

DECREASING (BAD) DEBT

American household debt has been steadily increasing, reaching a record high of \$14.3 trillion before the pandemic even hit in the first quarter of 2020. At that time, the majority of the total debt was comprised of mortgages at \$9.71 trillion and student loans at \$1.54 trillion. By the third quarter of 2020, total mortgage debt rose to \$9.9 trillion and total student loans rose to \$1.6 trillion. Although total mortgage high-debt and student debt increased, total credit card balances decreased on average across both high- and low-income earners (likely due to less consumer spending), while the remaining households' debt remained relatively flat.

The delinquency rate, payments at least 30 days past due, is significantly lower than during the Great Recession. This is largely driven by the CARES act, signed into law on March 27, 2020. The legislation, alongside financial institutions that voluntarily offered loan forbearance agreements, allowed borrowers to put a pause on payments and reduced delinquency rates on mortgages, student loans, auto loans and credit card balances.

The pandemic and resulting policy responses, including loan forbearance programs, will continue to drive households' relationship with debt. Without ongoing government aid, we may see increases in debt delinquencies as people struggle to stay afloat. If the unemployment rate remains high, loan forbearance programs may only be delaying delinquencies and defaults. As the pandemic continues, it remains unclear what the economic impacts will be, including whether delinquencies will rise in 2021.

We led four projects in 2019 focused on debt management and learned how important picking the right product and making repayment easy are in reducing household debt. Building on those findings, in 2020, we led 15 projects with various financial institutions centered around making the debt management process easier for people. These projects focused across three main areas: loan payback, deciding if and how much loan to take on, and getting help for too much debt:

1. **Loan Payback:** On-time payment is critical to maintaining access to credit; keeping interest rates low; and avoiding additional fees. This year, we focused on loan payback by automating loan payments, messaging to continue making payments, and supporting people struggling with debt.

Automating loan payments eliminates the need to remember to make a payment, but aligning the payment due date with the borrower's payday can further increase likelihood of making payments. The borrower is more likely to have the cash to cover the bill immediately following payday than later in their pay cycle. In a study with Beneficial State Bank, we found that texting people a form to align the due date with income doubled the number of borrowers that set up aligned, automatic payments versus a control group that was not sent the form. Read more on [page 69](#). We're currently working with Turkish fintech Colendi to encourage users to make payments through the app with an intervention to launch shortly. Read more on [page 72](#).

We're also investigating what types of communication to borrowers increase repayment. For example, in an experiment to launch shortly with financial planner Justine PETERSEN we are testing the use of text message reminders for small business owner to repay their loans. Read more on [page 89](#). With a large Midwestern credit union, we are comparing the effectiveness of different emails and refrigerator magnet at getting borrowers to make their payments. Read more on [page 75](#). With Turkish Findecks, we are exploring potential ways to use credit reports to help improve debt repayment. Read more on [page 86](#).

The content or presentation of the messaging could also have an impact on behavior. In two separate studies with a large Midwestern credit union, we are testing whether offering financial counseling in addition to payment reminders might decrease payment delinquency and how the seriousness of subsequent messaging impacts delinquency. Read more on [pages 78 and 80](#). In partnership with Cura Deuda, we are testing whether a contest to pay-off debts can increase payment rates. Read more on [page 83](#).



In addition to making payments on time, we also want to encourage households to pay down expensive debt more quickly, and one sure way to do that is to make sure credit card users pay more than the minimum monthly payment. We are working with Schools First Credit Union to compare how different payment rules of thumb encourage members to pay more than the minimum payment. Read more on [page 101](#).

2. **Deciding where and how much to borrow:** Not all loans are equal and borrowing the maximum allowable is not always good for the end user. Prior research shows that people often overlook additional costs and total loan costs when determining how much payment they can afford, making them one unexpected expense away from missing a payment.

With Patelco Credit Union, we designed a “right-sizing” loan calculator for members interested in a Credit Builder Loan to verify that members will have enough money to save for the unexpected even with their new loan payments; while the experiment is still in the field, preliminary data show that requested loan sizes are smaller for members that use the calculator, indicating that using the calculator may help borrowers not to overextend themselves financially. Read more on [page 98](#). We are also working with Turkish fintech Tarfin to diagnose why some farmers do not continue to use Tarfin’s competitively priced loans to buy farming supplies and may instead be relying on higher-cost lenders. Read more on [page 104](#).

3. **Getting help for too much debt:** When debt becomes over-burdensome, consumers can seek options to lighten the load, but they usually need help navigating what those options are. With Washington State Employees Credit Union (WSECU), we redesigned how feedback is displayed to members who complete a financial health assessment to nudge financially stretched members to take action or ask for help. Read more on [page 107](#). Additionally, with Money Management, Inc. we tested whether we can increase trust in debt counselors by using empathy, expertise and social norms to encourage borrowers to complete debt counseling. Read more on [page 94](#).

Read on for a deeper dive into these case studies and more.

Partner Type:
Bank

Partner Cohort:
2018

Project Type:
Field Study

Project Status:
Complete



Aligning Automatic Payments with Income

BACKGROUND

There are many reasons someone may default on an auto loan: job loss, health emergency, an expensive car repair, or [income and expense volatility](#). [Brian Baugh and Jialan Wang](#) found that financial shortfalls—particularly payday loans and bank overdrafts—are more common when there is a greater mismatch between the timing of someone's income and the bills they owe.

We partnered with Beneficial State Bank, a California-based community development bank beginning in 2017, to design solutions that help make repaying car loans easier. We developed a recurring payments form designed to encourage borrowers to repay their loans automatically when they are paid.

HYPOTHESIS AND KEY INSIGHTS

We began with a behavioral diagnosis that detailed each step in the entire auto lending process to better understand that process from the perspective of both the borrower and the loan issuer. Our behavioral analysis revealed a number of insights specific to Beneficial Bank's internal processes and barriers to repayment, as well as insights relevant to auto loan repayments broadly.

- » Monthly loan repayments are almost universally due on the day that a borrower bought their car. In some cases, this arbitrary choice does not cause any problems. If their repayment due date falls far from a payday, though, creates a disconnect between someone's expenses and income, making it more difficult to consistently make payments on their car loan.
- » While a loan payment is due on a specific date (e.g. the 15th), many people are not paid on specific dates (e.g. every other Friday). In these cases, simply changing the date their payment is due is not sufficient and borrowers still run the risk of having income come just after their due date some months.

EXPERIMENT

We randomized over 1000 new Beneficial State Bank indirect auto loan customers into either a control or an experimental group. Beneficial State Bank conducts a welcome call that is required for all new

loans or loan refinancings to confirm borrower information and to offer repayment information. During the welcome call, the experimental group was texted a Recurring Payments form designed to establish automatic loan repayment timed with when customers were paid. The control condition did not receive the form.

Recurring Payments

Name _____

Phone Num. _____

Car Make _____

Car Model _____

Set up automatic payments that **match**
when you get paid!

(A) Monthly Total Car Payment _____

(B) Times You Get Paid per Month _____

(C) Amount per Payment ($A \div B$) _____

Paid when paychecks *enter your account*

1. THE SAME DAY OF THE WEEK

☐ Weekly on _____

☐ Bi-weekly on _____

☐ Monthly on the _____

OR

2. ON SPECIFIC DATES

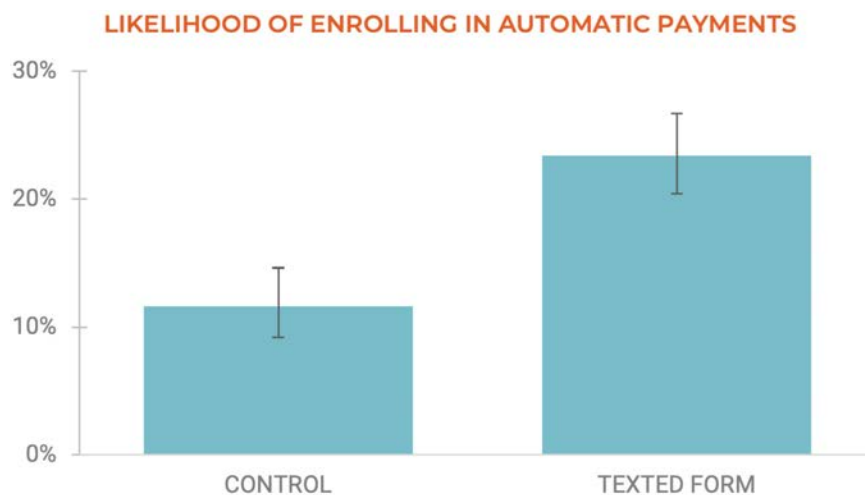
☐ 1x Monthly on the _____

☐ 2x Monthly on the _____ and _____

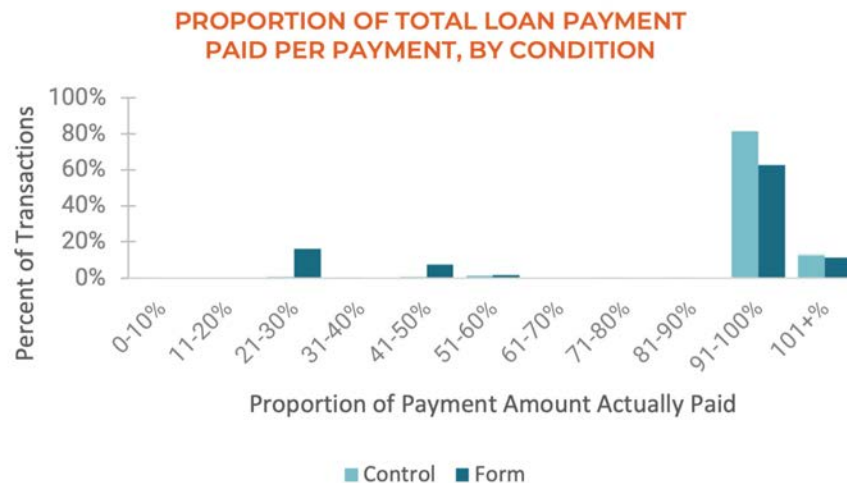
☐ I completed a Welcome Call & changed my monthly due date to match when I get paid.

