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Cash Transfer Study Report May 27, 2022



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EXECUTIVE SUMMARY

GI is Not Just for Adults

This guaranteed income program was the first study conducted exclusively with high school students and was the youngest group of participants in a GI study to date. The aim of this micro-pilot was to determine proof of concept and potential implementation structures for a GI program with high school students prior to engaging in a larger experiment. The study showed that **young people are capable of effectively managing their finances**, and that GI programs can offer important opportunities for financial literacy. The lessons learned by participants in this study mirrored those learned by adults twice their age in other studies but occurred before any major financial choices could leave them burdened with debt or low credit.

There Are Effects but a Larger Number of Participants is Needed

The 20-student study was able to identify some statistically significant measures, but a **larger number of participants is required for more statistically significant findings**. The small sample size and low response rate in the control group hindered quantitative analysis. Some variables, those associated with the tools CES-D-R, YAM-5, and Children's Hope Scale scores, were omitted completely due to missing only two responses from the treatment group. Four missing responses from the control group made wave 2 control comparisons insufficient in significance analysis. A larger study, along with improved measures for onboarding, will improve data quality.

Unconditional Cash Transfers Build Financial Literacy

Study findings demonstrate that **GI can act as a powerful tool of financial literacy**. The need for classes on financial literacy within a curriculum has historically been held as a prerequisite to giving money to people who have not had access to resources but this paternalistic view may be misplaced.

Receiving Unconditional Cash Can Help Teach You the Value of Your Time

Students reported being **more aware of the value of their time** and being less willing to tolerate poor working conditions.



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ABOUT GUARANTEED INCOME

“The dignity of the individual will flourish when the decisions concerning his life are in his own hands, when he has the assurance that his income is stable and certain, and when he knows that he has the means to seek self-improvement.”

-Dr. Martin Luther King, Jr.

Guaranteed income (GI) is an individual benefits program which provides unconditional, direct, cash transfers to participants. GI programs tend to target specific subsets of individuals within communities (for instance, those below a certain income level). Typically, they operate as short-term pilot projects, and many have a research component which tests the impact of direct payments by collecting user data through participant surveys.

With active initiatives on every continent, GI programs have been gaining momentum in recent years, particularly in the wake of the COVID-19 pandemic. There are currently 80 mayors across US cities who advocate for GI and at least 100 programs currently operating in the US.¹ Another 20 are expected to begin in the US alone before 2023, including a program in Atlanta inspired by UBI advocate Dr. Martin Luther King, Jr. This micro-pilot is part of an emerging new wave of pilots focused on young adults or young people, such as the Trust Youth Initiative² in New York City. Some are funded by public dollars, others by private philanthropy or a mix of public and private funds.

GI is not a novel initiative and past experiments from Canada, Finland and the US have yielded a range of positive benefits, including academic and health improvements. Findings also include increased economic capacity and personal agency.

Skeptics argue that GI may discourage labor participation or cite concerns with how the unconditional money may be used. Research does not support these concerns. Early evidence from the Stockton Economic Empowerment Demonstration (SEED) program in California finds that GI participants are more likely to become employed full-time and to take entrepreneurial risks.³ Unconditional cash allows people to make the decisions about their lives that make sense for them.

¹ Mayors for a Guaranteed Income. <https://www.mayorsforagi.org/>

² See the report at t.ly/a244

³ See the preliminary analysis of SEED at t.ly/eSr9



STUDY PARTNERS

This initiative was a partnership between 4.0 Schools and Rooted School, with research and evaluation by the Center for Guaranteed Income Research at the University of Pennsylvania to measure the impact of the cash transfers on students' lives.

Research Questions:

1. How does guaranteed income affect student, family and community financial stability?⁴
2. How does guaranteed income affect student wellbeing, adaptability to stressors, and anxiety and depression?⁵
3. How does guaranteed income affect students' perception of self within their environment?⁶
4. How does guaranteed income affect students' plans for the future?⁷

Each team was responsible for leading the following workstreams:

4.0 Schools invests in community-centered models of education, providing coaching, curriculum, community and cash to those with the imagination to envision more equitable ways to learn, and the desire to ethically test those ideas. The 4.0 team was charged with driving the overall vision of the study and provided funding. The 4.0 team managed the project and coordinated the work of the three other groups while driving the storytelling efforts and managing press.

Rooted School communicated with students and families at the community level while handling the logistics of the cash transfers. Rooted supported students with daily issues and barriers while monitoring school culture and the impact of the study on the student body as a whole.

Be Loud amplifies kid confidence through radio and digital media production. Be Loud helps turn screens into tools for creative self-expression and courageous collaboration. Be Loud creative director Alex Owens provided opportunities for reflection for students receiving cash during the program.

CGIR Research Team drafted the research plan, with approval from University of Pennsylvania's Institutional Review Board, and obtained consent from participants and families. CGIR handled communication with students for measurement purposes, administered surveys, and conducted interviews with participants.

⁴ Measured both qualitatively and through the Financial Attitudes Scale.

⁵ Measured through the Shift and Persist Scale, YAM-5, and CESDR-10, as well as qualitatively.

⁶ Measured through the MacArthur Scale of Subjective Social Status and the Kind of Person Implicit Theory Scale.

⁷ Measured qualitatively.



Credit: 4.0 Schools

RESEARCH FINDINGS OVERVIEW

The Effects of Receiving Cash Transfers

- 1. The treatment group had statistically significant improvements after the cash transfer intervention for two measures of family material hardship.**

At the beginning of the study, 40% of students receiving the money said that their family had not paid the full amount of rent or mortgage at some point in the last year. This dropped to 0% at the end of the study. At the beginning of the study, 50% of students receiving the money said that their families had not paid the full amount of a gas, oil, or electricity bill. This dropped to 0% at the end of the study.

- 2. The cash transfer program was an educational opportunity, allowing students to practice financial skills and set goals for their financial futures, and even helping students reframe the value of their paid work.**

Students said they felt the cash transfer study prompted them to acquire and practice financial skills, to learn through experimentation, and to take risks without dire consequences. The educational value of the program held across both treatment and control groups, since control group students still reflected on their spending and set goals for their financial futures as a part of their participation. Some even reported that they learned strategies for dealing with stress through completing the surveys about mental health.

- 3. Students spent their money on a diverse range of items, from snacks to stocks.**

Students reported buying snacks, pizza, gas, electronics, Apple stocks, and cryptocurrency, and making contributions to their family bills or to savings accounts.

Suggestions for Future Program Administration

- 4. The small sample greatly limited the analysis. The probability of finding statistically significant findings would rise with a larger sample.**
- 5. Response rates were low. Wave 2's rate was 60% for control and 80% for treatment. We make suggestions to improve the response rate in future.**
- 6. The students participating in the micro-pilot were enrolled in a school environment with a high degree of social supports in their educational milieu. Like most schools in New Orleans, this was a charter school with a flexible and innovative approach towards education. The field would benefit from future research comparing a program in this local environment with those in different geographic locations to determine what it would take to implement unconditional cash with youth at scale.**



Credit: <https://pxhere.com/en/photo/1382672>

SPENDING FINDINGS

Everything from Snacks to Stocks

Spending varied from the mundane—food like pizza or snacks, gas for everyday use or for special trips, electronics like headphones that had just broken—to the financially instrumental: Apple stocks, savings accounts, and cryptocurrency.

