"I WANT TO BE BETTER EVERY DAY": ACCELERATING POVERTY ELIMINATION THROUGH THE POVERTY STOPLIGHT PROGRAM

PRELIMINARY EVALUATION FINDINGS
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EXECUTIVE SUMMARY

This report summarizes preliminary findings from a study evaluating the "add-on" impact of the Poverty Stoplight (PS) program for Fundación Paraguaya's microfinance clients. The PS is an interactive survey and coaching model that complements the microfinance program, broadening the focus to multidimensional poverty. We used a rigorous randomized controlled trial design to engage three critical questions:

1. What is the impact potential for the PS model?
2. What types of participants are most likely to benefit?
3. What programmatic features are most likely to optimize impact?

Our results show that the PS accelerated multidimensional poverty reduction by about half of a standard deviation, which corresponds to turning two or three PS indicators from red or yellow to green. While financial indicators showed the greatest poverty reduction, benefits also materialized in non-financial dimensions of poverty.

There were important nuances in program effects for participants with different baseline incomes. While we observed reductions in multidimensional poverty for participants across the income spectrum, suggestive evidence indicates that the microfinance program alone drove the lionshare of multidimensional poverty reduction for lower-income participants, while the PS survey and coaching model drove impact for higher-income participants.

The results also revealed the impacts of mentoring could be increased slightly by 0.05 standard deviations (or about half a PS indicator) by providing coaches with explicit contact targets that guided how often they contact families). Qualitative follow-up suggests that the regular contact may have contributed to a critical trust-building process between coaches and participants. Notably, the study did not find evidence of impact for a group that just received the PS survey (without follow-up coaching).

Even though the findings are specific to the study context, some general recommendations arise, including (a) targeting participants across the spectrum of multidimensional and monetary poverty; (b) considering the potential of attending to a broad range of multidimensional poverty indicators, even outside of an organization's core area of competence; (c) providing follow-up support to participants; and (d) investing in relationship building, and considering setting explicit targets or guidelines around regularity of communication.

INTRODUCTION

Julia Ester Alcarón has been a client of Fundación Paraguaya's microfinance program for three years. When she first took her Poverty Stoplight survey, many of the multidimensional poverty indicators were "yellow" and "red," reflecting moderate and severe poverty, respectively. For instance, the survey showed that Julia was not actively engaged in a social group, which is a key contributor to overall quality of life. As Julia proved, however, this challenge had a solution. With women from her loan committee and other community members, she has formed a self-help group in her local church. Together, the women carry out various activities in their own or in neighboring communities to help people in need. As a result, she has become more open, self-assured, and empowered, all while strengthening her local community. Her next goal is to improve her small kitchen, and she is confident that she will be able to fulfill that dream as well.

Julia's story shows not only how the Poverty Stoplight program has helped her to address a specific challenge she was experiencing, but also how this program has affected her multidimensional well-being in a wider sense. But, is her story representative for participants in the Poverty Stoplight program? This report summarizes the findings from an impact evaluation study that attempts to answer that question.

The Poverty Stoplight (PS) is an interactive survey and coaching model that complements Fundación Paraguaya's microfinance program, broadening the focus to multidimensional poverty. The Stoplight is characterized by three key features:

1. Multidimensional snapshot of lived experience: Program staff work directly with participants to complete an easy-to-use, picture-based survey to represent their quality of life across six dimensions (Income & Employment, Health & Environment, Housing & Infrastructure, Education & Culture, Organization & Participation, and Interiority & Motivation). These indicators are self-assessed by clients as red (severe poverty), yellow

(moderate poverty), or green (out of poverty). The approach is designed to center the lived experience of participants, creating data from the bottom up.

2. Solutions that start from the participant: After the survey is facilitated, participants choose which specific indicators of poverty they want to change from red or yellow to green, as well as the action they think is most likely to produce change. Sometimes this involves taking action as individuals; sometimes it means utilizing community resources or peer-to-peer support; in other cases, it involves accessing government programs.

3. Personalized coaching to support solution implementation: Program staff take an individualized approach to support participants as they pursue change. Supports include collaborative identification of core challenges, as well as reflection exercises to support continuous improvement of poverty alleviation approaches.

The PS is applied across a broad range of contexts, ranging from poverty alleviation programs to assessments of quality of work life in professional contexts. This report focuses on the application to microfinance (see Box 1), seeking to elucidate the "add-on" impact generated on top of the microfinance program. As a growing number of ever more diverse organizations implement the Poverty Stoplight model around the world, the need for robust evidence on the model's impact is increasing, and so is the need for evidence on how to best implement the program.

To support evidence-based scaling of the model, we deployed a rigorous randomized controlled trial design to engage three critical questions:

1. What is the impact potential for this model?
2. What types of participants are most likely to benefit?
3. What programmatic features are most likely to optimize impact?