RESULTS

Over 50% of customers in both the control and experimental group expressed high levels of interest in automatic, recurring payments timed with income. However, people who were texted an automatic recurring payments form were **twice as likely** to enroll in automatic payments (23% compared to only 12%), $p < .001$. Turn-off rates were equivalent across the two groups (about one third), so the proportion of members enrolled in automatic payments remained higher in the experimental group (15% vs. 8%), $p < .001$.



There was some evidence suggesting the form successfully encouraged individuals to time their payment with their paydays. The automatic payers in the experimental condition made 1.2 payments/month compared the control group's 1.05 payments/month, $p < 0.001$. In examining payment patterns, it seemed that about 10% of members in the experimental group had set up these smaller, more frequent payments.



We hypothesized that timing loan payment with payday would improve loan performance. On average, we find that members in both payment groups pay the appropriate amount by the monthly due date. However, members in the experimental group have fewer late payments ($M = 3.83$) compared to the control group ($M = 5.29$), $p < .001$, and members in the experimental group have paid more toward their loan overall (104% vs. 94.2%), $p < .001$.

There were 17 loan defaults during the study period, and all were in the control group, $p = .128$. This is not a statistically significant difference, but is a strong directional effect.

 This project was in collaboration with Irrational Labs.

Partner Type:
Tech

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In Design



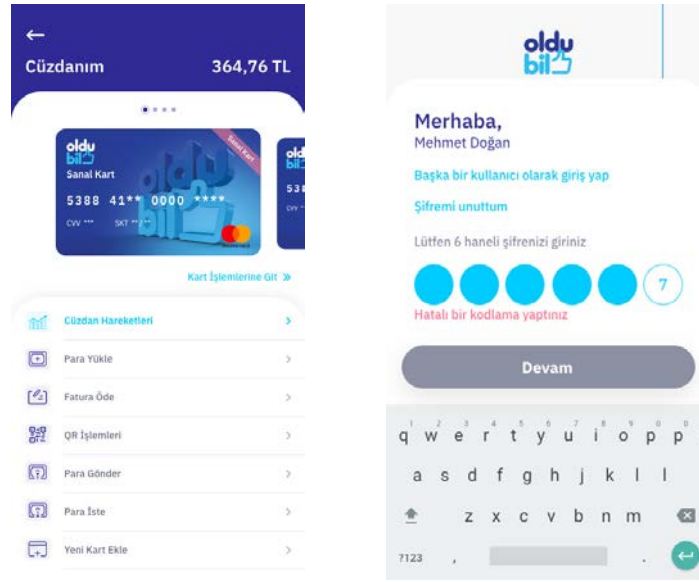
Encouraging Digital Payments Among Turkish Households

BACKGROUND

Turkey's economy has been particularly impacted by the COVID pandemic. A sharp decline in different economic sectors brought losses in employment and income reduction, together with rising inflation, a weaker currency, and volatile purchasing power among households. In fact, as of June 2020, 52% of households reported a loss in income, 65% of households saw their savings plummet, and 45% of Turkish households reported increased expenses. Under these circumstances, many households, especially those with less financial slack, faced the risk of being unable to cover their essential expenses, including utility bills.

Working closely with Boğaziçi University's Center for Applied Research in Finance (CARF), we partnered with Colendi, a Fintech that provides alternative credit scoring and access to credit options for the unbanked in Turkey. Colendi is working closely with Limak, one of Turkey's largest electricity companies and a customer solutions platform with around three million users. Recently, they launched OlduBil App, powered by Colendi for Limak, a mobile payment platform and prepaid card that makes it easier for unbanked users to make financial transactions such as paying their electricity bills. OlduBil works as a digital wallet that also allows users to pay their bills in installments (at a very low interest rate) when they face financial shortfalls, while helping them build an alternative credit score. Currently, OlduBil has more than 6,000 users.

Given the recent launch of OlduBil App, we decided to focus this project on how to get Limak users to download the app, register and make a first bill payment. We believe that using the app can provide an alternative when households face financial hardships or serve to make online payments easier and safer.



HYPOTHESIS AND KEY INSIGHTS

We are currently in the process of implementing diagnosis tools with Limak users to understand the specific barriers that prevent them from enrolling and using the OlduBil App. To date, we have gathered some insights from the literature and from Colendi's user reports:

- » As a result of the pandemic, Turkey has seen a decrease in the usage of physical payment and consumption channels, as well as an increase in online transactions.
- » However, 74% of Limak account holders are age 45 or older, which could suggest a generational barrier in the adoption of new technologies. Changing the **status quo of how they typically make electricity payments could be a challenge to overcome.**
- » **On the other hand, among age groups, Colendi's data shows a negative correlation between age and payment delinquency;** younger users have reported more months without paying utility bills in the recent year.
- » Finally, using a machine learning algorithm, Colendi has estimated a credit score based on Limak users' bill payment performance and additional user characteristics. Interestingly, those who are ranked in the lowest credit score group (meaning a worse payment performance) also show the highest electricity consumption on average. This could be reflecting a subset of large LMI households that are struggling to pay their bills on time.

From these insights, we hypothesize that some relevant barriers to the adoption and use of OlduBil App could be lack of trust in, and experience with, digital payments (typically lower among LMI and older individuals). Also, LMI households could be experiencing a scarcity mindset during a financially hard

year, which captures their limited attention and depletes their cognitive bandwidth, making it harder to adopt a new tool and change the status quo.

EXPERIMENT

We are currently finalizing a survey to Limak and Oldubil users to identify their behavioral barriers and opportunities for a behavioral intervention.

RESULTS

We expect to finalize the behavioral diagnosis and launch an intervention in Q1 2021.



This project is in collaboration with the Center for Applied Research in Finance (CARF) at Boğaziçi University.

Preventing Debt Payment Delinquencies with Behavioral Interventions

BACKGROUND

Falling behind on debt payments can happen for a number of reasons, including procrastination, inattention, financial constraints, and a misunderstanding of the costs of delinquent payments (e.g., higher borrowing costs in the future). Regardless of the reasons, these delinquent payments can pose financial risks to households. Sometimes these risks are small, like a modest decline in a credit score, and sometimes these risks are large, like a loss of access to credit or vehicle repossession.

Given the diversity of potential reasons for payment delinquencies, we wanted to compare a diverse array of behavioral interventions—some common, some less common—to determine which approach was most effective at preventing debt payment delinquencies. To do so, we partnered with a large Midwestern credit union to implement an experiment incorporating emailed payment reminders, reminders placed on refrigerator magnets, and access to a new type of savings account, each of which may impact payment delinquencies through different behavioral channels.

KEY INSIGHTS

In developing our approach to designing this multi-faceted intervention, we drew on three insights from existing research:

- » One of the most common behavioral interventions to address payment delinquencies and other financial behaviors is the use of [payment reminders](#). These reminders, often delivered by email and text message, [have been established as a cost-effective way to improve financial outcomes](#). We wanted to use debt payment reminders to both remind credit union members about upcoming debt payments and increase the salience of information that may further nudge them to make timely debt payments, such as the costs of delinquencies and the opportunities to set up automatic payments.
- » At the same time, [recent work](#) has pointed to the potential effectiveness of reminder-oriented refrigerator magnets, which are designed to be placed in a highly-trafficked part of the home,

in preventing delinquency. Magnets can act as a single, physical reminder of an obligation, in contrast to the recurring, digital content of email reminders, and may therefore reach credit union members that may lack access (or be less responsive) to email reminders.

- » Finally, there is ample work demonstrating a relationship between [holding even small amounts of emergency savings and having a reduced risk of missing bill payments](#). As such, helping credit union members build savings automatically may help them better manage unexpected financial volatility without missing debt payments.

Building on these insights, we developed an experiment to test the efficacy of email reminders, magnet reminders, and a savings intervention at helping debt-holding credit union members prevent payment delinquencies.

