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ABSTRACT
Little is understood about how an unconditional cash transfer might operate and affect behavior among low-income parents of infants in the United States. We investigate these questions using data from a random-assignment pilot study (\(N = 30\)) in which unconditional cash transfers were distributed monthly on debit cards to two groups of low-income parents in New York City during the first 12 months of their newborns’ lives. Mothers were randomized to receive either $100 per month or $20 per month. Mothers distinguished spending the cash transfer on essentials vs. extras, such as going out to dinner with family. The monthly cash transfer “tided them over,” even at the lower amount of $20, especially when income from other sources ran short at the end of the month. Some mothers reported saving money for unexpected expenses.

KEYWORDS
Poverty/welfare; unconditional cash transfer; economic issues; family policy; qualitative; quantitative

Introduction
About one in six U.S. infants and toddlers—some 11 million in all—reside in low-income households, defined as below twice the federal poverty line. (Jiang, Granja, and Koball 2017). Income-based poverty appears to matter for the early development of children: Recent research in developmental science, public health, and neuroscience shows striking socioeconomic disparities in children’s developmental outcomes starting in infancy across aspects of early cognition and socio-emotional behavior (Shonkoff et al. 2012; Fernald, Marchman, and Weisleder 2013). The timing of income poverty appears to be particularly crucial for children’s outcomes; for some outcomes later in life, such as educational attainment and earnings, poverty early in a child’s life may be especially harmful (Duncan, Ziol-Guest, and Kalil 2010).

Although social policies in the U.S.—Earned Income Tax Credit (EITC) and Child Tax Credit (CTC), for example—play an essential role in lifting children and families out of poverty (Marr et al. 2015), these programs fail to support a vulnerable group of children, whose whose parents are unable to find regular work (Moffitt 2015). In recent years, what aid is accessible to those most vulnerable families tends to come in the form of in-kind benefits, rather than cash assistance (Fox et al. 2015; Sprague, Thomhave, and Black...
Yet, a core challenge facing many families is cash deprivation; more than 1.5 million households in the U.S. are surviving on less than two dollars in cash per day (Edin and Shaefer 2015). Cash income is a potentially crucial support for essentials such as diapers, toilet paper, and basic household goods that are not covered by other types of benefits, for example, food stamps or Women, Infants, and Children (WIC) funding.

A growing body of research suggests that income transfers, even small ones, may be a mechanism to reduce child poverty rates, as well as to improve child health and development and parents’ well-being (Hoynes and Patel 2015; Bastagli et al. 2016; Almond, Currie, and Duque 2018; National Academies of Sciences, Engineering, and Medicine 2019). In fact, many economists support cash assistance in the form of unconditional cash transfers over in-kind benefits as a means of promoting low-income households’ autonomy while improving the efficiency of poverty-reduction programs by increasing the utility of their resources (Bitler, Hines, and Page 2018; Shaefer et al. 2018). Compared with in-kind transfers, Unconditional Cash Transfers (UCTs) are thought to offer a range of advantages over the existing system of benefits by enabling recipients to choose how best to allocate their money, rather than others choosing for them. Furthermore, UCTs are likely to make the infusion of cash into the household predictable and accessible (Sprague, Thomhave, and Black 2017). Likewise, cash transfers that provide benefits universally and unconditionally may eliminate stigma by integrating receipt of assistance as a component of social citizenship.

In this paper, we shed light on the implementation of a pilot UCT to low-income mothers of newborns. In order to ensure the potential success of a large-scale UCT program, conducting pilot studies aimed at helping researchers and policymakers understand how direct cash can affect the lives of mothers and their families in different regions of the United States and testing the performance of the administrative and delivery systems to make necessary improvements before scaling up such a program is crucial (Fraser and Galinsky 2010; Black and Sprague 2017; Mulvale and Frankel 2019). In addition to our study, recent UCTs initiatives, like the Magnolia Mothers’ Trust, which provides 15 low-income mothers in Mississippi money ($1000) each month for a year, are unfolding across the United States for that purpose. Unlike our study, the Mothers’ Trust is longitudinally following a select group of mothers who receive subsidies for housing with no comparison group. Currently, we know very little about the feasibility and experience of a UCT in the lives of low-income mothers of infants—a period of important consequence for children’s development, but also of high financial burden. These sets of studies will thus provide needed evidence to bear on prevailing arguments for and against UCTs and how best to implement them.

This study aims to broaden our understanding of mothers’ experiences of receiving a monthly cash transfer as implemented in a pilot UCT to low-income mothers of newborns. Half of the mothers were randomly assigned to receive a $100/month cash transfer, and the other half received a $20/month cash transfer. We collected quantitative transaction data from the debit card on which the cash transfer was disbursed and qualitative data from semi-structured interviews throughout 12 months among a sample of 30 low-income mothers of newborns to determine the answers to the following questions. First, is it feasible for a UCT for mothers of newborns to be distributed monthly on a debit card? Second, when and where do mothers use the cash transfer on the debit card? Does the amount of the cash transfer affect how it is used? Third, do these patterns change
within the month and over the course of the infant’s first year of life? Fourth, what do mothers report about their experiences of spending associated with the cash transfer, and how does this differ by treatment group?

