Not Too Far to Help:
Residential Mobility, Global Identity, and Donations to Distant Beneficiaries

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ABSTRACT

Extant research shows that consumers are more likely to donate to close than distant others, making donations to geographically distant beneficiaries a challenge. This paper introduces residential mobility as a novel variable that can lead to increased donations towards distant beneficiaries. This paper proposes that residential mobility (vs. stability) leads consumers to have a stronger global identity, whereby they see themselves as world citizens. This global identity results in higher donations to distant beneficiaries. A multi-method approach provides evidence for this prediction. An analysis of a national panel dataset demonstrates that high residential mobility is correlated with donations to distant beneficiaries. Lab experiments, including one with real monetary donations, replicate these effects using both actual moving experience and a residential mobility mindset.

Key words: residential mobility, moving, charitable donations, distant beneficiaries, global identity
Charity organizations such as Save the Children and Oxfam solicit donations for beneficiaries around the world, including high need areas in Africa and the Middle East. Most of these places are far away from potential donors, who may be living in more wealthy areas of Europe and North America. However, eliciting donations toward beneficiaries that are physically distant from donors is a challenging task. According to recent statistics, most charitable donations are made to local organizations. In 2018 almost 70% of donors worldwide gave to charities within their country of residence (nonprofitssource.com), and less than 7% of donations in the US were made to international charities (Giving USA 2019).

Extant academic research also finds that consumers are more motivated to help others who are perceived as psychologically or geographically close than far (Cavanaugh, Bettman and Luce 2015; Duclos and Barasch 2014; Reed and Aquino 2003; Toure-Tillery and Fishbach 2017; Winterich, Mittal and Ross 2009). Consumers are more likely to help relatives, neighbors, and local community members rather than individuals who are far away because of a variety of reasons, including empathy (Batson et al 1981; Krebs 1975; Small and Simonsohn 2008), perceived similarity (Rushton 1989), and the ability to make a greater impact on nearby beneficiaries (Toure-Tillery and Fishbach 2017). Yet, distant others may be needier than those in one’s local community, as distant communities often experience natural disasters, such as earthquakes, cyclones, and tsunamis. More generally, recipients in poorer countries, states or communities may be more needy than those in richer countries, states or communities. For nonprofit organizations, a challenge is how to increase donations to communities that are more distant to the donor.
Prior research identifies a handful of factors that can boost helping and prosocial behavior toward distant others, such as love (Cavanaugh et al. 2015), moral identity (Reed and Aquino 2003), and gender identity (Winterich et al. 2009). In this paper, we introduce another variable that can increase donations to distant beneficiaries, namely residential mobility. Defined as “the frequency with which individuals change their residence” (Oishi 2010, p. 6), residential mobility is a common occurrence that is easily measured. According to the Census Bureau, each year, about 10% of the U.S. population has moved to a new residence since the 1970s (U.S. Census Bureau, 2019). With globalization, people across the world are moving to new cities, countries, and continents (Oishi 2010). Thus, residential mobility is an easily measurable and actionable segmentation variable for marketers.

We propose that residential mobility affects the relationship between beneficiary distance and the amount of donations to charity. In particular, we predict that consumers with high residential mobility will donate more to distant others than will consumers with low mobility. Moreover, we identify global identity (Arnett 2002, Zhang and Khare 2009) as a novel underlying process for this effect. We propose that high mobility consumers have a stronger global identity, whereby they see themselves as members of a world culture. This boosted global identity, in turn, increases donations to distant beneficiaries. These predictions are tested in an analysis of national panel data as well as three experiments.

This paper makes a contribution to both the charitable donation literature as well as the literature on residential mobility. In terms of the donation literature, we introduce residential mobility as a new factor that increases the donations to distant beneficiaries, as well as identifying the underlying mechanism of global identity. In terms of the residential mobility literature, prior work has not examined its effect on charitable donations, nor has it examined the
difference between close and distant others. We also introduce global identity as a novel underlying mechanism for our effects. Finally, while the focus on prior work has been on demonstrating negative consequences of residential mobility (e.g., Sampson and Groves 1989; Oishi et al. 2007b), we show that residential mobility can result in prosocial behavior.

**THEORETICAL FRAMEWORK**

Beneficiary Distance

Broadly speaking, the beneficiaries of helping behaviors can be interpreted as psychologically and geographically close others, such as the local community, home state, and neighbors or distant others, such as non-home state, international groups, or even foreign countries. Prior literature suggests that consumers are more likely to donate to close rather than distant others (Duclos and Barasch 2014; Reed and Aquino 2003; Winterich et al. 2009; Toure-Tillery and Fishbach 2017). For example, Toure-Tillery and Fishbach (2017) found that actual donations from alumni were higher when the university was described as near/nearby than when it was described as far/far away. Similarly, Cavanaugh, Bettman and Luce (2015) found that participants allocated more money to charities with close vs distant beneficiaries. The general reasons for the greater donation to close vs. distant beneficiaries are empathy (Batson et al 1981; Krebs 1975; Small and Simonsohn 2008) and perceived similarity (Rushton 1989). In addition, Toure-Tillery and Fishbach (2017) demonstrated that participants may perceive donations made to close others to be more impactful than those made to distant others.
Past work has shown that several factors involving broadening of one’s identity can increase prosocial behaviors toward distant others (Cavanaugh et al. 2015, Reed and Aquino 2003, Winterich et al. 2009). For instance, the feeling of love expands one’s social connection, leading to increased pro-social behaviors towards distant others (Cavanaugh et al. 2015). Similarly, a highly self-important moral identity can expand the circle of moral regard toward out-group members (i.e., distant others) and thus lead to more donations (Reed and Aquino 2003). Finally, individuals with both a feminine identity and a strong moral identity are more likely to include others into their sense of self, leading to greater likelihood of helping distant others (Winterich et al. 2009).

We propose that residential mobility is another factor that can impact consumers’ donations to distant beneficiaries through its effect on identity. Because residential mobility is new to marketing, we expand on this construct before developing the hypotheses.

What is Residential Mobility?

