

**Moral Universalism:
Measurement and
Heterogeneity**

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Impressum:

CESifo Working Papers

ISSN 2364-1428 (electronic version)

Publisher and distributor: Munich Society for the Promotion of Economic Research - CESifo GmbH

The international platform of Ludwigs-Maximilians University's Center for Economic Studies and the ifo Institute

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Editor: Clemens Fuest

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Moral Universalism: Measurement and Heterogeneity

Abstract

This paper introduces a new set of simple experimentally-validated survey games to measure moral universalism: the extent to which people exhibit the same level of altruism and trust towards strangers as towards in-group members. In a representative sample of the U.S. population, an individual's degree of universalism is largely a domain-general trait. Older people, men, whites, the rich, the rural, and the religious exhibit less universalist preferences and beliefs. Looking at economic behaviors and outcomes, universalists donate less money locally but more globally, are less likely to exhibit home bias in equity and educational investments, have fewer friends, and report being more lonely.

Keywords: moral universalism, in-group bias.

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October 17, 2019

We thank Chris Roth for helpful comments.

1 Introduction

This paper introduces a new set of simple and portable experimentally-validated survey games to measure and study heterogeneity in moral universalism: the extent to which people exhibit the same level of altruism and trust towards strangers as towards in-group members. Economists have long been interested in studying prosocial behavior. Most of this literature does not take a stand on who “the other” is: widely used experimental games such as the dictator game are designed to illuminate tradeoffs between “me vs. you,” rather than “us vs. them.” At the same time, both psychologists and economists have long been aware that prosociality can be parochial in nature: people are not fully universalist but instead expend more altruism towards, and are more likely to trust, members of their own social groups such as co-ethnics, family members, or people with similar political views (Fershtman and Gneezy, 2001; Goette et al., 2006; Bernhard et al., 2006; Sutter and Kocher, 2004; Bauer et al., 2018; Kranton et al., 2016; Berge et al., 2018). Yet while there is now a considerable body of evidence on such parochialism or in-group favoritism in specific domains, little work has focused on (i) developing a simple and portable measurement tool that allows to identify universalism in a general way, rather than with respect to a specific in-group; (ii) understanding the consistency with which people are (not) universalist across different in-groups or domains (beliefs vs. preferences); (iii) documenting individual-level heterogeneity in universalism and corresponding sociodemographic correlates; and (iv) understanding the relationship between heterogeneity in universalism and economic decision-making.

This paper develops and experimentally validates a survey-based measure of moral universalism in altruism and trust with respect to a wide range of potential in-groups. By deploying our measure in a survey of a large representative sample of the U.S. population, we document that (i) an individual’s degree of universalism appears to be a fairly domain-general trait that is rather insensitive to the choice of specific in-groups or the choice domain (altruism or trust beliefs); (ii) individuals exhibit large heterogeneity in universalism, which correlates with a range of socio-demographic variables; and (iii) our measure of universalism is systematically related to relevant economic and social behaviors and outcomes.

The paper starts with conceptualizing universalism in a utilitarian framework. We highlight that the defining characteristic of universalists is not that they are “more” or “less” moral people, but simply that they expend a given altruism or trust budget more uniformly across people of varying social distance from them. Hence, by definition, more universalistic people are relatively more altruistic towards, and more likely to trust, strangers, but they are relatively less altruistic and trusting towards in-group members, such as friends, neighbors, or co-ethnics.

Our empirical measure of universalism in altruism derives from a series of money allocation games in a spectator design, in which survey participants split the hypothetical sum of \$100 between a random person and a member of one of the participant's social groups. This spectator design has the attractive feature that it does not rely on the detour of self-other tradeoffs and hence holds the overall level of a respondent's altruism constant by construction.

Ideally, we would like to capture universalism for the universe of social groups, yet this is infeasible in practice. Our approach is hence to select a broad range of in-groups based on an ex-ante crowdsourcing exercise. We then vary the specific identity of the in-group member and the stranger in the allocation games to construct measures of domestic, foreign, and global universalism in altruism.

First, domestic universalism measures tradeoffs between a domestic in-group member and a random domestic person. Here, the list of social groups includes the respondent's extended family, neighbors, friends of the family, colleagues, organization (e.g., club) and people who share the respondent's hobbies, religious beliefs, age, political views, or race. Second, foreign universalism is measured by asking respondents to split \$100 between a random person who lives in the U.S. and a random world citizen. Third, global universalism is derived from allocation games in which the potential recipients are either random world citizens or global in-group members such as someone who speaks the respondent's language or shares their religious beliefs. In total, respondents complete a set of 16 money allocation games. We combine the domestic, foreign, and global universalism components into a summary statistic of universalism in altruism.

Similarly, we estimate an individual's degree of universalism in trust. To this effect, respondents complete the same 16 allocation games as described above, yet split 100 trust points (rather than \$100) to indicate which of two individuals they trust more. Again, this yields summary measures of domestic, foreign, and global universalism, which we collapse into a summary statistic of universalism in the trust domain.

We validate these decision tasks in various ways. (i) While our tasks are hypothetical in nature, we implement an ex ante experimental validation procedure in which we show that behavior in our hypothetical money allocation tasks is strongly correlated with behavior in the same financially incentivized money allocation games. (ii) We show that responses to our trust questions are strongly correlated with beliefs in a structured experimental cheating task. (iii) We document empirically that universalism as estimated from our specific set of 15 domestic and global social groups is almost perfectly correlated with universalism as measured in a larger set of 40 such social groups.

To shed light on the internal structure of universalism and its relationship with economic behaviors and outcomes, we deploy our new instruments in a large-scale pre-registered nationally representative internet survey of the U.S. population ($N \approx 6,600$).

Our analysis begins by decomposing the variation in decisions in our 32 money and trust point allocation games. We find that more than 30% of the variation in the data is due to respondent fixed effects. In contrast, less than 10% of the variation in the data are due to fixed effects for specific in-groups. These patterns imply that a respondents's degree of universalism is a reasonably domain-general trait that is partly invariant to the domain (beliefs or preferences) and choice of in-group. Moreover, our summary measures of universalism in altruism and trust are fairly highly correlated with each other ($\rho = 0.56$), which again suggests that these different dimensions indeed reflect the same underlying psychology. Further analyses suggest that participants' consistency across choice tasks is not mechanically driven by "laziness", but indeed reflects deliberate decisions that vary in meaningful and internally consistent ways across social groups. The basic insight that respondents exhibit an encouraging degree of consistency motivate the development of a *short measurement module* for universalism that can be used as a reliable instrument when survey or experimental time is a binding constraint.

Next, we study individual-level heterogeneity in universalism and its sociodemographic correlates. While many participants consistently favor their in-groups, others essentially never discriminate based on group membership. This heterogeneity is partly explained (in a descriptive sense) by observables: older people, men, whites, the rich, people with lower cognitive skills, the rural, and the religious exhibit less universalist preferences and beliefs, on average. Here, the strongest correlations are found with age and religiosity.

In a final step of the analysis, we investigate the potential economic and social relevance of heterogeneity in moral universalism. To this effect, we focus on four sets of pre-registered outcomes and behaviors: donation decisions, home bias in equity and educational investments, and the structure of people's social networks. First, we document that more universalist people donate less money locally (to local community organizations or churches); at the same time, universalists donate more money to nationwide and global charities. Thus, the type of universalism that we pick up with our survey games is related to economically meaningful differences in real donation decisions, highlighting the external validity of our measurement tool.

Second, we elicit measures of home bias in equity investments. It is well-known in the finance literature that people on average exhibit so-called equity home bias, whereby they underdiversify internationally and invest considerably less money into foreign companies relative to domestic ones than seems warranted given actual risk-return profiles and transaction cost differences. We measure equity home bias by eliciting the value of national and international stocks participants own. In addition, we asked participants how they would invest a hypothetical budget between a manufacturer in the U.S. and one outside the U.S. For both actual and hypothetical equity investments, we find that

universalists exhibit less home bias.

Third, we obtain a measure of “home bias” in educational investments. It is conceivable that non-universalists are less open to move away for educational purposes, because they might value and trust their local environment more. We hence ask respondents whether they would advise their child to attend a local college, or a college that is geographically distant but ranked slightly higher. We find that universalists are more likely to advise their children to study at a faraway college.

Finally, we elicit a range of pre-registered measures related to social capital and social ties. The rationale for doing so is that universalists – by virtue of expending their altruism and trust budget more uniformly – might invest less into friends and well-functioning local networks. Indeed, moral philosophers in the communitarian tradition have long argued that moral universalism produces atomized and socially isolated individuals (Sandel, 2005; Etzioni, 1994). To empirically assess this, we measure how many friends and acquaintances our respondents have, how much time they spend with them, how often participants give and receive help within their local community, and whether they feel that they live a socially rewarding or lonely life. In line with our hypothesis, we find that universalists have fewer friends and acquaintances, spend less time with their social contacts, and report being more lonely.

Our paper fits into the small lab-to-field literature on in-group bias and parochialism cited in the opening paragraph and recently reviewed by Lane (2016). This literature has mostly used dictator games (self-other tradeoffs) to measure parochialism, while we rely on spectator designs that have recently received increased attention in other work on social preferences (Cappelen et al., 2013a,b). Other work in political economy and cultural economics has measured universalism using more qualitative psychological questionnaires that include a broad swath of both utilitarian and deontological moral concepts (Enke, 2018, 2019; Haidt, 2012). Our paper contributes to these literatures by (i) developing and validating a portable measurement device for moral universalism that can easily be deployed in surveys and experiments and does not rely on the detour of self-other tradeoffs, (ii) measuring universalism with respect to a large set of in-groups rather than one or two specific identities, (iii) studying heterogeneity in universalism and corresponding correlates, (iv) relating universalism to a range of relevant economic and social behaviors and outcomes. In Enke et al. (2019), we deploy the measurement tool in this paper in a new seven-country survey to study the link between universalism and the structure of political ideology. Other recent large-scale survey or experimental work on social preferences includes Almås et al. (2019), Cohn and Maréchal (2019) and Falk et al. (2018).

The remainder of the paper is organized as follows. Section 2 describes our measurement tool and corresponding validation steps. Sections 3–5 describe the survey data

and study individual-level heterogeneity in universalism. Section 6 shows results relating universalism to economic behaviors and outcomes, and Section 7 concludes.