EXPERIMENT

This study involved a five-arm experiment in which each of the above experimental components were tested against a control both independently and in conjunction with one another. The groups in the experiment were:

- » **Control group:** Received no payment reminders or any communications from the credit union other than standard communications, such as marketing emails or account statements.
- » **Treatment group 1:** Received monthly emails reminding them about their upcoming debt payments, and providing one of six additional informational nudges to motivate timely debt repayment. These email nudges aimed to address debt payment issues related to inattention, procrastination, status quo bias, income constraints, budgeting difficulties, and misunderstanding the costs of delinquency.
- » **Treatment group 2:** Received a refrigerator magnet and letter reminding them of their upcoming payment and inviting them to record their due date on the magnet.
- » **Treatment group 3:** Received a series of emails inviting them to enroll in the newly-designed Rainy Day Savings Account, in which 2% of every deposit made into the credit union's checking account is automatically deposited into the Rainy Day Savings Account.
- » **Treatment group 4:** Received a combination of Treatments 1, 2, and 3.



Hi [NAME],

Thank you for choosing Sample Credit Union for your [TYPE OF DEBT PAYMENT] loan. We appreciate the opportunity to serve you.

At Sample Credit Union, it's our mission to improve the financial lives of our members. That's why we want to simplify the process of making your loan payments by setting them up automatically. This will also help you avoid late fees or potential damage to your credit score.

If you wish to set up an automatic payment, you can within Online Banking in just a few minutes. Here is how:

- Login to online banking at www.SampleCU.org. Click "New User Enrollment" if you have not enrolled in this free service.
- In the left menu, select "Funds Transfer" under the Transfers/Deposits heading.
- Set up the transfer and select the "Make this a recurring transaction" box. This will allow you to indicate how often you would like the transfer to occur as well as the start date and end date.
- Click "Transfer Funds" to complete.

If you prefer not to set up an automatic payment or you already have, we've included a magnet to remind you when the funds will be deducted from your account and help you stay on track. To make a one-time payment, you can visit SampleCU.org/make-loan-payments.

Thanks again for choosing Sample Credit Union.

Sincerely,
Member Services

Loan Type _____
Due Date _____
SampleCU.org/make-loan-payments

RESULTS

The experiment launched in October 2020, to 23,361 members of a large Midwestern credit union, and will be administered for six months. Measured outcomes will be drawn from credit union data and include the incidence and frequency of debt payment delinquencies, the length of delinquencies, savings amounts, the incidence of setting up automatic debt payments, and the rate of opening Rainy Day Savings Accounts.



This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Using Reminders to Encourage Credit Union Members to Resolve Delinquent Payments

BACKGROUND

Payment delinquencies can have high direct and indirect costs for households. Even modest payment delinquencies can incur fines and fees, while longer-term delinquencies may result in foreclosures, repossession, and substantial harm to credit scores. While there has been ample research on ways in which behavioral economics can help prevent payment delinquencies—through the use of [payment reminders](#) or [setting up automatic payments](#), for example—there is less work on ways in which nudges can help households “cure” existing delinquencies. This is important because, despite the advances of behavioral economics, delinquencies are a fact of life.

There is less work on ways in which nudges can help households “cure” existing delinquencies.

We wanted to investigate the extent to which behaviorally-informed delinquency notices could impact the rates of households becoming current on their debt payments. To do so, we partnered with a large Midwestern credit union to design delinquency notice emails that would be delivered to any members who became delinquent on their installment debt payments.

KEY INSIGHTS

Through conversations with the credit union and reviews of the research literature, we identified four potential drivers of delinquency that we wanted to address with these interventions.

- » Inattention to payment dates, which may be resolved simply by providing members with timely notices that they were overdue on their payment.
- » Misunderstanding of the costs of delinquency, which may be resolved by making these costs more salient in the delinquency notices.

- » Financial constraints—a particularly relevant driver during the COVID-19 pandemic—which may be resolved by offering credit union members loan supports, such as the option to defer a payment or to go through a loan modification.
- » Procrastination, which may be resolved by offering members a backup payment deadline by which they can make a payment without it harming their credit score.

EXPERIMENT

To test these approaches to resolving payment delinquencies, we administered a four-arm experiment to credit union members who had at least one installment debt.

- » **Control Group:** Received no payment reminders or any communications from the credit union other than standard communications such as marketing emails or account statements.
- » **Treatment Group 1:** Delinquent members received a series of reminders that escalate in seriousness as the delinquency worsens. At roughly two weeks' delinquent, they received a simple reminder of their delinquency and an offer of loan deferral/modification programs (if they qualify). At 45 days delinquent, they received a reminder informing them that falling two payments behind can have a severe impact on their credit score. At 75 days delinquent, we informed them that three missed payments in a row (or 90 days delinquent) can be as damaging to their credit score as if they filed for bankruptcy.
- » **Treatment Group 2:** Two weeks after their first delinquency, members in this group received a message telling them that, if they can pay off their debt within 27 days of their original due date, their delinquency will not be reported to credit bureaus. The messages for more severe delinquencies are similar to those of Treatment Group 1.
- » **Treatment Group 3:** This is a combination of Treatments 1 and 2. That is, it combines the offer of loan deferrals and modifications with the pledge not to report their delinquency to credit reporting bureaus if they can get the payment in before 27 days past their due date.

RESULTS

This experiment was launched in September 2020, to 31,133 debt-holding members of a large Midwestern credit union and is currently in-field. Key outcomes for this study will be drawn from credit union data and include the rate of delinquency resolution, the time to delinquency resolution, and the occurrence of future delinquencies.



This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Linking Payment Reminders and Financial Counseling Services

BACKGROUND

Payment reminders and financial coaching and counseling services are two key ways by which programs can help people stay on track with their debts. Payment reminders, which alert people to an upcoming payment due date, are an extremely low-touch way of doing so. Financial coaching and counseling services, which work directly with clients to identify and address their financial needs and goals, represent a high-touch way of keeping people on track with their debt obligations.

Though each of these approaches can be effective on their own, they may also complement one another. One recent study, for example, found that recipients of credit counseling were more likely to avoid payment delinquencies post-counseling if they received emails reminding them of their payment due dates and/or their financial goals. Building off this research, we wanted to test the extent to which payment reminders could complement financial counseling services by partnering with a large Midwestern credit union and Horizons, a multi-service community organization that provides financial counseling services. Specifically, we designed an experiment testing the impact of offering indebted credit union members the opportunity to receive free financial counseling from Horizons coupled with debt payment reminders provided by the credit union in order to help them avoid delinquencies on their debt payments.

Recipients of credit counseling were more likely to avoid payment delinquencies post-counseling if they received emails reminding them of their payment due dates and/or their financial goals.

KEY INSIGHTS

One of the credit union's primary concerns is reducing loan payment delinquency rates in their membership. However, the drivers of delinquency are complex and can range from budgeting issues to cognitive biases to financial constraints. Financial counseling services of the type offered by Horizons may serve as a way to offset the risk of payment delinquencies by helping credit union members with their unique financial needs. For example, a participant who falls behind on payments because of budgeting issues may receive guidance on how better to track their spending, while a participant who falls behind due to inattentiveness may get help in setting up automatic debt payments.

However, while counseling services have shown promise in improving the financial outcomes of participants, they are often limited to relatively few interactions between counselor and client. This may lead to quickly dissipating benefits from these services after clients exit counseling, as has been observed in financial education programs. To address this risk, we wanted to couple the offer of Horizons' counseling services with regular monthly payment reminders to help credit union members stay on track with their payments.

EXPERIMENT

To test the efficacy of coupling payment reminders with financial counseling, we developed a three-arm experiment.

- » **Control group:** Received no payment reminders or any communications from the credit union other than standard communications such as marketing emails or account statements.
- » **Treatment group 1:** Received three emails at monthly intervals offering three free financial counseling from Horizons via emails sent by the credit union. These emails highlighted the benefits of financial counseling as well as the types of financial issues counselors can address, and included persuasive messaging elements to encourage counseling take-up.
- » **Treatment group 2:** Received the three offers of free financial counseling coupled with monthly emails reminding them about their upcoming debt payments and including one of six additional informational nudges to encourage members to pay their debts on time. These email nudges aimed to address debt payment issues related to inattention, procrastination, status quo bias, income constraints, budgeting difficulties, and misunderstanding the costs of delinquency.

These email nudges aimed to address debt payment issues related to inattention, procrastination, status quo bias, income constraints, budgeting difficulties, and misunderstanding the costs of delinquency.

In structuring the experiment this way, we are able to test both the impact of offering the counseling services themselves, as well as the combined impact of pairing these services with payment reminders.

RESULTS

This experiment was launched in September, 2020, to 18,355 debt-holding members of a large Midwestern credit union and is currently in-field. Measured outcomes will include the rate of financial counseling takeup as well as an array of relevant financial indicators captured through credit union data, including checking and savings account balances, account opening behavior, debt payment delinquencies, and new debts incurred.



