); as well as the GPay task (P&P: coeff = 0.704, $p < 0.01$; P&P plus: coeff = 0.600, $p < 0.05$). The treatment did not affect post-confidence when the tasks were done two days later (coeff < 0.45, $p > 0.1$). The regression values and averages are listed in Table 4. In relative numbers, For PhonePe, with gains of 19.0 and 18.6 points for the two treatments, respectively. For GPay, both treatments led to an identical 11–12 percentage-point increase. Two days later the PhonePe task saw a 6–6.5 point increase in both treatment groups, while for GPay, the improvements were 5.7 and a decrease of 0.4 points. There were no significant differences between the two treatments.

General confidence

The experiment included measures of general confidence. Participants completed three tasks, which gave us a measure of average reaction time, accuracy, confidence, and bias (See Methods). Here, we examined the effects of these independent measures on the task-related outcomes: accuracy, pre-confidence, and post-confidence for PhonePe and GPay tasks at each of the two time points immediately after the intervention and two days later (Table 5).

Average reaction time, a proxy for processing speed, did not affect any accuracies or post-confidences. There was a small negative effect on the pre-confidence in both tasks' immediate outcomes and the GPay task two days later (coeff < -0.044, $p < 0.1$). On the other hand, the average accuracy showed a positive effect on all the outcome variables (coeff > 2.01, $p < 0.05$), with effects being numerically greater for post-confidence than pre-confidence. Average confidence on independent tasks had a positive effect on all confidence outcomes (coeff > 2.3, $p < 0.01$) and none of the accuracies (coeff < 0.85, $p > 0.1$).

Lastly, we investigated the effect of average bias. Bias indicates how well matched a participant's confidence is with their ability. A positive bias suggests overconfidence and a negative bias suggests underconfidence. Among the accuracies, bias had a small negative effect on the PhonePe task 2 days later (coeff = -1.631, $p < 0.05$), and the rest were insignificant (coeff < 0.08, $p > 0.1$). It showed a positive effect on GPay's post-confidence at both time points (coeff > 1.6, $p < 0.05$) and not PhonePe's (coeff < 0.8, $p > 0.1$). It positively affected all pre-confidence outcomes (coeff > 1.6, $p < 0.01$).

Pairwise comparison of the effect of average measures on outcomes

We computed whether the effect in one outcome differed from another using all pairwise comparisons for each of the average measures of accuracy, confidence, and bias computed from the three independent tasks. This analysis is not

Table 5. Results from Regression. The outcome variables are accuracy, pre-confidence, and post-confidence for PhonePe and GPay tasks immediately after intervention and two days later. The treatment effects indicate coefficients and standard errors for ordinal logistic regressions. Regressions include experiment group dummy, digital and financial literacy, and demographic controls (not shown). IO refers to immediate outcome, and A2d refers to after two days.

		Average Reaction Time		Average Accuracy		Average Confidence		Average Bias	
		OLogit Treatment Effect	[SE]	OLogit Treatment Effect	[SE]	OLogit Treatment Effect	[SE]	OLogit Treatment Effect	[SE]
Accuracy	PhonePe IO	-0.018	[0.028]	2.728*	[1.083]	0.091	[0.637]	-0.889	[0.654]
	GPay IO	-0.030	[0.027]	2.015*	[1.027]	0.848	[0.631]	0.081	[0.652]
	PhonePe A2d	-0.029	[0.026]	4.219***	[1.046]	-0.010	[0.627]	-1.631*	[0.647]
	GPay A2d	-0.016	[0.026]	4.381***	[1.054]	0.795	[0.620]	-0.832	[0.639]
Pre-Confidence	PhonePe IO	-0.043+	[0.023]	2.707**	[0.929]	2.654***	[0.604]	1.682**	[0.613]
	GPay IO	-0.043+	[0.023]	2.143*	[0.951]	4.283***	[0.701]	3.429***	[0.688]
	PhonePe A2d	-0.030	[0.023]	3.245***	[0.940]	4.648***	[0.642]	3.337***	[0.627]
	GPay A2d	-0.044+	[0.023]	3.645***	[0.928]	4.943***	[0.663]	3.350***	[0.640]
Post-Confidence	PhonePe IO	-0.002	[0.025]	4.331***	[1.113]	2.534***	[0.719]	0.808	[0.700]
	GPay IO	-0.011	[0.025]	4.023***	[1.102]	3.418***	[0.769]	1.623*	[0.708]
	PhonePe A2d	0.013	[0.028]	5.707***	[1.257]	2.335**	[0.780]	0.155	[0.745]
	GPay A2d	0.033	[0.040]	4.833**	[1.689]	5.351***	[1.033]	5.037***	[1.223]