Residential mobility has been conceptualized at both the macro and micro levels. At the macro level, residential mobility can be captured by “the proportion of residents in a given neighborhood, city, state, or country who moved during a certain period of time, or expect to move in the future” (Oishi 2010, p. 6). At the micro or individual level, residential mobility refers to “the number of residential moves an individual experienced during a certain period of time, or expects in the future” (Oishi 2010, p. 6). For instance, a consumer who has moved to a different city three times has higher residential mobility than one who has moved once. In this
research, we conceptualize residential moving at the individual level by defining it as moving between cities, states, or countries rather than across neighborhoods within the same city. Although not examined in the mobility literature, the effects of mobility may differ depending on the experience itself. A positive stay in another city or country will have different effects than a negative stay. Similarly, a voluntary move may have different effects from one that is dreaded. However, measurement of consumers’ prior moving experience typically does not consider these distinctions. The manipulation of a residential mobility mindset also does not specify whether a move is voluntary (i.e., positive) or involuntary (i.e., negative). The general assumption is that moving leads to excitement about new opportunities for education, employment, and housing, even though it can also generate anxiety (Oishi et al 2012).

To address the causality issue in using past moving experience as a predictor, psychologists have primed a residential mobility mindset (Lun, Oishi and Tenney 2012; Oishi et al 2012). Such a mindset orients consumers to think about moving, and its effect may carry over to subsequent decisions and choices made in a seemingly unrelated situation (Lun et al. 2012). In the typical manipulation, consumers are asked to reflect on their lifestyle as well as their social relationships after the move. Prior work has shown that priming a residential mobility mindset leads to similar effects as measuring actual moving. Next, we examine the effect of residential mobility on donations.

Residential Mobility, Global Identity, and Beneficiary Distance

Although prior work does not consider the effects of residential mobility on donations, it shows that residential mobility hinders prosocial behavior. For instance, there is a positive
relationship between residential mobility and disruptive social behaviors, such as higher crime rates and more frequent occurrences of violent behavior (Shaw and McKay 1942; Sampson and Groves 1989; Sampson, Raudenbush and Earls 1997). Moreover, residential mobility (vs. stability) leads to fewer pro-community behaviors, such as lower purchases of local habitat license plates and lower attendance at a local professional team’s baseball games (Oishi, et al 2007b). Finally, students who have moved to mobile neighborhoods have shown a significant decrease in helping tendencies, whereas stable neighborhoods have shown a significant increase in helping tendencies (O’Brien, Gallup and Wilson 2012).

An important aspect of prior correlational work is that the helping behaviors focus on the local community, such as supporting a local sports team (Oishi et al. 2007b) or collectively solving the community’s problems (Sampson et al. 1997). Although these papers demonstrate the potential negative social consequences of mobility, these consequences are examined only in a local context, i.e., without a direct comparison of helping local vs distant others. This research does not consider prosocial behaviors that extend beyond the span of the local community. Thus, one of our contributions is to examine the context of prosocial behavior toward distant communities.

In terms of psychological processes, residential mobility affects consumers’ sense of self, as it changes the social landscape and requires consistent adaptation to new relationships (Lun et al. 2012; Oishi 2010). Mobile consumers are more likely to focus on personal (vs. collective) aspects of the self (Oishi, Lun, and Sherman 2007a). Personal identities include traits and individual characteristics, while collective or social identities refer to their membership in local social groups (Brewer 1991; Oyserman 2009). For example, consumers who moved more often were more likely to describe themselves using personal traits (i.e., good at football) rather than
collective traits (i.e., a member of a local football team) (Oishi, et al. 2007a, Study 1). This focus shift in aspects of the self (e.g., personal vs. collective or social) has been used to explain why highly mobile consumers may have lower identification with the local reference group. Although they did not measure local identity, Oishi, et al. (2007b) speculated that residential mobility might lead to lower level of identification with the local reference group which then reduces the types of prosocial behaviors that aim to enhance the well-being of the local community.

We propose that the effect of residential mobility is more nuanced, such that high (vs. low) mobility consumers may have higher identification with a variety of non-local communities, such as other communities they have lived in, the nation, or even the world as a whole. Moving experiences open consumers up to new ideas, places, and cultures, so their sense of self likely includes connection to communities beyond the local one. Moreover, residential mobility is a key characteristic of globalization, and Arnett (2002) suggests that globalization influences the extent to which people have a local or global identity (though everyone has both). He describes a local identity as one that involves membership in and connection to the local community and traditions, while a global identity involves membership in a world culture, seeing similarities rather than dissimilarities among people worldwide, and awareness of what is happening in other parts of the world. As with other types of identity, a global identity may be chronically accessible or situationally primed. Zhang and Khare (2009) found that consumers whose global identity is more accessible and diagnostic prefer global products, while those whose local identity is more accessible prefer local products. Consumers may be high or low on both types of identity or just on one.
We propose that high mobility consumers are more likely to see themselves as global citizens who are connected to the world than are low mobility consumers. This stronger global identity makes them more accepting of distant communities, and they care more about those outside the local community than do low mobility consumers. This makes them more likely than low mobility consumers to donate to a geographically distant beneficiary. Formally:

**H1**: Compared to stability, residential mobility will lead consumers to donate significantly more to distant others.

**H2**: The increasing donations towards distant others will be mediated by the stronger global identity triggered by residential mobility (vs. stability).

**OVERVIEW OF STUDIES**

We test our hypothesis that the experience and anticipation of residential mobility, compared to residential stability, will result in more donations to distant others. In four studies, we operationalize residential mobility using either past moving experiences (Studies 1 and 2) or manipulating a residential mobility mindset (Studies 3 and 4). Study 1 analyzes a national panel data, while the other three studies use experiments. Study 3 features actual monetary donations, while study 4 demonstrates mediation by global identity.