This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type:
Tech

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In Design



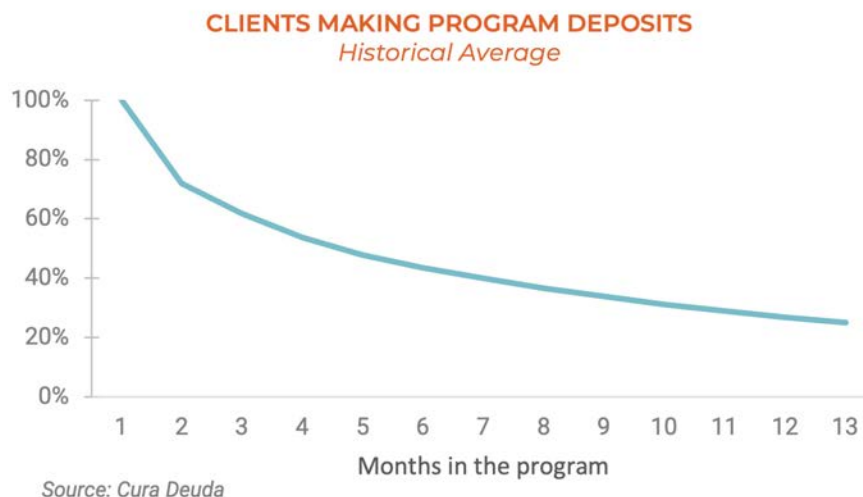
Incentivizing Savings for Debt Repayment With a Contest

BACKGROUND

According to recent reports, [8 out of 10 Mexicans](#) have some type of debt and, on average, personal debt represents [three times their monthly income](#). Failing to pay debt on time can have detrimental effects for financial health, both by pushing people into debt cycles and by reducing their capacity to build savings.

Working with [Cirklo](#), an innovation consultancy firm in Mexico, we partnered with [Cura Deuda](#), a debt-repair organization that helps Mexicans consolidate, refinance, and make deposits towards repaying their outstanding debts. After enrolling with Cura Deuda, users agree to a monthly deposit plan using a newly opened debt repayment account. Funds in this account can only be used for the repayment purpose. However, while all Cura Deuda users make the first month's deposit, less than 72% make the second deposit, and the rate keeps dropping as they move forward with the program.

In this sense, we focused on helping Cura Deuda users make their next loan repayment deposit on time, to continue progressing in their program towards debt repayment.



HYPOTHESIS AND KEY INSIGHTS

Our behavioral map revealed several barriers in the customer journey that discourage clients from keeping on track with their repayment program. Low- to moderate-income indebted users might suffer from cognitive overload and avoid paying attention to reminders and communications (ostrich effect), while progress towards debt repayment is less salient.

Cirklo ran diagnostic interviews with Cura Deuda's customer service team, reviewed user comments on social media and tested the enrollment process. Results revealed the following insights:

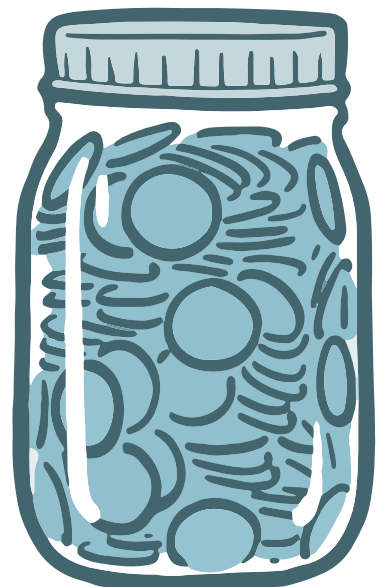
1. Clients are uncertain about the backend process that Cura Deuda does to negotiate their debts and have many doubts about how the process works.
2. Clients frequently avoid or miss reminder communications from Cura Deuda.
3. Clients feel that the deposits they make are not tangible enough, given the uncertainty associated with the debt negotiating process. Payments don't provide immediate positive feedback for the user.

In this sense, we decided to focus on making communications and payments more salient by making them more attractive. [Previous research](#) has shown that lotteries and prizes can incentivize savings, given that people tend to overweigh low probabilities. We hypothesize that pairing communications and payments with an opportunity to win a monetary prize (in a contest setting) will make the message more salient and encourage clients to make deposits towards their repayment program. Moreover, by framing the prize as a "chance to get out of debt", we expect that clients will make more on-time deposits compared to those that don't know about the contest.

EXPERIMENT

We designed a study to test whether "knowing about a debt-free contest" increases the likelihood that a client makes their next deposit on time. Currently active Cura Deuda clients were randomized to one of four study groups, depending on whether they received a control reminder email or a reminder email informing them about the contest. The contest will be run twice. Clients who make their deposits on time during November will be invited to participate in Contest 1, while clients who make their deposits on time during December will be invited to participate in Contest 2.

The contest works as follows: Eligible clients are automatically enrolled in the contest. If they make their deposit on time, they receive an opportunity to win, for which they must access a website to guess the weight of a jar full of "1 peso" coins. Whoever guesses the correct weight



or gets closest will win up to \$40,000 pesos (roughly USD\$ 2,000) put towards their debt repayment program. Since 80% of current debt amounts are below the prize amount, the contest was framed as a “debt-free contest”, which we hypothesize will make the prize more attractive.



In addition to active clients, inactive clients were also randomized into the same study groups to test whether the same intervention re-activates these clients and re-engages them with their debt repayment program, by making an on-time deposit.

RESULTS

The experiment was launched on November 1st, sending users control and contest reminders. We expect to begin analyzing the results after the end of the second contest in January 2021.



This project is in collaboration with Cirklo.



Leveraging Credit Score Reports to Encourage Debt Repayment

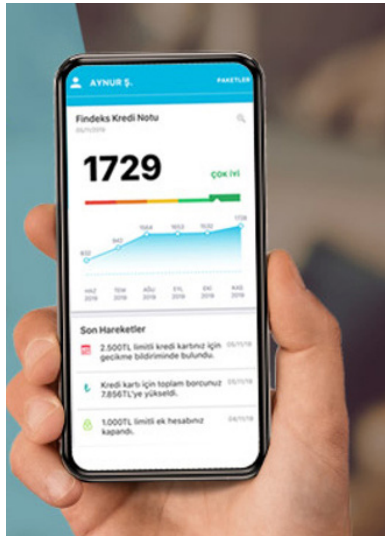
BACKGROUND

When facing financial challenges, people are more prone to neglect financial responsibilities and make unwise financial decisions. Among those responsibilities, repaying debt is particularly challenging, given the behavioral biases that have been shown to influence this behavior. For instance, we know that [people have limited attention](#) and can forget to make payments on time and that they can experience liquidity constraints due to a [mismatch between income and payments](#). Also, we know that [they are present biased and fail to accurately estimate the costs of late payments](#), and that when deciding how to pay off debts, people choose the smallest debts first instead of the most expensive ones ([we are debt averse](#)).

In 2019 there was a five to nine percentage point increase in the share of households holding any debt.

Turkish households are not exempt from these biases when dealing with debt repayment. According to a financial literacy survey, in 2019 there was a [five to nine percentage point increase in the share of households holding any debt](#), and we estimate this number to be higher during the economic crisis generated by the COVID pandemic, where [69% of households have seen their incomes reduced](#).

In this context, we are working closely with the Financial Literacy and Inclusion Association of Turkey (FODER) and collaborating with [FINDEKS](#), a service provided by the Kredi Kayıt Bürosu (KKB), Turkey's largest credit bureau. FINDEKS currently has approximately four million users, and we are focusing on how we can use the credit reports to help users pay their overdue debts on time, while also encouraging them to engage more with FINDEKS and their financial services.



HYPOTHESIS AND KEY INSIGHTS

While we are still in the process of implementing our diagnostic tools, some evidence from past research can shed some light into some potential interventions:

- » One of the barriers to on-time payments is limited attention, especially under stress conditions. Previous research by [Cadena & Schoar](#) has shown that sending timely reminders can have a positive effect on debt payment, even as big as the effect from providing financial incentives.
- » We also know that people fail to follow through on their intentions. One way to help them stick to their plans is to make “implementation-intention” prompts. Past research by [Mazar, Mochon & Ariely](#) has found that personalized, yet non-binding, commitment statements reinforce individuals’ motivations to follow through on intentions and pay their credit card bills, by around two percentage points.
- » Finally, we are taking into account that an intervention targeting credit reports is removed from the setting where the key behavior takes place (repaying a debt happens at a financial institution). In that sense, like providing users with an opportunity to elaborate an “implementation-intention” prompt, we can give them rules of thumb that guide them to repay their debts in a better way. A recent study by [Kondratjeva and collaborators](#) found that giving tax filers tips to pay their debts reduced the likelihood of having an unsecured debt by five percentage points.

We expect that these insights can help us leverage credit reports to help people improve their debt repayment behavior.

EXPERIMENT

Based on the results of an ongoing behavioral diagnosis and the feasibility, we expect to implement a study in Q1 2021.

RESULTS

After implementation, we expect to have results by the end of Q2 2021.



This project is in collaboration with the Financial Literacy and Inclusion Association of Turkey (FODER).

Partner Type:
CDFI

Partner Cohort:
2019

Project Type:
Field Study

Project Status:
In Design

Increasing The Number of On-Time Loan Payments Among Small-Business Borrowers With a Financial First Aid Kit

BACKGROUND

During times of crisis, a little encouragement can go a long way. A [recent study](#) conducted by Ideas42 aimed to nudge college students into using student support services through periodic SMS reminders. The Ideas42 team found that students who received weekly SMS reminders with encouraging messages were more likely to have positive educational outcomes than those who did not. In this experiment, we partnered with Justine PETERSEN, a St. Louis-based Community Development Finance Institution (CDFI) to see how the concept of encouragement could translate to increased loan repayment among small business borrowers.