2 Conceptualizing and Measuring Universalism

2.1 Defining Universalism

Figure 1 provides a stylized illustration of how we think about universalism in altruism, adapting the idea behind the models in [Tabellini \(2008\)](#) and [Enke \(2019\)](#). In the figure, we depict a decision-maker’s level of altruism towards others, as a function of social distance (group membership). Altruism will usually be higher for in-group members, which is to say that altruism tends to be parochial. However, the extent to which people favor in-group members potentially varies across individuals: for some, altruism declines relatively quickly when we move from in-group members to strangers, while for others this relationship may be entirely flat. Importantly, in our framework, variation in universalism leaves the overall level of altruism unchanged. By definition, universalist people are hence relatively more altruistic towards those that are socially far away but relatively less altruistic towards those that are socially close. This clarifies that universalism is not about “me vs. you” but instead about “us vs. them.”

Note that one can analogously conceptualize universalism in trust. Here, the y-axis in Figure 1 shows the decision-maker’s level of trust in someone else. Thus, a full universalist trusts, say, their mother to the same extent as a random stranger, while less universalist beliefs reflect high trust in in-group members but low trust in out-group members. Under this formulation, the overall level of trust again does not vary as universalism changes.

A key issue in this conceptualization of universalism is that we do not have an objective, independent measure of social distance. To simplify the problem, we hence define the following types of social identities and order them in a straightforward way:

1. Domestic in-group members (e.g., one of your neighbors, or someone in the U.S. who shares your religious beliefs)
2. Domestic stranger
3. Global in-group member (e.g., someone anywhere in the world who shares your religious beliefs)
4. Global stranger

As illustrated in Figure 1, we assume that the perceived social distances satisfy: 1. < 2., 2. < 4., and 3. < 4. All of our experimental measurements will rely on this simple

ordering. Specifically, we will empirically measure (i) domestic universalism as tradeoff between 1. and 2.; (ii) foreign universalism as tradeoff between 2. and 4.; and (iii) global universalism as tradeoff between 3. and 4.

2.2 Measurement Tool

Universalism in altruism. To measure universalism in altruism, we devised a “bystander” money allocation game. In a given task, participants were asked to allocate hypothetical \$100 between two individuals: a member of an in-group and a “randomly-selected person”. Subjects could allocate the \$100 in any way they saw fit, but could not keep any money for themselves to ensure that the overall level of altruism is netted out of the measure. Participants were asked to assume (i) that both individuals are equally rich (addressing income effects) and (ii) that neither of these individuals would find out who sent them the money (ruling out reciprocity considerations). Figure 5 in Appendix A.1 provides a screenshot of an example decision screen.

Our objective is to measure moral universalism with respect to a large set of potential in-groups, including both nationals and foreigners. Thus, respondents completed a total of 16 hypothetical money allocation tasks that fall into three categories, based on the discussion in Section 2.1: domestic universalism, foreign universalism, and global universalism. We describe how each of these components is constructed in turn.

First, to estimate *domestic* universalism, respondents made a total of ten decisions, the order of which was randomized across respondents. In each of them, respondents were asked to split hypothetical \$100 between (i) a randomly-selected person who lives in the U.S. and (ii) a randomly-selected member of one of their social groups, who also resides in the U.S. While ideally one would like to measure universalism with respect to *all* possible social groups, this is infeasible in practice. Accordingly, a key challenge was to make a selection from the universe of social groups. To tie our hands in the selection process as much as possible, we based the selection of in-groups on an ex-ante crowdsourcing exercise. On Amazon Mechanical Turk (AMT), we asked a set of $N = 400$ respondents which social groups they believe people most identify with. We then used those social groups that were mentioned most often (see Appendix A.2.3 for details).¹ The final set of social groups includes extended family, friends of family, neighbors, colleagues at work or school, same organization (e.g., club), same age, same ethnic background or race, same political views, same hobbies, and same religious beliefs. Thus, for example, in one question, respondents were asked to split \$100 between a randomly-selected person who lives in the U.S. and a member of their extended family, such as a

¹We excluded “close family” and “close friends”. Pilot data revealed very little variation in respondents’ parochialism with respect to these groups.

cousin. The average allocation to the randomly-selected person across the ten questions then makes up the domestic universalism measure.

Second, to estimate *foreign* universalism, respondents were asked to split hypothetical \$100 between (i) a randomly-selected person from the U.S. and (ii) a randomly-selected person who lives anywhere in the world. Foreign universalism then corresponds to the monetary amount sent to the global stranger.

Third, to estimate *global* universalism, respondents made five decisions, in each of which they were asked to split hypothetical \$100 between (i) a randomly-selected person who lives anywhere in the world and (ii) a randomly-selected person who lives anywhere in the world and is a member of the respondent’s social groups. Across the five questions, the social groups included same language, same religious beliefs, same ethnic background, same values, and same occupation. Again, the selection of these five groups is based on the crowd-sourcing exercise described in Appendix A.2.3, and the order of questions was randomized across respondents. The average amount of money sent to the randomly-selected world citizen then makes up the global universalism measure.

To reduce the dimensionality of the data, we compute a summary statistic of universalism in altruism, which averages domestic, foreign, and global universalism.

Universalism in trust. The choice paradigm to measure universalism in trust is identical to the one described for altruism, except that in a given task respondents were asked to allocate 100 “trust points” (rather than hypothetical \$100) between two individuals, to express whom they trust more. Figure 5 in Appendix A.1 provides a screenshot of an example decision screen. Respondents again completed a total of 16 tasks, based on the same social groups as above. This again yields domestic, foreign, and global universalism components, which we again average into a summary statistic of universalism in trust.

2.3 Ex-Ante Validation

2.3.1 Universalism in Altruism

All of the money allocation decisions described above are hypothetical in nature. This is in line with a large survey literature that relies on unincentivized measures. Moreover, it is worth pointing out that the hypothetical money allocation game is the direct analogue of a real experimental decision and hence tightly structured and well-defined.²

To add further credence to the validity of our measures, we follow [Dohmen et al. \(2011\)](#) and [Falk et al. \(2015\)](#) in conducting an experimental validation exercise. Sub-

²The procedure of deploying the hypothetical analogues of real experimental games in large-scale surveys appears to gain some traction in the literature ([Falk et al., 2018](#)).

jects on AMT completed both hypothetical and financially-incentivized versions of our universalism in altruism money allocation games. In these money allocation tasks, only those social groups that could feasibly be incentivized were included in the measure. These include: (i) same hobby, (ii) same age/ generation, (iii) same race or ethnicity, (iv) same political views, and (v) same religious views. To incentivize these decisions, we sampled AMT workers with the desired characteristics to serve as recipients in the money allocation games.

In our experiment, one subset of subjects ($N = 300$) completed both the hypothetical and the incentivized version of the allocation tasks with a one-week time lag. A second group of subjects ($N = 100$) completed the incentivized measure in *both* stages (also with a one-week time lag in-between), in order to obtain a test-retest correlation benchmark. See Appendix A.2.1 for details.

We find that, over a one-week horizon, the correlation between average unincentivized universalism and average incentivized universalism is $\rho = 0.38$. This compares favorably to the financially incentivized test-retest correlation, which is $\rho = 0.33$. These correlation coefficients are in the same range as those in the validation exercises by [Dohmen et al. \(2011\)](#) and [Falk et al. \(2015\)](#). Furthermore, the correlation coefficients likely understate the true correlation between incentivized and unincentivized measures (and the simple test-retest correlation) because of measurement error and resulting attenuation bias. For example, a potential source of measurement error in our survey might arise from inattentive subjects that rush through the survey.

We take two steps to reduce such measurement error. First, we consider only the subset of subjects who completed both stages of the survey in at least the median response time, finding that the correlation coefficient between incentivized and hypothetical decisions increases to $\rho = 0.49$. Meanwhile, the corresponding benchmark correlation for subjects making decisions under incentivized conditions in both stages also jumps significantly to $\rho = 0.64$. Finally, with the full validation sample we also apply the ORIV technique due to [Gillen et al. \(2019\)](#) to the correlations between the average universalism measures. The “corrected” correlation coefficients from ORIV become $\rho = 0.50$ for the case of unincentivized and incentivized measures, and $\rho = 0.45$ for the test-retest measures.

2.3.2 Universalism in Trust

To measure universalism in trust, our tool leverages adjusted versions of widely-used qualitative questions on trust that are standard in the political economy and development literatures. We validate this tool with a measure of beliefs about others’ behavior in a structured experimental cheating game. Here, subjects were asked to predict the

behavior of another subject (with a given group membership) in a task that was built to resemble the widely used die-in-a-cup cheating task developed by [Fischbacher and Föllmi-Heusi \(2013\)](#). In online sessions conducted on Amazon MTurk, $N = 300$ subjects completed both our qualitative trust questions and the structured cheating game. The measures of universalism in trust derived from beliefs elicited in the cheating game correlate strongly with our measure of universalism in trust ($\rho = 0.60$). For details on the validation of the trust universalism measure, refer to Appendix A.2.2.

2.3.3 Robustness to Larger Set of Social Groups

We aimed to verify that our measurement tool captures a domain-general element of universalism, also relative to potential in-groups that we did not include in our measurement tool. To this effect, with a sample of $N = 300$ AMT workers, we implemented our money allocation games with a superset of 40 social groups. Specifically, for each out of 25 domestic and 15 global groups, respondents were asked to split hypothetical \$100 between a member of that group and a randomly-selected person.

We then compute the correlation between our main universalism measure described above and universalism as constructed from a random subset of 15 social groups out of the superset of 40 groups. Here, the minimum correlation is $\rho = 0.85$ and the average correlation $\rho = 0.93$. This suggests that the selection of the specific set of social groups does not play a crucial role in assessing heterogeneity in universalism across individuals. Appendix A.2.3 describes this validation exercise in detail.

3 Survey Design and Logistics

3.1 Logistics

We implemented a pre-registered survey of U.S. citizens born in 2001 or earlier through *Dynata*, a market research internet panel. The survey was implemented between June 6, 2019, and July 17, 2019. The median response time was 18 minutes.

The survey consisted of five main components: (i) an initial screen that screened respondents in or out of the survey depending on whether their sociodemographic characteristics satisfied our sample quotas; (ii) decision screens to measure universalism and additional social preferences; (iii) a questionnaire to elicit additional sociodemographics; (iv) six survey blocks to elicit our outcome variables of interest; and (v) a Raven matrices IQ test.

The order of part (ii) relative to parts (iii)–(iv) was randomized, in that some subjects completed the sociodemographic and outcome variable blocks before measurements of

universalism. The sociodemographic questionnaire always preceded the six outcome variable blocks, the order of which was also randomized. Moreover, at the respondent level the following was also randomized: (a) the order in which universalism in altruism and universalism in trust were elicited; (b) within all altruism (trust) tasks whether the subject first completed those games meant to elicit universalism or the standard dictator game (generalized trust question); and (c) whether for any given category of social group and choice domain, all in-group members appeared on the left or on the right of the subjects' screens.³

We took two measures to ensure quality control. First, every respondent who completed the survey in less than 400 seconds was immediately dropped and replaced by *Dynata*. Second, the survey contained two attention check questions, interspersed throughout the survey. Whenever a respondent answered an attention check incorrectly, they were immediately routed out of the survey and replaced by *Dynata*.