Although our focus is on donations to distant others, we also consider the effect of residential mobility on donations to close others as a comparison. Thus, in each study, we either measure (study 1) or manipulate (studies 2-4) beneficiary distance. We expect an interaction between residential mobility and beneficiary distance, such that residential mobility (vs. stability) increases donations to distant others but not to close others. The exact effect of
residential mobility on close others is unclear. Prior literature on residential mobility finds that high mobility leads to lower prosocial behaviors in the local community (e.g., O’Brien et al. 2012; Oishi et al 2007b). This would suggest that residential mobility (vs. stability) would lead to lower donations to close others. However, it is unclear whether this would apply to the donations context that we are studying, since prior work does not consider donations. In contrast, according to the donations literature (Duclos and Barasch 2014; Reed and Aquino 2003; Toure-Tillery and Fishbach 2017; Winterich et al. 2009), consumers give more donations to close than distant others; therefore, it is also possible that both mobile and stable consumers could give equally to close beneficiaries. As a result, we make no prediction about the effect of residential mobility on donations to close others.

STUDY 1: NATIONAL PANEL: RESIDENTIAL MOBILITY AND WENCHUAN EARTHQUAKE DONATIONS

Study 1 was intended to provide preliminary evidence for our predictions using national panel data that included donation behaviors. Specifically, we examined the effect of residential mobility on donation behavior for victims of the 2008 earthquake in Wenchuan, China. The Wenchuan earthquake, one of the deadliest in China, occurred on May 12, 2008, in Sichuan province. Over 69,000 people lost their lives and 374,176 were reported injured, with 18,222 listed as missing as of July 2008 (Associated Press 2008). The disaster prompted a substantial amount of donations from within China and across the globe. We examined the effect of residential mobility on donation values by past moving experiences, and by comparing donations
that were made by close others (i.e., donors living in Sichuan province) and those made by distant others (i.e., donors living in other Chinese provinces).

The Data

The data are from the China Family Panel Studies (CFPS), which is a nationally representative, annual longitudinal survey launched in 2010 by the Institute of Social Science Survey (ISSS) of Peking University, China. In the 2010 baseline survey used here, the CFPS successfully interviewed more than 15,000 families and 30,000 individuals within these families, for a response rate of about 79%. In this dataset, 33,484 respondents disclosed the amount of monetary donations to the victims of Wenchuan earthquake.

*Residential Mobility.* We constructed two measures for residential mobility based on four questions in CFPS: 1) “In which city were you born?” 2) “Did you move before age 3?” 3) “Did you move before age 12?” and 4) “In which city are you currently living?” Respondents were categorized as “never moved” if they answered “no” to both questions (2) and (3), and the disclosed cities in questions (1) and (4) were the same.

*Donation Beneficiary.* We define a respondent as “donating to a close beneficiary” when he/she was currently living in Sichuan province, and “donating to a distant beneficiary” when he/she was currently living in a different province.

Results

*Donation to Distant Beneficiary.* Our theory predicts that consumers who had moved (vs. never moved) will donate significantly more to distant beneficiaries. To form the distant
beneficiary donors, we selected the 31,464 respondents from the survey data who were not born in Sichuan and were living in one of the 22 other provinces in China. Among these respondents, 31,312 disclosed their residential mobility information. In this sub-sample, 3,912 respondents (12.49%) had moved at least once, while 27,400 respondents (87.51%) had never moved. Of those who disclosed mobility information, 22,976 respondents (73.38%) donated to Wenchuan earthquake victims and, on average, each respondent donated 197.23 Chinese Yuan (CN¥) to distant beneficiaries ($SD=712.94$, $Min=1$, and $Max=40,000$). Our dependent variable is the amount of the donation to the earthquake victims. Since the monetary donation range was very large (from CN¥ 1 to CN¥ 40,000), we used the ln-value to control for the skewness$^1$ of the data.

H1 predicts that compared to stability, residential mobility should lead to greater donations to distant others. Respondents who had ever moved, on average, donated CN¥ 338.90, whereas respondents who had never moved, on average, donated CN¥ 173.94. After controlling for other variables (the respondents’ age, gender, education, annual family income, and current residential province), the results suggest that for a distant beneficiary, consumers who had ever moved donated significantly more money than those who had never moved ($\beta = .17$, $p < .01$ see Table 1). This is consistent with H1.

![Insert Table 1 about here](image)

*Donation to Close Beneficiary.* As a comparison, to assess how residential mobility affected donations to close beneficiaries, we examined whether past moving history would affect the donation amount from people in Sichuan. The results of conditional regression analysis showed that the donation amount ($\beta = .07$, $p > .10$) was not significantly different between those

$^1$ The skewness of donation amount=32.24, and it is reduced to -0.08 after the ln-value transformation.
who had ever moved (donation amount = CN¥ 165.66) and those who had never moved (donation amount = CN¥ 118.02; see Table 2). Thus, although residential mobility affected donations to distant others, it did not affect donations to close others.

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Insert Table 2 about here

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Finally, a series of robustness checks was performed, including examining alternative sets of control variables. The effect of residential mobility still holds for donation amount. (Please see Web Appendix A for detailed results).

In summary, the panel data provides support for H1, that for distant beneficiaries, residential mobility leads to significantly more donations than does residential stability. In contrast, for close beneficiaries, residential mobility had no effect on the donation amount. In the next study, we test H1 through an experiment that measures the relationship between actual moving and donations. In particular, we examine whether moving itself makes a difference or whether the frequency of moving increases the donation amount to distant others.

### STUDY 2: MOVING FREQUENCY AND DONATION BEHAVIOR

**Method**

*Design and Procedure.* A total of 350 US residents were requested on Amazon Mechanical Turk for the experiment in exchange for a small monetary reward. Across the three experimental studies, our exclusion criteria were: 1) incomplete responses: participants who did not finish the survey; 2) participants who did not follow the instruction to complete the donation
task; 3) participants who failed attention check questions; and 4) extreme outliers. For the current study, of the 367 recorded responses, 23 participants failed to complete the survey, leaving a total of 344 usable responses (M_{age} = 34.59, SD = 12.5, 43.1% female).