+ $p < 0.10$,
 * $p < 0.05$,
 ** $p < 0.01$,
 *** $p < 0.001$.

reported for average reaction time as the measure had a limited effect on the outcomes. Average accuracy had a greater effect on all Post-confidence outcomes compared to all pre-confidence outcomes (coeff = 2.46, $p < 0.001$) and compared to all accuracy outcomes (coeff > 0.90, $p < 0.01$; except no difference between Gpay accuracy two days later and Gpay post-confidence Immediate outcome). It had a lower effect on all the pre-confidence outcomes than accuracy outcomes (coeff > 1.55, $p < 0.001$). Average confidence had a greater effect on pre- and post-confidence outcomes compared to accuracy outcomes (coeff > 0.96, $p < 0.01$; except no difference between PhonePe pre-confidence Immediate outcome and Gpay accuracy Immediate outcome or two days later); there was no clear difference between pre- and post-confidence outcomes. Average bias had a greater effect on pre- and post-confidence outcomes than accuracy outcomes (coeff > 0.08, $p < 0.01$, except the effect of PhonePe accuracy two days later was greater than the effect on GPay post-confidence two days later coeff = 0.51, $p < 0.001$). Average bias had a greater effect on pre-confidence than post-confidence outcomes (coeff > 0.76, $p < 0.05$, except no difference between PhonePe pre-confidence Immediate outcome and GPay post-confidence Immediate outcome).

Digital and financial literacy

Along with the demographic controls, we also controlled for digital and financial literacy. Here, we examine the coefficients for these variables on all outcome variables (Table 6). These constructs were based on objective knowledge questions that participants answered before the intervention. Both digital and financial literacy have positive effects on all outcome variables (Digital: coeff > 1.08, $p < 0.1$; Financial: coeff > 0.95, $p < 0.1$). The average accuracy on the digital literacy questions was 74.2%; and on the financial questions, accuracy was 50% for the ones on financial knowledge, but 32.8% on questions around the use of financial tools like cheques and ATMs, which many had not used.

Demographic effects

All regression models were controlled for demographic variables. We report here any demographic effects on the accuracy and confidence outcome variables. There was an overall trend of decrease in all accuracy and post-confidence measures with age (coeff > -0.036, $p < 0.05$; except GPay post-confidence two days later), and a decrease in the same measures in female compared to male participants (coeff > -0.549, $p < 0.1$; except GPay post-confidence two days later). The same effect was seen for age and gender in GPay pre-confidence two days later (coeff > -0.036, $p < 0.05$) and gender only in PhonePe pre-confidence Immediate outcome (coeff = -0.549, $p < 0.05$). All other pre-confidence measures were not significant. We saw a decrease in all accuracy and confidence measures for participants who had completed secondary

Table 6. Results from Regression. The outcome variables are accuracy, pre-confidence, and post-confidence for PhonePe and GPay tasks immediately after intervention and two days later. The treatment effects indicate coefficients and standard errors for digital and financial literacy of ordinal logistic regressions described in Tables 2-4. Regressions include demographic controls (not shown). IO refers to immediate outcome, and A2d refers to after two days.

		Digital Literacy		Financial Literacy	
		OLogit Treatment Effect	[SE]	OLogit Treatment Effect	[SE]
Accuracy	PhonePe IO	1.316*	[0.521]	3.130***	[0.607]
	GPay IO	1.243*	[0.502]	1.612**	[0.551]
	PhonePe A2d	1.778***	[0.485]	1.162*	[0.514]
	GPay A2d	1.964***	[0.498]	0.993+	[0.525]
Pre-Confidence	PhonePe IO	1.477**	[0.454]	0.962*	[0.438]
	GPay IO	1.524**	[0.466]	0.954*	[0.429]
	PhonePe A2d	2.189***	[0.464]	1.801***	[0.452]
	GPay A2d	1.385**	[0.458]	1.378**	[0.443]
Post-Confidence	PhonePe IO	1.906***	[0.519]	1.840***	[0.485]
	GPay IO	1.085*	[0.507]	1.451**	[0.483]
	PhonePe A2d	2.680***	[0.587]	1.465**	[0.512]
	GPay A2d	1.581+	[0.865]	1.416*	[0.696]

