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Empowering the poor: A field study of the social psychological consequences of receiving autonomy or dependency aid in Panama

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This field study investigated the consequences of receiving poverty aid through conditional transfer programmes in the form of autonomy-oriented help (i.e., cash) or dependency-oriented help (i.e., vouchers) in impoverished rural communities in Panama. The empowering effects of autonomy- (vs. dependency-) help have so far only been studied in laboratory settings, or in settings where help could easily be refused. Little is known about the reactions of people who rely on help for extended periods of time. This study provides insights into how aid recipients are influenced by the type of aid they receive. Results showed that, as expected, recipients of cash reported more autonomy, empowerment, and life improvements than recipients of vouchers. Training, another type of autonomy-oriented help, was positively related to empowerment, personal, and family change beliefs. These findings illustrate the benefits of autonomy-oriented help programmes in empowering people from extremely poor communities around the world, who rely on aid for extended periods of time.

There are numerous poverty aid programmes worldwide, yet little is known about the psychological impact of these programmes. Usually, development programmes' discourses are dominated by the opinions and perspectives of the helpers, ignoring the needs and wishes of the aid recipients (Narayan, Chambers, Shah, & Petesch, 2000). Understanding the poor's needs and perspectives is an important condition for aid effectiveness. We studied the social psychological consequences of conditional transfer (CT) programmes in a field study conducted in traditional communities in Panama, which are among the poorest in Latin America (Olfarnes, 2007). Conditional transfer programmes provide cash or voucher benefits upon recipients' meeting certain requirements. We reasoned that aid recipients who receive a more autonomy-oriented type of help (i.e., cash or trainings) would report stronger feelings of empowerment, a

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greater improvement of their lives, and stronger beliefs that a change is possible, than recipients who receive a more dependency-oriented type of help (vouchers).

The context

Recently the World Bank acknowledged the scarcity of psychological research on aid programmes, highlighting the importance of attention to human behaviour and the social and psychological reactions to development policies (World Bank, 2014). Understanding the psychological impact of a programme is imperative as programmes could be beneficial to some extent, but affect recipients psychologically. As an example, microfinance programmes, which provide loans to the impoverished to start small businesses, yield a positive impact on poor households' income (Hulme & Moore, 2007), yet borrowers often suffer from high psychological pressure due to the strict repayment policies (Biswas, 2010; Buncombe, 2010; Field, Pande, Papp, & Park, 2012).

The CT programme is a type of programme that is active in at least 20 countries. The programme provides stipends or vouchers for food and domestic products to extremely poor households in return for certain actions, such as enrolling children into school and attending regular health check-ups (Fiszbein & Schady, 2009; Gelan, 2006; Handa & Davis, 2006; Lagarde, Haines & Palmer, 2007). Many studies have illustrated important benefits of CT programmes, such as helping younger generations achieve higher education and better health, and improving households' overall income. Research showed an increase in students' school attendance (Schultz, 2000; Skoufias, Parker, Behrman, & Pessino, 2001), a reduction in children's labour market participation (Skoufias, 2001), and a reduction in child mortality associated with poverty-related causes such as malnutrition and diarrhea (Rasella, Aquino, Santos, Paes-Sousa, & Barreto, 2013). Although this programme has been extensively studied and important benefits for recipients have been demonstrated (e.g., Behrman, Parker, & Todd, 2005; Behrman, Sengupta, & Todd, 2000; Das, Do, & Özler, 2005; Rawlings & de la Briere, 2006; Schubert & Slater, 2006; Skoufias, 2001; Soares, 2012), little is known about its effects on recipients' general belief that the programme has allowed them to improve their living conditions, and the belief that they can become selfsufficient in the future. Participants in CT programmes are expected to gain independence from the programme, but there is no conclusive evidence that CT programmes have improved households' capacity to generate their own income (Godoy, 2005; Villatoro, 2005). Depending on aid could have profound negative consequences for people's psychological well-being, communities' development, and countries' economies.

From the psychological literature on helping, we know that receiving help can undermine recipients' self-image and reputation (Nadler, 2014) and that it can increase dependence on the provider (Nadler, 2002, 2014; Nadler & Halabi, 2006). People often reject needed help if it is self-threatening (e.g., Ackerman & Kenrick, 2008; Lee, 1997; van Leeuwen, Täuber, & Sassenberg, 2011). For example, prior research found that students avoid seeking help in class to protect their feelings of self-competence (Butler & Neuman, 1995; Ryan & Pintrich, 1997), that women refrain from seeking help from men to disconfirm women's dependency stereotype (Wakefield, Hopkins, & Greenwood, 2012), and that people avoid seeking dependency help from other groups when group image concerns were activated by relational conflict (van Leeuwen *et al.*, 2011). Studies showed that publicly providing help can boost one's reputation (i.e., the competitive altruism hypothesis, Hardy & van Vugt, 2006) and that it is influenced by more factors than recipients' needs alone (van Vugt & Hardy, 2009). Just as giving help is positive for helpers' reputation and status (Hardy & van Vugt, 2006; Hopkins *et al.*, 2007), receiving it can mark a lack of resources, inferiority, and dependency on the helper (Nadler & Fisher, 1986). These lines of research illustrate the importance of considering the recipients' needs and their psychological reactions to the received help when implementing aid programmes.