The study had a 2 (Residential Mobility: Low vs. High) by 2 (Donation Beneficiary Distance: Close vs. Distant) mixed design with beneficiary distance as a between-subjects factor and residential mobility as a measured variable. Participants viewed a fundraising appeal adapted from the No Kid Hungry campaign (https://www.nokidhungry.org/). The appeal briefly described the mission of the non-profit organization as “no child should grow up hungry. But 1 in 6 children struggles with hunger. The aim of No Kid Hungry is to end child hunger by ensuring all children get the healthy food they need, every day.” Next, participants were randomly assigned to one of the two campaigns from No Kid Hungry. Participants in the close beneficiary condition viewed a poster of the No Kid Hungry campaign to help hungry children in their local area; whereas participants in the distant beneficiary condition viewed a poster of the No Kid Hungry campaign to help hungry children outside the United States. Participants were asked to make a donation decision “as you really would at this moment.” They were told to imagine receiving a $10 bonus payment that they could donate to the No Kid Hungry campaign that they had seen earlier or keep the $10 bonus payment (see details in Web Appendix B). Participants were asked how much out of the $10 they would donate, which was the main dependent measure.

Measures. Residential mobility was assessed with both categorical and continuous measures. Participants were asked if they had ever moved from one city to another, and the responses were coded as a categorical variable (Never moved = 0, 11.3%; Ever moved = 1, 88.7%). They also indicated how many times they had moved from one city to another as a continuous
measure of residential mobility (0=never moved, 1=once, 2=twice, 3=three times, 4=four times, 5=five times, 6=six times, 7=more than seven times). Finally, they completed demographic questions including their current household income, age and gender.

Results and Discussion

First, we examined whether the categorical moving variable affected donation amount to close or distant beneficiaries. A 2 (Residential Mobility) X 2 (Beneficiary) ANOVA revealed a significant main effect of donation beneficiary distance ($F(1,340)=4.15, p=.042, \eta^2_{p} = .012$) and a non-significant main effect of residential mobility ($F(1,340)=.001, p=.97$). This was qualified by a significant interaction effect ($F(1,340)=7.83, p=.005, \eta^2_{p} = .023$). See figure 1.

Consistent with H1, when the beneficiary was distant (i.e., hungry children in another country), participants who had moved indicated that they would donate significantly more money ($M=$5.48, $SD=3.52$) than participants who had never moved ($M=$3.90, $SD=3.29$, $F(1,340)=4.07, p=.044, \eta^2_{p} = .012$). The reverse was true for donations to close beneficiaries (i.e., hungry children in the local area). Compared to not moving, moving led to marginally lower donation amounts ($M=$5.05 vs. $6.67$, $F(1,340)=3.78, p=.053, \eta^2_{p} = .011$).

To look at the data another way, participants who had never moved donated significantly more to close than distant beneficiaries ($M=$6.67 vs. $3.90$, $F(1,340)=6.59, p=.011, \eta^2_{p} = .019$). However, there was no significant difference for donation amount to close and distant beneficiaries among participants who had ever moved ($M=$5.05 vs. $5.48$, $F(1,340)=1.28, p=.26$). Controlling for household income resulted in a similar pattern (see Web Appendix B).
We then tested the effect of residential mobility as a continuous variable, running a multiple regression with the donation amount as the dependent measure, and donation beneficiary (0=close, 1=distant), frequency of move ($M=3.33$, $SD=2.25$, min$=0$, max$=7$), and their interaction as the predictors (Spiller et al. 2013). The results revealed a significant main effect of donation beneficiary ($b=-1.68$, $t=-2.72$, $p=.006$), a marginally significant main effect of frequency of moving ($b=-.19$, $t=-1.68$, $p=.09$), and the predicted significant interaction ($b=.58$, $t=3.52$ $p<.001$). The results suggest that past moving frequency positively predicted donations towards distant beneficiaries ($t=3.32$, $p=.001$). Consistent with H1, high mobility participants donated significantly more to distant beneficiaries than low mobility participants (see figure 2). For close beneficiaries, past moving frequency marginally negatively predicted donations towards close others ($t=-1.68$, $p=.09$).

In summary, Studies 1 and 2 support H1 that residential mobility (vs. stability) leads to greater donations to distant beneficiaries. Moreover, both the categorical and continuous measure of residential mobility revealed similar patterns, suggesting that moving as well as the frequency of moving affects donations. One limitation of the studies is that the results are correlational. In the next study, we manipulate a residential mindset to show causality, and measure actual donations.

**STUDY 3: MANIPULATING RESIDENTIAL MOBILITY AND REAL DONATION TO DISTANT VS. CLOSE BENEFICIARIES**
Manipulation Pretest

The manipulation of a residential mobility mindset was adapted from prior research (Lun et al. 2012). To ensure that the manipulation makes moving-related associations salient, we tested it with a sample of 200 undergraduate students ($M_{age} = 20.78, SD=.83, 71.2\%$ female). The manipulation involves a visualization and writing task, and participants were randomly assigned to three different conditions. Participants in the mobile condition were asked to imagine that they were offered a job they had always wanted, and that the job also involved moving to a different location every other year. Participants in the stable condition were asked to imagine that they were offered a job they had always wanted, and that the job involved living in one area for the next ten years. Participants were then asked to write about what it would be like for them to have such a lifestyle, and what was good and bad about it. Participants in the control condition were asked to imagine that they were doing laundry and then asked to write about the steps they would need to complete the task. Past research has found that this manipulation produces a neutral affective state (Griskevicius, Shiota and Nowlis 2010, see Web Appendix C for stimuli).

Next, they did a word completion task which contained 12 words. Four of the 12 were focal words that could be related to moving (e.g., MOVE) or unrelated to moving (e.g., MORE). We calculated the number of words participants completed that matched the focal words related to moving (e.g., move, leave, change and mobile). The results showed that participants in the mobile condition identified a significantly higher number of focal words than did those in either the control ($M = 2.57$ vs. 2.13, $F(1, 197)=6.10, p=.014, \eta^2_p = .030$) or stable conditions ($M=2.57$ vs. 2.23, $F(1, 197)=3.68, p=.05, \eta^2_p = .018$). The means in the stable and control condition were
not significantly different ($F(1, 197)=.33, p=.57, \eta^2_p = .002$). Thus, the manipulation of residential mobility mindset made moving related associations more salient.