+ $p < 0.10$,
 * $p < 0.05$,
 ** $p < 0.01$,
 *** $p < 0.001$.

school or less compared to those who had a diploma or a higher degree of education (coeff > -0.439, $p < 0.1$; except GPay post-confidence two days later). Being employed in agriculture or as a part of the MNREGA employment scheme of the government increased all confidence measures compared to other forms of employment that included self-employment, informal, public, and private sectors in all confidence measures (coeff > 0.450, $p < 0.1$; except GPay pre-confidence Immediate outcome), and both measures of accuracy for PhonePe (coeff > 0.478, $p < 0.1$), but not GPay. Income showed a decreasing trend in all measures for those earning less than Rs. 10,000 per month compared to those earning more than Rs. 10,000 per month, but the effect was consistently seen. Similarly, there was a decrease in outcome measures with increasing household members, which was not very consistent. Interestingly, caste did not significantly affect any measure except a decrease in GPay post-confidence Immediate outcome in OBC (other backward classes) and other reservation categories compared to the General category (coeff < -1.011, $p < 0.1$). As our data was 94% of Hindus, the majority religion, we were not able to look for the effects of religion.

Self reports

Of the 444 surveyed two days after the intervention, 121 (27.5%) reported having practised the task at home (43 P&P plus, 35 P&P plus, 43 control). Of the 121, 59 (24 P&P, 19 P&P plus, 16 control) reported being successful, 61 unsuccessful, and 1 did not know the outcome. There were no significant differences in these numbers, perhaps limited by the sample size, short horizon or external factors like needing an opportunity to transact. Additionally, participants were asked to report their trust in different financial services. 185 (41.7%) mentioned they trusted banks a lot, 158 (35.6%) to an extent, 88 (19.8%) neither trusted nor distrusted, 5 distrusted to some degree (1.1%), and 8 (1.8%) distrusted a lot. 144 (32.4%) trusted ATMs a lot, 168 (37.8%) to an extent, 85 (19.1%) neither trusted nor distrusted, 8 distrusted to some degree (1.8%), and 39 (8.8%) distrusted a lot. Lastly, 141 (31.8%) trusted digital transactions a lot, 186 (41.9%) trusted to some extent, 74 (16.7%) neither trusted nor distrusted, 13 (2.9%) distrusted to some extent, and 30 (6.8%) distrusted a lot.

Discussion

The above study tested two behavioural interventions to improve the learning of a QR code task. Broadly, we ask if active learning, which includes doing the task alongside a teaching video, can improve the accuracy of the task when performed independently and people's confidence in their ability to do the task. We found that both the treatments of pause & practice and pause & practice plus (with additional information to handle contingencies) increase the accuracy in the task on which people were trained (PhonePe), and this effect transfers to a novel platform (GPay). The interventions also improved the subjective confidence of participants. Additionally, we uncovered specific effects of general confidence and bias. We controlled for digital and financial literacy, as well as demographic variables in all analyses.

Our intervention aimed to improve learning in multiple ways. We used short videos with simple language and a relatable narrator (visible throughout the video) to put people at ease. An external content creator was hired to make the script more engaging. The narrator was a local vlogger, popular in that geography for creating fun, informative videos. Thus, the control video also used behaviour science principles, often lacking in many financial knowledge-building videos. The core intuition of our intervention is that practice, in many ways, is a simulation-like condition where one can attempt learning with no cost of mistakes. The instruction to practice is the experimenter actively encouraging the learner, implicitly saying that the learner has the ability to do the task, an endorsement, or a tacit transfer of confidence. We hypothesised that by adding an instruction to pause and practice at strategic points, we allow for a breakdown of the task (overall goal) into smaller steps (manageable sub-goals), previously known to improve the uptake of behaviour (Delaney et al., 1998; Duncan et al., 2017; Hershfield et al., 2019; Rai et al., 2023). The strategy of breaking into effective sub-goals is woven into the intervention and is given to participants, lessening the cognitive load on them (Duncan et al., 2017). The pause and practice method is a form of active learning instead of passively viewing the information, which is known to improve learning (Blázquez et al., 2019; Freeman et al., 2014). Additionally, information on how to handle contingencies – what to do when the transaction doesn't go according to the ideal scenario usually taught, and what are the crucial benefits with appropriate explanations – can further build people's confidence in doing the task and translate to other such tasks (Inzana et al., 1996; Weisman & Markman, 2017).