Several students told us they spent the money on food. Villain (treatment) said he remembered one especially memorable purchase:

“These are the best snacks. I use them to buy snacks, junk food. I used it to buy a whole pizza when had got first dol-- first \$30 pay amount. *I'll never forget about a whole pizza. I was just like, ma, look. I bought it with survey money.* I was so happy. I was just like, yes, survey money, baby. You know, it's great. It, it was great.”

At the beginning, Leo (treatment) said he expected to spend the money on gas. “OK. I could use that for gas money.” This seems to match up with his experience when the money came through: Rheame asked Leo what it was like to use the money every week, to which Leo replied, “There's no specific word that I could use for it. It's just now I have money to-- for gas, so I can have-- use the rest of my money to actually do whatever I want.” The first time he used the money, he said, “That went straight to gas money.”

However, Leo also used the gas money to visit different places on a whim. The effect was a sense of freedom: the money also allowed for spontaneity and the ability to travel to new places.

“They had times when I'd just be sitting down. And then I'd just look and I'd be like, OK, I have a little bit of money now. And I just took a trip to a random place...I ended up in Biloxi out of nowhere. Ended up in Texas out of nowhere... Ended up in Baton Rouge.”

Jashai (treatment) expected to use the money as a buffer or backup for unexpected expenses: “I think uh most of it was just uh having, like, the back-- background buffer for

in case something came up that I needed.” He mentions laundry as a possible use: “when I came up, say like, I needed to like, hey, I need to pay to do my laundry. OK, cool. I have that money, we’re good. I don’t have to wear dirty clothing.”

For the first week, though, Jashai forced himself not to touch the money:

“I think it just sat there for, like, the first four weeks actually... Like the first month of it, I was just like, this is here. *We’re going to let this sit here and we’re just not going to touch it.* Because I rec-- I sat down and thought, you’re you. *You’re impulsive.* I think it just sat there for, like, the first four weeks actually... Like the first month of it, I was just like, this is here. We’re going to let this sit here and we’re just not going to touch it. Because I rec-- I sat down and thought, you’re you. *You’re impulsive.*”

The effect was a sense of free space in mind:

“I think it contributed to a lot of uh, better-- it-- *it just freed up a lot of things in my mind... Which was always welcome, because, yeah, that’s one less thing to have to-- ... Actively think about.* Like, OK, this, has to get done but this is here. I can handle that. This has to get done. I can handle that, yay.”

When we asked what he spent the money on for the first time, Jashai told us the timing was just right so that he could replace his broken headphones. He definitely had some ambivalent feelings about it:

“Was when I needed headph-- I remember that all my headphones were just, like-- the headphones I was using just stopped working. I was like, this is problematic... I live in a house with four other people. It’s loud. I don’t want to contribute to that. I need these. And so I just looked and I was like, yeah, no, this works. I can just do this and move on. I remember sitting there being, like, did I really just? Is this really the first thing I did with this? It felt jarring. *It felt weird. It felt wrong, but it also felt right.*”

In a more unusual instance, Villain (treatment) said his favorite use of the money was to buy stock:

“Oh, Apple stock. Absolutely... Yeah. Apple stock. Yeah. When I bought that Apple stock, I felt like a man. That, that was when-- that was when like it really kind of, like, sealed the deal like, yeah, OK... I’m doing this. You know what I’m saying? Like, I’m doing this investing stuff, you know? Like, that’s why I was just like, yeah, I like this.”



Credit: <https://www.piqsels.com/en/public-domain-photo-siday>

IMPROVING WELLBEING

Improvements in Material Hardship of Family

At the end of the intervention, **the treatment group was financially better off**. The paired t-test comparing treatment baseline and final responses showed a statistically significant improvement for the questions “In the past year, was there a time when your family did not pay the **full amount of the rent or mortgage?**” (40% “yes” at baseline, 0% “yes” at final) and “In the past year, was there a time when your family did not pay the **full amount of the gas, oil, or electricity bill?**” (50% “yes” at baseline, 0% “yes” at final).

By contrast, the control group trend showed these measures holding approximately steady or worsening between baseline and final measures, although the low control group response rate for Wave 2 precluded significance testing.

In interviews, students report **helping their parents financially**. One student we did not interview responded in the survey (SMS8) that the money is: “useful for helping my family.” Another student, Leo (treatment) said: “I help pay bills where I can.” Students’ role in family economies varied: in interviews, many reported helping their parents either financially or through in-kind labor such as caring for siblings.

This indicates that future research on unconditional cash programs with young people will benefit from methodologies more focused on understanding the interaction between social networks and recipients. In particular, understanding how young people weigh the material needs of their families alongside their personal goals and whether or not those over 18 choose to share their program participation with family and friends who rely on them.

Other Benefits: Mental Health Check-ins

For Athena (control), just the chance to report on her mental health helped her notice changes in her mood, and **to develop a coping mechanism** for her struggles. When asked, “did you learn anything about yourself?” She answered:

“Um, maybe like, when I was talking five minutes ago, that I really have, you know, a problem with my mental health... Um, but being able to like, you know,

write it down, put, you know, how I was feeling-- it made me feel better, honestly. So, um, when I learned that, that makes me feel better about myself. I let it go in my Notes on my phone, and write down what I'm feeling. And I feel so much better ... Yeah. Even though like, nobody's going to read it, or um-- well, I'm going to read it. Like, sometimes when I'm feeling good, I go back and I'll be like, dang. I really was feeling like this."

Athena also emphasizes this sentiment at the end of her interview: "I learned a lot about myself doing those surveys. And I feel like people shouldn't just join it just because they're getting money, right? If-- their survey's actually helping people, and you know, helping society, I feel like it's really good for people to do the survey."

Offering Stability During the COVID-19 Pandemic

The pandemic brought universal concerns about personal health and safety, and created barriers to accessing school – one of the most dependable and consistent structures in the life of a young person. The **cash transfer study offered a stable set of events during the pandemic**. Each week, the same sum would be deposited on the same day into the same account.

The test pilot began planning in June of 2020 with students receiving payments from October 2020 to October 2021. The selected students were in the senior class and scheduled to graduate in spring 2021. The New Orleans school district began the 20/21 school year remote and allowed hybrid schedules, a mix of in-person and online days, for high school students in October. In January 2021, a spike in cases caused a 6-week mandatory remote period for all schools in New Orleans. The impact of virtual sessions created anxiety for Anna (control) when she attended a virtual problem-solving activity for a scholarship:

"We had to collaborate. And so all of them were collaborating. I -- like, they were, like, basically jumping in and saying, oh, I think we should do this. And I didn't. And I tried and I tried. But they kept, like, cutting me off. So by the end of the -- that round I didn't say anything. And the thing is, the people from the scholarship were, like, going through this, like, breakout room...watching us, listening, listening in. And then by the end of the interview I just, like, started crying. I'm like -- I was like, yeah I did not make it. And then in two hours later they called me saying that I passed."