Method

Two hundred seventy-two US undergraduate students ($M_{\text{age}}=20.44$, $SD= 1.80$, 45.4% female) were randomly assigned to a 2 (Residential Mobility Mindset: Mobile vs. Stable) by 2 (Beneficiary Distance: Close vs. Distant) between-subjects design. Twenty-one participants did not follow the donation instructions and were excluded, leaving 251 participants for the final analysis. The residential mobility manipulation was identical to the one in the pretest. After completing the writing task, participants were directed to a second study in which they were asked to open an envelope placed on their desk in the behavioral lab. The envelope contained $2 (in quarters) that they would receive as a thank you for participating in the study. Next, participants were told about the opportunity to donate money to a charity of their choice: “In an effort to increase social awareness, we usually ask participants in our lab if you would like to make a small donation (up to $2) to a charity of your choice from the following organizations.” Participants in the close beneficiary condition saw descriptions of two charities targeting close beneficiaries (Save the Children XX State Program and Direct Relief In-State Chapter).

Participants in the distant beneficiary condition saw the same two charities targeting distant beneficiaries (Save the Children Global Program and Direct Relief International Chapter).

Participants in both conditions also had the option of no donation. Next, they were asked how much (if any) they would like to donate from their $2; they were directed to take the money they decided to keep for themselves and put the donated amount back into the envelope. This
procedure ensured that no one would see the donation amount, reducing social desirability bias. They were also told that the lab would donate the money to their chosen organizations, which we did. The main dependent measure was the amount of money donated. Finally, past moving frequency was measured by asking participants to recall the number of times they had moved to a new city or town. We intended to use this as a covariate, as the manipulation of residential mobility might have different effects for consumers with different rates of moving. Participants also provided basic information, such as gender and age.

Results and Discussion

A 2 (Residential Mobility) X 2 (Beneficiary Distance) ANOVA on donation amount revealed a significant interaction ($F(1, 247) = 10.48, p = .001, \eta^2_p = .041$). The main effects of residential mobility and beneficiary distance were not significant ($p_s > .62$). Consistent with H1, mobile participants donated significantly more money to distant beneficiaries than did stable participants ($M = $1.56, SD = .74 vs. $M = $1.18, SD = .87, $F(1, 247) = 7.12, p = .008, \eta^2_p = .028$). See figure 3. Furthermore, mobile participants donated marginally less money to close beneficiaries than did stable participants ($M = $1.23, SD = .88 vs. $M = $1.51, SD = .73, $F(1, 247) = 3.68, p = .056, \eta^2_p = .015$). Looked differently, participants in the stable condition donated significantly more money to close than distant beneficiaries ($M = $1.51 vs. $M = $1.18, $F(1, 247) = 5.32, p = .022, \eta^2_p = .021$), consistent with prior literature. Finally, participants in the mobile condition donated significantly more money to distant than close beneficiaries ($M = $1.56 vs. $M = $1.23, $F(1, 247) = 5.17, p = .024, \eta^2_p = .020$).
Next, we examined the role of frequency of moving as a covariate (see Web Appendix C). Even after controlling for the number of times moved, the interaction effect of residential mobility mindset and beneficiary distance on donation amount remained significant ($F(1, 246)=10.23, p=.002, \eta^2_p =.040$). Thus, H1 is supported.

In summary, we found support for H1 using an experimental approach and actual donations. In addition, the mindset manipulation was not affected in a systematic way by participants’ actual past moving experiences. Therefore, it appears that the manipulation of residential mobility is an effective way to activate consumers’ moving mindset, leading to similar results as actual residential mobility. In the next study, we test H2, the underlying process of global identity. We also examine an alternative explanation that heightened individualism might underlie residential mobility. Given that the personal self was more central to the self-definition of frequent movers than to that of non-movers (Oishi, et al. 2007a), one might argue that residential mobility may cause consumers to have a stronger sense of individualism. This increased individualism may affect donations towards distant others.

**STUDY 4: THE MEDIATING ROLE OF GLOBAL IDENTITY**

We first ran a pilot study to assess the effect of residential mobility on global and local identity (See Web Appendix D). The results showed that residential mobility enhances global identity without affecting local identity.

Method
A pre-registered study was conducted with a target sample of 600 participants on Prolific (https://osf.io/25fsh). Seven hundred and fifty participants were requested in exchange for a small monetary reward. A total of 628 complete responses were recorded ($M_{age} = 30.76$, $SD=10.21$, 47% female, see exclusion criteria in Web Appendix D) and were randomly assigned to one of four conditions in a 2 (Residential Mobility Mindset: Mobile vs. Stable) by 2 (Beneficiary Distance: Close vs. Distant) between-subjects design.

After the residential mobility mindset manipulation, participants completed the global identity and local identity measures from Tu, Khare and Zhang (2012). Four items captured global identity (i.e., “My heart mostly belongs to the whole world;” “I care about knowing global events;” “I believe people should be made more aware of how connected we are to the rest of the world;” “I identify that I am a global citizen.”); and four items captured local identity (e.g., “My heart mostly belongs to my local community;” “I care about knowing local events;” “I respect my local traditions;” “I identify that I am a local citizen.”). These items were combined to form indices of global ($\alpha=.82$) and local identity ($\alpha=.79$). Next, participants were directed to a second study in which they were asked to review some fundraising materials. Participants imagined that they had just earned a check for $100 from their part-time job and were asked if they would like to donate some of the money to a charity organization. Participants in the close beneficiary condition saw descriptions of the charity targeting close beneficiaries (Save the Children In-State Chapter), while participants in the distant beneficiary condition saw the same charity targeting distant beneficiaries (Save the Children Global Chapter). They then indicated how much they would like to donate from $0$ to $100$.