Although the aforementioned studies are fairly informative, they were mainly conducted in laboratory settings or in settings where aid can be rejected without having profound consequences for the welfare of recipients. Yet in impoverished areas, aid is crucial for survival, and refusing it might not be an option. This leaves us with a number of crucial questions; for example, how do people living in extreme poverty react psychologically to receiving continuous help? What aspects of the aid programmes strengthen recipients' beliefs that improvement of their living conditions is possible? One possible outcome is that aid recipients believe that they are able to change their situation, because the programme enhances their feelings of empowerment. We argue that these feelings of empowerment are an important condition for the success of CT programmes in the developing world.

The role of empowerment

Empowerment is an important condition for improving the lives of the impoverished. Empowerment is a broad concept. In poverty research empowerment has been primarily studied from an economics perspective, focusing mainly on the recipients' ability to take decisions and make strategic choices. In the psychological field, empowerment is broadly described as the process of gaining power or control over one's life (Conger & Kanungo, 1988), believing in one's abilities (Kark, Shamir, & Chen, 2003), and having a proactive approach to life (Zimmerman, 1995). In this study, individual psychological empowerment is defined as the awareness of personal control and the confidence in having the capacity to influence individual outcomes (Hansen, 2015). Psychological empowerment is an important precursor for several positive outcomes, such as improved individual job performance and satisfaction (Seibert, Silver, & Randolph, 2004), increased productivity and organizational commitment (Kirkman & Rosen, 1999), and positive behavioural changes (Graves & Shelton, 2007).

A possible outcome of feeling empowered is the belief that a positive change to one's life is an actual possibility (i.e., change beliefs). Research on collective action has demonstrated that feeling empowered greatly influences social change, because for social change to occur, not only do social movements need to have power, but their individual members should also be subjectively empowered (Drury & Reicher, 2005, 2009). The perception of increasing self-power allows people with few resources to gain autonomy over their lives and contribute to their life improvement and changes in their social standing.

Unfortunately, impoverished people rarely feel empowered. Narayan *et al.* (2000) interviewed over 20,000 people from 23 countries living in poverty to investigate their perspectives and feelings about their situation. This study found that, from the poor's perspective, low well-being or poor quality of life is much more than just material scarcity; the common theme underlying their experiences is feelings of powerlessness. Although empowerment is a bit of a 'buzzword' used in international development policies (Cornwall & Brock, 2005; Sen, 1997), few studies have investigated the factors that influence aid recipients' feelings of psychological empowerment, and the role of empowerment in the success or failure of aid programmes. A CT programme evaluation in Mexico showed that after the programme started female aid recipients reported

behaviours that could be considered 'empowering' (Skoufias, 2001). Such behaviours include being able to leave the house more often, having more opportunities to speak out in groups, becoming more educated through workshops, and having more control over household expenditures. However, that study did not investigate women's perception of psychological empowerment or what aspects of the programme explained why these females engaged in such behaviours.

Although the previous studies explained some of the benefits of feeling empowered, one important question remains: What factors influence aid recipients' feelings of empowerment and change beliefs? As we argue in the following section, empowerment depends, in part, on the type of aid being provided.

The social psychology of helping

According to Nadler (2002, 2014), different types of help could have different psychological consequences for recipients. *Dependency-oriented help* offers a complete solution to a problem and serves short-term purposes for its high instrumentality, yet it reinforces dependency and inferiority, and implies a view of recipients as unable to contribute towards solving their problems. *Autonomy-oriented help*, on the other hand, offers tools, hints, or resources to independently solve a problem. It is less instrumental, but might be more empowering, self-supportive, and effective on the long run than dependency-oriented help (Nadler, 2002).