The competitive nature of the setting was made more stressful for Anna by the virtual space. She feared that she might go unnoticed if she did not turn on her mic and assert herself verbally. Anna felt overwhelmed and worried she had been unable to effectively participate.

For Gretchen (control), the pandemic created additional care responsibilities with their elementary aged sibling:

“Like so when COVID initially started, she had COVID. And my parents were like dead set on her not having it. So she suffered with COVID for like three months. Like from March to like mid-June. And I was the one who was constantly doing it. Getting her ready for class. Making sure she's on her Zoom meetings. Her homework. All of that.”

Both students found additional stress came with the pandemic, and administrators saw additional stress in students which was not conveyed in interviews. In addition, when hurricane season struck, the students experienced the impact of extreme weather and power outages in the context of an on-going pandemic. The cash transfer pilot supported the students beyond financial measures by maintaining a consistency during period of global social ambivalence and local shocks produced by extreme weather events.

Giving Students Space to Process

The program’s storytelling component included a podcast course. Alex from Be Loud talked about the podcast not only as a skill-building opportunity but as a means and outlet to process the impact of the money. This might have been under-realized to an extent.

“And so I think I underestimated two things. One, the money, they care about it. But it's like, it's not going to make such a big impact that they're going to be like, ‘Oh, uh-huh!’ It's just like, ‘No, we're still poor. We're still Black so this still sucks.’ I'm doing a really bad job of summarizing how they felt. But that was essentially how one student felt at the end. He was like, ‘I'm still pissed off. I don't know what the fuck to do with that.’

Maybe I haven't processed to think enough about how to do it, but it was just like...a lot of the questions they were still asking and they're still grappling with. And I didn't do a good enough job of giving them the space to really process that, at least on the mic.

When we're recording kids talking about this, finding ways for them to talk about it without talking about it is sometimes really important.”

Involving a social worker or counsellor in motivational interviewing, or fostering spaces for students to talk about the program, might help students process the impact of the GI on their lives.

In general, clarifying the vision and outcomes of the podcast – as just a *podcast* or as a more meaningful platform:

“We were almost in between those two lanes of being like, am I just talking to you every now and then and capturing high quality audio? Or am I truly empowering you? And I think I was trying to sell the first one, but the kids thought we were doing the second one. So, for like two months we were kind of in between those. Like, all right, wait. What are we doing here? You know?”



Credit: Brian J. Matis, Creative Commons

INCREASING FINANCIAL LITERACY

The cash transfers offered students more than just a means to buy consumer goods or help their families with bills. The students talked about how receiving the money prompted them to learn about financial skills and their own financial goals.

The Cash Transfers Were a Financial Education

Kaitlin (school principal), told us that she had noticed that the students in the school were not well-informed about real costs and finances:

“I’ll start off with a quick story... One time, I asked our students, ‘how much do you think like a really nice house costs?’ And one of our students was like, ‘oh, my gosh, like, a thousand dollars.’ And her eyes like lit up. And she was like, ‘oh, wow.’ I think that’s a really good example of our like kids’ perceptions of money.”

This program was **a chance for students to** consider their knowledge of how financial skills feed into broader goals. Jashai (treatment group) said that after he heard he had been selected into the treatment group, he felt a pressure to carefully decide what to do with the money.

[Interviewer: Yeah, OK, umm, so you found out you were selected, how did that feel?] “It felt weird... Like, I-- I remember sitting there, being like, huh. OK, like, it’s weird because I just remember sitting there being, like, OK. Well, I’m now a part of this. OK, cool. Now I need to figure out what I’m doing with this money outside of just living... I can put this into so many things, where do I start? Like, where do I start saving and pushing things to be ready for when I need them?”

When we asked, “what did you learn,” Villain (treatment group) said he **learned valuable financial skills**, including budgeting and saving. He even reported using a gamified approach to saving:

“Oh, what I learned about myself was that I have the ability to, like, budget. Like when I tell you budget, like, I can budget in my head down to the last dollar... I will be like, OK, this much money. So if I take this much money, put into this account, put this much money to this one, then I’ll have this much left over to spend. That’s-- well, you know, like, I’m that type of person. So I’m just like, OK,

you pay me \$50. I have \$25. The rest of it is just going to disappear into my savings account. Once-- hm. where's that savings account? I don't know where that savings account is anymore. But, you know, like, but I have \$25 now. You know what I'm saying? So, like, that's the type of person that I am. It's just like, it made me-- it made me gain the ability to out of sight, out of mind my money. It made me able to just put my money somewhere and just not look at it, just let it just sit there, and when I grew that ability to do that, it got so easy. And when I tell you, like, I didn't realize how easy it was to just sit and stack your cash until I started getting that money because it was really just like, OK, I can really just sit here and just put this somewhere, just right there. Like, you know what I'm saying? And it's so rewarding. It's like playing a video game where you just sit there and you just watch the digits just go up. It's like di, di, boop. Yeah."

Jashai said he found that the cash transfers gave him a **chance to experiment** with additional income that he wouldn't otherwise be able to access, and that this is a safe way to experiment and make mistakes:

"A lot of people would not just assume that high school students would [not] have the idea of what to do with this money. But also it's, like, that's the thing. We don't because we don't have that source of income... And so giving them that money to figure it out, make the-- like make some mistakes, figure it out, and then uh, fix that-- helps them in the long run... And so-- th-- so on paper, a lot of people would be like, this is just going to be a bunch of kids spending it on stupid stuff... But, in practice, especially from what I've witnessed and from what I've researched...Uh, it works out for everyone, because everyone gets the ability to sit down and figure this out. They get to experiment. They got to learn. They get to adapt off of what they've learned."

The cash transfer program offered these students a chance to think deeply about economics, to acquire financial skills, and to learn through safe experimentation, and potential failure.

This was true across both treatment and control groups. Athena (control) also says that during the pilot she changed her attitude about shopping, shifting from a more impulsive approach to one that took time to evaluate, "what purpose is it going to serve?" Anna (control) said that the small amount of money in research compensation made her evaluate her spending.

"Um, yes, it made me think about money a lot. Because like, sometimes, like, I would have money in the card and then sometimes I wouldn't. And then when the email came it'd be like, hey, do this survey. And I'm like, hey, money. You know, hey, money came in. So yeah, it made me, like, think about how do-- like, how am I really spending this money and it's like, really wisely. But yeah."

It also made Anna confirm a goal she had for the future:

“...the money also made me think, like, you know, financial stability is, like, the end goal for me. Yeah, I guess it was just kind of, like, a back-up reminder. Like, I still want to do this, you know, for the future.”