We contracted with *Dynata* for a nationally representative sample of $N = 1,000$ respondents. However, because constructing a sample that matches the census on the dimensions of age, gender, educational attainment, income, race, and employment status is logistically challenging, *Dynata* eventually supplied a much larger sample to us (total $N = 6,591$), a subset of which makes up the more nationally representative sample that we pre-registered. The physical process was that *Dynata* kept sampling respondents until our pre-specified quotas were satisfied. "Surplus" respondents came free of charge for us. Since we view throwing away data as scientifically questionable, we report analyses based on the full sample in the main text. In the Appendix we replicate all analyses using the pre-registered (smaller) representative sample. The corresponding results are always similar.

The final sample characteristics for both the full and representative samples of our *Dynata* survey are described in Appendix B.1. In terms of summary statistics, our full sample is 40.5% male, 79.0% white, and 56.6% college-educated. The median and average age is 49, while the median income is \$70,000. As such, relative to our representative sub-sample, the full sample is relatively female, white, educated, and higher-income. Our representative sub-sample is 48.4% male, 62.7% white, and 36.4% college-educated. The median and average age is 47, while the median income is \$52,000.

3.2 Pre-Registration

The target sample size, sample characteristics, specifications of universalism measures employed, and set of relationships explored in this paper were included in a pre-registration on EGAP, see <http://egap.org/registration/5810>. Several remarks regarding

³We find no order effects in our analyses with respect to these randomizations.

the relationship between the pre-registration and the analyses in this paper are in order.

First, as discussed above, we departed from the pre-registration due to circumstances related to data collection beyond our control, which left us with a larger sample size than anticipated. We report replications of our analysis using only the pre-registered representative subsample in Appendix F.

Second, in the pre-registration we specified that we would conduct separate analyses for universalism in altruism and in trust. However, to reduce the dimensionality of our analyses in the main text, we work with a summary statistic of universalism that averages decisions across altruism and trust, as described below in Section 4. Appendices D and E report robustness checks for altruism and trust separately. The results are always similar.

Lastly, we added two additional correlational analyses that were left out of the pre-registration but included in the sociodemographic questionnaire: race / ethnicity (specifically, an indicator for white subjects), and net worth.

4 Descriptives: The Structure of Universalism

4.1 Variance Decomposition

In a first step, we decompose the variation in our full set of allocation game decisions, pooled across domains (altruism and trust) and types of in-groups, for a total of 210,912 decisions by 6,591 respondents. From an ex ante perspective, it is unclear whether variation in universalism is largely due to heterogeneity across respondents or across types of in-groups. Figure 2 provides a variance decomposition that visualizes the incremental R^2 of different types of variables for allocation decisions. The figure shows that about 32% of the variation in the data is due to variation in a respondent's average universalism (i.e., respondent fixed effects). Similarly, we see that about 8% of the variation is due to variation in average universalism with respect to specific in-groups (i.e., social group fixed effects). Finally, the figure reveals that 36% of the variation is due to respondent-social group fixed effects, which capture a respondent's universalism with respect to a specific in-group (type of tradeoff), above and beyond both the respondent's average universalism and the average universalism that all respondents exhibit with respect to this particular in-group.

This decomposition hence highlights three themes. First, a substantial share of the variation in the data is due to simple heterogeneity in how universalist respondents are on average, across different types of in-groups in the domestic, foreign, or global domain. This implies that we have uncovered a reasonably *domain-general* trait, which we call moral universalism.⁴

⁴A different way to see this is to take each respondent's full set of 32 money allocation and trust

Second, variation in universalism with respect to different types of in-groups is meaningful, but appears less important. Third, the encouraging degree of within-respondent across-task consistency in universalism appears to reflect deliberate decisions, rather than laziness. This can be inferred from the fact that more than a third of the variation in the data is due to respondent-group specific effects. If respondents had heuristically decided about some average level of universalism and then made decisions without paying attention to the specific groups, then the respondent-group fixed effects would explain none of the variation in the data. Instead, we see that if, say, a respondent is very universalist with respect to a domestic neighbor in the money allocation game, *relative to (i) how universalist they are on average and (ii) how universalist all respondents are with respect to domestic neighbors*, then this respondent is likely to be very universalist with respect to a domestic neighbor in the trust point allocation game, again relative to (i) and (ii) above. In other words, a respondent’s money allocation and trust point decisions with respect to a particular in-group are highly correlated, conditional on the respondent’s average universalism. Thus, while there is large and meaningful variation in average universalism across respondents, this appears to reflect deliberate and internally consistent group-specific decisions, rather than laziness.

In what follows, we decompose the respondent and social-group fixed effects more to develop a deeper understanding of the heterogeneity in our data.

4.2 Variation Across In-Groups

Averaging all decisions regardless of choice domain (altruism and trust), subjects allocate roughly 62 dollars or trust points to the respective in-group member.⁵ In Panel A of Figure 3 we break down this average figure into average decisions in each of our 32 decision tasks: 16 money allocations and 16 trust questions. The dotted line at 50% corresponds to the full universalism benchmark. Thus, Panel A of Figure 3 provides evidence that, (i) in our survey, people are on average parochial across all of the domains that we consider, and at the same time, (ii) there is considerable variation across in-groups. For example, respondents are more parochial towards their extended family than towards someone of the same age or generation.⁶ Note, however, that as covered in Section 4.1, compared to other sources of variation the portion of variation in our data attributable to social-group fixed-effects is relatively small.

point allocations and construct a full correlation matrix. Figure 8 in Appendix C.1 plots the full set of 496 correlation coefficients that we obtain in this exercise. We find that *every single one* of these correlation coefficients is positive and usually sizable in magnitude. The average correlation coefficient is $\rho = 0.33$. This again suggests a substantial level of consistency in how universalist a given respondent is.

⁵Figure 9 presents histograms of all money and trust point allocation decisions made in our survey.

⁶Panel A of Figure 16 in Appendix F reproduces Panel A of Figure 3 in the representative sample.

4.3 Variation Across Respondents

An important takeaway from the variance decomposition is that people’s universalism appears to be a reasonably domain-general trait, which we call moral universalism. In light of these results, we compute an overall composite measure of universalism, which is given by the average of the summary statistic of universalism in altruism and the summary statistic of universalism in trust. Even though this procedure reduces the dimensionality of the data from 32 decisions into a single number, the simple summary measure explains an encouraging 27% of the overall variation in the stacked dataset of all decisions by all respondents.

Panel B of Figure 3 shows a histogram of our composite moral universalism measure. Because the measure is computed as average of universalism in trust and universalism in altruism, it has a simple interpretation. Zero means that the respondent allocated all money and all trust points to the respective in-group member in each of the 32 decisions. 50, on the other hand, means that the respondent split the money and the trust points equally on average. Thus, values between zero and 50 correspond to intermediate, parochial decisions, while values above 50 reflect respondents who allocated more money or trust points to the strangers than the respective in-group members, on average.⁷

4.4 Digression: A Short Measurement Module

The insight that universalism is a reasonably domain-general trait allows us to develop meaningful short versions of our measurement module that are based on fewer questions. These shorter modules may prove useful for researchers interested in eliciting moral universalism under tight time constraints.

We relegate a detailed description of the development of the short modules to Appendix C.3 and describe the basic logic here. To illustrate, take the case of universalism in altruism. We seek to identify that combination of only five survey questions that explains as much of the variation in our main measure of universalism in altruism as possible. To this effect, we compute hypothetical universalism measures by forming all possible five-item combinations of our different survey questions, subject to the constraint that the module comprises (i) two domestic universalism questions; (ii) the foreign universalism question; and (iii) two global universalism questions. We then investigate the correlation of these simpler universalism measures with our main summary statistic of universalism in altruism.

The minimum correlation that we identify in our sample is $\rho = 0.92$. Thus, as long

⁷Figure 12 in Appendix D reproduces this distribution for universalism in altruism and trust separately. Panel B of Figure 16 in Appendix F reproduces Panel B of Figure 3 in the representative sample.

as researchers stick with our proposition of having two domestic, one foreign, and two global universalism questions, the precise implementation does not really matter. At the same time, for completeness, we note and recommend here that short five-question module that explains the largest fraction of the variation in universalism in altruism in our data. We present the short module for universalism in trust in Appendix C.3.

Short module.

1. *Domestic: Split \$100 between a former or current colleague at work or school and randomly-selected U.S. person*
2. *Domestic: Split \$100 between someone who shares your interests or hobbies and randomly-selected U.S. person*
3. *Foreign: Split \$100 between randomly-selected U.S. person and randomly selected person from anywhere in world*
4. *Global: Split \$100 between someone who speaks your same language and lives anywhere in the world and randomly selected person from anywhere in world*
5. *Global: Split \$100 between someone who shares your religious beliefs and lives anywhere in the world and randomly selected person from anywhere in world*

5 Sociodemographic Correlates of Universalism

Table 1 reports OLS regressions of our composite universalism measure on a set of covariates that we elicited as part of our survey. See Appendix B.2 for detailed descriptions of the construction of each of these variables. Here, among others, we consider (i) a measure of cognitive skills that corresponds to the score on a five-item Raven matrices IQ test; (ii) an income and wealth index that aggregates measures of income and net worth; (iii) an urbanicity index that aggregates information on local population density and the respondent's self-reported neighborhood size; and (iv) a religiosity index that aggregates self-described religiosity (from 0 to 10), frequency of church attendance (on a scale from 0 to 5), and an indicator for atheism, agnosticism, or no religion.

We find that older people, men, whites, people with lower cognitive skills, the rich, the rural, and the religious exhibit less universalist preferences and beliefs. The strongest correlations are found with age ($\rho = -0.21$) and religiosity ($\rho = -0.20$). In terms of quantitative magnitudes, the results suggest that everything else equal, an additional ten years in age is associated with an additional 1.1 dollars or trust points allocated on average to a member of one's in-groups relative to a random stranger. Similarly, a one-standard-deviation increase in religiosity (as given by our index described above)

is associated with an additional 2.4 dollars or trust points allocated on average to a member of one’s in-groups relative to a random stranger.⁸

Tables 4 and 5 in Appendix D reproduce Table 1 for the cases of universalism in altruism and in trust, respectively. Table 10 in Appendix F reproduces Table 1 with the representative sample.