Accuracy was increased for both arms in both tasks in the first time point, immediately after intervention. Two days later, the treatment arms still had a small effect on the PhonePe task. This suggests that active learning is superior to traditional learning methods, i.e. lecture-style knowledge sharing like the Control arm (Ballen et al., 2017; Dewsbury et al., 2022; Freeman et al., 2014; Prince, 2004; Røe et al., 2022). Practising leading to improved performance aligns with previous literature (Calamia et al., 2012; McCaffrey et al., 2000), and even mental practice has been known to improve performance (Driskell et al., 1994). We wanted to further probe the effects of active learning in the domain of confidence. Having practised the task, treatment arms expressed greater confidence before starting to do the task independently. Interestingly, they also showed greater confidence before doing a novel task, and the first treatment arm participants (pause & practice) showed greater confidence before doing both tasks two days later. Practising alongside increases their

specific confidence in doing tasks (Jin et al., 2022; Leopold et al., 2005; Mengelkamp & Bannert, 2010) and is retained two days later.

Further, we found that participants who practised alongside finishing the task were more confident in getting the answer correct. Being able to correctly place their confidence, i.e., high confidence when they complete the task, shows better learning overall (Shashidhara et al., 2024). Our findings indicate that active practice not only makes participants more confident to try using digital payments but also instils lasting procedural knowledge (at least over a few days) for the specific app they practised. The loss of treatment advantage on the new app after two days suggests that without continued exposure, the broad confidence is not sustained in unfamiliar contexts – users might need periodic reinforcement or experience across different platforms. Participants in the intervention group, having practised the tasks beforehand, demonstrated high success rates (unsurprisingly) on their first real attempt. In contrast, those in the control group experienced more trial-and-error, including some failures. The opportunity to fail during a safe practice phase—and thereby avoid failure in real use—may be critical, as early failure could discourage adoption; by sparing users the discouragement of initial failure, the intervention helped sustain confidence and momentum toward continued use.

We then checked if the two treatments differed in any outcome measure, i.e., the effect of the additional information on handling contingencies, and we found no significant differences ($p > 0.1$). This may be due to the length of the video in pause and practice plus, which may have yielded benefits on repeated viewing. Enumerators observed that some participants got lost in the additional details, which were too much for first-time encounters with the app. Another likely explanation is that few participants actually encountered contingencies during the study tasks, so the additional info had no opportunity to manifest in better performance. However, that doesn't mean the content is useless – in real-world usage, those users might handle problems better. Similarly, the outcomes two days later are not significant when the intermediate outcomes are included as factors in the regression, indicating that the same effect persists.

To comprehensively understand confidence's role in learning, we independently measured general confidence (average across three cognitive tasks). We measured average reaction time, a proxy for processing speed, along with general confidence. Reaction time negatively affected both tasks' pre-confidence on the day of the intervention and GPay two days later. Taking more time to do cognitive tasks, or processing in general, is correlated with decreased confidence before attempting the task (Ackerman, 2014) and does not affect accuracy or confidence after having done the task.

Average accuracy across the three tasks, a proxy for ability, affected all accuracy, pre-confidence, and post-confidence measures for both tasks and time points. Much literature suggests that general ability is a good predictor of task performance (Jackson & Kleitman, 2014; Schmidt & Hunter, 2004; Spearman, 1904). Evidence suggests it matters in everyday complex tasks and job performance (Gottfredson, 1997; Schmidt & Hunter, 2004). Interestingly, average accuracy had the most effect on post-confidence, more than even the accuracy outcomes. The participants who are better at the independent tasks report more confidence in getting the task correct at the end of the task, and even more so than the objective task accuracy. We saw the least effect on the subjective measure of pre-confidence before the task, suggesting confidence in one's ability to do the task cannot be completely explained by ability (Jackson & Kleitman, 2014; Stankov, 2004).