Leo (treatment) thought the program was worthwhile because it might help students to **get to know themselves** through the process of considering how to spend the money. Asked what he would tell politicians or educators about the program, he said:

“I'd tell them that it was a good program. And that they should try, because it helps students realize how they actually are and what they might actually want to do. It might help them start to set plans that they may want to start creating... So, like, after they get the money, that's when they might start coming up with ideas that they wouldn't have actually thought about at first. Because they didn't have any type of lead to, like, maybe it might be before they got a job or whatever. It might be like, OK, now I can try to start doing this and start doing that. So it might help them decide what they want to do.”

Leo's comments reflect a tendency for young adults to view activities as having a value directly tied to the compensation it earns. This tendency pushes students to consider activities and careers which earn higher wages but as Leo reflected, the GI allows students to receive compensation for the activities that they enjoy. In this regard, cash transfers allowed students to pursue their interests without having to consider if it would be externally valuable because they would be compensated the same regardless of their chosen activities.

The Privilege of Spending with a Safety Net

Unlike financial literacy or coaching programs that provide knowledge prior to tangible financial supports, this pilot simply provided unconditional cash and produced the unexpected finding that even small amounts of money prompted them to **consider their financial habits and goals**.

One of the program staff, Alex, felt this was both especially powerful and extremely unlikely to be an experience these students would otherwise have. He considers this to be a privilege: the privilege of spending your money on something neither good nor bad, but simply “random,” or mundane:

“I bet more they didn't know how they were spending that extra \$50. Which I think is kind of true, right? Like, how many of us track our spending in a real responsible way outside of like, maybe our credit card, Chase app, or whatever? And I think a lot of that was like, it wasn't that they could point to like, “Oh, I bought \$100,000 sneakers or something.” But it was more like, they probably couldn't tell us exactly how they spent their money.

...You know, a lot of it, I was just like, what? And he'd be like, "You know, food". You know? "I'm getting ready for college." And he couldn't directly point to where the money was going... So either it was going to nefarious things that he didn't want to admit to, or I bet really he just--....Had an extra \$50 in his bank account and, you know, he went to eat -- eat out more... So I think that is actually more the thing. It's not good or bad, but it's just like, kind of random...Which, again, is a privilege afforded to some, you know."

These types of financial skills can help students chart pathways to financial goals: not only short-term budgeting and planning, but opportunities to experiment, practice and consider their financial futures.



Credit: Camilo José Vergara, Creative Commons.

REFRAMING THE VALUE OF WORK

Cash Transfers Reframe the Value of Wages

Cash transfers or guaranteed income are *by definition* provided without being in exchange for labor. Some students nevertheless found that their experience receiving cash transfers helped them **think differently about the wages** they were earning for work.

Villain (treatment) explained that he felt a sense of freedom in what to spend the money on, since the money didn't feel the same as money that had been earned through wage labor.

“Because the thing is when you're getting money that you're not working for, you're more incentivized to do something good with the money that you wouldn't have otherwise done with the money that you were getting before. Because if you're getting \$50 a month, that's just like, whoa, you could do whatever you want with this \$50? Well, I've never invested in a stock before. ... It's not something where it's just like your normal money that you would get where it's just like, OK, I have this money, but I also have to pay these bills. You know what I'm saying?”

Villain provides very evocative language of the experience of receiving the money while a student. He was not working or earning money, so the experience of receiving the funds without having active expenses felt different. It opened him up to the possibility of having savings.

“I wasn't getting paid a lot of money. So when it came down to it, you know, Netflix, Funimation. You know what I'm saying? You got your phone bill, then you know, all this different stuff. You not gonna have that much money left over. You know what I'm saying? So it's just like, wow, look at this. \$50. Shka-boing right there into the-- you know? Like you can just put it right there into the account. So yeah.”

Reframing the Value of Self and Work

The GI also reshaped how students thought about **the value of the work they perform**, and the relative ‘need’ to stay in bad employment situations.

When asked what else changed about his life when he started receiving the GI, Villain said he quit his job. At first it sounded like this was a direct result of the funds, but then he explains that it was also precipitated by poor management and unpredictable work hours. However, the GI presented a sense of permission to leave:

“When I started getting that \$50 a week, I quit working at Burger King. And the reason why I quit working at Burger King is because-- well, what actually ended up happening was they wanted me to come in there and work the day before Thanksgiving, day after Thanksgiving, and on the day of Thanksgiving. I told them I wasn't coming in on Thanksgiving and they essentially told me, come in or you're fired. I was like, I quit. You know what I'm saying? So that kind of made me think to myself, like, OK, well, these people they were paying me 8.50 an hour. OK? They were paying me 8.50 an hour. Right? I would go in there, I would work, I'd be miserable the whole time. Then I'd get a check for, like, 200, 300 something dollars every two weeks.”

It also seemed to furnish a sense of freedom in terms of self-worth, drawing attention to lower wages and causing Villain to reconsider the value of his labor.

“And I would just be like, man, is it really worth it to have this job? You know what I'm saying? So it made me think to myself, like, I'm getting \$50 every week, which amounts to \$200 every month, for doing no work at all. So it makes me think to myself, like, OK, my time is way more valuable now that if my, like-- if my-- if zero of my time is worth \$50 a week now, pretty much-- tall boast. So it's just like, OK, well then I'm not-- I'm not working for less then, like, \$10 an hour. Then I get a job that pays me like \$17 an hour, so it's pretty nice.”



Credit: 4.0 Schools

IMPLEMENTATION INSIGHTS

Difficulties of Disbursement

School principal Kaitlin emphasized the challenges associated with getting students signed up for disbursement of the funds.

“I think that was a bit of a surprise in executing it and as we learn from this process, it’s like I think like one of the biggest lessons learned - is like the logistics that can get in the way of getting cash in kids’ hands. Because they’re some of them are minors. Um or, and I think also, when we talk about institutional and structural racism, and like barriers that exist and kids accessing IDs, umm I just think that yeah, it, it played a bigger role than we anticipated. So, I think the first thing was that we hit barriers with Cash App.”

First there were issues with the choice of disbursement partner. The first choice, CashApp was not responsive and did not address help queries in a timely manner. In future, Kaitlin suggested that finding a partner with the capacity to provide support and technical assistance, even to smaller organizations, would be ideal. As a recipient, Villain suggested that “CashApp is kind of not the best sometimes” and the program should try something different. They preferred receiving the funds on a **ClinCard**.

There were issues with getting students bank accounts once the decision was made that that would be necessary. In some instances, parents had concerns about setting up bank accounts for their children; Birdell noted that “there’s a lot of psychology into that.” It is possible – although this was not explicitly expressed so may be a flawed interpretation – that concerns might reflect wariness around predatory financial institutions in some low-income communities or hesitancy among undocumented members of the community.

There were challenges accessing the paperwork necessary to open a bank account, including IDs:

“A couple of the barriers that we hit were around kids having IDs... And the other thing, too, is when you have to get an ID, you need certain paperwork. Ummm, some of that stuff. Our kiddos, we do have Katrina kiddos. So, some of that stuff is lost when you’re younger. There were just these barriers that you’re like, oh, right. You need like a birth certificate. You need like, you need a social security

card, you know like those kind of pieces. And so, um that definitely presented barriers.”