**Conceptual framework**

We draw upon economic, cultural, and developmental theories of investment behaviors for viewing poverty and the experience of receiving cash transfers. The most prominent theory of household investments is Becker’s (1991) human development theory, which suggests that parental investments in children can lead to future educational success and higher earnings in the next generation. Parents perceive the importance of investments and try to support their children’s future success by spending—even when their children are very young—on goods they expect may enhance later outcomes (Lareau 1989). A child investment perspective suggests that additional cash resources enable parents to buy goods and services for their families and children. Parental investments related to improved child development among low-income parents include high-quality child care, housing, and nutrition; more cognitively stimulating home environments and learning opportunities outside of the home; and, through reduced or restructured work hours, more parental time spent with children (Ermisch and Francesconi 2000). Together, these theories help us to understand the consequences of poverty by examining how low-income families make financial investments.

**Unconditional cash transfers, income, and household spending**

UCTs and universal basic incomes (UBIs) are untested in the United States but are available in various forms in other countries (e.g., universal child benefits are provided to all families with children in the United Kingdom and Sweden). The underlying principle of universal benefits and UCTs is to directly alleviate poverty and support a minimum economic threshold of well-being; this may be particularly needed within the United States, where cash aid to the very poorest families, in particular, has declined (Edin and Shaefer 2015). This anti-poverty approach presumes that individuals are best equipped to decide how to allocate income for their family (Hulme, Hanlon, and Barrientos 2010). By allowing recipients to choose how to spend money, UCTs may generate psychological benefits for them and help them avoid the consequences of negative stigma and social exclusion that may accompany conditional benefits (Haushofer and Shapiro 2016). The counter-argument, which prevails in the United States, is that unconditional income serves as a windfall for most families and, as such, can act as a disincentive to earn or retrieve income from other available sources (Banerjee et al. 2015). While critics of UCTs hypothesize that cash transfers may be used for illicit substances such as alcohol, tobacco, or drugs rather than health-promoting items such as nutritious food, there is little evidence in studies in the US and Africa to support that contention (Akee et al. 2010; Haushofer and Shapiro 2018).

Despite the debate on the utility of UCTs and UBIs, momentum and support for them as a mechanism to reduce poverty is building. There are a handful of UCT and UBI trials in various stages of development around the world (e.g., Kenya, Finland, and the United States). However, in general, we lack empirical data that would lead us to a precise
prediction as to how low-income families may use a UCT cash transfer when experienced during their child’s infancy. Researchers are beginning to conduct rigorous studies in order to understand whether a UCT program works and how it might be scaled up (Lowrey 2018). Furthermore, this study of UCTs and their implications differs from those involving UBIs in the non-universality focus and the targeting of families with young children. Thus, our mixed-method study, incorporating both qualitative and quantitative data, will provide the field with valuable information regarding the complex process of household spending and allocation and help inform the use of UCTs as a policy intervention.

We contend that particular features of our UCT—delivery through a debit card, initiation in the birth hospital, and the connection to one’s identity as a mother and the birthdate of their baby—may shape the psychological well-being, social meaning, and experience of the money and, ultimately, a mother’s allocation of it. The casual link between poverty and maternal psychological well-being is well documented. For example, two studies, one examining the increases in the Canadian Child Benefit (Milligan and Stabile 2009) and the other examining the impact of higher EITC payments within the United States (Evans and Garthwaite 2014) found that mothers’ psychological well-being improved due to increases in household income. Furthermore, the link between increased income and feelings of social inclusion, namely the process by which efforts are made to ensure equal opportunities for everyone to achieve their full potential in life, has also been established. One study suggests that the EITC, a relatively generous, wide-reaching, means-tested government program, boosts feelings of social inclusion (Sykes et al. 2015) because of its delivery through a tax system, which is also accessed by the middle class, rather than via a welfare office, which distributes services reserved for stigmatized groups. In our study, accessing a UCT in the birth hospital and then receiving payments on the monthly anniversary of a child’s birth via debit card may have positive associations, as compared to being required to access benefits from welfare offices (Zekeri 2010). Nonetheless, questions remain as to how a UCT and mothers’ experiences of it (e.g., social inclusion, psychological well-being) influence household spending; this limitation of the literature will be addressed by our mixed-method study.

Prior studies of basic income and UCT programs also illustrate that specific elements of UCT program design, such as mode and amount of the cash transfer, may affect the feasibility and the mother’s experience of a UCT. A commonly cited “bottleneck” or implementation challenge of UCTs involves the practicalities of receiving the cash transfer (De Wispelaere and Stirton 2012). Experts suggest that the success of a UCT may be dependent upon the utilization of an entirely different disbursement mechanism, such as a debit card, which participants can use just like any other debit card to pay for transactions or withdraw cash (Standing 1999; De Wispelaere and Stirton 2012). This may be particularly important for low-income families; around 22% of low-income families in the U.S. do not have a checking or savings account, and this makes distributing benefits difficult. Cash is the principal payment instrument for a range of types of purchases, including small- and larger-value transactions, among low-income families because of their lack of alternative payment options like credit cards or direct withdrawals from a bank account. (Bennett et al. 2014). Our UCT compares monthly cash transfers of $20 and $100. We do not include a no-cash group, because if we were to do so, we would not be able to unpack the role that receiving a debit card potentially played in the spending
of the cash transfers. Nonetheless, as the literature suggests, the method of distribution can have broad implications for a UCT’s usability, including fees, restriction on ATM access, limited functionality, and inadequate consumer protections (Sprague, Thomhave, and Black 2017); this study will examine the feasibility of distributing cash through a debit card.