BOX 1 - The Poverty Stoplight in Fundación Paraguaya's microfinance program

Fundación Paraguaya developed the Poverty Stoplight in 2009 and has since then used it in its microfinance program (and in other contexts). The microfinance program is largely based on the village banking model: women form solidarity loan groups and receive a loan as a group; they are co-responsible for repaying that group loan. Once a loan is repaid, the group can start a new loan cycle, with an increased loan size in each further cycle. All of Fundación Paraguaya's village banking clients receive additional services, such as savings accounts and entrepreneurship training. In addition, some microfinance clients are randomly selected and invited to join the Poverty Stoplight program[1].

The PS survey is carried out as a collaboration between loan officer and client. The loan officer guides the client through the tablet-based survey, presenting the three levels for each indicator, yet the final selection is done by the client. At the same time, the client puts colored stickers on a paper-based results dashboard to indicate the deprivation level for each indicator; this paper-based dashboard stays with the family at the end of the survey. Based on the results, the client and her family then select their priority areas for improvement, and

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[1] Each loan officer may selectively invite further clients for participation. For the purpose of this study, only data from randomly selected clients is used.

the loan officer helps them identify practical solutions to their challenges in an integrated and empowering mentoring program. For these mentoring activities, the loan officer is in regular contact with the family (in person, in loan committee meetings, via WhatsApp or telephone, or via other means) to provide continued support and encouragement. Each loan officer has specific progress targets (e.g., how often to contact a given client) as well as results targets (e.g., number of indicators that should be moved to green).

The mentoring program is centered around the behavioral theories of Albert Bandura[2] and adaptations thereof, especially the Theory of Positive Influence presented by Grenny and colleagues[3], as well as on the Integral Theory developed by Ken Wilber[4]. The main idea is that people only make changes in their lives if they can answer two questions affirmatively: First, *is it worth it*? And second, *can I do it*? Together with the loan officer, the family first identifies the most likely source of the problem, for instance, whether it is likely due to internal factors (such as a lack of information) or external factors (such as a lack of resources, affordable service providers, or infrastructure). Then, together they work on appropriate ways of addressing the problems that were identified, drawing on resources from all sectors, including private companies, government support, NGOs, family, and community. By design, the nature of problems—and the solutions—may differ considerably between families. Examples include the development of micro franchising business to increase incomes; the elaboration of household budgets to help manage incomes and expenses; community competitions to upgrade kitchens; and petitioning the local government to improve access roads.

FINDINGS

This section provides an overview of the main findings of the evaluation study, showing that the Poverty Stoplight program helped Fundacion Paraguaya's microfinance clients to accelerate poverty reduction. Evidence is presented on the overall impact of the program, the types of participants who are most likely to benefit, and the programmatic features associated with better program outcomes.

Unless otherwise stated, all results refer to a difference-in-differences comparison of the following two groups of microfinance clients:

- A treatment group that received microfinance support, took the PS survey, and received follow-up PS coaching.

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[2] Bandura, A., Adams, N. E., & Beyer, J. (1977). Cognitive processes mediating behavioral change. *Journal of Personality and Social Psychology*, *35*(3), 125–139. https://doi.org/10.1037//0022-3514.35.3.125; Bandura, Albert. (1989). Social cognitive theory. In R. Vasta (Ed.), *Six theories of child development*. Greenwich, CT: JAI Press; Bandura, Albert. (1997). *Self-efficacy: The exercise of control*. New York: W H Freeman/Times Books/Henry Holt & Co.; Bandura, Albert, & Wessels, S. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71–81). New York: Academic Press.

[3] Grenny, J., Patterson, K., Maxfield, D., McMillan, R., & Switzler, A. (2013). *Influencer: The New Science of Leading Change, Second Edition* (2 edition). New York: McGraw-Hill Education.

[4] Wilber, K. (2000). *A Theory of Everything: An Integral Vision for Business, Politics, Science, and Spirituality*. Boston: Shambhala.

- A control group that received microfinance support, but just took the PS survey without follow-up coaching.
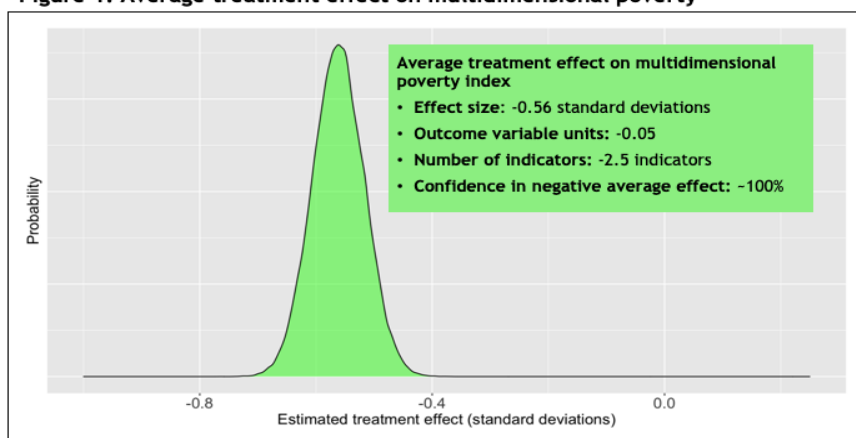
Accordingly, the study shows how much *more* clients that received coaching decreased their poverty over the study period, compared to clients only doing the PS survey and receiving the standard microfinance intervention package. The reported effects are thus "add-on" reductions in poverty achieved on top of the effect of Fundacion Paraguaya's microfinance program, given that all study participants received the same microfinance programming. Note that a "negative" effect is desired as it indicates a reduction in poverty.