Kaitlin says she would require **bank accounts** set up in advance: “And I think, in hindsight now, would have either required with extensive supports- bank accounts to be set up in advance of application or a requirement for application- just because um, that kiddo didn’t get money for a while.” She also emphasized that any disbursement should be regular and consistent; that young people could expect them on the same day at the same time. Birdell also said that automatic disbursements are ideal.

The program should also take into account that **means of communication** may change for teens. During the course of the program, one respondent talked about not getting the surveys because her phone number had changed; she said her boyfriend, also in the program, got a new phone and stopped getting the survey texts.

These insights are particularly salient given that this school environment arguably contains more social supports and connections with educational staff than many others. Future programs and experiments should consider disbursement mechanisms with a distinct eye towards their contextual environment in addition to the general trends among students.

The Need for Streamlined Communication Throughout the Program

The interviews highlighted a gap between messaging that occurred at the beginning of the program and how well the information was retained throughout the duration of the pilot. Despite a robust on-boarding process that benefitted from the relational scaffolding and positive environment at Rooted, there was a disconnect between what was communicated at the beginning to students, parents, and caregivers and what they reported in the interviews at the conclusion. Much of this disconnect can likely be attributed to the demands placed on students, families, and teachers during covid. The project started during June 2020 with the first payments being distributed in October of the next school year. Therefore, the pilot’s implementation stretched across two academic years, disrupted by the pandemic and the need to suddenly navigate moving an entire educational process out of the classroom and onto the Internet. While the pandemic was an unprecedented event, extreme weather events and other shocks common to areas with a high degree of financial vulnerability will continue occurring. Thus, these gaps provide key insights into implementing messaging around unconditional cash programs in environments marked by risk and potential volatility. Future experiments with young people would benefit from carrying the messaging delivered during on-boarding throughout the life of the program.

Like other experiments with adults, youth reported confusion about why they were randomized into the control condition instead of the treatment condition. Although the process was carefully explained, disappointment at not receiving the cash was understandably felt, and teachers were those that students went to with their

disappointments and frustrations. Talia mentioned that some students were coming up to her “asking why they didn’t get the money.”

A similar confusion was felt by parents and caregivers. In Kaitlin’s words, some parents of those selected didn’t realize until later that they had consented to their children receiving money and that their children were the ones who would receive the cash if they were randomized into treatment.

“I think that parents get a lot of forms that they just sign that are sent home. And I think that if I were to go back and do this again, *I would have a mandatory information session*. I was like, “hey, I need you to understand- I need you to think deeply about what this means when you sign up for it.” ... But one parent, in particular, was just like, I didn’t understand how much money this was, and how much my child was gonna get.... Um, she’s like, “Um, I don’t want this. I need this to go into this joint account. And I don’t want him to access to this.” And was like, “do you understand what this means?” And I was like- *I realized I understood, but I don’t think she understood, at the start of it, in like signing the consent*.

And so, I think I would just talk with families, and be like, let’s operationalize this out. Like “This is the lump sum of money at the end. This is how much is coming week by week. You cannot access it. You cannot ask your child how they’re spending it, what they’re doing with it,” like and just be most clear, and reiterate that a couple of times. And then just create discussion space for families. Like, what impact might this have on you, your child, your family? You know, things like that. Just so that parents have just like a maybe more clear understanding than a piece of paper.”

Birdell reiterated that **more consistent reminders** of what was explained during the onboarding process would help to clarify expectations around disbursement.

“Once you’re accepted and-- or, you know, like, you’re going to participate for certain. Before this happens, it’s going to be ‘this, this, and this’. And then, um, try to incentivize, uh, not necessarily penalize. But just codify that. OK, the disbursements are going to happen on this day, on this method. There’ll be no re-disbursement of the monies each time that you’re not set up.”

He also suggested a more structured explanation of the rules and responsibilities involved with the pilot, setting clear-cut and non-negotiable expectations for the study, even though the pilot—by definition—is not supposed to contain strings or rules in order to receive the unconditional cash.

“Going forward, um, a part of it should be to foster that independence and the ability to follow guidelines and rules. Because that’s a huge part of our society. Like, you have to-- you have to know the rules. You have to know how-- you have to be able to follow-- follow guidelines. And I’m not saying that-- that, um,

the rules are always correct or the guidelines are always correct, and you get to choose which ones you follow and when. And there are real consequences for not following those guidelines.

And as arbitrary as just a blanket statement as rules and guidelines are-- is, it's also the world in which we live in. It's-- and we can't change that. We can't change that. And so I would, uh, have some-- some more-- not stringent, but clear cut, like—[for onboarding] This is what it is. We have figured it out. This study is, like, we're going to figure it out. Y'all are going to work. Y'all are going to work with us. Like, we're working with y'all. But now we have figured it out. This is what you need to do. Do it."

Jashai (treatment), also reflected a departure from the ethos of unconditional cash, without strings attached, when suggesting that onboarding could better communicate the program's potential opportunities.

"I think it would be important to know that-- I think it would be important for [future participants] to know that, like, it's important that this money is also give-- is given out, but it's also important to make sure that people are aware of what this money means in the grand scheme of things. Because you-- you can give anyone anything-- anything. But if they don't know what to do with it, or, like, what is open to them, some people just don't know where to go with it.

...I'd say that I wouldn't really give more structure. Because that implies, like, limitations and stuff like that. But what I'd say, is that just communicating it, like, more thoroughly...I wish I'd known the scale of all of what I could be doing with this money."

Although limited, these themes reflect broader literature on social constructions of deservedness and assumptions that those experiencing poverty lack knowledge rather than cash⁸. As demonstrated in research on other pilot programs⁹, the framing around guaranteed income and basic income can shift some of these assumptions, but that research was conducted with adults instead of youth. It remains unknown how to address narrative shifts with young people, but the messaging in this early micro-pilot offers some insight into how to carry messaging moving forward.

More Touch Points and Support Staff

Multiple touch points and highly involved staff proved an important component to maintaining youth engagement. It seemed that the program implementation benefited from staff-student relationships and support.

⁸ Castro, A. & West, S. (2022). The case for basic income experiments. *Journal of Policy Analysis & Management*. 41(2).

⁹ Calnitsky, D. (2016). "More normal than welfare": The Mincome experiment, stigma, and community experience. *Canadian Review of Sociology/Revue Canadienne de Sociologie*, 53, 26-71.

Kaitlin talked about her role as specifically tasked with facilitating removal of barriers; serving as an intermediary that worked directly with young people and their families; leveraging relationships and holding people accountable. This kind of close involvement helped limit participant drop off:

“When something was slowing down, I would either reach out to a student, or to a family. I have really close relationships with students. And so, I was also the person who texted them. And was like, ‘Hey, we need your survey. Don’t you want 15 bucks?’”