KEY INSIGHTS

Low-Income households, and especially low-income small business owners, often have a wide range of financial obligations, making it difficult to stay on track with their obligations. Failure to meet these obligations can worsen financial outcomes, leading to lower credit scores and higher costs of borrowing over the course of their lives. The ongoing COVID-19 pandemic has further complicated matters, and has had [disastrous implications for small business owners](#). As revenue drops and budgets tighten, it is becoming more difficult for business owners to meet their debt obligations and more important to avoid paying late fees or unnecessary interest payments.

The ongoing COVID-19 pandemic has further complicated matters, and has had disastrous implications for small business owners.

Targeted reminder messages have been shown to help individuals meet a wide range of financial goals, [including loan repayment](#). Additionally, previous research has indicated that simply by [developing a plan for executing a goal](#) can increase the likelihood of following through on a wide range of goals. In this experiment, we test how restructured loan repayment reminder messages that use small business owners' goals and their own words of encouragement can affect the loan delinquency rates of Justine PETERSEN's small business loan borrowers.

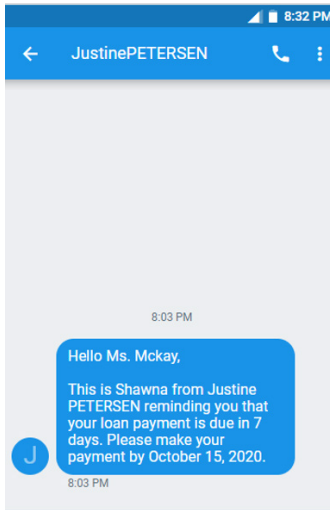
Previous research has indicated that simply by developing a plan for executing a goal can increase the likelihood of following through.

EXPERIMENT

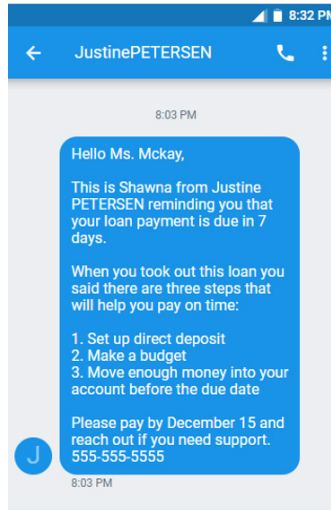
Building on the above insights, as well as Justine PETERSEN's support-focused relationship with its borrowers, we wanted to design an experiment that would prompt borrowers to pay on-time and provide them with encouragement and support to manage any financial circumstances that may make on-time payments difficult. At the end of 2020, we are finalizing a four-arm experiment to test the best way of achieving this goal:

- » **Control Group:** Participants in the control group will receive the standard notification from Justine PETERSEN, which includes monthly invoices sent through the mail or online statements available through a loan portal.
- » **Treatment Group 1:** Participants will receive simple SMS payment reminders 14 days, 7 days, and 1 day before their loan repayment due date.
- » **Treatment Group 2:** Before closing their loan, participants will complete a simple goal-setting exercise with a Justine PETERSEN staff member followed by the same SMS payment reminder schedule as Treatment Group 1, but messages will also include a reminder of participants' goals.
- » **Treatment Group 3:** Before closing their loan, participants will complete the goal-setting exercise from Treatment 2 and a "financial health first-aid kit" with a Justine PETERSEN staff member. To build this kit, participants will answer a series of questions about how they will "get back on track" if they do not complete their loan repayment by the 15th. If participants do not make their loan payment by the 15th, they will receive six messages (three SMS and three email) that remind them that they have missed their payment and include a visualization of their financial health first aid kit, which depicts their strategies for getting back on track.

Treatment 1: Simple SMS Reminders



Treatment 2: Goal-Setting SMS Reminders



Treatment 3: Financial First Aid Kit



This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.



Decreasing High-Interest Debt Through Loan Consolidation Products

BACKGROUND

In recent years, American household debt has [increased past \\$14 trillion](#), leaving the average household with nearly [20% more debt](#) than they had at the height of the financial crisis in 2008. While certain types of loans (e.g., mortgages, student loans) can be useful and allow for important investments, the sheer amount of debt and number of individual loans families carry represents a significant burden on households. Debt payments, combined with the high interest they often come with, can create a debt spiral in which households need additional loans when they face an inevitable unexpected expense.

To address this growing concern, we partnered with LendingClub to test whether we can assist existing borrowers in paying their current personal loans closer to their payment due date each month, rather than using the grace period—a 15-day period after the loan payment is due, during which there are no late fees or negative marks on their credit, but during which interest continues to accrue on a daily basis. To achieve this, we designed an email test comparing LendingClub's business-as-usual emails with one that highlights the member's streak of on-time payments, the ultimate aim being to encourage sooner payment.

HYPOTHESIS AND KEY INSIGHTS

A payment grace period allows for a certain level of forgiveness: members can use the 15 days to make the payment without late fees or negative marks to their credit report. However, because interest accrues daily, members who habitually make their loan payment at the end of the grace period face extra interest costs and can therefore end up owing additional money.

There are multiple reasons why existing borrowers would use the grace period to make their loan payment instead of paying on the due date, including:

- » **Cash flow and misalignment of pay cycles with loan due date:** A member's income pay hits their checking account within the grace period of the loan, only giving the member access to their money after the loan due date.

- » **Forgetfulness:** Scarcity of mental bandwidth and lack of attention may lead the member to forget to pay by or on their due date, relying on emails to remind them to pay each month.
- » **Habit:** Since there is little obvious reason not to use the grace period, members may choose the path of least resistance and fall into the habit of using the grace period.

We are seeking to nudge people to make their loan payments earlier in the grace period to help prevent members from accruing additional debt from interest. We will do so by leveraging a message that reflects the member's current streak of on-time payments, to encourage them to continue this streak and make their next payment. [Research](#) has demonstrated that “gamifying” behavior and displaying streaks of well-intentioned behavior can encourage habit formation and continued behavior. Here, we are testing whether similar streak messaging can help motivate people to pay their loans sooner in the grace period.

We predict that our treatment email will increase the number of people making payments within 72 hours of the email opening and that in the long term, the members who receive the treatment email will accrue less debt in the form of interest, compared to those who receive the control email.

EXPERIMENT

LendingClub sends all borrowers emails at multiple points during the grace period to remind them that their payment is due. One such email is sent on day five after the payment due date; we aim to leverage this touchpoint to introduce and test a new treatment email. Members who have made at least three on-time payments in a row and are currently on day five of their grace period will be randomized to one of the two conditions:

- » **Control:** LendingClub's business-as-usual payment reminder email,
- » **Treatment:** an email reminding them to make a payment and highlighting their streak of recent on-time payments

RESULTS

We anticipate launching this email intervention in the Spring of 2021 for approximately five months, for a total of approximately 10,000 members included in this study.



Partner Type:
Non-Profit

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In Design



Using Short Language Cues to Improve Debt Counseling Completion

BACKGROUND

The U.S has reached an all-time high in consumer debt, with more than [60%](#) of U.S Americans reporting that they are weighed down by debt. In looking for solutions, one way of managing one's debt is through non-profit organizations that offer credit counseling. However, [only 23%](#) of U.S adults indicate that they would utilize this type of service. Considering that credit counselors have the potential to positively impact one's finances, there is a need to understand how to increase engagement with credit counseling services.

We partnered with Money Management International (MMI), a non-profit organization offering credit counseling and debt management services, to explore ways to increase the number of clients completing counseling sessions with the hope that this will then lead to more households reducing their debt load.

HYPOTHESIS AND KEY INSIGHTS

Our partnership began at our 2019 Durham Fall Workshop and was followed by a multi-day virtual workshop with MMI leadership and staff. We interviewed debt and budget counselors regarding how sessions start and progress as well as the common pitfalls that prevent clients from completing a session.

The diagnosis yielded a number of key insights into the barriers to completing the debt and budget counseling session.

1. **Lack of clear expectations:** The beginning of the counseling session is very important to building trust, but clients may not have clear expectations about MMI's function or purpose when starting a call.
2. **Lack of trust in credit counseling:** Trust may be critical for seeking financial advice and implementing the advice. A client's trust in credit counseling broadly depends on two

components: their perceptions of the counselor's expertise and the counselor's empathy. The counseling session may be the first time clients interact with or hear about MMI and its services. Sharing information with and accepting advice from an organization like MMI relies on clients trusting in both their ability to help and feeling that their own best interests are being considered.

3. **Overwhelming options:** When it comes to reducing overwhelming debt, there are also numerous options in the market and advice on every corner. Yet, it's difficult to sort through what works. We can get overwhelmed by the sheer number of options available to us and may choose to take our time making a decision or streamline our decisions by relying on mental shortcuts. This uncertainty can lead to procrastination.
4. **Limited time and attention:** Counselors have attempted to make debt and budget counseling easily accessible online and over the phone, but despite the convenient access to counseling, there is a time investment on the client's part. The client must wade through all the budgeting and credit information necessary just to determine their next steps. Callers feel that their time is limited and are unsure if the process is "for them". During moments of crisis, cognitive resources are strained, making it harder to effectively allocate attention. People tend to focus on finding seemingly immediate solutions whereas the issue of reducing debt requires a long-term mindset. With credit counseling, it's initially unclear that they'll get any benefit after this investment of time and information.