Finally, no study has examined household spending on children in the first year of infants’ lives—a period when expenses can be particularly high, occur in the context of intensive caregiving needs, and few targeted social safety net programs other than WIC are available. The negative income tax experiments in two rural states (Alaska and Indiana) showed positive impacts on the quality of nutrition, suggesting an increase in spending on food (Marinescu 2018). Nonetheless, drawing upon theoretical frameworks, we believe that our UCT may ease the costs of raising children, which some evidence suggests are proportionally higher in lower-income households’ budgets; on average, lower-income households spend approximately 25% of their before-tax income on a child; those in the middle-income group, 16%; and those in the highest group, 12% (Lino 2014). Costs are higher in early rather than middle childhood—in part because subsidies for infant and toddler care in the United States are provided to only a minority of those eligible (Chaudry et al. 2017), and the country lacks a federally funded means-tested public program covering recurring expenses like infant diapers. A group receiving $100 a month may be more likely to spend it on childcare or child-specific expenditures in comparison to a group receiving $20 a month because they can use the larger amount of money to purchase higher priced items. Finally, a baby’s development occurs very rapidly in the first year of life, and expenditures may differ across the first versus the second six months of life, when formula use decreases in favor of solid foods and other such transitions. (Lugo-Gil and Yoshikawa 2006). Yet, to our knowledge, this issue of developmental changes in spending, particularly when coupled with a cash transfer, has not been examined.

Extant research from the U.S. and other countries around the world supports our hypotheses that providing cash transfers through a debit card likely improves “autonomy, flexibility, and feelings of inclusion among mothers of infants”. Nonetheless, the challenge lies in determining how best to implement a program that incorporates this fundamental knowledge. This study will provide evidence of the feasibility of a basic income approach to create tangible benefits for low-income mothers and a deeper understanding of how unconditional cash is used and experienced. We employed a concurrent triangulation (QUAL + QUAN) mixed-methods design, utilizing transaction data and qualitative findings from interviews. Findings from this study informed the implementation of a larger-scale UCT randomized study in the U.S. that is currently underway and can inform policy proposals that would change benefit levels across a host of federal and state programs. To our knowledge, ours is the first pilot to track how income-poor families with infants use and experience differing amounts of an unconditional monthly cash transfer.

**Methods**

**Sample**

This study was approved by Columbia University’s Institutional Review Board (IRB). Thirty mothers of newborns were recruited from the well-baby nursery at a large public hospital in New York City (NYC) beginning in 2014. Mothers were eligible to participate
in the study if they reported family income below the poverty line in the calendar year preceding the birth, were over 18 years old, had a Social Security Number (SSN) or Taxpayer Identification Number (TIN), spoke either English or Spanish fluently, and lived in or near NYC. All children in the study were singletons born at 37 weeks or later who had no known neurological or developmental disorders at birth. Some mothers reported a household income below the poverty line during the eligibility screener but were found to be above the poverty line during the baseline assessment when other sources of income were taken into account; they were ultimately excluded from the analysis. There were no statistically significant differences between treatment groups on any baseline measures. See Table 1 for a full description of the sample. In the current study, we analyzed data from 26 mothers who completed a qualitative interview during a home visit, either when the baby was six months old \( (n = 13) \) or 12 months old \( (n = 13) \). Of these 26, 25 authorized our team to access spending tracking data; 12 mothers in the $100/month group, and 13 mothers in the $20/month group.

**Recruitment**

Mothers were approached in the well-baby nursery to participate in a study about the experiences of families whose babies had been born in the hospital. They completed a baseline questionnaire after providing consent to participate. Then, mothers were told that there was an additional component of the study that aimed to understand how additional income affects the day-to-day lives of families whose babies had been born in the hospital. Mothers were told that they would be asked to engage in interviews via home visits at 6 and 12 months postpartum on how they were spending the extra income. (They received separate compensation for their participation in such surveys.) If mothers agreed to participate and were able to provide a valid SSN, they were given an envelope to open (which had previously been randomly assigned a $20 or $100 amount). The envelope included the debit card, which was activated with the cash transfer following assignment to a condition. Of the parents who were eligible and agreed to participate in the baseline interview, 73% were recruited to participate in the lottery/income portion of the study. The primary reasons for not signing up for the lottery

| Table 1. Sample demographics. |
|-----------------------------|-----------------|----------------|
| Demographics of mothers     | Mean (SD)       | Range          |
| Hispanic-Black              | 13%             |                |
| Hispanic-White              | 7%              |                |
| Hispanic-Other              | 50%             |                |
| Non-Hispanic, Black         | 27%             |                |
| Non-Hispanic, Other         | 3%              |                |
| Maternal age                | 26.89 (6.28)    | 18–39          |
| Maternal years of education | 12.35 (1.71)    | 8–15           |
| Household income before child’s birth | 16 007 (7,305.89) | 3,000–34,000 |
| Average household size (exclusive of baby) | 4.56 (1.70) | 2–8 |
| Income-to-needs ratio       | 0.89 (0.44)     | 0.18–2.10      |
| Received SNAP               | 60%             |                |
| Received WIC                | 87%             |                |
| First-time mothers          | 50%             |                |
| Male children               | 70%             |                |
were: concerns about sharing Social Security Numbers \( n = 5 \), no reason provided \( n = 4 \), or other \( n = 2 \).