A. What is the impact potential for this model?

The Poverty Stoplight program reduced multidimensional poverty by about half of a standard deviation.

As shown in Figure 1, the evaluation provides strong evidence that the PS program helped microfinance clients accelerate poverty alleviation. A reduction of half a standard deviation corresponds to a decrease in the index of 0.056 points, which is the equivalent of moving two or three indicators from yellow or red to green. A significant poverty reduction of about half a standard deviation could also be observed for a "severe only" poverty index (which only considers indicators in red as deprivations).

Figure 1: Average treatment effect on multidimensional poverty

Average treatment effect on multidimensional poverty index
- **Effect size:** -0.56 standard deviations
- **Outcome variable units:** -0.05
- **Number of indicators:** -2.5 indicators
- **Confidence in negative average effect:** ~100%

According to research benchmarks, this is considered a medium-to-large effect, which is striking given the program duration of just a year.[5] However, it is likely that coaches and clients pragmatically prioritize indicators that are most likely to be improved. Accordingly, these large initial gains likely cannot be repeated over time with the same client.
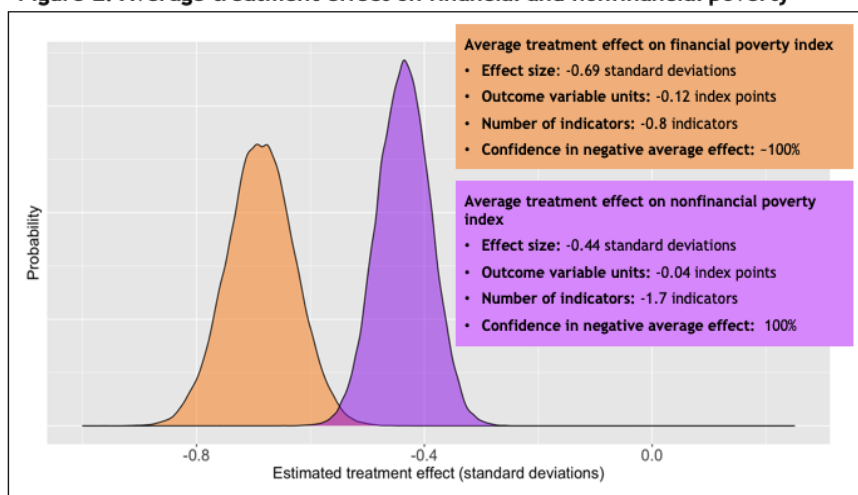
Poverty reduction was concentrated in financial indicators, although benefits also materialized for non-financial dimensions of poverty.

Not all of the 50 PS indicators improved equally; as shown in Appendix B, the program's estimated effect on each individual indicator varies considerably. Figure 2 disaggregates the average PS program's effect on the seven financial indicators and compares it to the effect observed for the 43 non-financial indicators. The graph shows that the estimated effect is larger for financial

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[5] Sawilowsky, S. (2009). New Effect Size Rules of Thumb. *Journal of Modern Applied Statistical Methods*, *8*(2). https://doi.org/10.22237/jmasm/1257035100

Figure 2: Average treatment effect on financial and nonfinancial poverty

Average treatment effect on financial poverty index
- **Effect size:** -0.69 standard deviations
- **Outcome variable units:** -0.12 index points
- **Number of indicators:** -0.8 indicators
- **Confidence in negative average effect:** ~100%