When one student had difficulties setting up a bank account, another staff member was there to support them:

“Having the presence of the art therapist, who is our counselor in this case, is a really important piece of the process. Because our counselor actually was able to go with them to the bank, and get things set up. [For a child that needed extra support figuring out paperwork] And, and make sure that, you know, again, barriers were removed. Um and that is a process.”

Talia suggested having a consistent point of contact for enrollment and notifications, though this might not be possible due to the RCT design:

[Interviewer]: Were you the one in charge of notifying the ones who weren’t?
“So, ultimately no. But I think-- and I think that’s, like, something that we could tighten up, is because I was the one who was like, are you interested? Sign up for this. Do that. You know. So then it was like, in that last moment, they found out from someone else.”

During the study, a CGIR staff member set up Zoom homeroom sessions with students. However, at this point in time, it seemed that students were experiencing Zoom fatigue. In a different (possibly post-COVID) configuration, it was suggested that creating these kinds of spaces for interaction in real life can help ‘bring the face of research’ to students, and that can help incentivize them, too.

One participant appreciated the touch points that the surveys provided. It sounded like the medium of text made it feel more personal. Gretchen (control) said:

“I look forward to the surveys y’all give us...I look forward to it. [Interviewer: That’s me behind that. I’m always the one annoyingly, you know, texting, but.] So it doesn’t even matter, like it gives me something like different to look forward to, like besides packages. I definitely look forward to it. It’s so predictable when I’m going to get it”

At the same time, Kaitlin noted that as a practitioner/administrator it felt like good practice to protect the anonymity of the participants' spending, not asking them what they did with the money, even informally.

"I don't want to know- I shouldn't know – I don't want to have that impact anything of how they're spending money, or communicating with me, or our relationship."

Strengthening the Storytelling Component

Alex (Be Loud) suggested that **there was a disconnect between the investment in the podcast and the capacity and support offered**. He thought that the podcast program 'needed a couple more touch points than just me.'

He says if he was re-doing this project, he would go one of two ways:

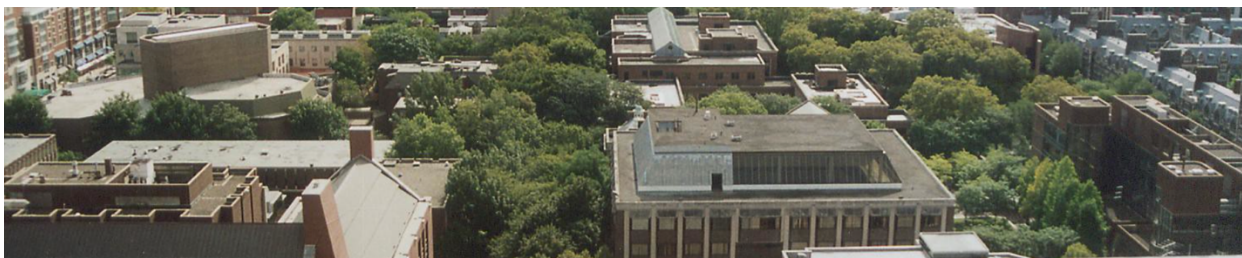
"I would either go two different directions. [Option 1:] I would have touch points five weeks out, throughout. Five touch points throughout the experience. Where they came... And we met them. And I just recorded their experiences. ... [So in this option] it's like less about... "Oh, let's teach you how to podcast." And it was just like, no--... Let's just like facilitate a conversation with you. Let's help you prompt, let's do some writing. And then just like, let's take the conversation and edit it. I would either go that route, and just kind of build a sense of like community among the kids and just get to know them more, and then record that in a facilitated way. Or, [Option 2:] I would go this like class route of like, if you want to coproduce this from start to finish, let's like, give you the skills to do that. That second is like the biggest investment... It's more labor intensive."

In terms of a bigger investment, Alex envisioned designing and structuring it in a more intentional way – shifting from a podcast about kids to a podcast about 'income inequality through the eyes of kids.' He suggested that skills be built in throughout the process, from interviewing to production and editing.

This type of program would require **more funding** to build capacity:

"But also, it was just like, yeah, the stipend was good but once we kind of paid out the kids and I ended up bringing on someone to help with it. And I mean, it was just like, cool, like a year-long project for everything that this entailed --I actually don't think that's an appropriate amount. And I talked to a few [education nonprofit] people and it was just like, I think if -- it's not just producing a podcast. I think it's like, if you're making a story good, the investment has to be more and it has to be more collaborative."

Integrating these program insights may help strengthen the response rate, implementation process, and meaningful impacts for students and program staff.



Credit: Shreyans Bhansali: Creative Commons

METHODS & DEMOGRAPHICS

The Rooted 4.0 Cash Transfer Study was a randomized control trial (RCT) of 20 students, with 10 students in the control group and 10 students in the treatment group. The study began in Fall 2020 and ended in late Fall 2021.

Treatment and control groups were similar in terms of demographics. The population was rising high school seniors, so most students were 17 years old at the time of enrollment. The gender split was 60/40: 12 students identified as male, and 8 students identified as female. African American participants were the largest racial group with only two students identifying differently (one American Indian/Alaska Native and another participant identifying as White/Caucasian). Further, 30% of the participants identified as Hispanic or Latino.

Participants largely lived with one parent (45% of the total participants), and 25% percent of participants lived with both their mother and father. Households with a parent and a parent's partner made up 20% of the total. Finally, individuals who lived only with their grandparents accounted for 10% of the total. The students' household income ranged from less than \$10,000 to \$70,000. At the baseline survey, 65% of participants identified that they lived in stable long-term housing and the remainder identified as living in "temporary or transitional housing".

Students in both treatment and control completed two long surveys at the beginning and end of the study. To analyze these data, we ran paired t-tests on treatment cases' baseline and final responses. An overview of the demographic variables can be found in the Appendix, Tables 1-4.

To collect semi-structured interviews, a team of CGIR researchers travelled to New Orleans in October 2021 and interviewed seven students and program administrators. Interviews ranged in length from 45 minutes to 2 hours. We use pseudonyms for the students and real names to refer to four interviewees, who are staff members of 4.0 Schools, Rooted School, and Be Loud.

Students answered additional short survey questions; these were sent over text message biweekly for a total of twelve times. These open-ended questions were thematically analyzed along with the interviews.



Credit: <https://www.maxpixel.net/Mobile-Games-Playing-Phone-Games-Mobile-Phone-Man-5922635>

MAJOR RESEARCH CHALLENGES

Sample Size and Response Rate

Only a total of three measures had statistically significant differences, and **the small sample size and low control group response rate** in the post-treatment survey limited the power of the quantitative analysis. The control group response rate to the Wave 2 (post-treatment) survey was 60%, meaning all Wave 2 variables had at least 40% missing control data. This is high enough to compromise quantitative findings incorporating the control group, so it was dropped from the significance analysis. Future pilots could be improved with a larger sample size and strategic changes to Wave 2 control data collection.