**Intervention**

The pilot study was funded by a private foundation. The UCT was disbursed during each of the 12 months onto a debit card. The first cash transfer was disbursed immediately upon activation of the debit card, immediately following enrollment in the study. The monthly cash transfer was disbursed automatically each month, on the date of the child’s birthday (for example, a birth on July 18 would mean that a cash transfer would be made on the 18th of each month). At the beginning of the project, mothers were contacted to ensure that they were able to activate their debit cards. Team members contacted mothers if there was a pattern of declined transactions or wrong PIN error messages. With those exceptions, no outreach was made to mothers who did not spend the cash transfers. Mothers received the cash transfer for the duration of the study, irrespective of whether they lost contact with the researchers.

All participants received information on the logistics of using the debit card and the procedure for checking their balances, as well as reporting lost or stolen cards. The debit card company sent monthly automated text message reminders to participants on the day on which their funds were deposited. All participants provided a cell phone number, and no mothers opted out of receiving the automated reminders. For lost or stolen cards, participants could either call the number on the back of the card or the project coordinator to make a report and obtain a new card at no charge. Participants could still use the debit card after the study was completed.

**Qualitative interviews**

Regardless of treatment status (i.e., $20 or $100 condition), all mothers were eligible to participate in the qualitative interviews at their homes about the use of the monthly cash transfer and economic well-being more generally. Mothers were randomly assigned to have a semi-structured interview at either 6 or 12 months. Mothers were compensated for their time. The 45- to 60-minute interviews were conducted in the mothers’ primary languages (11 interviews were conducted in Spanish). The interviews were conducted one-on-one, tape-recorded for transcription, and translated into English for analysis, when applicable.

The interview protocol included five pre-specified themes: updates on the participants’ lives; how participants were making ends meet in general and their expenses since baby’s birth; the cash transfers; how the cash transfers affected participants’ ability to make ends meet and their potential influence, if any, on experiences of economic hardship; and logistics of getting the money. Prompts such as, “Can you share a story about it?”, “Tell me more about that,” and “Why do you think so?” elicited further explanations from the mothers. To code the qualitative interviews, we first reviewed the existing literature to find out what types of expenses are most commonly reported and their monthly fluctuations. These included mainly housing, food, non-essential, and child-related expenses (Edin and Lein 1997; Lugo-Gil and Yoshikawa 2006; Seefeldt and Castelli 2009). Analysis of the qualitative data followed a consensual qualitative research (CQR) method (Hill,
Thompson, and Williams 1997). Specifically, a coding team of four researchers independently reviewed five (out of 26) randomly selected transcripts, created an initial coding manual, and independently identified text corresponding to definitions of codes in the manual. The corresponding codes were reviewed, and a consensus was reached across three categories that were established: (1) specific expenses mentioned by mothers in the study (e.g., diapers, books, clothes, baby toiletries, formula, and other); (2) monthly behaviors around spending (e.g., Mother spends money ASAP, or Mother spends money later in the monthly cycle); and (3) how the mother experienced the cash transfers (e.g., “Experiences of the mother,” which is made up of the codes (1) for baby, (2) for household necessities, (3) extras, (4) overall helpfulness/savings/planning of purchases, and (5) changes over the year).

Then, following a thematic analysis approach (Braun and Clarke 2006), researchers separately read each of the interview excerpts initially coded to the three broad categories, documented emerging sub-themes within each category, and compared notes. Emergent sub-themes were discussed, and a structured codebook, including definitions of subcodes and example text to enhance inter-coder agreement, was refined and finalized through consensus. To test the coding framework, members of the team independently coded three transcripts in Dedoose (i.e., qualitative research analysis software) using the revised manual and resolved any discrepancies via consensus to produce a final codebook from which core ideas were distilled using the CQR method (Hill, Thompson, and Williams 1997). The coding team worked collectively to resolve coding discrepancies and revised the coding manual when necessary.

Finally, a subset of interviews (10) were double-coded to establish reliability. Intercoder reliability is considered strong once a Cohen’s kappa above 0.80 is obtained (Hruschka et al. 2004). After three rounds of coding, with six codes per round, the team reached an overall minimum kappa of 0.85. The remaining members of the research team conducted an audit of these themes on 10% of coded transcripts, namely cross-checking the themes and subthemes, to account for any individual biases (Hill, Thompson, and Williams 1997; Tashakkori and Teddlie 2008). Feedback was provided, discussed, and incorporated as warranted.