Average treatment effect on nonfinancial poverty index
- **Effect size:** -0.44 standard deviations
- **Outcome variable units:** -0.04 index points
- **Number of indicators:** -1.7 indicators
- **Confidence in negative average effect:** 100%

indicators. Within these financial indicators, follow-up analysis shows that most of the improvement is concentrated in the indicator "budgeting." As shown in Appendix B, the change in percent green is more than twice as large for budgeting relative to any other indicator. Hence, the overall result is sensitive to the inclusion or exclusion of individual indicators. That being said, our analysis shows that the positive (and statistically significant) results persist even after excluding single indicators.
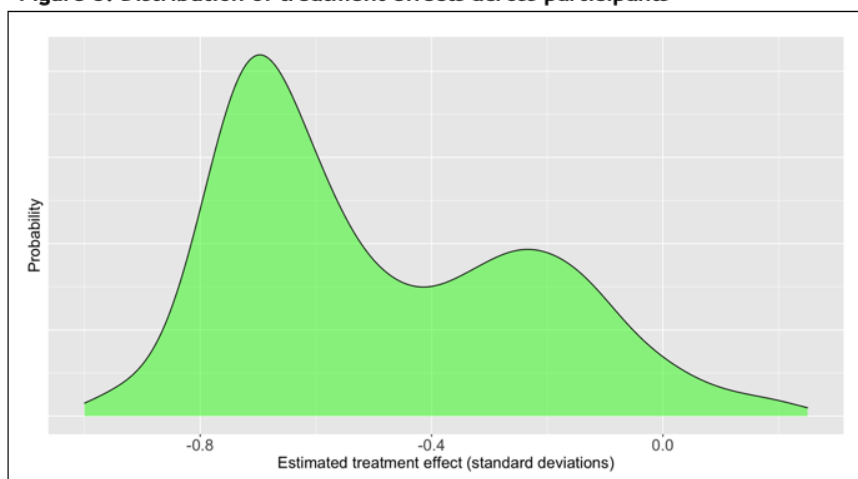
Importantly, the positive effects of the program are not limited to these financial indicators, and even non-financial indicators could be improved by around 0.4 standard deviations (or 1.7 non-financial indicators). A stronger effect for financial, compared to non-financial, indicators is to be expected, given that the Poverty Stoplight is embedded in a microfinance program, and loan officers are best positioned to work with clients on issues related to financial inclusion and literacy.

B. What types of participants are most likely to benefit?

Preliminary evidence suggests that the Poverty Stoplight generates the greatest add-on impact for higher-income participants, as lower-income participants experienced the lionshare of their poverty reduction from microfinance alone.

Thus far, the results have focused on average effects. But what if we instead considered the distribution of effects across participants? Figure 3 leverages an innovative methodology (see Appendix B) to explore this distribution. The graph shows a bimodal distribution: there is not *one* clear average or expected effect size for the program, but rather two effect size values around which individual clients
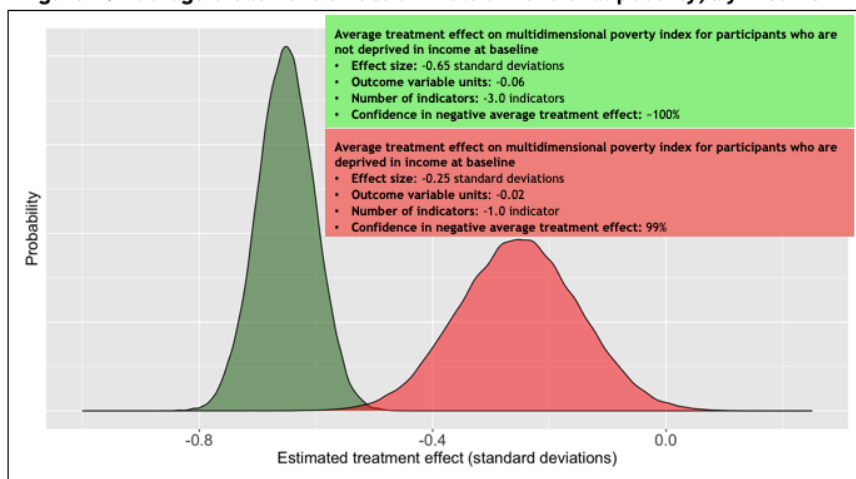
Figure 3: Distribution of treatment effects across participants

cluster. This might indicate that there are certain client or intervention characteristics that influence the program's effectiveness.

As it turns out, there is one particularly critical factor to determine the program's potential: clients' baseline income. The study suggests that the PS model had a greater impact on participants that are green in the PS income indicator (see Figure 4). For these participants, we estimated an add-on impact of -0.65 standard deviations, corresponding to moving three indicators from red or yellow to green. For clients below the monetary poverty line at baseline, on the other hand, we estimated an add-on impact of -0.25 standard deviations, corresponding to moving about one indicator from red or yellow to green.

At face value, this result is striking. However, a closer look reveals that this difference is driven by differences in the control group, rather than the treatment group. Lower-income participants experienced a multidimensional poverty reduction of 0.54standard deviations in the control group that just received the microfinance program, whereas higher-income participants did not experience a multidimensional poverty reduction without the PS add-on. While changes in the control group can not be definitively distinguished from background trends, this suggests that the microfinance program alone drove the lionshare of multidimensional poverty reduction for lower-income participants, while the PS survey and coaching model drove impact for higher-income participants.