After the donation decision, participants were told that the next part of the study was about their memory and were asked to recall and write about the imagination task they had
before about the job. This was designed to boost the manipulation of residential mobility to assess its effect on individualism and collectivism. Participants completed the four different dimensions of individualism and collectivism on a 16-item and 9-point scale (1=definitely no, 9=definitely yes; Triandis and Gelfland 1998). Finally, participants reported how many times they had moved in the past, age, gender, education level and income.

Results and Discussion

Donation Amount. A 2 (Residential Mobility) X 2 (Beneficiary Distance) ANOVA on donation amount revealed a significant interaction ($F(1,624)=4.30$, $p=.039$, $\eta^2_p = .007$), and non-significant main effects of residential mobility ($F(1,624)=.61$, $p=.43$) and donation beneficiaries $F(1,624)=.07$, $p=.78$). Consistent with H1, mobile participants donated significantly more money to distant others ($M=$20.60, SD=25.24) than did stable participants ($M=$15.36, SD=20.66, $F(1,624)=4.13$, $p=.046$, $\eta^2_p = .006$). However, there was no significant difference between mobile ($M=$17.30, SD=21.08) and stable participants’ ($M=$19.67, SD=24.42, $F(1,624)=.85$, $p=.36$, $\eta^2_p = .001$) donation to close others. See figure 4. Finally, for mobile participants, donations for distant and close others were not significantly different ($F(1,624)=1.59$, $p=.21$). In contrast, and consistent with prior donations literature, stable participants donated marginally more to close than distant others ($F(1,624)=2.81$, $p=.094$, $\eta^2_p = .004$).

Global Identity and Local Identity. We examined whether the manipulation of residential mobility affected participants’ global identity and local identity. Consistent with the pilot study, participants in the mobility condition had a significantly stronger global identity than did those in
the stability condition ($M=5.13$ vs. $4.93$, $F(1,626)=3.97$, $p=.047$, $\eta^2 = .006$). However, the differences among participants’ local identity between mobility and stability conditions were not significant ($M=4.64$ vs. $4.52$, $F(1,626)=1.56$, $p=.21$).

**Moderated Mediation Analysis.** To test H2 that global identity is the mediator, we ran a moderated mediation PROCESS model (Hayes 2018, Model 15; using 10,000-bootstrap resampling). Residential mobility was used as the predictor variable, beneficiary distance as the moderator, global identity as the mediator, and donation amount as the dependent measure. The analysis showed that global identity significantly mediated the effect from residential mobility on donations when the beneficiaries were distant (i.e., global chapter, $b=1.39$, $SE=.74$, CI: [.05, 3.01]), but not when the beneficiaries were close (i.e., local chapter, $b=.45$, $SE=.35$, CI: [-.05, 1.30]). The index of moderated mediation also showed a significant difference between conditional indirect effects (index=.93, $SE=.58$, CI: [.01, 2.29]). Running these analyses with past moving experiences as a covariate yielded the same pattern of significant results. For completeness, we also ran a moderated mediation analysis with local identity as the mediator. The results showed that local identity was not a significant mediator for the effects on close (CI: [-.22, 1.26]) or distant others CI: [-.32, .44]). The overall index of moderated mediation was also not significant (CI: [-1.28, .23])

**Alternative Explanation: Individualism.** Finally, we tested whether individualism represented an alternative explanation for the findings. A one-way ANOVA showed no significant differences between participants in the mobile and stable conditions on horizontal individualism ($M=28.37$ vs. 28.19, $F(1,626)=.23$, $p=.64$) or vertical individualism ($M=19.77$ vs. 19.98, $F(1,626)=.16$, $p=.69$). Furthermore, a moderated mediation analysis using residential mobility as the predictor, beneficiary distance as the moderator, horizontal individualism or
vertical individualism as the mediator, and donation amount as the dependent variable confirmed that none of them can explain the effects (index=.13, SE=.36, CI: [-.46, 1.01]; index=.06, SE=.24, CI: [-.41, .61], see all results in Web Appendix D). Thus, individualism is not an alternative explanation. Moreover, there were no significant differences between participants in the mobile and stable conditions on horizontal collectivism ($M=26.08$ vs. $26.27$, $F(1,626)=.20$, $p=.66$) or vertical collectivism ($M=24.65$ vs. $23.87$, $F(1,621)=2.37$, $p=.12$).

In summary, both Study 4 and the pilot study show that the residential mobility mindset manipulation heightens global identity while leaving local identity unaffected. In addition, global identity mediated the effect of residential mobility on donations to distant beneficiaries. Finally, we rule out individualism as an alternative explanation of the underlying process.

**GENERAL DISCUSSION**

Across four studies, we show that high (vs. low) residential mobility leads to greater donations to distant beneficiaries. This finding was robust across a national panel data set as well as an experiment with real monetary contributions in the lab. It also held when measuring actual moving experiences as well as manipulating a residential mobility mindset. We demonstrated that high mobility consumers’ heightened global identity underlies this relationship. Finally, we ruled out alternative explanations for the underlying process, including individualism (study 4) and perceived control (study reported in Web Appendix E). These findings contribute to our understanding of two streams of literature: charitable donations and residential mobility.

Implications for Research and Practice on Consumer Donations
Our results contribute to the literature on prosocial behavior by identifying residential mobility as a factor that can increase donations to distant beneficiaries. Consistent with prior findings that consumers generally are more motivated to help close others (Batson et al 1981; Krebs 1975, Toure-Tillery and Fishbach 2017), aggregate donation data suggest that prosocial requests from distant beneficiaries prompt fewer donations (Cavanaugh et al. 2015; Giving USA 2019). As such, it is important both theoretically and substantively to identify factors that can increase donations to distant others. Residential mobility joins other factors that can increase donations to distant others, such as love, moral identity and gender identity (Cavanaugh et al. 2015; Reed and Aquino 2003; Winterich et al. 2009). A commonality across these factors is that they broaden consumers’ identity to include distant others in the sense of self. We found that residential mobility evokes a global identity, where consumers see themselves as world citizens, care about knowing global events, and feel connected to the world. As a result, high (vs. low) mobility consumers are likely to donate more to distant others.