During moments of crisis, cognitive resources are strained, making it harder to effectively allocate attention.

Based on these findings, we designed an experiment similar to one that was launched with Navicore Solutions in 2017, which focused on increasing trust through the use of "Feel, Felt, Found" (FFF) statements.

In the [experiment](#), we trained debt and budget counselors to use a "Feel, Felt, Found" (FFF) statement. The FFF statement was designed to increase trust by incorporating an empathy statement ("I know how you feel") and by using social norms to signal expertise and encourage call continuation ("I've worked with a lot of clients and they found this successful"). We found that using an FFF statement did increase trust. We saw a significant difference in the percentages of clients who started the survey

and a significant increase in information disclosure among callers. Based on these findings, we plan to replicate this experiment with MMI.

Increasing trust could lead to a greater uptake of beneficial products, and it may also help counselors make more personalized recommendations as participants share more details about their financial circumstances.

EXPERIMENT

In our experiment with MMI, we trained debt and budget counselors to use a “Feel, Felt, Found” (FFF) statement.

The FFF statement was designed to increase trust and was incorporated in the same manner as the Navicore Solutions experiment to highlight empathy, expertise, and social norms.

Experimental Condition

empathy

"I know you **feel** like talking about your finances is a little overwhelming. It's perfectly normal to feel like that.

expertise

In fact, many of the other clients I've worked with in the past **felt** that way too.

social norms

They **found** that by working with me and following our guidance they were able to get through the month without relying on their credit cards. If we work together on this, I am confident that we can help you do that too."

Sample FFF statement

We measured three main outcomes:

- 1. We asked every client that started a session to take a post-session survey. Previous research suggests that if counselors increase trust, callers are more likely to do small favors for them.
- 2. We will use MMI administrative data to track information among completed sessions to see if a client is more likely to share personal information.
- 3. Lastly, we measured the percent of clients that completed the counseling session.

Callers were randomly assigned to one of two groups of counselors. The first group was trained to use FFF statements, while the second group used the business-as-usual scripts for the session. The counselors in each group were randomly selected and balanced to ensure equal experience.

RESULTS

We are currently collecting responses for the intervention that was launched in November 2020. We expect to begin analyzing the results in Q1 2021.

Partner Type:
Credit Union

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In-Field



Building Financial Resiliency With Credit Building Loans

BACKGROUND

The Consumer Financial Protection Bureau (CFPB) estimates that [about 45 million Americans lack access to credit because they don't have enough credit history](#), and 30% of borrowers in 2019 had a subprime credit score according to the Federal Reserve Bank of New York. Poor or missing credit histories [significantly reduce access to credit or make the use of credit much more expensive](#). While “credit” or “loans” can be “dirty” words, having access to credit is essential for financial stability, resiliency, and growth. Credit building products exist to build or rebuild credit scores so that people can grow their assets (e.g., home loan or car loan) or invest in themselves (e.g., student loan or business loan). However, credit building products have historically had limited success as found by the [National Bureau of Economic Research](#) and [CFPB](#). The most common credit building product, secured cards, require households already have money saved to use as collateral for credit. And many people fail to complete the terms of unsecured credit building products, and therefore see little improvement to their credit scores and credit access.

Credit building products have historically had limited success.

California-based Patelco Credit Union, with more than 380,000 members, has been committed to improving members' financial wellbeing and fueling hope and opportunity for over 80 years. Delivering on this mission, Patelco launched a new credit building product ScoreUp in 2020 that helps members forge a positive credit history while also creating a saving nest egg. We partnered with Patelco to see if we could use behavioral science to keep members making payments and build personal finance skills, and thus actually realizing the benefits of a credit building product.

HYPOTHESIS AND KEY INSIGHTS

We looked to the literature on behavioral biases to understand potential reasons why borrowers using unsecured credit-building products may fail to complete their product payment terms. We identified the following potential barriers:

- » Optimism bias. People often are often overly optimistic in their ability to handle the future; for example, [research by Seaward and Kemp showed that students overestimated their future incomes and their ability to pay back their student loans](#). Looking to get a boost in their credit score as quickly as possible, households may be signing up for payments with very little slack in their budget. If they are faced with an emergency expense, or even an unusual or forgotten expense, they may have no choice but to stop payments on the credit building product. We may be able to combat this optimism bias by getting applicants to assess their budget before applying for the product and ensure that even with new payments that they will still have slack to cover unexpected expenses.
- » Lack of visible progress. We are more motivated to complete things that we feel we are making progress on, but building credit takes time, so we are more likely to give up. [Monitoring progress towards goals have been shown to increase attainment goals](#).
- » Limited attention. [Research indicates that limited attention may be partially at fault for poor financial behaviors, for example, overdrafting accounts](#). We have limited attention to give to the world around us, and sometimes our finances may not be our number one priority. While the ScoreUp loan requires the payments to be automatically drafted from their checking account, borrowers could miss a payment if there isn't enough money in their account. Automatic alerts to the borrower for low balances in their account may help overcome this challenge.

EXPERIMENT

In order to test our hypotheses, we designed two experiments around elements of the ScoreUp program: the Credit Builder calculator and gamified emails.

First, to combat optimism bias, we created a Credit Builder calculator that identified if users had enough room in their budgets to afford the product with slack for emergencies or if they needed to adjust the terms. The Credit Builder calculator was randomly assigned for use by branch team members at half of Patelco branches; the team members at the other branches were asked not to use the calculator. Additionally, half of marketing emails for ScoreUp sent interested members to the calculator while the other half of emails sent interested members directly to the ScoreUp application.

Potential outputs from the calculator showing if ScoreUp is affordable.

Results

Based on your current income and expenses, the credit builder will fit well within your budget.

Results

Based on your income and current expenses, you would need a smaller credit builder or a long payment period.

Results

Your income is not enough to cover all your expenses as well as a credit builder payment. Consider how to update your budget if you still want to apply for the credit builder.

The calculator should ensure that households are not overextending themselves financially, but they may still need tools and motivation to make on-time payments.

To help make the loan more salient and help members feel progress, we created gamified emails to celebrate payment streaks, but also to encourage people to learn more about how to improve their finances and be successful in ScoreUp. ScoreUp participants can receive badges for learning about financial tools and deploying them, including setting up balance alerts to ensure borrowers have enough funds in their account or automatic transfers between checking and savings. ScoreUp participants have been randomly assigned to receive gamified emails or standard emails.

RESULTS

The calculator and the gamified emails launched in September and October 2020, respectively and will collect data through 2021. We anticipate sharing out the results in our 2021 Annual Report.

Partner Type:
Credit Union

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In Design

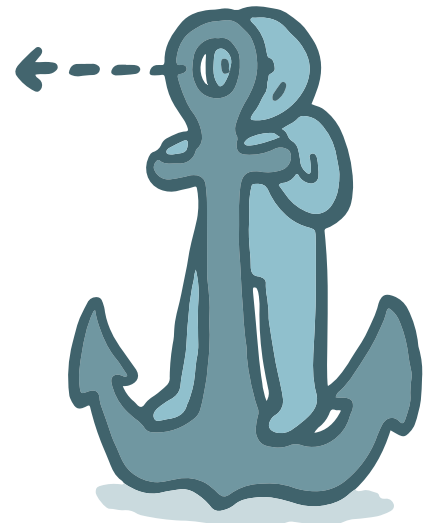


Using Rules of Thumb to Impact Minimum Payment Behavior

BACKGROUND

Credit card balances in the US have been rapidly growing over the past few years to form one of the most common types of debt held by US households. At the end of 2019, total debts from credit cards stood at [\\$930 billion](#), a record high and a more than 30% increase since 2009. While access to credit can help individuals manage income fluctuations and cope with unexpected shocks, many consumers are unable to actually afford the total debt loads they accumulate, resulting in a huge strain on their finances. In fact, in 2019, [52%](#) of all cardholders carried a balance at least some of the time, and [29%](#) of cardholders consistently made just the minimum payment. Further, households with revolving credit card debt carried an [average balance of \\$6,849](#) and incurred as much as \$1,162 in annual interest costs alone. With debt levels of this magnitude being approached through minimum or partial payments, it's incredibly difficult for households to make progress on their financial goals.

To address this growing concern as well as explore ways to help individuals better manage their credit card debt, we partnered with SchoolsFirst Federal Credit Union (FCU). SchoolsFirst FCU noticed that some of their Members were going into debt on a regular basis and were often using their credit cards to fund their overspending. When surveyed, most Members said getting out of debt was a top priority, yet many of them continued to carry high revolving balances while only making minimum payments. We therefore worked together with SchoolsFirst FCU to develop an email intervention. The purpose was to examine how we can motivate Members to pay more than the minimum balance due each month, with the eventual goal of helping them reduce their total credit card debt.