That said, there is still evidence that the PS survey and coaching model improved impact for lower-income participants—even on top of the microfinance program. That is shown when we zoom in on the income indicator. In the treatment group, 30 percent of clients were deprived in income at baseline, compared to only 3 percent at endline (in the control group, 22 percent were deprived in income at baseline, compared to 15 percent at endline). This is reflected in the multidimensional poverty index as well.

Figure 4: Average treatment effect on multidimensional poverty, by income

Average treatment effect on multidimensional poverty index for participants who are not deprived in income at baseline
- Effect size: -0.65 standard deviations
- Outcome variable units: -0.06
- Number of indicators: -3.0 indicators
- Confidence in negative average treatment effect: ~100%

Average treatment effect on multidimensional poverty index for participants who are deprived in income at baseline
- Effect size: -0.25 standard deviations
- Outcome variable units: -0.02
- Number of indicators: -1.0 indicator
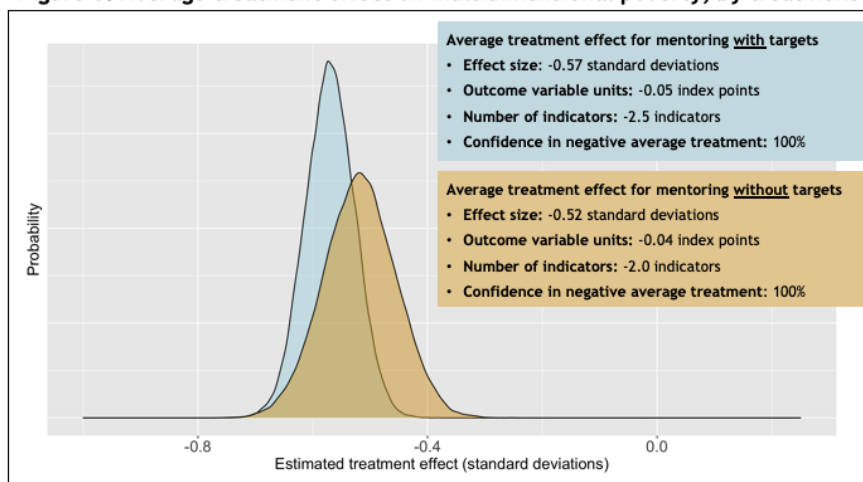- Confidence in negative average treatment effect: 99%

Even for clients below the monetary poverty line, the analysis still provides very strong confidence that the conditional average treatment effect is negative, that is, a reduction of multidimensional poverty (see Figure 4).

C. What programmatic features are most likely to optimize impact?

When coaches were guided by explicit contact targets, the treatment effect grew by 0.1 standard deviations.

Whenever microfinance clients received the Poverty Stoplight program with some mentoring, they could expect an acceleration in the reduction of their level of multidimensional poverty. That

Figure 5: Average treatment effect on multidimensional poverty, by treatment

Average treatment effect for mentoring **with** targets
• **Effect size:** -0.57 standard deviations
• **Outcome variable units:** -0.05 index points
• **Number of indicators:** -2.5 indicators
• **Confidence in negative average treatment:** 100%

Average treatment effect for mentoring **without** targets
• **Effect size:** -0.52 standard deviations
• **Outcome variable units:** -0.04 index points
• **Number of indicators:** -2.0 indicators
• **Confidence in negative average treatment:** 100%

being said, results show that effects were slightly larger if the loan officers were given specific mentoring targets (rules on how often to visit each client), as opposed to being allowed to decide individually how often to do the follow-up. As shown in Figure 5, clients who received mentoring based on clear rules could expect to reduce their multidimensional poverty by 0.57 standard deviations (2 or 3 indicators), while those receiving mentoring without follow-up rules could expect a poverty reduction of 0.52 standard deviations (2 indicators).

It is not clear whether this finding is transferable to other settings, as Fundación Paraguaya's microfinance program makes frequent use of other types of performance targets (and ties bonuses to achieving those targets). Thus, while contact targets might be beneficial in other organisations with such target-based cultures, this study does not allow to draw more general conclusions on the most adequate mentoring program design for organisations with a different culture.

This finding ties in interestingly with the results of qualitative interviews with loan officers. Those interviewed tended to stress the importance of being able to respond to individual clients' mentoring needs. A common theme in qualitative interviews was that program success largely depended on relation building at program start: only once trust between loan officer and client has been established are clients able and willing to fully engage with the program. This suggests that loan officers need some flexibility as to how to approach program participants, yet the requirement to be in consistent, regular contact with participants likely helps to build trust. This relationship is then the basis for more successful mentoring work.

Follow-up mentoring is a crucial aspect of the program package.