6 Universalism and Economic Behaviors and Outcomes

An important question is whether the heterogeneity in universalism documented in Section 5 has potential ramifications for economic and social behaviors and outcomes. We provide a first pass at answering this question by presenting pre-registered correlational analyses of the relationship between universalism and four types of behaviors and outcomes: (i) the structure of people’s donations; (ii) home bias in equity investments; (iii) education choices; and (iv) the structure of people’s social networks. This list of topics is unified by a common theme: they relate to how an individual makes trade-offs involving their preferences over and beliefs about options that are relatively more or less “local.” Appendix B.2 contains details on the elicitation procedure for all variables discussed in this section. Appendix E.3 replicates all analyses in this section employing the obviously-related instrumental variables (ORIV) approach of [Gillen et al. \(2019\)](#) to reduce measurement error.

Donations. Heterogeneity in universalism might be related to whom people donate to. Here, an important distinction is between donations that go to local community organizations such as schools or local churches, relative to donations to nationwide or even global charities. To assess this, our survey asked respondents to report the dollar amount that they donated over the past 12 months in each of four categories: local community organizations, local church, nationwide charities, and global charities.

The top panel of Figure 4 studies the relationship between universalism and log

⁸We further analyze the correlations between universalism and other social attitudes and preferences: (i) altruism, as elicited in a standard dictator game splitting \$100 between the subject and a “randomly-selected person” who lives in the U.S.; (ii) generalized trust, elicited by asking subjects how much they believe they can in general trust a “randomly-selected person” who lives in the U.S., on a scale from 0 to 100; and (iii) equity-vs.-efficiency preferences, as given by a bystander dictator game between two “randomly-selected people” who live in the U.S., in which the most unequal split of money maximizes total payoffs; (iv) respondent’s attitude towards communal moral values ([Haidt, 2012](#); [Enke, 2018](#)). Notice that there is a mechanical relation between universalism and altruism as well as between universalism and trust, because the dictator game and the generalized trust question were formulated as being about a randomly-selected person. We indeed find that both behavior in the dictator game and generalized trust are positively correlated with universalism ($\rho = 0.29$ and $\rho = 0.10$ respectively). Furthermore, universalism correlates weakly negatively with preferences for efficiency versus equity ($\rho = -0.07$) and with the relative importance of communal moral values ($\rho = -0.17$).

donations in each of these four categories. Throughout, we standardize dependent variables into z-scores for ease of interpretation. For each dependent variable, we present the OLS coefficient of universalism for each of three different regression specifications: (i) a univariate regression (blue); (ii) a regression that conditions on age, gender, race, cognitive skills, and the economic and wealth index; and (iii) a conservative specification that additionally controls for religiosity, urbanicity, and college education.⁹

The results show that universalist people donate less locally than less universalist people, yet they donate more at more global levels. In fact, going from left to right, the regression coefficients become uniformly more positive looking across the different donation domains. The fifth analysis in the top panel uses as dependent variable the log difference between non-local and local donations and hence summarizes the key take-away from the top panel: universalism is strongly correlated with whom people donate to. In terms of quantitative magnitude, an increase in moral universalism equivalent to an additional one dollar or trust point allocated to a random stranger is associated with a decrease in donations to local religious organizations of 4.9% and to local communities of 0.9%, and an increase in donations to global non-profits of 0.9%. In aggregate, a one-dollar or trust point increase in moral universalism is associated with an increase of 4.1% in the ratio of non-local to local donations.

Equity Investments. A long line of literature originating with [French and Poterba \(1991\)](#) has documented “home bias” across a wide variety of financial asset classes, trade, and consumption goods. This phenomenon is pervasive across a wide swath of countries and has been a longstanding puzzle in international economics and finance.

We hypothesize that some part of such home bias in equity investment decisions might be driven by non-universalist preferences and beliefs. For example, it is conceivable that people with low universalism do not trust that managers of foreign companies conduct their regular business and believe that they instead engage in rent-seeking activities.

To investigate the relationship between universalism and home bias, our survey included two questions. First, we asked respondents how much money they have currently invested in national and foreign stocks. Second, because many people do not themselves own financial assets, we included a hypothetical investment question in which respondents were asked how they would invest hypothetical \$100 between stocks of a U.S. manufacturer and those of a manufacturer based abroad.

The middle panel of Figure 4 summarizes the results. Again, for each outcome variable, we present three regression coefficients that correspond to different specifications.

⁹Figures 13 and 14 in Appendix E.2 reproduce Figure 4 separately with universalism in altruism and in trust respectively. Figure 18 in Appendix F reproduces Figure 4 in the representative sample.

All dependent variables are standardized into z-scores. We find that higher universalism is consistently correlated with lower home bias in equity. In terms of quantitative magnitudes, our data suggests that a one-dollar or trust point increase in moral universalism is associated with a 0.2% decrease in the portion of an investor's actual equity portfolio made up of domestic stocks, and similarly a 0.5% decrease in the domestic portion of an investor's hypothetical portfolio. It is worth emphasizing that these correlations do not reflect the confounding effects of income or wealth, such that only wealthy people incur the fixed transaction cost of invest abroad: as we saw above, universalists are on average *poorer* than non-universalists. Yet, they are nonetheless more likely to invest abroad.

Education Choices A potentially important dimension of educational decisions is geographic distance. Some people might prefer to study close to their place of upbringing, while others might be willing to move further away from home. It is conceivable that less universal people are less willing to study further from home, simply because they value and trust their local community more.

To study the relationship between universalism and educational investment, our survey included a question on how likely (on a scale 0–10) respondents would be to recommend to their child that they attend a local college, relative to a college that is more distant but ranked slightly higher. The middle panel of Figure 4 summarizes the results. Again, we present three regression coefficients that correspond to our three different specifications. The dependent variable is again standardized into a z-score. We find that higher universalism is consistently correlated with lower home bias in educational investments. In terms of quantitative magnitudes, an increase of ten dollars or trust points (about one standard deviation) in universalism is associated with a decrease on a scale from 0 (definitely recommend the local college) to 10 (definitely recommend the distant college) of 0.11.

Social Networks. In a final step, we study the relationship between universalism and the structure of people's social networks. An immediate implication of how we conceptualized universalism in altruism (compare Figure 1) is that, for a given level of altruism, universalists expend less altruism towards socially close people (such as friends), compared to people with less universalist preferences. It is thus conceivable that universalists have fewer social contacts, are being helped and do help less often, and are more likely to consider themselves lonely. Indeed, moral philosophers in the communitarian tradition have long argued that moral universalism produces atomized and socially isolated individuals (Sandel, 2005; Etzioni, 1994).

To investigate this, our survey contained six additional questions, regarding: (i) how many friends a respondent has, which we defined as “individuals with whom you feel

mutual bonds of affinity and with whom you would feel comfortable sharing personal information”; (ii) how many acquaintances a respondents has, which we defined as “individuals you know and with whom you would feel comfortable spending some time, but only for more superficial or professional purposes”; (iii) how often a respondent interacts with friends in a typical week; (iv) how often a respondent both (a) gave help to and (b) received help from members of the local community within the month prior to completing the survey; and (v) respondents’ self-assessment of whether they live a fulfilled social life or feel rather lonely, on a scale from zero to ten.

The results are reported in the bottom panel of Figure 4. Again, all outcome variables are standardized into z-scores. We find that universalists indeed have fewer close social connections: they report having fewer friends, fewer acquaintances, meeting with friends less often, and being more lonely. We do not find meaningful correlations with the number of times the respondent received or gave help to others. Overall, these results are consistent with a fundamental idea behind our framework: while universalists treat socially distant people relatively well, they are relatively less inclined to invest into close relationships.

7 Conclusion

Through a large-scale survey of the U.S. population, we have derived evidence that universalism (i) is a domain-general parameter at the level of the individual that does not strongly depend on the specific social group in question, (ii) varies meaningfully across the population along demographic dimensions of interest, and (iii) is systematically correlated with important dimensions of economic and social behavior.

To do so, this paper has proposed a simple, portable and experimentally-validated set of survey items to measure individual heterogeneity in universalism in both altruism and trust. In addition to our main elicitation tool, we have provided a shorter measurement module that is easy and fast to implement, yet maintains almost all of the explanatory power of the full universalism measure. Our measures of universalism also include components on domestic universalism, foreign universalism, and global universalism, each of which could in principle be leveraged by researchers who are interested in these specific contexts. We hence believe that this paper opens up the possibility for more detailed or applied work on the role of universalism in economic decision making.

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Tables and Figures

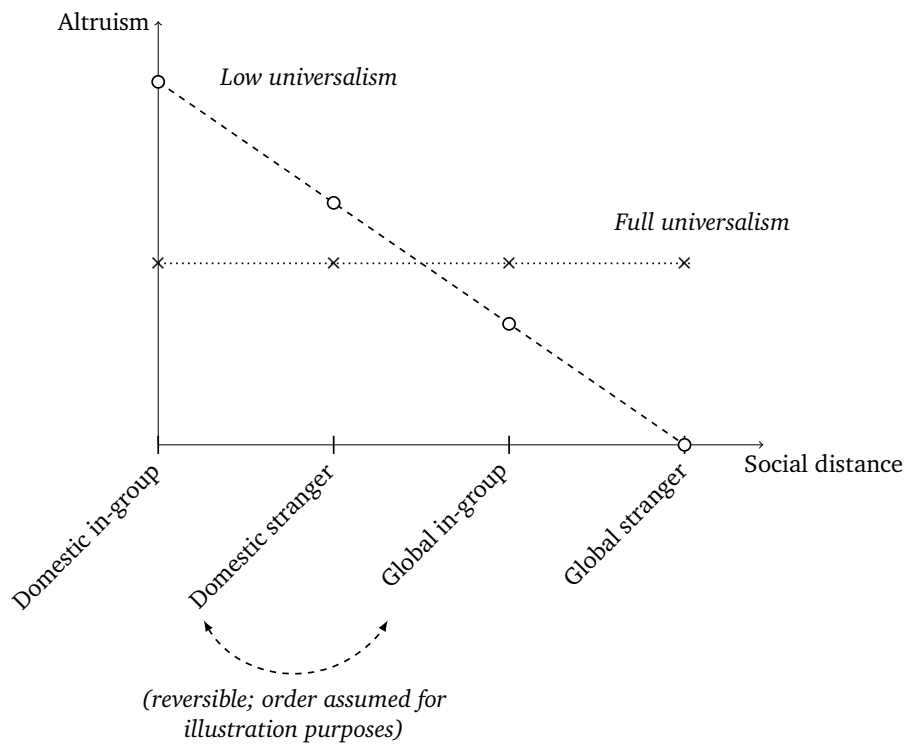


Figure 1: Illustration of heterogeneity in universalism with respect to altruism. For a decision-maker with low universalism, the utility they derive from extending altruistic behavior to others declines quickly as a function of social distance. A fully universalistic decision-maker's preferences, on the other hand, are completely insensitive to social distance. Universalism only concerns the change in preferences as social distance is varied (how altruism is distributed amongst "others" depending on their distance from the agent), and holds the overall level of altruism that is distributed fixed. Two observations must be made about the figure: (i) we plot the specific case where the agent perceives a domestic stranger to be socially closer than a global in-group member, whereas in general it may be the case that the order between these two groups is reversed for any given agent; (ii) we plot the specific case where the two functions intersect to the right of both domestic individuals, and to the left of both global individuals, whereas the labels may be shifted left or right (leaving the functions intact) such that a fully universalistic decision-maker is more altruistic towards both global individuals *and* the domestic stranger, or more altruistic towards only the global stranger, for example.