The treatment group Wave 2 response rate was 80%, meaning all Wave 2 variables had at least 20% missing treatment data. This means all Wave 2 variables required imputation of 20% of the variables (if the other 8 students responded), or omission from the significance analysis (if any of the other 8 students skipped that question in Wave 2). Variables omitted due to >20% treatment data missing were those associated with the tools CES-D-R, YAM-5, and *Children's Hope Scale* scores.

Variables with 10-20% missing treatment data underwent imputation (Markov Chain Monte Carlo). Paired t-tests were performed to compare the pre-treatment means to the post-treatment means for 18 measures. These were: eight measures of family material hardship; *Shift-and-Persist Scale* cumulative scores as well as "shift" and "persist" subscores; *Mattering Scale* cumulative scores as well as "importance," "reliance," and "awareness" sub-scores; *Kind of Person Implicit Theory Scale* scores; and *McArthur Subjective Social Status Scale* scores in both community and USA contexts.

Robust quantitative findings require a response rate of at least 80%, with an ideal target of 95% or higher. Wave 2 survey response rates, especially for the control group, need to be increased in future pilots.

Perhaps this can be achieved with greater incentives or different protocols for encouraging students to fill out surveys.

Here are some suggestions to increase the response rate:

1. **Emphasize the importance of control groups to the validity of the study; demonstrate that we are trusting them with something important.**

Rhys reported that in his experience as an educator, students respond well when they feel a sense of responsibility and importance. This is also borne out by the podcast, since the two students who were involved with the podcast reported that they felt responsible for responding to surveys and to make the pilot successful. One (Villain) even identified himself as a kind of evangelist for the idea of GI. This also relates to the suggestion to onboard students more intentionally as to the broader impact of their participation in the surveys (See 'More Robust Onboarding').

2. **Examine the timing and medium of reminder messages.**

Rheame reported that CGIR initially requested that teachers nudge students who were not responding and changed strategy mid-way through the pilot so students started receiving both SMS and email prompts. In future, students could receive the survey two ways from the beginning or be given a choice of how to receive the survey.

3. **Make surveys easier to fill out.**

With every click we risk participants dropping off. Making it possible to answer the survey questions by responding directly to a reminder text message would be ideal; rather than opening a new window.

4. **Shorten surveys.**

Respect time scarcity by shortening surveys if possible. This can be accomplished by evaluating survey questions closely to eliminate those that are highly correlated (factor analysis of previous data sets could help with this).

5. **“Nudge” participants to respond by wording reminder messages strategically.**

Research from behavioral economics suggest that the phrasing of reminder messages can influence people's responses. Here are possible strategies to increase the response rate:

Salience: sending reminders in general is typically quite effective. The most important info should be first and visually distinguished (bold/caps) if possible.

Loss aversion: “If you do not respond, you will lose out on [incentive amount].” (This messaging tends to be more effective than pointing out potential gains e.g., “if you respond you will receive [incentive amount].”)

Impose a deadline: For those experiencing time (or other) scarcity, “important but not urgent” items are de-prioritized. Imposing a sense of urgency may help “break through the noise.” Loss aversion could potentially be combined with deadlines by offering a larger incentive amount to those who complete the survey by a given date.

Norm statements and/or minority personal behavior: Humans lean towards conforming to their in-groups and tend to adjust their behavior to the majority. This is more effective if the message is specific about the in-group being referenced (i.e. “people in your class” is a more powerful in-group to reference than simply “people” or “respondents”). Note that this can backfire if they do not identify with the in-group being referenced.

First message could include something like: “Most participants respond within [x] amount of time.”

Message that could be sent to stragglers (assuming these things are true, of course!): “Most participants in your school have already submitted their responses.” And/or “You are currently in the small minority of Rooted seniors who have not responded yet.”

Pandemic and Weather Disruptions

As mentioned throughout this report, implementation of the program was consistently disrupted by the pandemic. All of the teaching, research, and program staff involved were running the micro-pilot while also handling the challenges of remote school and work with inconsistent internet access. These dynamics were exacerbated during hurricane season which added evacuations and power outages to the challenges faced by staff and participants. As such, retention and response rates to research activities were lower than would otherwise be expected.

APPENDIX: TABLES

Table 1: Treatment Group Continuous Variables (pre-imputation)

Variable	Mean	SD	N	% missing
McArthur Community Baseline	5.5	1.51	10	0
McArthur Community 2	5.33	1.80	9	10
McArthur Community 3	6.56	1.42	9	10
McArthur Community Final	5.63	1.19	8	20
McArthur USA Baseline	6.2	1.55	10	0
McArthur USA 2	4.70	1.77	10	0
McArthur USA 3	5.86	1.22	7	30
McArthur USA Final	5.88	1.81	8	20
Kind of Person Baseline	3.5	1.09	10	0
Kind of Person 2	3.64	1.15	8	20
Kind of Person 3	3.92	1.05	10	0
Kind of Person 4	4.17	1.12	8	20
Kind of Person 5	4.08	1.16	10	0
Kind of Person Final	3.81	1.25	8	20
Shift Baseline	12.4	3.10	10	0
Shift Final	11.25	2.05	8	20
Persist Baseline	11.1	3.00	10	0
Persist Final	12.88	2.47	8	20
Shift & Persist Total Baseline	23.5	5.28	10	0
Shift & Persist Total Final	24.13	4.09	8	20

Table 1 (cont'd): Treatment Group Continuous Variables (pre-imputation)

Variable	Mean	SD	N	% missing
Mattering: Awareness Baseline	32.50	3.63	10	0
Mattering: Awareness Final	26.25	7.30	8	20
Mattering: Importance Baseline	38.78	2.91	9	10
Mattering: Importance Final	36.88	6.20	8	20
Mattering: Reliance Baseline	21.80	5.59	10	0
Mattering: Reliance Final	24.75	4.50	8	20
Mattering Total Baseline	94.89	5.84	9	10
Mattering Total Final	87.88	14.35	8	20
Agency Baseline**	12.10	3.63	10	0
Agency Final**	12.57	4.79	7	30
Pathways Baseline	11.80	4.10	10	0
Pathways Final	10.00	4.47	8	20
Child Hope Baseline**	23.90	7.50	10	0
Child Hope Final**	22.14	8.88	7	30
YAM-5 Baseline	46.00	12.09	9	10
YAM-5 Final	44.43	12.26	7	30
CES Baseline	12.78	4.66	9	10
CES Final	11.5	6.98	6	40
Financial Attitudes Baseline	17.60	2.41	10	0
Financial Attitudes 2	17.00	3.37	10	0
Financial Attitudes 3	17.56	1.88	9	10
Financial Attitudes 4	15.3	5.68	10	0
Financial Attitudes 5	13.50	6.76	8	20
Financial Attitudes Final	18.25	2.31	8	20