Studies show the positive effects of autonomy-oriented help. For instance, being trained in job searching skills was demonstrated to boost general feelings of self-efficacy (Eden & Aviram, 1993). Training interventions for entrepreneurship have several important benefits, such as increased self-efficacy and goal intentions, more job creations, and business success (for an overview, see Frese, Gielnik, & Mensmann, 2016). Women who participated in microfinance programmes that included a training component reported higher levels of personal control beliefs than non-participants (Hansen, 2015). Experimental studies showed that participants who sought and received autonomy-oriented help (a hint) to solve difficult puzzles felt more self-competent, more empowered, more positive, and more respected than those who sought and received dependency-oriented help (an answer; Alvarez & van Leeuwen, 2015; Alvarez & van Leeuwen, 2011). Together, these results attest to the important contribution of autonomy-oriented help for people's feelings of empowerment.

Although the previously mentioned studies provide important insights into the psychological effects of receiving and seeking help, their results do not automatically generalize to situations in which people rely on help for prolonged periods of time. People living in extreme poverty are exposed to physical, psychological, and financial deprivation and can usually not afford the luxury of rejecting the type of help that is on offer, thereby impairing the control they have over their circumstances. When people feel that they have no control over their situation, they may start behaving in a helpless manner. This inaction, also called learned helplessness (Seligman, 1972), can lead people to overlook opportunities for change and behave as if they are unable to change the situation.

Overview of the field study and hypotheses

Panama has been one of the fastest growing economies worldwide, but it has sharp regional social inequalities (World Bank, 2016). Overall, 18.7% of the Panamanian

population lives in poverty (World Bank, 2016). Poverty is more pronounced in indigenous areas (World Bank, 2016); for instance, 93.8% of the Ngäbe-Buglé population lives in poverty (Diéguez, 2015). CT programmes in Panama help households living in extreme poverty to satisfy basic needs. There are two variants of this programme: the cash transfer that provides \$100.00 cash per 2 months, and the voucher programme that provides the equivalent of \$100.00 per 2 months in the form of vouchers that can be used at local shops to acquire food or domestic products.¹ Only people living in extreme poverty can receive CT benefits. The decision of which communities receive cash or vouchers was made randomly at the start of the CT programme (J. Torregroza, Ministry of Social Development, personal communication, January 18, 2010).

One important underlying difference between cash and vouchers is the degree of autonomy they afford recipients. We argue that cash transfers provide more autonomy and freedom to recipients than vouchers, because cash can be invested according to individual households' needs, compared to voucher transfers that give fewer choices to recipients to decide how to use the help. We therefore consider aid in the form of cash more autonomy-oriented than aid in the form of vouchers. Of the two types of aid, cash therefore has the most potential to empower recipients.

In addition to receiving cash or voucher transfers, some households received training on topics such as agriculture, art crafts, administration, or cooking. Typically, a representative from the government approaches the communities and invites community members to workshops and trainings given by experts on specific fields. Training is an autonomy-oriented type of help, as it teaches skills and knowledge. We also investigated the effects of participating in such trainings, in addition to receiving CT benefits, and reasoned that receiving training would lead recipients to feel more empowered and would boost their beliefs that improvement is possible.

The field setting allowed us to test the following hypotheses. First, we predicted that cash recipients would experience stronger feelings of autonomy than voucher recipients (*Hypothesis 1*). Second, we expected that cash recipients would experience stronger feelings of empowerment as compared to voucher recipients (*Hypothesis 2*). We also expected that, as compared to voucher recipients, cash recipients would experience greater improvement in their household living conditions since entering the CT programme, and report greater beliefs that a change in their social standing is possible (*Hypothesis 3*).

With respect to training, we expected that recipients who had recently received a skills training (e.g., in agriculture, administration, or baking) would feel more empowered than recipients who had not received such a training (*Hypothesis 4*). Aid recipients who received training were also expected to report a greater improvement in their living conditions and to hold stronger beliefs that change in their social standing is possible than recipients who had not received training (*Hypothesis 5*).²

To evaluate the general impact of the CT programme, we also measured people's satisfaction with the programme. We further assessed a number of demographic variables to examine the comparability of the communities who received either cash or vouchers.

¹ According to the Ministry of Economy and Finances of Panama, the minimum income per person needed per month to satisfy basic food expenses is \$143.50 in urban areas and \$106.49 in rural areas (Diéguez, 2017).

² We additionally explored the degree to which empowerment mediated the effects of (1) type of help on the perception of improving one's life because of the aid, and (2) type of help and the beliefs that personal and family changes are possible. These results are not included in the manuscript, but are included in the Supporting Information (Appendices S3 and S4).

Method

Participants and design

The cross-sectional field study was conducted in Panama, at the Comarca Ngäbe-Buglé, Besikó District. In Besikó, four regions receive cash only, and four regions receive vouchers only. For our sample, we randomly chose one region that receives cash (*Soloy*, N = 814 households) and one region that receives vouchers (*Niba*; N = 606 households; Contraloría General de la República de Panamá, 2010).