Variance Decomposition All Allocation Decisions

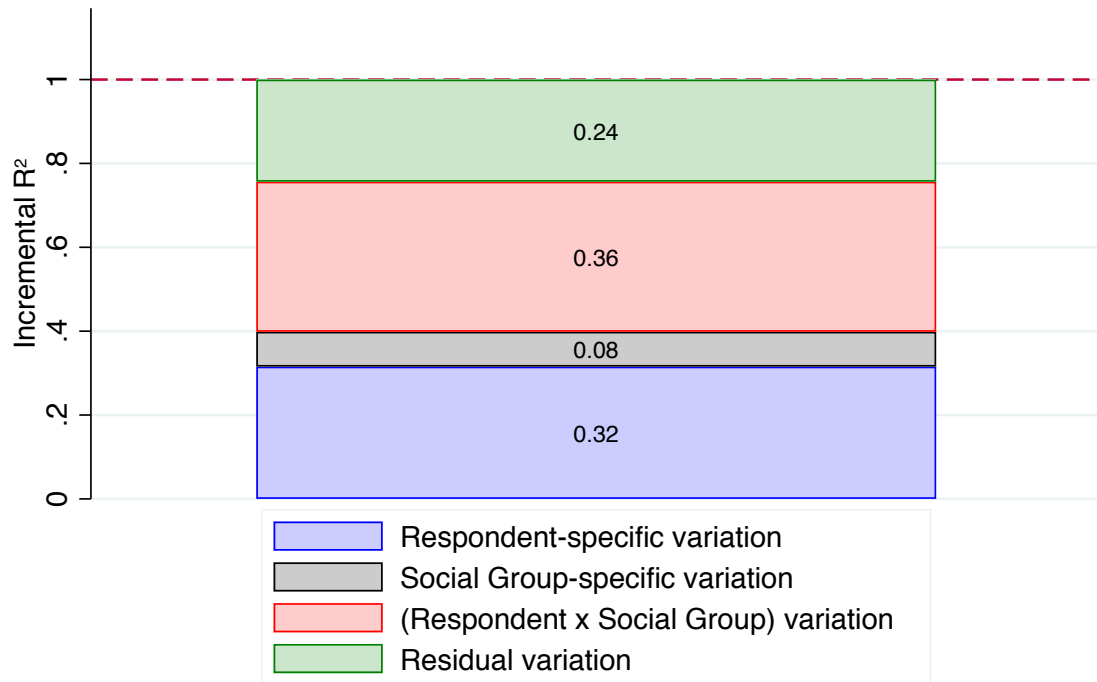


Figure 2: This figure presents the incremental R^2 for a stacked regression of all 32 allocation decisions made by all 6,591 respondents in our survey on various features of our bystander dictator games. It shows that 32% of variation in the data can be explained by heterogeneity in respondents' average level of universalism (i.e., each respondent's "type"). Similarly, once social group fixed effects are added to the regression, an additional 8% of the variance in the data can be attributed to heterogeneity in average universalism across social groups (as discussed in Section 4.2, on average respondents are more parochial with respect to some social groups, like extended family members, than others). Finally, 36% of the variation in the data can be explained by how individual respondents choose allocations specific to the given task, beyond that which would be predicted by their average universalism level, the choice domain, and the specific social group. As such, the figure reveals that while a significant portion of the data can be explained simply by heterogeneity in average universalism across respondents (i.e., respondents of different "types" making fairly consistent decisions across tasks and thus implementing relatively domain-general choice rules), allocation decisions are nevertheless responsive to the specifics of each individual task (that is, even if of a fairly consistent "type", each respondent varies their allocation decisions depending on the given social group). Data underlying figure is from the full, non-representative study sample. Results for the representative sample in Figure 17 in Appendix F are nearly identical.

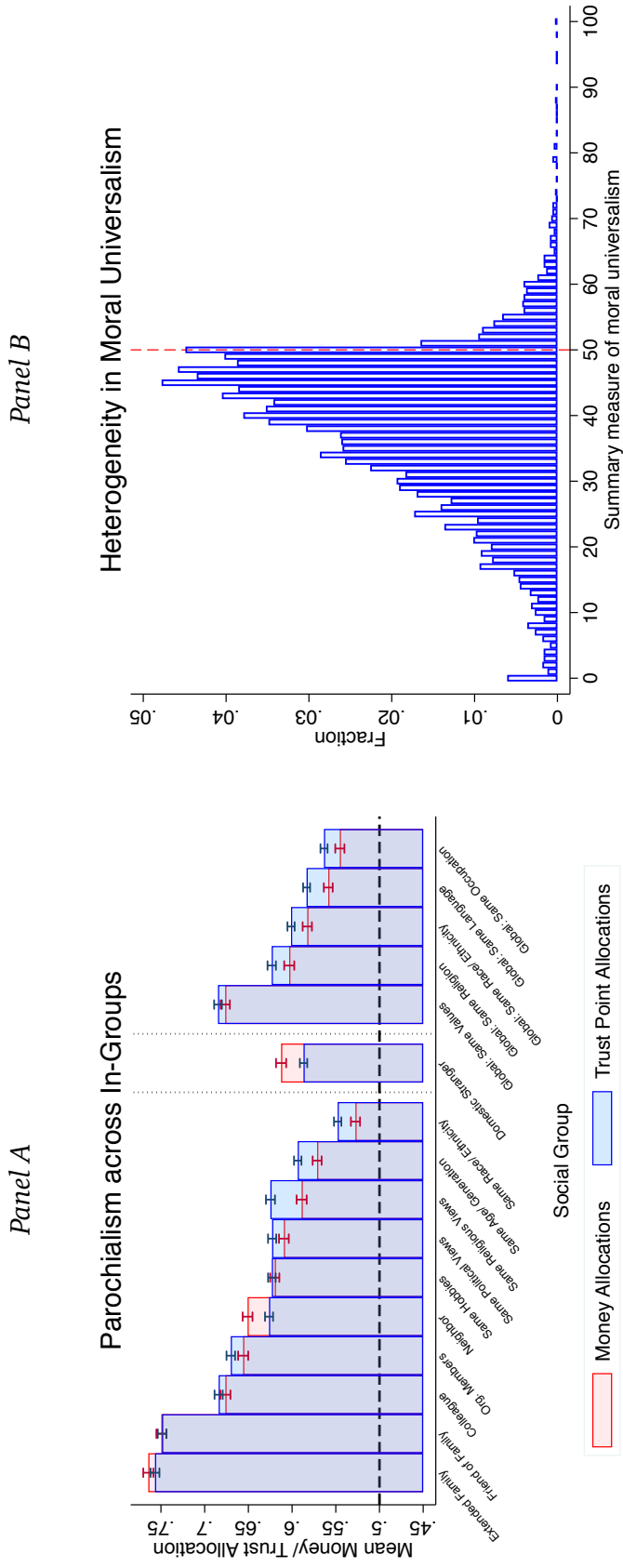


Figure 3: This figure presents heterogeneity in decision-making along two key components of the variation in data from our universalism tasks. In Panel A, we present *social-group-specific variation*: average allocations of money and trust points given to every social group across all subjects, along with standard error bars. The first ten bars show average allocations to domestic in-groups in tradeoffs vis-à-vis a domestic stranger. The 11th bar shows the average allocation to a domestic stranger relative to a global stranger. Bars 12–16 show average allocations to a global in-group member vis-à-vis a global stranger. Each bar is composed of $N = 6,591$ individuals. In Panel B, we present *respondent-specific variation*: the distribution of composite measure of moral universalism across our sample of the U.S. population. The measure is a summary statistic averaging each subject’s allocation decisions across both altruism and trust and across all social groups. These average amounts reflect allocations to random strangers, so that the measure is decreasing in subjects’ in-group favoritism. As such, note the large amount of mass located to the left of an average allocation of 50:50, indicating a substantial degree of in-group favoritism across the population. Data underlying figure is from the full, non-representative study sample. Results for the representative sample in Figure 16 in Appendix F are very similar.

Table 1: Sociodemographic correlates of universalism

	<i>Dependent variable: Composite measure of moral universalism</i>									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Age	-0.15*** (0.01)								-0.11*** (0.01)	-0.11*** (0.01)
Male	-0.92*** (0.31)								-0.92*** (0.31)	-0.94*** (0.31)
White		-1.80*** (0.35)							-0.80** (0.36)	-0.80** (0.36)
Cognitive skills			0.77*** (0.12)						0.22* (0.12)	0.20 (0.12)
College-educated				-0.26 (0.30)		0.69** (0.32)				0.41 (0.31)
Income and Wealth Index					-1.23*** (0.13)	-1.32*** (0.14)			-0.75*** (0.13)	-0.80*** (0.14)
Urbanicity Index							0.51*** (0.13)		0.20 (0.12)	0.17 (0.13)
Religiosity Index								-1.66*** (0.10)	-1.41*** (0.10)	-1.42*** (0.10)
Observations	6591	6591	6591	6591	6591	6591	6491	6591	6491	6491
R ²	0.05	0.00	0.01	0.00	0.02	0.02	0.00	0.04	0.08	0.08

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The dependent variable is the composite measure of moral universalism, corresponding to the average of all allocation decisions across social groups and across both altruism and trust. Data underlying figure is from the full, non-representative study sample. Results for the representative sample in Table 10 in Appendix F are very similar. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