DECREASING (BAD) DEBT

HYPOTHESIS AND KEY INSIGHTS

Past research suggests that there are several reasons why people tend to make minimum or near minimum payments, despite having the means to pay more than the minimum, or even their total card balance:

1. Research by [Keys and Wang](#) found that minimum payment amounts anchor people to lower values when making credit card payment decisions. They also serve as a reference point for what is and what isn't an acceptable payment amount, especially for those who are unsure about how much they should be paying.
2. Research by [Lusardi and Tufano](#) found that individuals are often unaware of the interest costs associated with making minimum or near minimum payments. Moreover, [Salisbury](#) and Zhao report that while minimum payment warnings (MPW), i.e. alerts that highlight the costs of minimum payments have a positive impact on repayment behavior, these disclosures are typically embedded in credit card statements, a document that [less than ten percent](#) of consumers typically view, let alone read.

Through our partnership with SchoolsFirst FCU, we sought to address these barriers by designing email communications that make the cost of minimum payments more salient, as well as provide alternate payment amounts to anchor Members on higher values and counter the minimum effect. Our emails leverage rules of thumb, i.e. easy and actionable heuristics that are useful in helping people make financial decisions. Research by [Theodos et al.](#) as well as [Kondratjeva et al.](#) has found that such strategies are effective in guiding debt repayment decisions, and help people better manage as well as reduce their credit card debts. Similarly, this project utilizes rules of thumb as a means of providing alternate payment anchors and increasing payments.

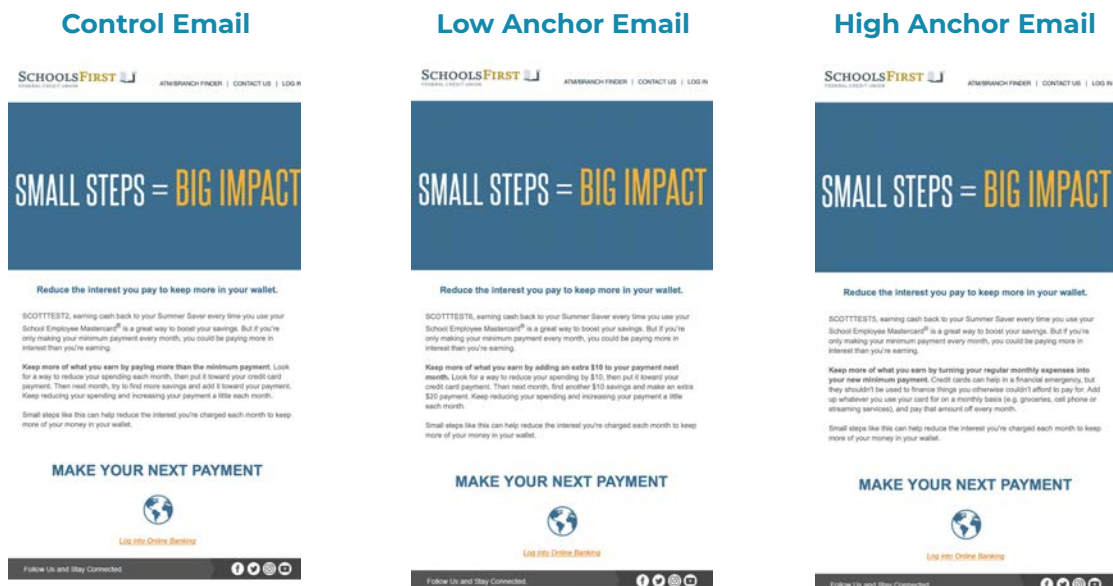
Research by [Sussman and Alter](#) found that consumers are fairly adept at budgeting for and predicting their ordinary expenses. Consequently, by prompting Members to think about and pay their ordinary expenses over the past month, we can provide them with a higher yet achievable number to anchor their payment decisions. On the other hand, a comparatively lower anchor, such as add \$10 to your payment might seem more approachable. This experiment aims to test both variations.

EXPERIMENT

Through our experiment, repeat and recent minimum payers will be randomly assigned to receive one of four types of communications:

1. No communication (pure control)
2. Control email with salient MPW but no alternate anchor
3. Email with salient MPW + rule of thumb to pay minimum + \$10 (low alternate anchor)

- Email with salient MPW + rule of thumb to pay off ordinary expenses, such as gas and groceries (high alternate anchor)



RESULTS

Our experiment is expected to launch in the field in Q1 of 2021. We plan to measure the impact of our intervention on minimum payment behavior, as well as total payment amounts over two consecutive pay cycles following the experiment launch.



Redesigning Communications to Increase Farmers' Engagement With a Sustainable Financial Alternative

BACKGROUND

Agriculture is one of the major contributors to Turkey's GDP, [employing around 25%](#) of the population, mostly in rural areas. Income, however, tends to be seasonal in the farming business; farmers earn from selling their crops during one harvest season and must stretch their budget for several months until the following harvest season. Previous research by [Mani and collaborators](#) has shown that this dynamic can have negative effects on cognition and financial decision-making; for instance, farmers are more likely to give their land and tractors as security to apply for expensive loans before harvest, when their income is running out.

Farmers are more likely to give their land and tractors as security to apply for expensive loans before harvest, when their income is running out.

Working closely with [BUBA Ventures](#), we partnered with [Tarfin](#), a Turkish fintech start-up that was launched in 2017 with the mission to help farmers improve their business and their financial wellbeing. They provide farmers with a loan alternative, allowing them to purchase farming inputs at retail stores and repay them after harvest. By aligning debt payment with income (harvest season), Tarfin helps their farmers manage their cash flow and avoid late fees. Tarfin currently serves approximately 15,000 farmers



with a repayment rate above 95%. However, per Tarfin's 2020 customer research, while 90% of these farmers express their interest to re-engage with them in the following season, only around 50% apply again. Instead, farmers purchase inputs through informal loan agreements with retail owners (29%), or banks and cooperatives (33%) that can be either more expensive or more restrictive, or purchase with cash (26%).

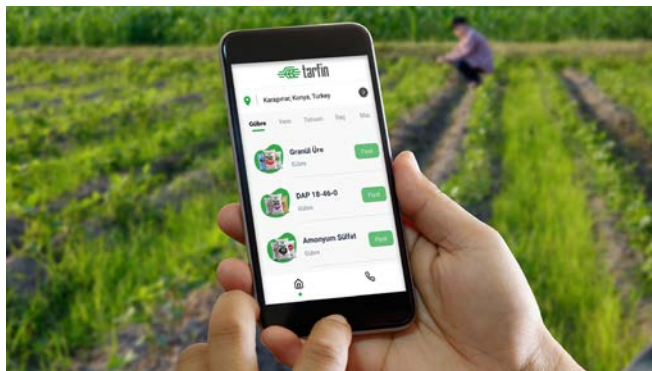
Given the financial benefits of Tarfin's loan alternative, we decided to focus on an intervention that encourages farmers to re-apply to Tarfin after a first financing experience.

HYPOTHESIS AND KEY INSIGHTS

Tarfin has implemented two customer studies in 2020, including a survey developed with CCL exploring the financial challenges that farmers are facing during the COVID-19 pandemic. Upon analysis of both qualitative and quantitative responses, we've identified the following insights:

- » Farmers' main reason to choose Tarfin is harvest payment terms and competitive prices. However, during the harvest season, farmers are not fully satisfied with the repayment journey. While they value calls from representatives (80%), they perceive that Tarfin sends them too many reminders and communicates too intensely with them.
- » Moreover, Tarfin does not fully align with the social norms around debt repayment in traditional farming communities. While Tarfin follows more predefined standards, farming communities follow a less structured approach, where both lenders and farmers engage in informal conversations and social activities as part of building trust between them. Previous research by [Kuhfuss and collaborators](#) has explored the role of social norms influencing farmers' behaviors.
- » Farmers value the social connectedness of other business alternatives such as cooperatives and retailers. Tarfin is a distant actor (fully virtual) from farmers' perspective.
- » Farmers are averse to being rejected at the retail location by Tarfin, since the financing application occurs at retail stores, where farmers typically have existing relationships with retail owners. Customer reports show that some farmers prefer to avoid being rejected and use alternative payment means or informal loan agreements with the retail owner, even if they have never been rejected before. Past research by [Bone and collaborators](#) has shed some light into how choice restriction can affect self-esteem and autonomy; farmers could be protecting it by choosing a loan alternative that gives them more control.
- » Farmers value recommendations from peers and colleagues; however, they are wary of making recommendations themselves for fear of their fellow farmers not being approved by Tarfin.
- » Newer customers appear to be more skeptical of Tarfin and have low trust in Tarfin and in the repayment process.

In line with these insights, we are redesigning the re-engagement and repayment processes, to incorporate social norms, give farmers autonomy, and reduce the social distance between Tarfin and farmers.



EXPERIMENT

Based on the results of the diagnosis survey, we will begin designing an intervention that will focus on improving the repayment and re-engagement process and addressing the specific barriers identified in the survey.

RESULTS

We expect to design and launch the main re-engagement study by Q1 2021 and begin analyzing the results in Q2 2021.

 This project is in collaboration with BUBA Ventures.