The selected area contained communities that live in extreme poverty, received either cash or vouchers (not both), and were similar in most other important aspects such as ethnic background, language, culture, infrastructure, and poverty level.³ Using a random number generator, we selected 18 villages (of 59) within Niba and nine villages (of 26) within Soloy. Households within each village were selected by choosing one house every five houses, starting from the first marked house. Between 20% and 27% of households per selected village participated in the study. Within each household, we selected only the direct recipients of the CTs. Because CT benefits are usually awarded to the mother of each household – in order to encourage women's participation and reduce the gender gap (Fiszbein & Schady, 2009) – most of our sample consisted of women. However, if a man is the primary caretaker of the children, he will receive the CT benefits. The total sample consisted of N = 154 Indigenous Ngäbe recipients (n = 77 cash and n = 77 voucher receivers; 145 females, nine males, $M_{age} = 41$, SD = 12.86).

Procedure

Native Ngäbe interviewers, fluent in Spanish and Ngäbere (participants' native language), conducted the structured interviews. Prior to data collection, interviewers received extensive training in how to conduct the interviews. Interviewers approached participants at their houses and introduced themselves as representatives of a research project from the university. Interviewers provided information about the study in Spanish or Ngäbere and requested participants' consent to participate in the study. All participants consented. The person who was the primary recipient in the programme was interviewed, in the language of the participant. The interview lasted approximately 45 min. Upon completion, participants received an incentive that consisted of a small educational gift for their children (e.g., notebooks, colouring books, crayon, and pencils). Participants were thanked and debriefed.

Measures

As a check, participants were asked whether they received cash or voucher transfers. Participants were also asked whether they had participated in any training or workshop, or received technical assistance to learn a skill (e.g., agriculture, art crafts, administration, or cooking) within the past 2 years.

³ To further ensure that participants from both regions were comparable, interviewers used a checklist to select households with certain characteristics. We selected only houses that have earthen floors, no drinkable water, no electricity, that were within 3 hrs walking distance of a road, that have access to schools and a health center, and that received a CT at the time of data collection.

Demographics

Participants were asked for their age, gender, number of children, land ownership and use of the land, employment status, business ownership, income, literacy, and year in which they started the programme (Appendix S1 contains a list of the items).

Measures

Unless otherwise indicated, all dependent measures were assessed on 5-point scales (1 = not at all, 5 = very much). Scales were created by averaging the items (Appendix S2 contains a list of the items).

Participants were asked to what extent they felt the CT programme provided them with *autonomy* ('How much freedom or independence do you feel you have in deciding how to use the money [voucher] from the transference?'; 1 = none, 5 = completely). *Empowerment* was measured with five items (e.g., 'To what extent do you think ... your current socioeconomic status is something that you are able to improve by yourself'; $\alpha = .77$). *Life improvement* was measured with two items ('To what extent do you feel that having received the conditional cash [voucher] transference has helped to improve the living conditions of the people in your household?'; r = .45). *Personal change beliefs* were measured with three items (e.g., 'To what extent do you feel that something you are doing right now will improve your own chances of getting a (better) paid job in the future?'; $\alpha = .74$). *Family change beliefs* were assessed with three items (e.g., 'To what extent do you feel that something you are doing right now will improve the chances for one or more members in your household to become independent of government aid in the future?'; $\alpha = .79$).

One graphic item measured participants' *satisfaction*⁴ with the programme ('Please choose the face that comes closest to expressing how satisfied you feel about the conditional cash [vouchers] transfer you receive'; a face was depicted accordingly, ranging from a sad face to a happy face).

Results

Preliminary analyses

Demographics

Using independent sample *t*-tests, we compared the two help type conditions (cash or voucher recipients) on a number of demographic variables. No significant difference between cash and voucher recipients was found with respect to participants' age, the number of children (M = 3.81, SD = 1.96; min = 1, max = 9), year in which participants started the CT programme, employment status (97% did not have a job), having a (family) business (87% did not own a business), nor land ownership (56% owned a land). Of participants who owned land, almost everyone used it for agriculture (99%), and some of them also used it to raise animals (18%).

Cash recipients reported a significantly higher income⁵ than voucher recipients, M = 1.45, SD = 0.58 vs. M = 1.16, SD = 0.37, respectively; t(136) = 3.49, p < .001. This difference is probably due to cash transfers adding up to cash recipients' total income. It is

⁴ Some participants mentioned that they did not understand the meaning of the faces, probably because of their lack of exposure to such faces. Interviewers then focused on the number rating the answers.