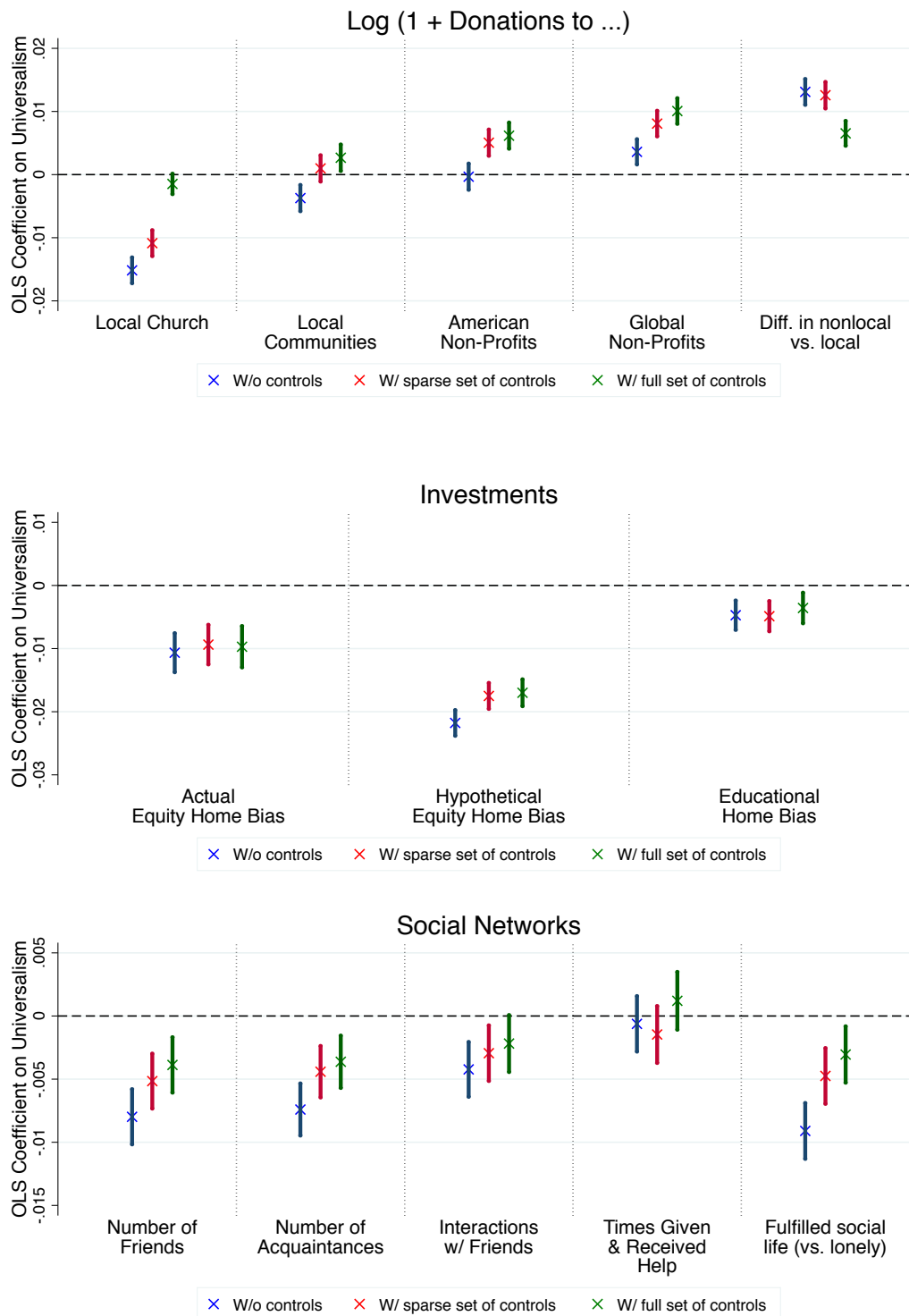


Figure 4: This figure presents OLS coefficients for the regression of a given outcome variable on the composite measure of moral universalism. All dependent variables are standardized into z-scores. Other than the first panel, the following outcome variables are in logs: (1) number of friends, (2) number of acquaintances, (3) interactions with friends, and (4) times given and received help. The sparse set of controls consists of age, gender, race, cognitive skill, and our composite economic index (of log net worth and log income). To these, the full set of controls adds an indicator for college education, urbanicity, and religiosity. Data underlying figure is from the full, non-representative study sample. Results for the representative sample in Figure 18 in Appendix F are very similar.

ONLINE APPENDIX

A Details on Measurement Tool and Validation

A.1 Screenshots

In each row below, how would you split \$100 between a randomly-selected person who lives in the United States and the individual displayed on the right (who is part of a particular social group)?

The closer you drag the slider to one individual, the more money you allocate to that individual. Please assume all individuals below have the same income, **all live in the United States**, and would not find out that it was you who sent them the money.

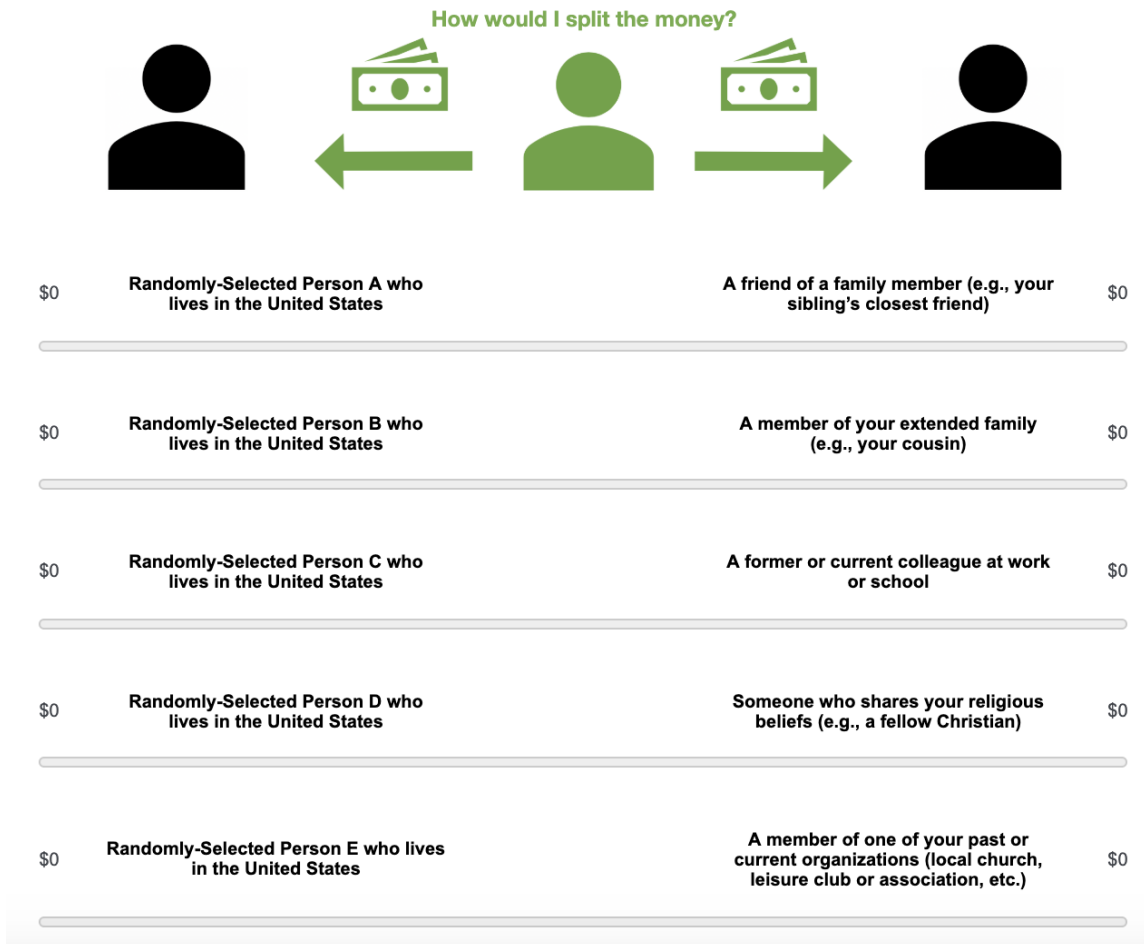


Figure 5: Screenshot of decision screen for money allocation tasks meant to elicit domestic universalism in altruism. Subjects would see two of these screens consecutively, where five of the ten groups would be presented on each screen. Note that across all subjects, the order of the ten social groups was randomized, and whether all social groups appeared on the left or all appeared on the right was also randomized for any given choice domain. The layout for tasks eliciting global universalism in altruism is identical to that of domestic groups.

How would you split \$100 between a randomly-selected person who lives anywhere in the world and a randomly-selected person who lives in the United States?

The closer you drag the slider to one individual, the more money you allocate to that individual. Please assume both individuals below have the same income, and would not find out that it was you who sent them the money.

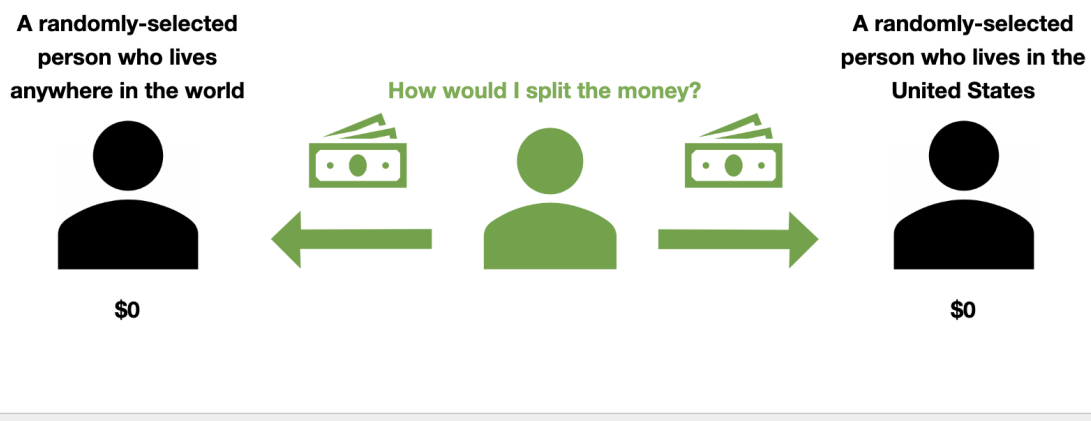


Figure 6: Screenshot of decision screen for money allocation task meant to elicit foreign universalism in altruism. Across subjects, it was randomized whether the domestic social group appeared on the left or on the right. The layout for the task eliciting foreign universalism in *trust* is identical to this layout, with the exception of necessary changes to the instructions and to graphics, as consistent with the layout for trust tasks presented in Figure 7.

In each row below, how would you split 100 “trust points” between a randomly-selected person who lives in the United States, and the individual displayed on the right (who is part of a particular social group)?

The closer you drag the slider to one individual, the more you trust that individual, relative to the other individual. Please assume **all of the individuals below live in the United States.**

Whom do I trust more?