WSECU

Giving Feedback that Prompts Action

BACKGROUND

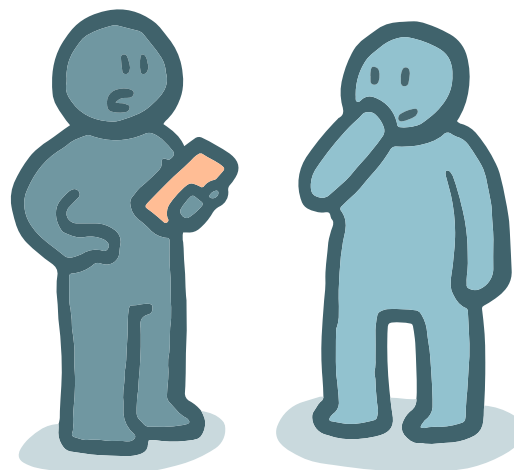
The Financial Health Network's (FHN) FinHealth Score is used by financial service providers to assess where members or clients are struggling and to track their financial progress over time. The FinHealth Score assessment includes eight survey questions to gauge how people spend, save, borrow, and plan for the future; typically, respondents are designated as Financially Healthy, Coping, or Vulnerable. The 2020 FHN Pulse Trends report indicates that [only about a third of Americans are Financially Healthy](#).

While these metrics can be useful as a way of summarizing past behavior and comparing someone's circumstances to others, they may provide little context for what behaviors to change or how to prioritize changes. Even worse, sharing these results in the wrong way could have negative consequences—sharing negative feedback at the wrong time potentially could demotivate individuals from engaging in behaviors that would improve their situation at all. For example, German researchers found that negative feedback decreased students' intrinsic motivation. A CCL lab study undertaken in 2019 suggested that providing sub-scores for different focus areas motivated users to take relevant action more than providing a single assessment score. It was not possible to distinguish a difference in motivation between people given descriptive labels of how they fared in each category versus numeric scores. Read about that study in our 2019 Annual Report.

We partnered with Washington State Employees Credit Union (WSECU) to better understand how we can display the results of a financial health survey to encourage more members to complete targeted recommendations for improving financial health based on their survey responses.

HYPOTHESIS AND KEY INSIGHTS

WSECU wanted to offer the FinHealth Assessment to their members to help understand the member's needs, but they wanted to optimize the feedback output to motivate behavior change towards improving financial health.



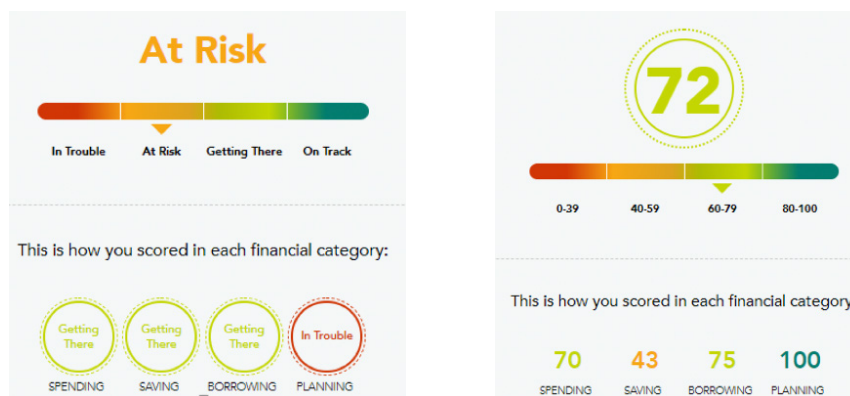
In addition to allowing a credit union to have a better understanding of their members and their financial needs, the individualized survey assessment results could increase a member's motivation to change their behavior. However, there are several reasons why the way the survey results page was originally designed might actually discourage members from seeking strategies for improving their financial health:

- » The survey results page currently offers little to no context for the overall financial health score. Without contextual cues as to how to interpret their responses, members may struggle to understand what a numerical score means for them.
- » Relatedly, the results of the survey are presented in categories that may be unfamiliar to the member. This could further exacerbate the tendency to shut down and avoid undesirable information.

We hypothesized that communicating the results of the survey in ways that highlighted participants' strengths and weaknesses and suggested specific next-step actions would increase the likelihood that users take action to improve their financial health.

EXPERIMENT

Starting in October 2020, WSECU offered members the chance to take the Financial Health Network's Financial Health Assessment. Currently, the assessment works as follows: After completing a survey, members are given an overall score based on their responses. In addition to the overall score, members are also given four sub-scores based on specific questions related to spending, savings, borrowing, and planning. The members were presented the scores in one of two ways depending on the experimental condition to which they were assigned randomly: in the numerical condition, the overall score and sub-scores were assigned numerical values from 0-100, and in the descriptive condition, the overall score and sub-scores were assigned descriptive values of "In Trouble", "At Risk", "Getting There", and "On Track", in ascending order from low to high scores.



Based on the participant's responses to the assessment questions, the participant will be shown a suggestion for how to improve financial health, e.g., decrease spending by getting rid of unused subscriptions or talking with a financial counselor. The participants will be asked if they intend to follow the suggestion. If they do intend to take action, a follow-up survey will be sent to the participant 6 weeks later to see if they completed the action.

RESULTS

The Financial Health Assessment test is currently in the field and is expected to run through the middle of 2021, with at least 2,000 responses split between the two conditions.

Partner Type:
N/A

Partner Cohort:
N/A

Project Type:
Lab Study

Project Status:
Complete

Learning from the Lab: Optimism and the Likelihood to Overspend

BACKGROUND

Budgets are thought to play an important role in shaping individual spending behavior—they provide rules that help us curb spending as we try to increase savings, repay debt, manage financial volatility, or to achieve any number of our financial goals. Furthermore, we often believe that budgets make us happier over time because they will help us spend more on things that make us happier and less on things that we regret. Budgets are often seen as essential for avoiding high-cost consumer debt, like credit cards.

However, there is plenty of evidence that we struggle to adhere to our budgets and that [budgets are not all that effective in helping us reach our financial goals](#). People often [find it difficult to rein in overspending](#), leading to revolving debt with high interest rates.

For this reason, we were interested in exploring how budgeting informs the ways individuals make singular spending decisions. Specifically, we were interested in better understanding how individuals incorporate budget reference points into their spending decisions, both within a single time period and across multiple time periods.

HYPOTHESIS AND KEY INSIGHTS

There are many behavioral and psychological factors that are believed to be why people struggle to adhere to the budgets they set for themselves. We wanted to isolate two specific factors in this experiment.

- » The what-the-hell effect: When people break a rule such as overspending on a budget, people may feel license to spend even more. Once a rule has been broken, people may no longer feel constrained to engage in that behavior.
- » Planning fallacy: People are often overly optimistic when assessing their capacity to achieve their goals in the future. One reason people may struggle to adhere to their budgets is they assume that they will compensate for temptation in the moment with strictly adhering to the rules they set for themselves in the future.

EXPERIMENT

To test these ideas, we created a simple hypothetical scenario. Participants were asked to imagine they are coming home from work. They were presented a choice: either to order take-out from their favorite restaurant or to cook at home. They are then told they have previously given themselves a budget of \$30 to spend on food each week and shown a summary of their last ten expenses.

Participants are then randomly assigned into one of three weekly spending conditions.

- » In the “under budget” condition, their spending on food this week adds up to \$29, or just under their weekly budget.
- » In the “at budget” condition, their spending on food this week adds up to exactly \$30, or exactly their weekly budget.
- » In the “over budget” condition, their spending on food this week adds up to \$31, or just over their weekly budget.

Participants will also be randomly assigned into one of two future spending conditions.

- » In the “reminder” condition, participants will be additionally told that even though ordering takeout will put them over their weekly budget, they have only spent half of their budget for the full month. They are also shown a “monthly budget” graphic depicting their spending showing opportunities to reduce future spending.
- » In the “no reminder” condition, participants are not reminded of their monthly budget.

All participants were then asked, on a scale 0%-100%, how likely they are to purchase take-out even though they have groceries at home. Then, participants were also asked, on a scale 0%-100%, how likely they are to reduce spending on food in the following week.

RESULTS

We recruited just under 500 participants to take our study. There was a wide distribution in ages, ranging from early 20s to mid-70s, about 66% of the sample was male, and the sample skewed lower income, with nearly 70% earning \$60,000 or less.

We found that a majority (~67%) of participants said they would likely try to reduce their spending on takeout the following week. We did not find any effect of the reminder condition on either ordering food or reducing expenses in the future. However, the likelihood that a participant reported that they would try to



reduce their spending was different between the budget conditions. As one might expect, participants who were informed that they had already overspent their budget were significantly more likely to report trying to reduce their spending in the future ($p=0.04$).

However, this did not change their likelihood of ordering take-out from their favorite restaurant. We found that across all conditions, about 40% of participants said they would order food and that this percentage was not meaningfully different between conditions. We also found that if someone said they would reduce their spending, they were also significantly more likely to say they would order food ($p<0.001$).

Taken together, this suggests that people's optimism about their behavior in the future exacerbates willingness to spend today. The more people feel like they will adjust their spending in the future, the more likely they are to overspend in the present.