Across all the studies, we found consistent support for H1, that residential mobility (vs. stability) increases donations to distant others (see Web Appendix E for a table summarizing the results across studies). We also found support for the findings of prior donations literature that stable consumers donate more to close than distant others. Interestingly, the other two contrasts did not provide a clear picture. In all but study 3, mobile consumers donated equally to close and distant beneficiaries. Moreover, residential mobility (vs. stability) either marginally decreased (or did not affect) donations to local beneficiaries. In both studies 1 and 4, there was no effect of mobility on donations to local beneficiaries; in studies 2 and 3 (as well as the replication study in Web Appendix E), there was a marginal negative effect, with high (vs. low) mobility leading to
lower donations to local beneficiaries. One of the reasons for the mixed results may be that the underlying process for donations to close beneficiaries is likely to be different. In two studies (study 4 and pilot), we found that local identity remained the same across residential mobility and stability, which may be surprising given prior work on residential mobility. Future research can investigate the mechanisms underlying the influence of residential mobility on consumers’ prosocial behaviors towards close others. For example, residential mobility, compared to stability, may make consumers think they can benefit less from helping close others because they are going to move, and such a concern may have a negative impact on such donations. Alternatively, other factors may affect this relationship, including the relative length of stay in the local vs. nonlocal community, the quality of stay (positive vs. negative experiences), and the timing of the stay (childhood vs. adulthood). These moderators are worth examining to get a clearer picture of the overall pattern of donations.

An important practical implication of our findings is that boosting global identity may lead to greater donations to distant others even among consumers with low mobility. Based on our findings, activating consumer’s global identity should increase donations of low mobility consumers to distant others. For example, charitable organizations often use pictures or descriptions of distant beneficiaries in their appeals, such as mentioning people in need in Africa or Latin American. Given the low amount of giving to international causes, it seems that merely picturing distant beneficiaries is insufficient to raise global identity. Instead, charitable organizations could use other global cues, such as reminders of travel to other countries, pictures of famous global icons, or slogans that trigger consumers to feel they are part of a global community. These cues are likely to increase the accessibility of global identity, potentially leading to higher donations to distant others. Such manipulations could be tested in a field
experiment where different groups receive appeals that either heighten or do not heighten global identity. We encourage future research to use and test our proposed effects in the field.

Another practical implication is that charitable organizations could use Census data or mobile phone usage data to identify communities, where residential mobility is high, such as cosmopolitan areas like New York City or London. They could then target these communities for donations to distant others. For example, in order to increase donations to distant beneficiaries, Feed the Children could use an appeal that stated that children in Lagos or Bogota are struggling with hunger. In other words, a national or international appeal might be more effective to solicit donations from a high (vs. low) mobility consumer.

Implications for Research on Residential Mobility

We contribute to the literature on residential mobility by increasing our understanding of the effects of mobility on prosocial behavior. Prior work on residential mobility has largely found negative prosocial consequences of mobility, such as higher crime rates (Shaw and McKay 1942; Sampson and Groves 1989; Sampson et al. 1997) and less positive action towards the local community (O’Brien et al. 2012, Oishi et al. 2007b; Sampson et al. 1997). However, we find that high mobility consumers are not intrinsically anti-social; rather, they behave more prosocially than low mobility consumers toward geographically distant communities. One reason for this discrepancy is that the target of prosocial behavior in prior work has been the local community rather than geographically distant communities. For instance, Oishi et al (2007b) examined the effect of residential mobility on purchase of local habitat license plates or support of a local sports team. Our work suggests that mobile consumers may behave prosocially toward distant
others, such as those in other parts of the nation or the world. Having a global identity makes consumers relate to places and people outside their local communities, increasing donations to distant others.

An important theoretical contribution to the residential mobility literature is to identify global identity as the mechanism underlying residential mobility. In doing so, we found that although a residential mobility mindset enhances global identity, it does not affect local identity. The results on local and global identity were the same across both undergraduate students (study 4 pilot study) and Prolific workers (study 4), increasing their generalizability. One question this raises is why low mobility consumers do not have a higher local identity than do high mobility consumers. One possibility is that the measure of local identity, based on the work of Tu et al. (2012), is not sufficiently nuanced. For one thing, the term “local” may be ambiguous, as it can have many meanings, such as one’s neighborhood, county, city, or even state. Any of these may be perceived as local in different contexts, and connectedness to neighborhoods, cities and states may be different. Future research may examine different ways of measuring local identification that might capture differences relevant to our inquiry.

Another interesting aspect of residential mobility is the co-existence of moving to metropolitan versus suburban areas. One natural question following the current study is to what extent our findings vary among groups of consumers with different types of residential changes. For example, would consumers experience the same psychological change if they moved from a small town to a big city compared to from one small town to another small town? Similarly, how might moving during different life stages can impact consumer behavior? Studies have shown that certain life stages, such as adolescence, have particularly lasting effects on one’s behavior (Mofitt 1993), so future research could investigate how global identity is affected by the timing
of the move. Finally, the nature of the move will also affect consumer response. Moving for a new job is both voluntary and potentially exciting, opening consumers up to new experiences and cultures and enhancing their global identity. It is possible that if moving resulted in negative experiences, including loss of social ties or a feeling of being forced to move, mobility may not lead to a global identity. These moderators could be investigated in future research.