Table 2: Control Group Continuous Variables

Variable	Mean	SD	N	% missing
McArthur Community Baseline	5.5	2.22	10	0
McArthur Community 2	6.14	1.07	7	30
McArthur Community 3	6.5	2.35	6	40
McArthur Community Final	5.8	1.30	5	50
McArthur USA Baseline	4.8	2.30	10	0
McArthur USA 2	6.14	1.95	7	30
McArthur USA 3	5.80	2.59	5	50
McArthur USA Final	6.00	1.41	5	50
Kind of Person Baseline	3.89	0.89	10	0
Kind of Person 2	3.85	1.12	9	10
Kind of Person 3	3.95	0.86	9	10
Kind of Person 4	3.68	1.17	7	30
Kind of Person 5	3.57	0.77	8	20
Kind of Person Final	5.53	0.38	5	50
Shift Baseline	12.3	4.14	10	0
Shift Final	9.50	4.51	6	40
Persist Baseline	13.5	2.46	10	0
Persist Final	10.33	3.20	6	40
Shift & Persist Total Baseline	25.8	5.77	10	0
Shift & Persist Total Final	19.83	6.05	6	40

Table 2 (cont'd): Control Group Continuous Variables

Variable	Mean	SD	N	% missing
Mattering: Awareness Baseline	25.83	7.93	10	0
Mattering: Awareness Final	32.3	3.43	6	40
Mattering: Importance Baseline	40.0	4.94	10	0
Mattering: Importance Final	34.17	11.05	6	40
Mattering: Reliance Baseline	23.2	5.92	10	0
Mattering: Reliance Final	21.33	6.19	6	40
Mattering Total Baseline	95.5	12.86	10	0
Mattering Total Final	81.33	23.85	6	40
Agency Baseline**	12.5	3.50	10	0
Agency Final**	10.50	4.76	6	40
Pathways Baseline	10.0	2.40	10	0
Pathways Final	8.67	1.97	6	40
Child Hope Baseline**	22.5	5.06	10	0
Child Hope Final**	19.17	5.64	6	40
YAM-5 Baseline	46.1	12.21	10	0
YAM-5 Final	56.0	11.81	5	50
CES Baseline	11.1	5.07	10	0
CES Final	13.00	6.57	6	40
Financial Attitudes Baseline	16.4	3.50	10	0
Financial Attitudes 2	16.88	3.83	8	20
Financial Attitudes 3	16.67	4.50	6	40
Financial Attitudes 4	17.88	3.18	8	20
Financial Attitudes 5	17.00	3.83	4	60
Financial Attitudes Final	14.60	4.45	6	40

Table 3: Treatment Group Material Hardship Variables (pre-imputation)

In the past year, was there a time when your family...	Mean	Frequencies		N	% missing
		Yes (1)	No (2)		
did not pay the full amount of the rent or mortgage? (Baseline)	1.6	4	6	10	0
did not pay the full amount of the rent or mortgage? (Final)	2	0	8	8	20
was evicted from your home or apartment for not paying the rent or mortgage? (Baseline)	2	0	10	10	0
was evicted from your home or apartment for not paying the rent or mortgage? (Final)	2	0	8	8	20
did not pay the full amount of the gas, oil, or electricity bill (Baseline)	1.5	5	5	10	0
did not pay the full amount of the gas, oil, or electricity bill (Final)	2	0	8	8	20
received free food or meals because there wasn't enough money? (Baseline)	1.8	2	8	10	0
received free food or meals because there wasn't enough money? (Final)	1.88	1	7	8	20
moved in with other people even for a little while because of financial problems (Baseline)	1.7	3	7	10	0
moved in with other people even for a little while because of financial problems (final)	1.88	1	7	8	20
stayed in a shelter, in an abandoned building, a car, or any other place just for one night? (Baseline)	1.9	1	9	10	0
stayed in a shelter, in an abandoned building, a car, or any other place just for one night? (Final)	2	0	8	8	20
borrow money from friends or family to help pay bills? (Baseline)	1.67	3	6	9	10
borrow money from friends or family to help pay bills? (Final)	1.63	3	5	8	20
need to see a doctor or go to the hospital but couldn't afford it? (Baseline)	2	0	10	10	0
need to see a doctor or go to the hospital but couldn't afford it? (Final)	2	0	8	8	20

Table 4: Control Group Material Hardship Variables

In the past year, was there a time when your family...	Mean	Frequencies		N	% missing
		Yes (1)	No (2)		
did not pay the full amount of the rent or mortgage? (Baseline)	1.8	2	8	10	0
did not pay the full amount of the rent or mortgage? (Final)	1.83	1	5	6	40
was evicted from your home or apartment for not paying the rent or mortgage? (Baseline)	2	0	10	10	0
was evicted from your home or apartment for not paying the rent or mortgage? (Final)	2	0	6	6	40
did not pay the full amount of the gas, oil, or electricity bill (Baseline)	1.7	3	7	10	0
did not pay the full amount of the gas, oil, or electricity bill (Final)	1.67	2	4	6	40
received free food or meals because there wasn't enough money? (Baseline)	2	0	10	10	0
received free food or meals because there wasn't enough money? (Final)	1.83	1	5	6	40
moved in with other people even for a little while because of financial problems (Baseline)	2	0	10	10	0
moved in with other people even for a little while because of financial problems (final)	2	0	6	6	40
stayed in a shelter, in an abandoned building, a car, or any other place just for one night? (Baseline)	2	0	9	9	10
stayed in a shelter, in an abandoned building, a car, or any other place just for one night? (Final)	2	0	6	6	40
borrow money from friends or family to help pay bills? (Baseline)	1.7	3	7	10	0
borrow money from friends or family to help pay bills? (Final)	1.83	1	5	6	40
need to see a doctor or go to the hospital but couldn't afford it? (Baseline)	1.9	1	9	10	0
need to see a doctor or go to the hospital but couldn't afford it? (Final)	1.83	1	5	6	40

***The Children's Hope Scale consists of "agency" and "pathways" sub-scores. One of the questions corresponding to the "agency" score was listed in the survey as: "2. I cant think of many ways to get the things in life that are most important to me." The second word should have been "can"; this reverse in meaning could compromise the results from this score. Note that the response rate for this tool was also too low to include in significance testing.

Table 5: Treatment Group Paired t-tests
continuous variables (post-imputation, pooled; final - baseline)

Variable	Mean difference	95% CI difference		p
		Lower	Upper	
McArthur Community	0.17	-0.75	1.08	0.720
McArthur USA	-0.39	-1.19	0.41	0.339
Kind of Person	0.20	-0.52	0.93	0.581
Shift & Persist: Shift	-1.19	-3.39	1.01	0.289
Shift & Persist: Persist	1.69	-0.08	3.46	0.061
Shift & Persist Total	0.49	-2.80	3.78	0.771
Mattering: Awareness	-6.36	-10.22	-2.50	0.001
Mattering: Importance	-2.14	-5.73	1.46	0.243
Mattering: Reliance	2.93	-1.11	6.97	0.155
Mattering Total	-6.756	-13.96	0.45	0.066
Financial Attitudes	0.57	-1.04	2.18	0.485