I trust the individual on the left much more	I trust the two individuals to the same extent	I trust the individual on the right much more
0 Randomly-Selected Person M who lives in the United States		A friend of a family member (e.g., your sibling's closest friend) 0
0 Randomly-Selected Person N who lives in the United States		A member of your extended family (e.g., your cousin) 0
0 Randomly-Selected Person O who lives in the United States		A former or current colleague at work or school 0
0 Randomly-Selected Person P who lives in the United States		Someone who shares your religious beliefs (e.g., a fellow Christian) 0
0 Randomly-Selected Person Q who lives in the United States		A member of one of your past or current organizations (local church, leisure club or association, etc.) 0

Figure 7: Screenshot of decision screen for tasks meant to elicit domestic universalism in trust. Subjects would see two of these screens consecutively, where five of the ten groups would be presented on each screen. Note that across all subjects, the order of the ten social groups was randomized, and whether all social groups appeared on the left or all appeared on the right was also randomized for any given choice domain. The layout for tasks eliciting global universalism in trust is identical to that of domestic groups.

A.2 Details on Ex-Ante Experimental Validation

A.2.1 Universalism in Altruism

Validation Survey Design. We validate our measure of universalism in altruism by financially-incentivizing our bystander dictator games. In a series of online survey sessions conducted on Amazon MTurk over a one-week time horizon, $N = 400$ subjects completed two rounds of a condensed version of our survey that included only money allocation tasks.

For every subject, each round of the two-part survey could come in one of two flavors: (i) hypothetical money allocations, and (ii) financially-incentivized money allocations. The goal was to compare within-subject the consistency in allocations and universalism between the hypothetical and incentivized conditions.

Given incentivization, money allocations in both hypothetical and incentivized conditions were played only with the following set of five groups: (i) same hobby, (ii) same age/ generation, (iii) same race or ethnicity, (iv) same political views, and (v) same religious views.

The hypothetical condition consisted of the following components: (i) an introduction screen that informed subjects that the survey consisted of two parts; (ii) money allocation tasks to measure revealed altruism and universalism in altruism; and (iii) elicitation of sociodemographics (gender, educational attainment, income, and employment status). The incentivized condition was identical to the hypothetical condition, but in order to identify group membership and thus incentivize the measure, immediately after part (i) subjects were asked to provide answers to the following set of questions: (a) their favorite hobby¹⁰; (b) their age¹¹; (c) ethnicity/ race; (d) informal political affiliation as either a Democrat, Republican, or Independent; and (e) religious denomination.

Logistics. In the first stage, $N = 150$ subjects completed the hypothetical versions of our allocation tasks, while another $N = 250$ subjects completed the financially-incentivized version of the survey. All subjects were informed at the beginning of this first stage of the survey (before providing consent to participate) that the survey would consist of two parts, and that they would receive an invitation to complete the second part of the survey one week after completing the first stage. To reduce attrition, subjects were paid \$1.00 for completing the first stage, and would get paid \$2.00 for completing the second stage. In addition, only those subjects who completed *both* parts of the survey would be eligible to have their incentivized decisions randomly-selected for payment, and as such

¹⁰The options here were: movies, TV series, video games, sports, outside recreational activities (canoeing, hiking), art, and music.

¹¹Subjects were asked to choose the decade they were born in; the options were “Before 1930”, “1931 – 1940”, “1941 – 1950”, and so on so forth until “1991 – 2001”.

only those subjects would be eligible to potentially receive a monetary bonus, explained below as part of the incentive structure.

The $N = 150$ subjects who first completed a hypothetical version of our money allocation tasks then completed the incentivized versions in the second stage. Of the $N = 250$ subjects who first completed the incentivized versions, $N = 150$ would complete the hypothetical counterparts in the second stage, and the remaining $N = 100$ would repeat the incentivized condition. Of the 158 subjects randomly-assigned to complete the incentivized condition in the first stage and the hypothetical condition in the second stage, 146 (92.4%) completed both stages. Of the 145 randomly-assigned to complete the hypothetical condition first and then the incentivized condition second, 127 (87.6%) completed both stages. Finally, of the 97 subjects assigned to complete incentivized conditions in both stages, 79 (81.4%) completed both rounds. These stages were run on April 29th, 2019, and May 6th, 2019.

In order to incentivize the allocation tasks, subjects completing the incentivized condition were informed that 2.5% of study participants would be selected for payout. If selected, one of their six decisions (the dictator game eliciting revealed altruism, plus five incentivized money allocation tasks to elicit universalism in altruism) would be randomly selected and implemented exactly as chosen by them. That is, in an online session on Amazon MTurk, an entirely separate set of subjects completed elicitations of sociodemographics and group memberships, out of which some would be randomly selected to receive payment according to the financially-incentivized decisions of participants of our validation exercise. Subjects of our validation exercise were explained this process before making their money allocation decisions; they were aware that fellow MTurk Workers would be randomly-selected for payout of whatever portion of \$100 corresponded to them based on the subjects' decisions.

Results. As documented in Section 2.3.1, for both conditions we generate measurements of universalism in altruism based on the five social groups included in the survey. Section 2.3.1 presents correlation coefficients.

A.2.2 Universalism in Trust

Our measure of trust universalism relies on qualitative questions, which cannot be incentivized. In order to validate this measure, we show with data collected from online sessions of our study on Amazon MTurk that this direct measure of trust universalism correlates strongly with a structured, experimental game measure of trust.

In these online sessions, subjects in the United States were asked to play a “cheating game”. Subjects read instructions asking them to imagine another participant of the

survey would be responsible for allocating \$200 between themselves and the subject. In this game, the other, hypothetical participant would sit at home with 201 cards in front of him/ her, each one numbered with a different integer from 0–200. The subject was asked to imagine that the other survey participant would shuffle the 201 cards and, not knowing which card was which, draw one of these cards at random to determine how to allocate the money. Specifically, the other, hypothetical participant would keep as much out of the \$200 as the number listed on the randomly-drawn card, and give the remaining amount of money to the subject. For example, subjects were instructed that if the other participant drew a card of 136, the other person would be instructed to keep \$136, and give \$64 to the subject.

Instructions clarified that the drawn card would only be observable to the other participant, and not to the experimenter or to the subject, thus mimicking double-blind setups as in [Fischbacher and Föllmi-Heusi \(2013\)](#). As such, subjects were asked to imagine that the hypothetical participant on the other end of the cheating game would need to type the number of the drawn card into his/ her computer to report the number on the drawn card. Since the actual allocation of money would be determined by the number actually entered into the computer, instructions read that the other participant could potentially cheat by reporting a higher number than was actually drawn (and thus keeping more of the \$200 amount than the game's mechanism allowed them to).

To play the cheating game, subjects were asked to imagine that the card drawn by the hypothetical participant on the other end of the game contained the number "100". Thus, if the other person were completely honest, both the other participant and the subject would receive hypothetical \$100. The task for the subject in the cheating game was twofold: (i) to predict the number that would be reported by a randomly-selected person who lives in their own country acting as the person on the other end of the cheating game, and (ii) predict which of two people would cheat more to the subject's disadvantage (and by how much) in a version of the game in which both a randomly-selected person from their country and a member of their in-group would play the cheating game with the subject (that is, each draw their own card containing \$100, and each report their own numbers). To simplify the space of possible allocation pairs between the two participants, subjects were asked to imagine that the people on the other end of any cheating game would only ever cheat to the subject's disadvantage (that is, no hypothetical person playing the cheating game with them would ever give the subject *more* than the equal split of \$100 they were supposed to). In all games, subjects were instructed to assume each person had the same information about their identity as the subject had about theirs (in other words, a member of the subject's in-group playing the cheating game with the subject would know that the subject was a member of their in-group as well, and likewise for a randomly-selected person from their country).

A composite measure of our qualitative trust questions correlates positively with a composite measure of beliefs in the cheating game ($\rho = 0.65$). That is, those subjects who reported trusting members of their in-group relatively more than a randomly-selected person in our qualitative trust questions also reported beliefs consistent with members of their in-groups cheating relatively less than a randomly-selected person in the cheating game.

We employ qualitative trust questions instead of this cheating game because they are faster to complete in the survey, easier to understand by subjects, and have been employed widely in literature in economics. Moreover, [Glaeser et al. \(2000\)](#) document that trust games are more predictive of *trustworthy* behavior than *trusting* behavior.

A.2.3 Robustness to the choice of groups

In order to have a feasible and portable instrument to elicit moral universalism, our measurement tool requires the selection of a specific subset of social groups that is small relative to the universe of all candidate groups.

To thus alleviate concerns about the sensitivity of our estimate of moral universalism and of our results to the particular set of social groups chosen, we ran an ex-ante crowd-sourcing exercise and a separate online session of our study on Amazon MTurk.

Crowd-sourcing exercise. In the crowd-sourcing exercise, we partitioned a list of 27 different domestic social groups into two broad categories as commonly examined in the sociological literature: those groups people typically *interact* with (i.e., specific individuals you know, such as close family members), and those groups people typically do *not* interact with but have consciousness of kind or of a common set of characteristics (e.g., someone of your same race or ethnicity). From each of these two sets of groups, $N = 200$ subjects on Amazon MTurk were asked to select the five social groups people typically identify with. We repeated this same exercise with an additional $N = 200$ subjects on Amazon MTurk, but with an equally broad set of *global* social groups (where naturally the distinction in terms of interaction was not made).

From these two separate crowd-sourcing exercises, we selected five domestic social groups people typically identify with the most out of the *interaction* list, and the corresponding five domestic social groups from the *non-interaction* list. Note that these excluded “close family” and “close friends”, as they lacked variation across respondents and thus would not contribute to a strong instrument.

We finally selected the five most-selected global social groups. Combined, these fifteen groups make up the domestic and global versions of our universalism measures.

Validation exercise. In the validation exercise, $N = 300$ subjects from the United States were tasked with completing the same sequence of money allocation tasks as the subjects in our main sample, except with a larger selection of 25 domestic social groups and 15 global social groups.¹² We analyze data from these sessions as follows.

First, we construct measures of universalism from the broader set of domestic and global groups. The raw correlation coefficient between the domestic ten-group measure in our main sample and the domestic 25-group measure in our online session (which includes the ten social groups in our main measure) is $\rho = 0.96$. Excluding the original ten social groups from the latter measure (i.e., correlating the ten-group measure in our main sample and the measure involving only the 15 new social groups), the correlation coefficient is $\rho = 0.89$.

For the global versions of these universalism measures, the correlation coefficients are very similar. Between the 5-group measure in our main sample, and the “full” measure with 15 groups from the online session, the correlation coefficient is $\rho = 0.93$. Excluding the five social groups included in the main survey from the larger universalism measure, the correlation coefficient between the five-group measure and the corresponding ten-group measure is $\rho = 0.84$.