**Quantitative Measures**

**Debit card transaction data**

Each month, the debit card company provided a spending report for mothers who consented to having their spending tracked; this listed all transactions for that month, including information about the location (city and store name), amount, and type (ATM or point of service [POS]) of each transaction, as well as whether or not the transaction had been approved. If the transaction had not been approved, the reports indicated the error relevant to the transaction. We created the following variables from the debit card transaction data, including: (1) retention rates; (2) number of episodes of debit card PIN or related problem requiring customer service throughout the year (sum); (3) the number of days before first transaction within each monthly cycle (calculated the number of days between cash transfer and the first transaction; range = 0–36); and (4) frequency and percentage of purchases that took place across a range of categories. The categories were established based on labeling of store or institution name. The transaction
reports had names and addresses of the point of sale (POS) locations. Based on the availability of goods and service offered at each POS, they were grouped in a corresponding category. For example, the category of “Delis” included those locations that had “deli” in the name of the merchant provided by the debit card company in the transaction reports. In cases where there were challenges interpreting the category of a specific location, we researched the merchant to better understand the types of products or services that it offered in order to assign the merchant to a category (see Figure 1 for a complete list of categories).

**Analytic strategy**

To address our study’s aims, we used complementary qualitative and quantitative data, or a concurrent triangulation mixed-methods design (Creswell and Plano Clark 2007; Tashakkori and Teddlie 2008). The purpose of this design is to take advantage of different but complementary data (Creswell and Plano Clark 2007) using a “QUAN + QUAL” mixed-methods design (Tashakkori and Teddlie 2008) in which quantitative and qualitative data are integrated. Such designs are useful when the goal is to inform a single overall interpretation of the study findings and to cross-validate findings (Creswell and Plano Clark 2007). Quantitative data sources were transaction data from the debit card, and qualitative data sources were maternal interviews.

To address Research Question 1—the feasibility of distributing a UCT to mothers of newborns monthly on a debit card—we calculated the retention rate, counted the episodes of debit card PIN or related problems requiring customer service throughout the year, and figured the number of days between cash disbursement and the month’s first transaction. To address Research Question 2, which sought to understand the categories of transactions that occurred, we ran descriptive analyses on measures of the frequency and percentage of purchases that took place across a range of categories. We examined whether these categories were different across the $100 and $20 groups using t-tests and controlling for multiple comparisons. To address research aims 3 and 4, we drew on both the quantitative data (debit card transactions) and the qualitative data (maternal interviews) to gain

![Figure 1. Number of transactions in each category.](image)
a more in-depth understanding of the mothers’ patterns of expenditures, as well as the monthly spending dynamics.

Results

Research Question 1: Is it feasible to distribute a UCT for mothers of newborns monthly on a debit card?

The overall retention rate of mothers was 83% at 12 months. Twelve mothers within the $100 group and 13 mothers within the $20 group completed data collection throughout the year of use. Of the three mothers within the $100 group with missing data, two mothers moved out of state, and one completely lost contact with the study staff. These three mothers remained only in our quantitative sample. Of the two mothers within the $20 group with missing data, one mother moved out of state, and the other moved within the state but lost contact. These two mothers remained only in our quantitative sample.

In the qualitative interviews, approximately 21% of mothers reported not having used a debit card before. Nonetheless, all participants successfully made a transaction for the first time within about three weeks of the child’s birth ($M = 6.4$ days, range = 0-22 days) and regularly thereafter. Each month, a debit card transaction was recorded on the debit card of all mothers within two weeks of receiving the cash transfer. There were few documented problems: Of the 1,112 total transactions, there were 27 declines due to insufficient funds, six PIN resets, 11 reports of a stolen/lost card, three cards locked, and two fraudulent charges. Debit cards were temporarily locked (i.e., unable to be used) when an incorrect password was entered; to unlock a debit card, the participant called the debit card company to reset the password. Only one participant had her card replaced by the debit card company.

Research Question 2: When and where do mothers use the cash transfer on the debit card? Are there differences in use according to the amount of the cash transfer?

According to the transaction data, about 20% of all transactions were cash withdrawals, mostly from ATMs (18.4%) rather than banks (1.4%). Of those cash withdrawals, the $20 treatment group made 33% of them, and the $100 treatment group made 67%. Figure 1 illustrates the number of transactions that took place in the diverse types of spending locations broken down by treatment group. About 14% of transactions occurred at supermarkets, 10% at department/multipurpose stores, 14% at restaurants, and 8% at pharmacies. Notably, of the more than 1,100 approved transactions, only three were made at a liquor store. We observed statistically more transactions in the clothing/shoe store ($t(27) = 2.38, p = .03$), department/multipurpose store ($t(27) = 2.91, p = .007$), and restaurant ($t(27) = 2.67, p = .01$) categories among the $100 treatment group than in the $20 treatment group, suggesting that the larger amount was associated with categories that could potentially represent higher-priced items (such as clothing), buying of multiple different items (department/multipurpose stores), and “extras” such as a meal out (restaurants). These types of transactions align with what researchers have thought to be indicators of social inclusion among the poor (Mistry et al. 2008; Edin and Shaefer 2015).
Research Question 3: Do these patterns change within each month and over the course of the infant’s first year of life?