⁵ Sixteen participants did not answer the question regarding their income.

important to note that 98% of recipients scored 1 or 2 on this 6-point scale (1 = <\$50, 2 = \$50-\$200), indicating a low to very low income. A significant difference was also found for literacy: More cash recipients were literate (23%) than voucher recipients, 13%; *t* (146) = 2.73, *p* < .01.

To conclude, both groups were comparable with respect to their age, number of children they have, year they started the CT programme, employment status, and business and land ownership, yet cash recipients were somewhat more wealthy (probably due to their cash endowment) and were more often literate.

Satisfaction

Results showed no significant difference between cash and voucher recipients with regard to their satisfaction with the programme (M = 4.61, SD = 0.78). On average, participants reported feeling very satisfied, which could be expected given that the programme fulfils basic needs for survival.

Effects of help type

In hypotheses 1, 2, and 3, we predicted that cash recipients would experience more feelings of autonomy, empowerment, perceive to have more improvements in their living conditions since entering the CT programme, and have stronger beliefs that a change is possible, compared to voucher recipients.

Analyses

Multiple imputations were first implemented to handle 24.36% of missing values using the package MICE 2.25 (van Buuren & Groothuis-Oudshoorn, 2011) for R 3.2.3 (R Core Team, 2015). Thus, 100 imputed data sets were generated under the assumption of missing at random mechanism (MAR) by including several auxiliary variables related to the missing patterns. An inclusive approach was used to add as many auxiliary variables as possible to recover the missing information (Collins, Schafer, & Kam, 2001; Enders, 2010; Little, Jorgensen, Lang, & Moore, 2013).

To control for possible individual differences in help type, propensity score matching (PSM) was performed (Rosenbaum & Rubin, 1983). A propensity score (PS) matches cash and voucher participants based on important individual covariables (Rosenbaum, 2005). A full match model was estimated to obtain a PS for each participant. The PS was used as a weight for further analysis in all regression models by converting the PS (p_i) to an odds scale ($p_i/1 - p_i$). Thus, participants in the cash group receive a weight of 1 whereas the members of the voucher group receive an odds value (Hirano, Imbens, & Ridder, 2003). The variables included in the PSM analysis were as follows: age, sex, year, number of children, having a job, having a business, owning a land, income, and literacy. The package MatchIt 2.4.21 (Ho, Imai, King, & Stuart, 2011) was used to perform PSM analysis.

In addition, an intraclass correlation including village as the cluster variable was calculated to account for this source of variance. The results showed that autonomy (ICC = .31), empowerment (ICC = .33), and life improvement (ICC = .23) presented a large ICC value, whereas personal change beliefs (ICC = .19) and family change beliefs (ICC = .06) showed a smaller ICC value. This means that there is variance accounted for at a second level; therefore, a multilevel analysis might be suitable for the data (Hayes, 2006). However, these results were unexpected and the research design did not include second

level predictors or specific second level hypothesis. In addition, the small sample size at the second level (27 villages) makes it difficult to estimate a multilevel level model with enough statistical power (Maas & Hox, 2004). Nonetheless, to account and control for the source of variance at the second level, we conducted a linear mixed-effects model that includes a random intercept but keeps the slopes fixed. The linear mixed-effects models were estimated using the *lme4* package (Bates, Mächler, Bolker & Walker, 2015) as provided in R (version 3.3.2) for statistical computing (R Core Team, 2015). In addition, the random effects were tested using likelihood ratio test (LRT) comparing a simple model excluding the random effect versus a model including the random effects. As the regression models were estimated using multiple imputed data sets, we pooled the point estimates using Rubin's rule (Rubin, 1987) via the package MICE 2.25 (van Buuren & Groothuis-Oudshoorn, 2011).

Results

We performed a random-effects model for each dependent variable (autonomy, empowerment, life improvement, personal change beliefs, and family change beliefs) to test the relevance of a random effect. The LRT showed that it is pertinent to include a random effect for autonomy, $\chi^2(1, N = 154) = 5.61$, p = .018, empowerment, $\chi^2(1, N = 154) = 5.62$, p = .018, personal change beliefs, $\chi^2(1, N = 154) = 7.73$, p = .005, and life improvement, $\chi^2(1, N = 154) = 11.39$, p < .001, whereas it was not meaningful to include a random effect for family change beliefs, $\chi^2(1, N = 154) = 0.0002$, p = .989. Because autonomy is an ordinal variable, the proportional odds model was implemented (Anderson, Kim, & Keller, 2014). Based on these statistical tests, we report the results of the random-effects model of empowerment, autonomy, life improvement, and personal change beliefs and, of the linear regression of family change beliefs. The estimates of the regressions were not standardized.