We defined residential mobility in terms of moving to a new city or further, as this is more likely to open consumers up to new ideas compared to moving within the same city. Our results might be stronger if we examined a population that had moved to different countries rather than different cities, as that would be more likely to enhance global identity. The fact that we find that global identity matters even in our situation is a conservative test of our process. An interesting question is the extent to which moving within a city might also broaden consumers’ perspective. We speculate that any move is likely to expose consumers to new experiences, though it might not trigger a global identity. Future research could examine the effect of intra-city moves on consumer behavior.
DATA COLLECTION INFORMATION

All the participants were randomly assigned to different conditions and all computer surveys were programmed using Qualtrics. The data collection for studies 2-4 was supervised by the first author. Study 2 was collected through Amazon Mechanical Turk Online panel during May 2017 by a research assistant. Study 4 was collected through Proftic Online panel during July 2020 by the first author. The replication study reported in the Web Appendix E was collected through Amazon Mechanical Turk Online panel during March 2020 by the first author. The manipulation check pretest of study 3 was collected at the University of Maryland at College Park behavioral lab during October 2019. Study 3 was collected at the University of Maryland at College Park behavioral lab between September and October 2019. The pilot study of Study 4 was collected at the University of Maryland at College Park behavioral lab during November 2019. Lab manager and research assistants who were blind to the hypotheses conducted these study. The third author did the data analysis of study 1, and the first author did the data analysis for study 2, 3, 4. The results of the experimental studies were discussed by the first and second authors. All the data are currently stored in a project directory on the Open Science Framework.
REFERENCES


U.S. Census Bureau (2019), CPS Historical Migration/Geographic Mobility Tables, accessed in August 2020 at https://www.census.gov/data/tables/time-series/demo/geographic-mobility/historic.html


Table 1: The Effect of Residential Mobility on Donation Amount  
(Distant Beneficiary)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coef. (std. err.)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Mobility</td>
<td>0.17 (0.03) ***</td>
<td>6.43</td>
</tr>
<tr>
<td>(1: Ever Moved; 0: Never Moved)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ln (Family Annual Income)</td>
<td>0.41 (0.01) ***</td>
<td>44.51</td>
</tr>
<tr>
<td>Current Residential Provinces (Fixed Effect)</td>
<td>Included</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.01 (0.001) ***</td>
<td>17.66</td>
</tr>
<tr>
<td>Gender (Male=1; Female=0)</td>
<td>-0.12 (0.02) ***</td>
<td>-6.52</td>
</tr>
<tr>
<td>Education (years)</td>
<td>0.09 (0.002) ***</td>
<td>40.41</td>
</tr>
<tr>
<td>cons.</td>
<td>-0.81 (0.14) ***</td>
<td>-5.71</td>
</tr>
<tr>
<td>N obs.</td>
<td>21,458^2</td>
<td></td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>0.26</td>
<td></td>
</tr>
</tbody>
</table>

*** significant at the 99% level

---

^2 The change of observation is due to conditional regression analysis. In this model, we analyze the donation amount conditional on people deciding to make the donation.
Table 2: The Effect of Residential Mobility on Donation Amount  
(Close Beneficiary)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coef. (std. err.)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Mobility (1: Ever Moved; 0: Never Moved)</td>
<td>0.07 (0.15) NS</td>
<td>0.48</td>
</tr>
<tr>
<td>ln (Family Annual Income)</td>
<td>0.37 (0.03) ***</td>
<td>11.99</td>
</tr>
<tr>
<td>Age</td>
<td>0.01 (0.002) ***</td>
<td>4.23</td>
</tr>
<tr>
<td>Gender (Male=1; Female=0)</td>
<td>-0.12 (0.08) NS</td>
<td>-1.51</td>
</tr>
<tr>
<td>Education (years)</td>
<td>0.10 (0.01) ***</td>
<td>10.52</td>
</tr>
<tr>
<td>cons.</td>
<td>-0.30 (0.30) NS</td>
<td>-1.00</td>
</tr>
<tr>
<td>N obs.</td>
<td>1,015</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.26</td>
<td></td>
</tr>
</tbody>
</table>

NS: not significant at the 90% level; * significant at the 90% level  
** significant at the 95% level ; *** significant at the 99% level
FIGURE 1: STUDY 2 DONATIONS TO DISTANT VS. CLOSE BENEFICIARIES AS A FUNCTION OF RESIDENTIAL MOBILITY

<table>
<thead>
<tr>
<th></th>
<th>Distant Beneficiary</th>
<th>Close Beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Moved</td>
<td>$3.9</td>
<td>$6.67</td>
</tr>
<tr>
<td>Ever Moved</td>
<td>$5.48</td>
<td>$5.05</td>
</tr>
</tbody>
</table>

The chart above illustrates the average donations to distant and close beneficiaries as a function of residential mobility. The data indicates that individuals who have never moved donate slightly less than those who have ever moved, with the exception of close beneficiaries, where the donation amount is higher than in the distant category for both groups.
FIGURE 2: STUDY 2 DONATIONS TO DISTANT VS. CLOSE BENEFICIARIES AS A FUNCTION OF RESIDENTIAL MOBILITY AS A CONTINUOUS MEASURE
FIGURE 3: STUDY 3 DONATIONS TO DISTANT VS. CLOSE BENEFICIARIES AS A FUNCTION OF RESIDENTIAL MOBILITY
FIGURE 4: STUDY 4 DONATIONS TO DISTANT VS. CLOSE BENEFICIARIES AS A FUNCTION OF RESIDENTIAL MOBILITY
1) THE THEORETICAL FRAMEWORK

2) Beneficiary Distance

2) What is Residential Mobility?

2) Residential Mobility, Global Identity, and Beneficiary Distance

1) OVERVIEW OF STUDIES

1) NATIONAL PANEL: RESIDENTIAL MOBILITY AND WENCHUAN EARTHQUAKE DONATIONS

2) The Data

3) Residential Mobility

3) Donation Beneficiary

2) Results

3) Donation to Distant Beneficiary

3) Donation to Close Beneficiary

1) STUDY 2: MOVING FREQUENCY AND DONATION BEHAVIOR

2) Method

3) Design and Procedure

3) Measures

2) Results and Discussion

1) STUDY 3: MANIPULATING RESIDENTIAL MOBILITY AND REAL DONATION TO DISTANT VS. CLOSE BENEFICIARIES

2) Manipulation Pretest

2) Method

2) Results and Discussion
1) STUDY 4: THE MEDIATING ROLE OF GLOBAL IDENTITY

2) Method

2) Results and Discussion

3) Donation Amount

3) Global Identity and Local Identity

3) Moderated Mediation Analysis

3) Alternative Explanation: Individualism

1) GENERAL DISCUSSION

2) Implications for Research and Practice on Consumer Donations

2) Implications for Research on Residential Mobility