The transaction reports showed few notable differences between where transactions took place throughout the first six months as compared to the second six months postpartum. Mothers had more transactions at pharmacies (59 vs. 39) and, marginally, at supermarkets (88 vs. 82) between zero and six months than between seven and 12 months. More transactions took place at ATM’s (120 vs. 92), restaurants (103 vs. 66), and delis (82 vs. 50) during the seven to 12 month period, compared to the zero to six month period.

The qualitative interviews captured more fully how expenditures shifted throughout the baby’s first year. More mothers reported using the monthly cash transfers to make child-related purchases (i.e., formula and diapers) at six months than at 12 months. Often the shifts described by mothers between six and 12 months in child-specific expenditures mimic developmental changes throughout the baby’s first year (e.g., breastfeeding, formula use, and the introduction of solid foods). At six months, 64% of mothers reported in the qualitative interviews that they purchased formula using the cash transfer, but at 12 months, only 36% of mothers stated that they purchased formula. As mothers moved from breastfeeding or feeding their child formula to introducing solid food, child-specific expenditures changed. No longer did mothers need to buy formula (one of the most expensive and common purchases they made each month).

Next, we examined how patterns of transactions varied within the month; on average, 69% of mothers across both groups used their monthly cash transfer within five days of receipt—approximately 90% of the mothers in the $100 cash transfer group compared to 53% of the mothers in the $20 cash transfer group. Figure 2 presents the average weekly transactions for the $100 group vs. the $20 group. There was a spike in monthly spending patterns every four weeks at the point at which mothers received the monthly cash transfer deposit on their debit cards.

Research Question 4: What do mothers report about their experiences and spending associated with the cash transfer, and how does this differ by treatment group?

![Figure 2](image-url). Average transactions by experimental group and week.

Note: Experimental ($100); Control ($20)
Overall, all mothers reported that the cash transfers were helpful, including those in the $20 group: One mother said:

It’s very helpful because sometimes if it’s an urgent thing that I have to buy on that day at least I know it’s going to be there like at a certain time on that day, just once at twelve o’clock it’s there, so I wouldn’t have to wait until nine o’clock or ten o’clock in the morning and then go get it. So it’s like I don’t have to put her on hold or whatever it is that she wants or needs.

Because, like, with those $20, I was able to, you know, especially when I wasn’t working, I was able to, you know, put at least some of my part in, you know, John’s expenses, which are huge, especially these first few years … Which yeah, which are difficult these first few years, because there’s so many things at once. It’s like clothes, toys, food, everything, you know because you want to get him toys. Because if not, he’s gonna want to play with things that he shouldn’t be playing with.

A theme emerged that the cash transfers “tided” mothers over until they received their next paycheck or social benefit disbursement. Mothers discussed how the cash transfer enabled them to purchase necessities as they were waiting for more money to arrive. The cash transfers were useful when mothers needed money to “cover a need” that would come up. Many of the mothers, across both groups, considered the cash transfer as “backup money” or for “emergencies”:

For some reason it comes every time when it’s like two days before my payday, and I’m running low on something so—if I have to wash clothes real quick, so it really helps [for] if I have to buy something from the supermarket, so it really does help or even a MetroCard, it really helps a lot.

This mother tried to save her full amount ($20 a month), which she called her “quiet stash” of money:

I try to save [the debit card money]. I get paid every two weeks. You spend your money in less than a week, and you have a whole other week where you’re just like okay I’ve [got] to wait this week a half until I get paid again. [I’m] happy but I always have to have what I call my quiet stash, and it’s never more than twenty but if anything happens you grab it and use it.

Some mothers described how the monthly cash transfer increased their comfort about borrowing money from family members or friends because they knew that they would be able to pay the loans back once they received the cash transfer:

It made a difference because it may not come when I need it to, but at least I can borrow it from someone and then I know it will be there that month so I can pay them back and not have them wait or anything.

This phenomenon was not limited to the $100 group. Those in the $20 group also mentioned using this strategy when necessary:

Basically, if I know that I’m missing something and that’s coming in, I’ll be like, “Oh, well, I can take it from here,” because I know those $20 are gonna be there the next day. There was one time that I did use his entire $20 for something that I needed, and I replaced them as soon as his dad [baby’s father] gave us some money. Like I said, I want to save that for him.

A few mothers described the advantage of the predictable monthly timing of the cash transfer:
It was good. I mean it was like I would get paid and then the 26th will come, and I’ll get $100, and I’m like I don’t even have to use my check. Or there will be months that I won’t even use it and then end up waiting until the next month and have $200 instead of $100. It just went toward him.

Mothers in the $100 treatment group were more likely to describe including the monthly cash transfer into their budgets:

Well, usually I had it in my budget with my bills. So I knew: “Okay, this month, what am I gonna spend it on? Or do I have to buy him something, or is it gonna go toward the light bill? Is it gonna go toward the gas bill?” Something like that. Like I always try to budget it out. So it just varied, depending on what I had to do for that month.

Nonetheless, for mothers in both groups, discussions about developing a monthly budget were frequently intertwined with stories about unexpected expenses, as highlighted in the following examples from one mother:

Not with the baby, but usually random stuff will pop out, and you’ll have to—it’s a headache. ‘Cause it’s like when stuff pops out and you have to pay for it, and we like to have everything scheduled. We save it up, and then at the beginning of the month, we pay what we have to pay. Then whatever we have left, we save, and then we leave something for ourselves. But then when you have to pay something that you don’t have scheduled or planned, then you have less money at the end of the month.