A significant effect of help type on the reported level of *autonomy* showed that cash recipients reported more autonomy in using the help than voucher recipients (b = 1.14, p = .01, OR = 3.14). These results support our prediction that, of the two types of help, cash provides recipients with more autonomy than vouchers (Hypothesis 1). Consistent with predictions, cash recipients felt more empowered than voucher recipients (b = 2.75, p = .004), confirming Hypothesis 2. Cash recipients also reported more improvement of household living conditions than voucher recipients (b = 0.92, p = .008), which is consistent with Hypothesis 3. Unexpectedly, no significant difference was found between cash recipients and voucher recipients with respect to their reported personal change beliefs (b = 0.29, p = .659) or family change beliefs (b = 0.14, p = .757). An overview of the relevant means is presented in Table 1.

Table 1. Means (and standard deviations) as a function of help type

	Cash recipients M (SD)	Voucher recipients M (SD)
Autonomy to use the transfer	3.95 (1.48)	3.04 (1.40)
Empowerment	3.57 (0.83)	3.16 (1.01)
Life improvement	4.06 (0.75)	3.64 (0.82)
Personal change beliefs	3.26 (1.03)	3.06 (0.90)
Family change beliefs	3.43 (1.08)	3.20 (0.87)

In sum, these results fully confirmed Hypothesis 1, Hypothesis 2, and partly confirmed Hypothesis 3. Cash transfers were associated with more autonomy, empowerment, and perceived life improvement than voucher transfers. Individual and family change beliefs, however, were not different between cash and voucher recipients.

Effects of training

In hypotheses 4 and 5, we predicted that recipients who received training in the 2 years prior to data collection (in addition to receiving cash or voucher benefits), would feel more empowered, perceive more improvement in their life conditions, and have stronger beliefs that personal and family changes are possible, compared to recipients who did not receive training. In total, 31% (N = 48) of participants indicated having received any type of training in the past years. Cash and voucher receivers did not differ in how much training they received, t(152) = 1.04, p = .300.

As expected, a significant difference between having received training and not having received training was found with respect to feelings of autonomy, empowerment, and personal and family change beliefs. Participants who had participated in one or more trainings reported more feelings of autonomy (b = 1.19, p = .046, OR = 3.27) than participants who had not participated in a training. Participants who had received training also felt more empowered (b = 2.26, p = .002), experienced more personal change beliefs (b = 2.15, p < .001), and reported stronger family change beliefs (b = 2.34, p < .001) than participants who had not received training. Unexpectedly, no significant difference was found with respect to reported life improvement (b = 0.25, p = .430). An overview of the relevant means is presented in Table 2.

In sum, results confirmed Hypothesis 4 and partly confirmed Hypothesis 5. Participants who had received training experienced more autonomy, more empowerment, and a stronger belief that they can have an individual and a family change compared to participants who had not received training. Unexpectedly, no effect was found for participants' perception of life improvement.

Discussion

According to the United Nations' Millennium goal report of 2015, extreme poverty worldwide has decreased from 1.9 billion in 1990 to 836 million in 2015. Numerous programmes have helped these groups and their benefits are evident (Banerjee *et al.*, 2015; Pronyk *et al.*, 2012). However, aid does not always have the desired results: Recipients of aid frequently fail to achieve independence after the programmes end

Table 2. Means	(and standard of	deviations) as a	function of training
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	Received training M (SD)	Did not receive training M (SD)
Autonomy to use the transfer	4.08 (1.43)	3.21 (1.47)
Empowerment	3.73 (0.77)	3.20 (0.98)
Life improvement	4.01 (0.80)	3.78 (0.81)
Personal change beliefs	3.53 (0.97)	2.99 (0.93)
Family change beliefs	3.85 (0.91)́	3.07 (0.92)

(Coates, Renzaglia, & Embree, 1983; Easterly, 2014; Moyo, 2009; Munk, 2013; Pulley, 1989). Social psychological research has pointed out that help can have unexpected negative side effects for recipients, such as dependency, decreased self-competence, and reinforcement of unequal status hierarchies (Halabi, Dovidio, & Nadler, 2014; Nadler, 2002; Schneider, Major, Luhtanen, & Crocker, 1996). Although there are important concerns about aid programmes' psychological and social effectiveness (World Bank, 2014) – and much research has provided valuable information about this (e.g., Nadler, 2014) – the social psychological research has primarily investigated helping interventions in situations where help can be refused. These settings do not necessarily reflect realistic situations, in which people often depend on help for their physical and psychological well-being. In those situations, people typically do not have the luxury of refusing help and rely on continuous support for extended periods of time. This field study was, to the best of our knowledge, the first of its kind to investigate the psychological consequences of receiving autonomy- versus dependency-oriented help among aid recipients in impoverished communities.