Based on the small subset of indicators where a comparison between the control group and the conventional survey group is possible, no differences between these groups could be detected. In other words, the study did not find a decrease in multidimensional poverty for clients who did

the Poverty Stoplight survey but then did not receive any follow-up mentoring by design. This suggests that the Poverty Stoplight achieves its impact not primarily through the self-assessment (alone), but rather through the entire program package. This finding was generally confirmed in qualitative interviews with loan officers, who noted that clients do not tend to start working independently on their indicators after doing the Poverty Stoplight survey. Instead, clients first have to come to see their loan officer as a personally invested coach before they are willing and able to fully engage in the program.

CONCLUSIONS AND RECOMMENDATIONS

The results of this evaluation study show that the Poverty Stoplight program supports people in overcoming their multidimensional poverty. In the context of Fundación Paraguay's microfinance program, the acceleration effect is particularly strong for financial indicators, though the results show with high confidence that multidimensional poverty also decreases in non-financial indicators. Some key recommendations for practitioners that arise from this study are:

- Target participants across the spectrum of multidimensional poverty. A positive program effect could be found for virtually all participants This suggests that implementing partners should not limit the program to specific participants, such as those who are better-off at the baseline. Rather, they should help participants work towards identifying solution strategies that are of particular relevance to those more disadvantaged at program start.
- Consider the potential of attending to a broad range of multidimensional poverty indicators. Even though an organization's core competence might lie in a specific thematic area, such as financial inclusion for Fundación Paraguaya, the results of this study indicate that improvements can also be achieved in multidimensional poverty indicators outside of that core area. A broad focus can unlock the positive feedback loops through which gains in one dimension of poverty support gains in others.
- Provide follow-up support to participants. Follow-up mentoring is key to the program's success. Implementing organizations should make sure that participants have support in developing personal anti-poverty plans.
- Invest in relationship building, and consider setting explicit targets or guidelines around regularity of communication. The study showed that these targets can increase the program's effect. However, implementing partners should be careful to align such targets with the overall organisational culture, and to use enough of the mentoring time for mentors to create a trusting and friendly relationship between participants and mentors.

APPENDIX A: METHODOLOGY

This evaluation uses a randomized controlled trial (RCT) design, supporting identification of the causal contribution of the PS to changes in multidimensional poverty that occur over the study period. The RCT includes two treatment arms and two control groups, as summarized in Table 1:

Table 1: The study's two treatment and two control arms

	Mentoring A	Mentoring B	Control Group	Conventional Survey group
PS self-evaluation survey	yes	yes	yes	no
Conventional survey	no	no	no	yes
Personalized life map	yes	yes	yes	no
Type of follow-up received	Follow-up based on established rules (at least once per month in person, and at least twice more per month via any channel (telephone, WhatsApp, in person, etc)	Follow-up frequency and type up to the decision of the mentor, based on perceived need	No follow-up	No follow-up

At the end of 2017, out of the list of all active microfinance women village banking clients in good standing, clients were randomly invited to participate in the PS program. For this evaluation, data is used from a total of 2,381 clients (1,745 who participated in mentoring A, 338 in mentoring B, 157 in the control group, and 141 in the conventional survey group).[6] This study focuses specifically on mentoring A, mentoring B, and the control group, as they each include rich data from the Poverty Stoplight.

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[6] A stratified, two-stage sampling process was used based on the following rules: First, out of each of the 75 loan officers' portfolios, nine (9) loan committees were randomly selected: four (4) for mentoring A, one (1) for mentoring B, two (2) for the control group, and 2 (two) for the conventional survey group. In a second step, out of all the clients in the selected committees, a predetermined number of clients was randomly selected. Initially, from each committee in mentoring types A and B, seven (7) clients were selected; from each committee in the control group and the conventional survey group, two (2) clients were selected. Hence, out of each loan officer's portfolio, 35 clients are selected for the PS program with some form of follow-up mentoring, 4 clients are selected for the PS without follow-up mentoring, and 4 clients are selected for the conventional survey group. Note that the unbalanced sampling strategy was employed because of the program necessities of the MF program that hosted the evaluation study. The final numbers reported above are only those clients who remained in the study.

Qualitative semi-structured interviews were used to validate and better understand the results. Based on the preliminary results of the quantitative analysis, twelve loan officers whose clients saw particularly large or small improvements were purposefully selected to gather in-depth information on the mentoring process and validate the main findings. These interviews were conducted in February of 2021.

The evaluation focuses on outcome variables that represent multidimensional poverty. As described in Table 2, these outcomes provide a rich, multifaceted window into the lived experience of program participants.