Mothers in both groups struggled to budget their families’ monthly expenses in an environment with little monetary flexibility and many unexpected expenses. Mothers planned how they were going to spend the monthly cash transfer before receiving it. However, an unexpected expense would regularly come up, such as a massive bill or a cab ride in the rain—situations in which the monthly cash transfer, no matter the amount, appeared to play an important role.

Based on the information available about the types of places in which transactions occurred, we inferred that approximately 4% of cash transfer transactions could be categorized as child-specific, as they occurred in toy stores or children’s clothing/shoe stores. The qualitative data suggested much higher child-oriented spending. Mothers described making a wide range of purchases with the cash transfer that they categorized as “for the baby.” Approximately 80% of mothers mentioned that receiving the cash transfer on the day of the child’s birthday prompted them also to consider using the cash transfer for their child. Mothers reported using the monthly cash transfer to buy whatever supplies or materials they felt the baby needed. Some common examples include food, clothes, and small necessities:

Oh yeah. It all goes to her. Like now I need to buy her new nipples for her bottles and stuff and some socks, pants, and t-shirts; she likes to mess up all her t-shirts. Yeah, anything that she needs; she always needs something. She’s a little bigger than she’s supposed to be. She grows a lot; every month I have to get something, or she wants something new to play with.

Approximately three-quarters of the mothers (76%) said there were times when they did not need to buy anything for the baby. Mainly, when other children were living in the household, mothers tended to think about using the monthly cash transfer for all of the children. In these cases, they reported using the monthly cash transfer to purchase items for the household, such as paying electricity or phone bills:
I knew I would spend it on her or things for the house, but most of the time it goes on things for the house because she hardly ever needs anything because somebody is always coming with something, so I spend it on maybe food or just household things.

Whatever I need it for, say if I have to pay the light bill and I haven’t done it, I pay the light bill because it’s for all of us . . . . I mean whatever they need here; if they need clothes or they need sneakers.

Some mothers described how the stockpile of clothes, diapers, and bottles that they received from their friends and family members at baby showers or as gifts before and after the baby’s birth helped keep expenses to a minimum during the early months of their infant’s life. However, as the baby got older and as their supplies dwindled, mothers tended to use the monthly cash transfer for child-specific items:

Before she really didn’t need anything before. When she was first born, she had everything, clothes, everything. I got a lot of clothes and stuff from my mom and everything; I had a little baby shower, so I got a few things, but now it’s crazy.

Mothers described using the cash transfer for “extras.” The “extras” were little treats, such as going to a restaurant, taking a cab on a rainy day, or buying supplies for annual celebrations like birthdays. The mother below recounted how the monthly cash transfers sometimes allowed her to “treat” herself and her son:

Like, that extra $100, that helped keep money in my pocket for other things, or sometimes, if I already had everything that I needed for the month, like left over from buying in bulk or whatever, the $100 would just be extra money that I would take to treat Mike and just put extra to the side for him. We would do something like go to Red Lobster or go to Coney Island like in the summertime.

Having extra funds to purchase goods or experiences may not be considered a basic need, but it could be symbolically significant for the mother. Below are two quotes from mothers describing how spending the cash transfer for “extras” was psychologically beneficial:

It was. It was very helpful like at times when like I was down or whatever, and right around the time Mike [baby] would get the money or whatever, I’d be like, “You know what, Mike?” Let’s treat ourselves. Let’s go do something. We already have everything we need. Get you dressed. Let’s go take [inaudible]—able to do things, and it was just—it was a relief sometimes.

So if I needed cab fare or something like that—’cause he was so small, I didn’t wanna take him on the train. So that was, like miracle money, a blessing.

**Discussion**

Little is understood about the experience of a UCT in the lives of low-income mothers of infants in the United States. A UCT for families with young children may be a valid alternative to conditional transfers, like cash welfare, which might be limiting if families cannot follow through on the requirements and which can produce stigma and perpetuate social exclusion among low-income parents (Shaefer et al. 2018). Results from our pilot UCT indicate that mothers perceived the cash transfers to be overwhelmingly positively regardless of the amount. In contrast to findings of experiences of in-kind benefits, the majority of mothers (regardless of cash transfer amount) associated the cash with their
child. Along with the flexible use of the cash transfer for both basics and extras, these factors arguably resulted in supporting family efforts to meet consumption needs and improve feelings of social inclusion.

Aligning with the hypothesis outlined in De Wispelaere and Stirton (2012), debit cards were a feasible mechanism for disbursing cash to mothers. The study recruitment rate was 73%. The primary reason for non-take-up had less to do with lack of interest in the UCT, but, rather, concerns with sharing Social Security numbers (our sample had a high proportion of immigrant mothers). The overall retention rate was 83% at 12 months. Despite this being the first debit card for 21% of the sample, all mothers activated and completed transactions. In the qualitative interviews, there were virtually no mentions of any household conflict associated with the use of the card (e.g., with the fathers of the infants) or with extra fees. The findings from this study suggest that debit cards might be a practical solution to the implementation challenges conventionally faced by UCTs, due to their administrative ease and marked success in distributing payments to participants (De Wispelaere and Stirton 2012).