Discussion of main findings

In line with previous results and our predictions, this study found that cash was perceived as more autonomy-oriented than vouchers. Moreover, cash recipients reported feeling more empowered, and having more improvements in their life, than voucher recipients. These results are consistent with experimental studies that found that participants who received autonomy-oriented help to solve difficult puzzles felt more self-competent and empowered than participants who received dependencyoriented help (Alvarez & van Leeuwen, 2015; Alvarez & van Leeuwen, 2011). Although cash should by no means be construed in terms of autonomy type of help only (indeed, whereas cash recipients are free to spend the money as they see fit, the immediate need for life's necessities means that they are unlikely to invest the majority of it in a manner that directly contributes to their growing independence), it is more autonomy-oriented than vouchers for food or domestic products. What matters here is perhaps not so much the actual freedom that recipients have in how to use the help they receive, but the psychological freedom they experience as recipients of this type of help. Autonomyoriented help signals to recipients that they are capable of making important decisions on their own. This important psychological message, in turn, could empower them to assume control over their lives.

Receiving training, a different type of autonomy-oriented help, was positively related to empowerment and the belief that a change is possible both at the personal and family level. However, training was not related to life improvement, possibly because training programmes do not necessarily improve one's living condition or health immediately. But training programmes provide tools that can enhance the recipients' skills, knowledge, cognitive functions, personal control, and self-efficacy (see Blattman, Fiala, & Martinez, 2013; Eden & Aviram, 1993; Frese *et al.*, 2016; Hansen, 2015; Heyn, Abreu, & Ottenbacher, 2004 for more information). Training has the potential to contribute to a real sense of independence among recipients' future status. Although the results of training need to be interpreted with some caution due to the small sample size of people having received training in our research, several studies have shown the numerous benefits of having received some form of training (e.g., Eden & Aviram, 1993; Frese *et al.*, 2016; Hansen, 2015).

The fact that so few recipients had received training in our own research points to a structural problem with the provision of training programmes and their acceptance by recipients in poor communities. This is particularly problematic as one of the main goals of CT programmes in Panama is to provide skills training, such as learning new agriculture techniques or enhancing their job seeking skills (MIDES, 2008).

Practical implications

Although the CT programme in Panama was initially intended to last 5 years (Fiszbein & Schady, 2009), the programme has continued for more than 10 years at the time of writing this article. Only 3% of the recipients in our sample had a paid employment. Previous research showed that CT programmes were ineffective in improving one's financial independence (Godoy, 2005; Villatoro, 2005). Whereas establishing independence is an important aim of CT programmes, to the best of our knowledge, none of the recipients in actuality had gained independence since entering the programme. The dependence of recipients on aid is a critical negative side effect of such programmes. In her controversial book *Dead Aid*, Dambisa Moyo (2009) wrote that more than US\$1 trillion had been invested in developmental assistance to Africa, and yet the recipients of this aid are not showing major improvements on terms of self-sufficiency. The author argues that aid had promoted dependency, fostered corruption, hindered economic growth, and perpetuated poverty. All these findings are worrisome and call for new measurements to encourage recipients' self-sufficiency and avoid long-term dependence on aid.

In our view, relief aid, which is mainly of a dependency nature, is required in crisis situations or in extreme poverty conditions where people struggle to satisfy their basic needs. Yet when the immediate crisis is over, and the situation becomes more stable, moving towards an autonomy-oriented approach that empowers recipients (e.g., capability trainings, funds for investment, farming supplies) would promote independence and a change in recipients' lives. In our study, cash transfers were perceived as more autonomy-oriented than voucher and had more benefits for recipients in terms of empowerment and perceived improvements in their life. Yet receiving cash exclusively was not enough to encourage recipients' belief that a change in their situation is possible. One explanation for these results is that offering cash also has some dependency features and therefore does not offer all the psychological benefits of a more autonomy-oriented help. Another explanation might be that the amount of cash received is not enough to invest or otherwise utilize in a manner that can help them achieve a real change.