Average confidence had an effect on all the confidence outcomes, pre- and post-, without a clear distinction of having a greater effect on one or the other. Average bias, a more objective measure of confidence that examines the relation between subjective confidence and objective accuracy, showed the highest effect on pre-confidence, followed by post-confidence and accuracy. People who overestimate their ability in general also tend to express higher confidence before the task, suggesting a positive effect of overconfidence (Hirshleifer et al., 2012; Johnson & Fowler, 2011; Weinberg, 2009).

We saw an increase in all outcome measures with increased digital and financial literacy (Hastings et al., 2013; Kaiser et al., 2022). We also saw demographic effects. Overall, there was a decrease in accuracy and post-confidence measures with age and gender (a decrease in females compared to males). Our results match much of the literature showing decreased confidence in women and, at times, accuracy too (Boekaerts & Rozendaal, 2010; Lundeberg et al., 1994; McMurran et al., 2023; Stankov et al., 2012). We saw a decrease in all measures with lower education compared to participants with higher educational degrees. The digital technology task could explain the age and education effects (Lundeberg et al., 1994; Zhang, 2023). Interestingly, we did not see much effect of caste on confidence.

Self-reports on trust showed that 77.3% trusted banks, 70.2% trusted ATMs, and 73.7% trusted digital transactions. Trust is an important factor in financial inclusion and has been known to affect bank use (Ghosh, 2021). Our participants already had access to a bank account and thus showed higher trust, while trust in DFS was slightly lower. Lastly, we also

looked at how the different outcome measures are related, and we saw a strong correlation between them (See Appendix). Further, in exploratory interaction analyses, we find that the effectiveness of the interventions varies with first-day pre-task confidence for some outcomes, particularly showing negative effects for high-confidence individuals on unfamiliar tasks (GPay) and positive effects for high-confidence individuals on familiar tasks (PhonePe) after two days (See Appendix). The independent tasks showed a strong correlation in reaction time, accuracy, confidence, and bias (See Appendix).

One of the study's limitations is that the follow-up was after only two days. We did not evaluate the impact of our interventions in real life. However, we did ascertain if the effects of the intervention were retained two days later to test for learning. Interventions did not cover the app installation and any additional requirements on that front, potentially something that could be taught in a similar pause and practice style when implementing at scale. Furthermore, balance checks revealed a trend of higher educational attainment in the Pause and Practice arm, which may have influenced some of the observed outcomes. However, it is worth noting that demographic variables were controlled for in all regression analyses. From an economic perspective, while the magnitude of the treatment effects is statistically significant, further analysis would be necessary to determine their precise implications for welfare. Given the observable improvements in confidence, one can infer that the interventions may foster greater engagement with digital financial platforms, potentially enhancing financial inclusion. This low-cost intervention could be deployed by banks, fintech apps, or government programs to increase digital payment adoption. For example, onboarding tutorials in apps could incorporate interactive 'pause and practice' elements. Future research might test such interventions at scale or evaluate long-term impacts on actual financial behaviour (e.g., reductions in cash usage). However, a more detailed examination would be required to assess how these confidence gains translate into sustained behavioural changes and broader economic benefits. Confidence could predict successful intervention uptake (Stankov et al., 2014).

In development contexts, confidence is frequently cited as a barrier to technology adoption. Research from low-income settings has shown that individuals are less likely to engage with digital financial tools if they lack confidence in navigating them (Demirgüç-Kunt et al., 2020). We add to a small but growing literature on the real-world application of behaviour science and psychology. We find our intervention increases confidence prior to doing the task, which is more likely to make the intervention sustainable (Bandura, 1997), and through a series of independent tasks and confidence judgements, we find both general ability and overconfidence bias a predictor of performance. Confidence-building strategies, like the pause and practice method, may thus play a critical role in bridging the digital divide and enhancing financial inclusion.

Conclusion

While more people join the digital financial infrastructure daily, a digital divide remains. Here, we tested interventions to teach simple QR code transactions to smartphone users through practicing alongside. We found that such intervention improves both performance and confidence in one's ability to do the tasks.

Based on what we learned from our study, we recommend using active learning rather than passive videos for interventions. Both practising alongside and having practical information increased confidence in one's ability to do the task before attempting it, even in a novel platform. More interventions need to examine participants' confidence, which may be a better indicator of them accepting the behaviour and trying said behaviour on their own.

Data availability

All data, analysis code, and research materials are available in a masked link [https://osf.io/m527c/?view_only=c97e39ee58214e2a8a8ab6dfcd5c131].

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