The vast majority of transactions were at retail or POS establishments. However 20% of all transactions were cash withdrawals from ATMs. Mothers in the $100 group more frequently made cash withdrawals relative to the $20 mothers (67% of all transactions compared to 33%), suggesting a preference for cash in the context of a relatively higher monthly cash transfer. This is consistent with findings that low-income consumers tend to use cash more frequently for bills, among the more substantial regular household expenses (Bennett et al. 2014).

The mothers were deliberate in integrating their cash transfers into their cycle of consumption and exhibited spending behaviors that co-occur with regular income inflows. As in other qualitative studies, mothers described how the monthly cycling of disbursement (SNAP, WIC, some paychecks) generated monthly periods of income scarcity, despite budgeting, and that the cash transfers helped alleviate these periods of low or no cash income (Seefeldt and Castelli 2009). Many of the mothers in the $20 group reported that the cash transfer made a difference both psychologically and in meeting basic needs. These mothers tended to “save it” rather than withdraw it immediately, thus giving it a particular meaning in their monthly financial experiences—for instance, buying a MetroCard when they needed to go to a doctor’s appointment or purchasing a special birthday gift.

Overall, the UCT appeared to provide mothers with a feeling of psychological security. Other research has found that a lack of economic slack creates a heightened vulnerability to income scarcity at the end of the month, with possible repercussions across a wide range of well-being outcomes (Gennetian et al. 2016; Gassman-Pines and Bellows 2018). The predictability of the cash transfer allowed mothers in our study to more stably engage in strategies like borrowing money from friends with quick payback. Unlike prior qualitative studies of cash benefits that suggest that means-tested programs may increase social exclusion, mothers did not have to go through the potentially stigmatizing experience of signing up for this benefit, which may have contributed to the positive experiences and overall take-up and retention rate of cash transfers use.

The debit card transaction data did not provide information about what was purchased. However, the qualitative interviews revealed that mothers tended to associate expenditures
on the debit card as “for the baby,” even if they were using the debit cards to pay bills or buy household supplies. In fact, the behavioral economics literature suggests that receiving the cash transfer on the monthly anniversary of the baby’s birth may have reinforced the mothers’ tendency to associate expenditures paid for with cash on the debit card as “for the baby.” To the degree that we could isolate spending in the quantitative data across categories of child-specific, household general, and “vice” spending, the category of vices was minuscule (two of more than 1,100 transactions took place in liquor stores). Nevertheless, we cannot be sure that “vice” purchases did not occur at general stores (e.g., supermarkets that sell beer or cigarettes).

As Edin and Lein (1997) and Mistry and colleagues (2008) found in their studies of low-income mothers’ expenditures, our data showed that affording even a few modest “extras” like being able to take a cab or going out for dinner are essential for mothers’ psychological well-being and their feelings of adequacy as caregivers. For example, mothers reported the satisfaction of being able to pay for a taxi in the rain with a newborn rather than ride the subway, or dressing up for a meal out. These “extras,” symbols of upper-middle-class life in New York City, were cited by our mothers as having psychological significance.

The current study should be interpreted in light of its strengths and limitations. A significant strength is the use of a mixed-methods approach to unpacking relations among the constructs of interest. The complementary nature of the data sources is a crucial asset and allowed for the depth of the findings. One limitation of the quantitative data is the lack of specificity within the transaction data. It is possible that mothers embellished their child-specific expenditures on the debit card with interviewers because they knew that the interview was being conducted within the context of a study. However, our pattern of findings was reflected across the majority of the mothers and the dollar value of cash transfers. In addition, we were unable to fully tease apart how the cash transfers fit into the broader context of household spending and budgeting, a task that is particularly complicated with multiple adults contributing benefits and paychecks. Due to the design of the study, we were unable to test how findings might differ based on the timing of the cash transfers across childhood development (e.g., infancy vs. middle childhood). Future research could specifically examine whether there are differences in the role of cash transfers based on children’s age. Finally, in this study, the cash transfers may have been considered income for the determination of benefits by programs like SNAP, which could have resulted in less of an increase to family net income than expected. Future studies should consider how cash transfers could be offset by reductions in public program benefits.

Overall, the patterns of results demonstrated the perceived utility of a UCT across minimal and moderate amounts, which, according to recipients, provided financial support and psychological benefits. The cash transfers themselves were implemented successfully through debit cards, with relatively few reports of lost or stolen cards. Mothers were able to allocate the cash transfers in ways that worked best for their family and the patchwork of services and income they received. Furthermore, to the extent that we were able to measure, mothers did not spend the cash transfers in ways that would concern UCT critics (i.e., vice purchases). Although ours was a small study, it was similar in scope (e.g., sample size and length of initiative) to other recent UCT projects (e.g., Mother’s Trust) and helps extend the literature in this area of inquiry.
Note

1. The terminology used to describe these payments to participants was “unconditional cash gifts.” In the manuscript they are referred to as “cash transfers.”

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**References**