Table 2: Baseline mean and standard deviations of the study's outcome variables

Variable	Description	Baseline mean	Baseline standard deviation
Multidimensional poverty index	This index combines all the deprivations (yellows and reds) a family experiences into an aggregate number. It is based on the Alkire/Foster methodology[7] and can have theoretical values between 0 (no poverty) and 1 ("maximum" poverty).	0.110	0.0876
Financial poverty index	This index combines all the deprivations (yellows and reds) a family experiences in indicators directly related to income generation or financial literacy into an aggregate number. It is based on the Alkire/Foster methodology and can have theoretical values between 0 (no poverty) and 1 ("maximum" poverty).	0.257	0.186
Nonfinancial poverty index	This index combines all the deprivations (yellows and reds) a family experiences in indicators not directly related to income generation or financial literacy into an aggregate number. It is based on the Alkire/Foster methodology and can have theoretical values between 0 (no poverty) and 1 ("maximum" poverty).	0.0861	0.0823

The study applies innovative Bayesian methodologies for their intuitive outputs and their ability to identify otherwise unanticipated heterogeneities in program impact. Unless otherwise stated, the charts shown in the report reflect outputs from a simple linear Bayesian regression model. Additionally, we applied a Bayesian Additive Regression Trees model to help identify nuances in program impact. Bayesian Additive Regression Trees, or BART, is an alternative to traditional regression analysis that applies machine learning techniques to identify factors that moderate program impact. This approach offers a few core benefits. First, by flexibly surfacing potentially unanticipated heterogeneities, the approach can identify the contextual features that are most likely to optimize impact, therein informing program design. Second, it provides intuitive insights

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[7] Alkire, S., & Foster, J. (2011). Counting and multidimensional poverty measurement. *Journal of Public Economics*, *95*, 476–487. https://doi.org/doi:10.1016/j.jpubeco.2010.11.006

into the distribution of treatment effects *across* microfinance clients. Traditional regression, by comparison, prioritizes estimation of the average treatment effect. Finally, it applies a flexible approach that minimizes assumptions and potentially distortive choices in model design.

There are a few limitations to the approach we took. First, the data that the analysis is based on is part of the intervention itself, hence there may be issues such as biased reporting. Second, not all clients for whom baseline data was collected were still available at the time of follow-up, and this attrition may lead to an over- (or under-) estimation of the program effect if those leaving the program were less (or more) likely to decrease their poverty level. Third, the PS intervention is delivered on top of another big intervention (microfinance), which raises questions about the results' external validity, that is, the transferability of the results to other contexts. Forth, the study covers only a relatively short time span (one year); it is unclear from the data whether the same rate of change could be expected over a longer period of time, whether the rate of change is likely to decrease (if decreases in poverty are limited to easy wins), or whether it is likely to increase (if the first year serves mostly to set the stage for changes that take longer). Fifth, and related, we have no information on the sustainability of the observed changes, that is, on whether indicators stayed in green after the intervention ended. And sixth, to avoid overfitting, BART applies a conservative, "skeptical" approach to detecting interactions between variables. Accordingly, it is possible there are some substantively important relationships that were not surfaced by the BART model.

APPENDIX B: INDICATOR CHANGE

The table below shows the difference-in-difference estimators for the program's effect on each individual indicator. These are the differences between clients in the treatment and the control group in the change of share of clients who are in green in a given indicator, at baseline versus at follow-up. For instance, in indicator #33 (budget), the share of clients who are in green has increased by 51 %-points *more* between baseline and follow-up survey for clients in the treatment group than for clients in the control group. We find such a positive effect of the program for 32 indicators; for 14 indicators, the effect is 5% points or larger.

Table 3: Difference-in-difference changes in individual indicators

Indicator	Percentage point change in green (treatment relative to control)	Inclusion in financial vs. non-financial poverty index
PS indicator #33 (budget)	51%	Financial
PS indicator #7 (garbage)	21%	Nonfinancial
PS indicator #1 (income)	20%	Financial
PS indicator #40 (participation)	15%	Nonfinancial
PS indicator #19 (bedrooms)	13%	Nonfinancial
PS indicator #6 (environment)	12%	Nonfinancial
PS indicator #36 (entertainment)	10%	Nonfinancial
PS indicator #12 (sexual health)	9%	Nonfinancial
PS indicator #16 (insurance)	8%	Nonfinancial
PS indicator #14 (eye health)	8%	Nonfinancial
PS indicator #29 (access road)	6%	Nonfinancial
PS indicator #20 (kitchen)	6%	Nonfinancial
PS indicator #47 (emotions)	6%	Nonfinancial
PS indicator #41 (influence)	5%	Nonfinancial
PS indicator #43 (voting)	4%	Nonfinancial
PS indicator #4 (diversified income)	4%	Financial
PS indicator #8 (water)	3%	Nonfinancial
PS indicator #27 (electricity)	3%	Nonfinancial
PS indicator #21 (bathroom)	3%	Nonfinancial
PS indicator #13 (dental health)	3%	Nonfinancial

