RESEARCH SUMMARY • AUGUST 2022

MRELIEF SIMPLIFIES SNAP APPLICATIONS

Based on April-July 2020 randomized control trial of users in Kentucky who likely qualified for SNAP benefits

THE EXPERIMENT

- From April 13, 2020 to July 31, 2020 individuals in Kentucky who were determined to be likely eligible via mRelief's eligibility screener were randomly assigned to either the treatment or the control group
- The treated users were directed to apply using mRelief's simplified application, while control users were directed to apply through the Kentucky SNAP application portal
- Overall, the results indicate that having access to the simplified mRelief application led to a statistically significant increase in SNAP applications of 27 percentage points

The Need for a Simplified Application

Over \$11 billion dollars in SNAP benefits go unclaimed every year, and millions of families that would have qualified for assistance do not receive it¹.

mRelief aims to alleviate this problem by simplifying the process for applying to receive SNAP benefits. They achieve this aim by eliminating optional questions from state applications, offering mobile-friendly applications, providing eligibility screening, and by offering application guidance. mRelief provides a digital screening tool in conjunction with screening via text messaging that informs users of their eligibility for SNAP benefits. If the screening process demonstrates that an applicant is likely eligible, mRelief directs users to the best way to apply. In select states, mRelief offers a simplified application and will guide the applicant through the actual SNAP application.

Testing the Simplified Application

To test the efficacy of their simplified version of the SNAP application, mRelief worked with an independent third party to conduct a randomized controlled trial. From April 13, 2020 to July 31, 2020 individuals in selected counties of Kentucky who were determined to be likely eligible via mRelief's eligibility screener were randomly assigned to be in either the treatment or the control group. The study included the following counties: Bullitt, Henry, Jefferson, Meade, Oldham, Shelby, Spencer, Trimble, and Washington.

1 Forbes "Meet mRelief, The Nonprofit Using Technology To Fight Hunger", Oct 2020

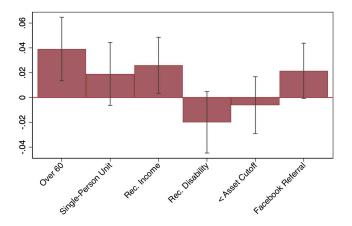


Individuals assigned to the treatment group were guided to apply using mRelief's simplified version of the Kentucky SNAP application, while users assigned to the control group were directed to apply through the Kentucky SNAP application portal. Twenty-four hours after the user was directed to apply, the user received a text message inquiring whether the SNAP application was completed. Users who responded "yes" or a variant of "yes" were recorded as having applied. If the user indicated that they did not apply, they received a link to apply online. If the user indicated that they had applied, they received a message that the SNAP office would get back to them within 30 days.

In this study, demographic data and data covering the treatment process were collected for the users. In terms of demographics, this data includes the household size and type, the region, whether anyone in the household received income within the past 30 days, citizenship status, student status, and whether anyone in the household is over 60. In terms of the treatment process, the data covers the language that the screener was completed in (English or Spanish), the platform that the screener was completed on (website or text messaging), and how the applicant was referred to mRelief.

The demographic and treatment data enable an evaluation of balance between treatment and control groups. Namely, under random assignment, the control group should be comparable to the treatment group for all characteristics excluding the treatment variable. In the graph below, we test whether the treatment group is representative of the control group.

Figure 1 - Balance of Baseline Characteristics



We provide a graph of the balance test in Figure One. Baseline characteristics that are above zero imply that the treated group is more likely to have higher levels of the given characteristic. The black lines indicate confidence intervals; if the confidence interval contains zero, then there is not a significant positive or negative baseline characteristic amongst the treated group.

Based on Figure One, we see that the following users are slightly overrepresented in the treated group: users over 60, users receiving income from any source, and users referred to the platform via Facebook. While these three groups are overrepresented among treated users, the difference is not large enough to discredit the results. Across other observable characteristics, such as disability, asset cutoff, and single-person unit, the sample is balanced.

In addition to using the baseline characteristics to test for balance in the sample, we can also evaluate non-response rates, or attrition, amongst the treated users by different baseline characteristics. In Figure Two, we evaluate the likelihood of a non-response for each baseline characteristic, conditional on the characteristic evaluating to either true or false. For instance, the left panel shows non-response rates amongst users with household members under the age of 60, users who do not live in a single person unit, users who do not receive disability assistance, users who are above the asset cutoff, and users who were not referred via Facebook. The right panel of Figure Two demonstrates attrition rates amongst users with a household member over 60 years of age, users living in a single person unit, etc.