As an illustration, in a small study in London, 13 homeless men received 3,000 pounds in cash with no strings attached from a local charity (Bregman, 2013). They were free to decide how to use this money. A year later, 11 of the 13 had moved off the streets, had a place to sleep, were enrolled into classes, had learned new skills, received treatment for drug abuse, and had made concrete plans for their future (Bregman, 2013). Although these results need to be interpreted with caution due to the small sample size, they suggest that cash of an amount that supersedes the fulfilment of immediate short-term needs can be utilized by recipients to genuinely change their lives. A study in Uganda further explored this idea (Blattman *et al.*, 2013). Groups of people were invited to submit grant proposals for trainings or business start-ups. The treatment group received unsupervised grants of about \$7,500 on average per group (\$382 per person). Results showed that grant recipients spent 11% of the money on training, 52% on tools, and 13% on materials. After 4 years, the treatment group practised more skilled trade, had increased business assets, worked more hours, and had increased their earnings compared to a control group (Blattman *et al.*, 2013). These results clearly undermine the widely held presumption that the poor are not able to handle money properly (e.g., Mani, Mullainathan, Shafir, & Zhao, 2013; Vohs, 2013). Giving the poor the opportunity to take their own decisions on how to use the help they receive can help them build confidence on their choices and feel more empowered.

CT programmes are not meant to be used as investments; therefore, it is understandable that providing larger amounts of cash might not be an option. However, combining CT programmes that help satisfy households' basic needs together with other programmes that provide larger sums of money for investments and training programmes (see Banerjee, Duflo, Chattopadhyay, & Shapiro, 2011 for an example) might give recipients the opportunity to autonomously manage their resources, to invest them in what they value as most essential, thereby boosting their feelings of power and their motivation to improve their situation.

Boosting feelings of power or empowerment is an important outcome of receiving autonomy-oriented help. Several studies have explained the benefits of feeling empowered (e.g., Conger & Kanungo, 1988; Drury & Reicher, 2009; Israel, Checkoway, Schulz, & Zimmerman, 1994; Seibert et al., 2004; Zimmerman, 1990). For instance, just the mere belief in one's ability to engage in a behaviour can lead to a behavioural change (Bandura, 1993), such as positive health behaviour change (Strecher, DeVellis, Becker, & Rosenstock, 1986) or academic accomplishments (Bandura, 1993). Understanding the consequences of feeling empowered is important, especially for recipients of poverty aid, who often suffer from feelings of powerlessness (Narayan et al., 2000). In our view, empowerment contributes to the concrete belief that a positive change in social standing is a real possibility. We tested and found (see Appendices S3 and S4) that empowerment mediated the effect of (1) type of help on the perception of improving one's life because of the aid, and (2) type of help and the beliefs that personal and family changes are possible. Specifically, empowerment explained the relationship between help type and life improvement, and help type and both change beliefs. Empowerment is therefore related to a belief that a change is possible, which might be an important precursor for actual change. Although this model provides valuable information, due to the cross-sectional nature of our data we cannot demonstrate causal effects. Future studies should examine the link between empowerment, change beliefs, and actual change in longitudinal experimental studies.

Limitations and suggestions for future research

This study has a number of limitations. By the time the data were collected, all comparable communities were receiving CTs. Therefore, no baseline measurement before the programme started was collected. Because the study design is of a cross-sectional nature, it is not possible to determine temporal or causal relationships. For instance, although having received training correlated positively with empowerment, we cannot state conclusively that participating in one or more trainings actually resulted in stronger feelings of empowerment. For example, it is also possible that empowered individuals were more motivated to take advantage of available trainings. Future studies could help generate causal conclusions about CT programmes.

Another limitation of the current study concerns the generalizability of the findings to other populations. For instance, the sample consisted mainly of women, because mothers of the households are the primary CT receivers (Fiszbein & Schady, 2009). Men could react differently to the programme in some aspects, for example by feeling contempt or angry

about relying on aid for an extended period of time. Research shows that males, compared to females, tend to seek less help for emotional problems (Möller-Leimkühler, 2002) and have more negative attitudes towards seeking professional psychological assistance (Good, Dell, & Mintz, 1989). Future research should investigate whether men respond similarly to women receiving long-term aid.

Conclusion

We wish to conclude with the following question: What determines whether an aid programme is successful? This study showed the benefits of autonomy-oriented help and the importance of empowering aid recipients. Programme evaluations need to consider all aspects of the programmes and the possible unexpected reactions, especially the psychological ones, towards receiving aid. In our study, overall satisfaction was high between both groups but that does not mean the programme is successful in making recipients independent. Likewise, increased health care and school attendance can coincide with increased feelings of dependency and helplessness. Ignoring the psychological impact of a programme can lead us to overlook unintended consequences. Does an aid programme empower and motivate changes among recipients? What aspects of the programme enhance human capabilities and promote opportunities to the impoverished? Future studies should look into how a programme's success could be measured.

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Supporting Information

The following supporting information may be found in the online edition of the article:

Appendix S1. List of demographic variables.

Appendix S2. List of items.

- Appendix S3. Exploratory analyses: Indirect effect of empowerment.
- **Appendix S4.** Figure 1: Effect of help type mediated by empowerment.
- Appendix S5. Latent factors correlation.