PS indicator #49 (entrepreneurship)	2%	Nonfinancial
PS indicator #5 (documentation)	2%	Financial
PS indicator #2 (savings)	2%	Financial
PS indicator #42 (conflict management)	2%	Nonfinancial
PS indicator #3 (credit)	1%	Financial
PS indicator #44 (family goals)	1%	Nonfinancial
PS indicator #18 (comfort)	1%	Nonfinancial
PS indicator #10 (nutrition)	1%	Nonfinancial
PS indicator #23 (phone)	1%	Nonfinancial
PS indicator #26 (security)	1%	Nonfinancial
PS indicator #28 (transportation)	1%	Nonfinancial
PS indicator #48 (domestic violence)	1%	Nonfinancial
PS indicator #22 (appliances)	0%	Nonfinancial
PS indicator #34 (generate income)	0%	Financial
PS indicator #46 (moral conscience)	0%	Nonfinancial
PS indicator #15 (vaccines)	0%	Nonfinancial
PS indicator #39 (child labor)	0%	Nonfinancial
PS indicator #37 (diversity)	0%	Nonfinancial
PS indicator #38 (human rights)	0%	Nonfinancial
PS indicator #45 (self-esteem)	0%	Nonfinancial
PS indicator #24 (clothing)	0%	Nonfinancial
PS indicator #30 (schooling)	0%	Nonfinancial
PS indicator #17 (safe home)	0%	Nonfinancial
PS indicator #50 (autonomy)	0%	Nonfinancial
PS indicator #11 (hygiene)	0%	Nonfinancial
PS indicator #32 (school supplies)	0%	Nonfinancial
PS indicator #9 (health services)	0%	Nonfinancial
PS indicator #25 (safety)	-1%	Nonfinancial
PS indicator #35 (information)	-1%	Nonfinancial
PS indicator #31 (literacy)	-2%	Nonfinancial

APPENDIX C: BASELINE-ENDLINE COMPARISONS FOR HIGH AND LOW INCOME PARTICIPANTS

As described in the main body of the report, the study reveals important nuances in program impact for participants with different levels of income at baseline. If we focus on the treatment group, we see comparable reductions in multidimensional poverty for both lower and higher income participants (about 0.05 index points, or 2-3 indicators). However, the study shows a multidimensional poverty reduction of 0.04 index points for low income participants even in the control group that just received microfinance services without follow-up coaching. By comparison, there was no poverty reduction in the control group for higher income participants.

While changes in the control group can not be definitively distinguished from background trends, this suggests that the microfinance program alone drove the lionshare of multidimensional poverty reduction for lower-income participants, while the PS survey and coaching model drove impact for higher-income participants.

Figure C2. Baseline-endline comparison for participants that are <u>above</u> the monetary poverty line at baseline
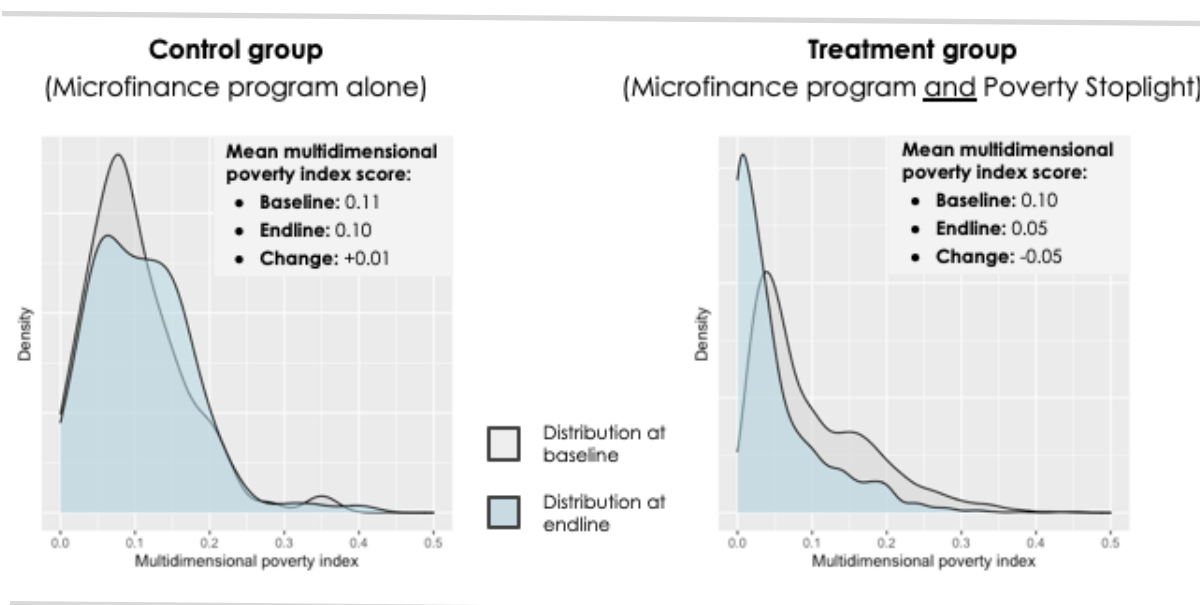
Figure C2. Baseline-endline comparison for participants that are <u>below</u> the monetary poverty line at baseline