From Figure Two, it appears that response rates are different for users with an older individual in their household and for users receiving disability assistance. Figure Two implies that users in the treated group are more likely to respond if they have a household member over the age of 60 or if they receive disability assistance.

Results

The average application rates for control users and treated users are significantly different. Figure Three displays the mean application rate by treatment status.

The results in Figure Three indicate that the mRelief treatment led to a statistically significant increase in SNAP applications of 27 percentage points. Given that the average application rate amongst control users is 32%, this

represents a large increase in application rates.

Figure Four displays the likelihood of the treated user applying, conditional on a given baseline characteristic evaluating to either true or false. For instance, the left panel shows application rates amongst users with household members under the age of 60, users who do not live in a single person unit, users who do not receive disability assistance, users who are above the asset cutoff, and users who were not referred to mRelief via Facebook. In both panels the combined treatment effect, 27 percentage points, is included for comparison.

The simplified application led to a statistically significant increase in SNAP applications from 32% in the control group to 59% in the treated group.

From Figure Four, we see that the effect is comparable across applicant types. One difference appears to be whether the applicant has a household member over the age of 60—younger applicant households are more likely to apply. Figure Four also demonstrates that there is no impact for individuals above the asset cutoff.

Figure 3 · Application Rates by Treatment Status

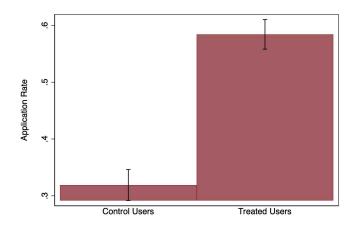
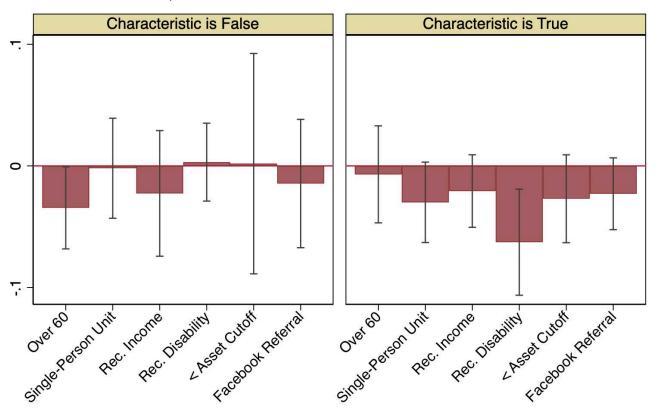


Figure 2 · Attrition Rates by Baseline Characteristics





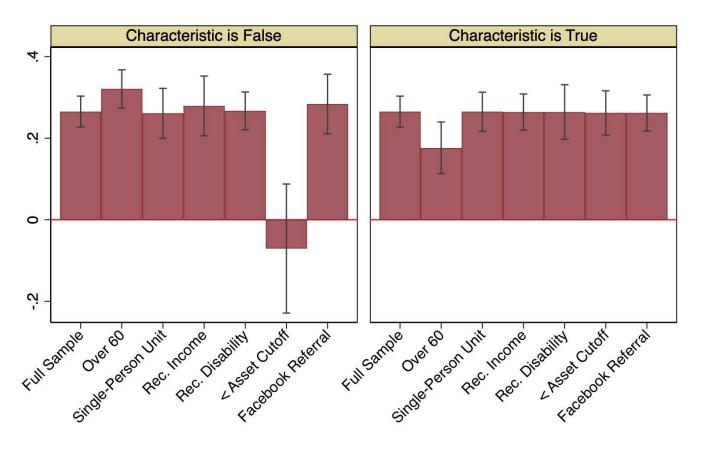
Conclusion

We can conclude that mRelief's streamlined application increases application rates for SNAP benefits. While the randomized control trial (RCT) is not perfectly balanced, and it relies on self-reported outcomes, the sample is sufficient for obtaining an approximate treatment effect. This study reveals that access to the mRelief application led to a statistically significant increase in SNAP applications from 32% for qualifying users exposed to the Kentucky SNAP portal to 59% for qualifying users exposed to the mRelief version of the application.

CLOSING TAKEAWAY

The results of the randomized control trial are promising. When users who qualify for benefits have access to a simplified application, they are more likely to apply. With mRelief's simplified applications, more individuals receive the benefits they need.

Figure 4 · Application Rates by Baseline Characteristics



Written by: Jason Cook, Assistant Professor, University of Utah Paige Nelson, Doctoral Student, University of Utah