Second, we find the pairwise correlation between the allocations given to all 25 domestic social groups in the corresponding dictator game. For example, we find the correlation between all allocations given to “Someone who lives in your local neighborhood” and all allocations given to “One of your close friends”, and do this for all possible pairings of social groups (excluding all pairings of a social group with itself). Both the mean and median correlation coefficients for allocations to domestic social groups are $\rho = 0.29$, while the minimum is $\rho = 0.08$ and the maximum is $\rho = 0.45$. That is, higher allocations to one social group are always at least weakly correlated with higher allocations to any other social group.

For the foreign versions of the universalism measures, these statistics are $\rho = 0.42$ for both the mean and median, $\rho = 0.25$ for the minimum, and $\rho = 0.61$ for the maximum.

Lastly, because there is in theory a very large parameter space of possible measurements of universalism (where each measurement involves a slightly different set of social groups), in our third analysis, we draw randomly from the superset of 25 domestic social groups and 15 global social groups to form a different version of the universalism measure that only involves ten domestic social groups and five global social groups. We constructed 2,500 different versions of the universalism measure using this method. The mean of all correlations between these 2,500 measures and the main measure formed from the 10 domestic social groups and 5 social groups in our main survey is $\rho = 0.93$, while the minimum is $\rho = 0.85$.

¹²For lists of these groups, see Appendix A.3.

A.3 List of Social Groups

Domestic social groups included in main survey.

1. A member of your extended family (e.g., your cousin)
2. A member of one of your past or current organizations (local church, leisure club or association, etc.)
3. Someone who lives in your local neighborhood
4. A friend of a family member (e.g., your sibling's closest friend)
5. A former or current colleague at work or school
6. Someone who shares your interests or hobbies (e.g., a fellow fan of the same sports team, or a fellow runner)
7. Someone who shares your religious beliefs (e.g., a fellow Christian)
8. Someone of your same age/ generation
9. Someone who shares your political views (e.g., a fellow left-winger, or a fellow right-winger, etc.)
10. Someone of your same race/ ethnicity (e.g., a fellow Hispanic person)

Additional domestic social groups included in validation exercise (Appendix A.2.3).

1. A member of your close family (e.g., your sibling)
2. One of your close friends
3. A friend of one of your close friends
4. One of your acquaintances (who is also not a friend)
5. A member of your distant family (e.g., a cousin of your parent)
6. One of your distant friends
7. Someone who shares your values
8. Someone of your same occupation/ profession
9. Someone who speaks your same language
10. Someone of your same social class (e.g., a fellow working class member)

11. Someone of your same gender
12. Someone who resides in your same city
13. Someone who resides in your same state
14. Someone of your same sexual orientation
15. Someone of your same educational attainment

Global social groups included in main survey.

1. Someone who speaks your same language and lives anywhere in the world
2. Someone who shares your religious beliefs (e.g., a fellow Christian) and lives anywhere in the world
3. Someone of your same race/ ethnicity (e.g., a fellow Hispanic person) who lives anywhere in the world
4. Someone who shares your values and lives anywhere in the world
5. Someone who shares your occupation/ profession and lives anywhere in the world

Additional global social groups included in validation exercise (Appendix A.2.3).

1. Someone who shares your interests or hobbies (e.g., a fellow fan of the same sports team, or a fellow runner) and lives anywhere in the world
2. Someone of your same gender who lives anywhere in the world
3. Someone of your same age/ generation who lives anywhere in the world
4. Someone who shares your political views (e.g., a fellow left-winger, or a fellow right-winger, etc.) and lives anywhere in the world
5. Someone of your same social class (e.g., a fellow working class person, or middle class individual) who lives anywhere in the world
6. Someone of your same educational attainment who lives anywhere in the world
7. Someone of your same sexual orientation who lives anywhere in the world
8. Someone who lives in the same continent as you, and not in your same country
9. Someone who lives in a country that is an international ally to your country
10. Someone who lives in a country that is a member state of the same international organization as your own country's (e.g., NATO, European Union, etc.)

B Additional Details on Survey Design and Logistics

B.1 Sample Characteristics of *Dynata* Survey

Category	Population (%)	Study Sample (%)	
		<i>Full</i>	<i>Representative</i>
Gender			
Male	49	40.5	48.5
Female	51	59.5	51.5
Age			
18–29	21	12.1	21.8
30–39	16	19.5	16.8
40–49	16	19.1	16.8
50–59	17	23.3	16.4
60–69	14	5.7	14.8
≥70	16	20.3	13.3
Income			
Below 15,000	11	5.2	16.7
15,000–24,999	9	6.0	9.2
25,000–34,999	9	8.3	8.9
35,000–49,999	12	12.0	10.7
50,000–74,999	17	21.9	17.1
75,000–99,999	13	15.1	13.2
100,000–149,999	15	16.6	15.3
150,000–199,999	7	8.0	6.3
200,000 or more	7	7.1	2.5
Ancestry			
White	63	79.1	62.7
African-American	17	8.1	17.2
Hispanic	12	5.7	12.0
Asian	5	4.8	5.0
Other	3	2.4	3.1
Education			
No high school	11	0.9	6.1
High school	29	13.6	29.4
Some college	29	28.9	28.0

Bachelor's degree or higher	31	56.6	36.4
Employment Status (for those at most 65)			
Employed full-time	67	70.7	67.0
Not employed full-time	33	29.3	33.0

Note: Income ranges are in annual amounts of USD.

B.2 Description of Main Survey Variables

Domestic universalism in altruism. Universalism with respect to altruism (preferences), measured through bystander dictator games over the local currency analogue of hypothetical \$100, between a domestic member of one's in-groups relative to a domestic stranger. The measure averages the ten corresponding money allocation decisions.

Foreign universalism in altruism. Universalism with respect to altruism (preferences), measured through a bystander dictator games over the local currency analogue of hypothetical \$100 between a domestic stranger and a global stranger.

Global universalism in altruism. Universalism with respect to altruism (preferences), measured through bystander dictator games over the local currency analogue of hypothetical \$100, between a global member of one's in-groups relative to a global stranger. The measure averages the five corresponding money allocation decisions.

Summary measure of universalism in altruism. Unweighted average of domestic universalism in altruism, foreign universalism in altruism, and global universalism in altruism. Because these three individual components correlate highly with each other, the summary measure reduces the dimensionality of the data and describes a respondent's broad universalism in altruism as a general type.

Domestic universalism in trust. Trust analogue of domestic universalism in altruism, where the bystander dictator game is instead over 100 trust points.

Foreign universalism in trust. Trust analogue of foreign universalism in altruism, where the bystander dictator game is instead over 100 trust points.

Global universalism in trust. Trust analogue of global universalism in altruism, where the bystander dictator game is instead over 100 trust points.

Summary measure of universalism in trust. Trust analogue of the summary measure of universalism in altruism. That is, unweighted average of domestic universalism in trust, foreign universalism in trust, and global universalism in trust.

Composite measure of universalism. Unweighted average of (i) summary measure of universalism in altruism and (ii) summary measure of universalism in trust. Reduces the dimensionality of the data.

Dictator game behavior (revealed altruism). Altruism as elicited through a standard dictator game over \$100 between the self and a domestic stranger.

Generalized trust. Generalized trust in others as elicited through an allocation of trust points on a scale from 0 to 100. Respondents were prompted to consider their trust in a domestic stranger, where 0 meant that they believe they “cannot trust a randomly-selected person very much”, and 100 meant they believe “a randomly-selected person can in general be trusted a great deal.”

Equity-efficiency preferences. Elicitation of preferences for efficiency over equity, as given by a bystander dictator game between two “randomly-selected people” who live in the subject’s country, in which the most unequal split of money maximizes total payoffs. The measure captures how much a subject deviates from an equal, 50:50 split of the money.

Communal moral values. Respondent’s preference for communal moral values, as elicited through the difference between one loyalty and one fairness item of Haidt’s Moral Foundations Questionnaire. Specifically, the difference between subject’s rating on a scale from 0 (not at all relevant) to 5 (extremely relevant) regarding the relevance of “Whether or not someone showed a lack of loyalty” and “Whether or not some people were treated differently than others” in determining whether something is right or wrong.

Religiosity Index. Composite measure from a principal component analysis of: (i) self-described religiosity on a scale from 0 (not at all religious) to 10 (very religious); (ii) church attendance on a scale from 0 to 5; and an indicator for atheism, agnosticism, or no religion.

Income and Wealth Index. Composite measure from a principal component analysis of: (i) log income (from free-form text entry), and (ii) log net worth (from free-form text entry).

Urbanicity Index. Composite measure from a principal component analysis of: (i) the population density in respondent's zip code, and (ii) respondent's neighborhood size on a scale from 0 to 9.

Educational attainment. Respondent's educational attainment. The four educational categories were: (i) no high school, (ii) high school, (iii) some college or vocational training, (iv) bachelor's degree or higher.

College-educated indicator. Indicator for a college education, from the educational attainment variable.

Cognitive skills. Respondent's score on a Raven's Progressive Matrices IQ test.

Donation amounts. Total log dollar amounts given over the past twelve months by each respondent to the following four causes, respectively: (i) Local church or other local religious organizations; (ii) Local communities and groups (e.g., local firefighters, schools, libraries, and city-sponsored functions), excluding local churches; (iii) Non-profit organizations that work towards a better life for people in America in general (e.g., Feeding America); and (iv) Non-profit organizations that work towards a better life for people around the world (e.g., United Way Worldwide).

Difference in nonlocal versus local donation amounts. Log dollar amount of nonlocal donations (those donations to non-profits focused on the United States as a whole or the entire world) minus the log dollar amount of local donations (those donations to local churches and local communities).

Actual home bias. Subjects were asked to estimate the actual total dollar amount of dollars invested in both domestic (based within-the-US) and foreign (based outside-the-US) stocks in their own equity portfolio(s). The proportion of their total stock investments made up by domestic stocks made up each subject's degree of actual home bias.

Hypothetical home bias. Respondent's allocation (out of \$100) to stocks of a domestic manufacturer relative to a foreign manufacturer. In forming these hypothetical portfolios, subjects were told to assume none of their investments would be taxed.

Educational home bias. Subject's response to the following prompt: "Suppose you have a child that asks you for advice. Your child is undecided between attending (a) a local college or (b) a college that is geographically distant but ranked slightly higher. On a scale from 0 to 10, how strongly would you advise your child to attend either college?", where 0 represented "Would definitely advise to attend the local college", and 10 represented "Would definitely advise to attend the distant college".

Number of friends. Respondent's estimate of the number of people they consider to be friends, defined in the survey as those "individuals with whom you feel mutual bonds of affinity and with whom you would feel comfortable sharing personal information".

Number of acquaintances. Respondent's estimate of the number of people they consider to be acquaintances, defined in the survey as those "individuals you know and with whom you would feel comfortable spending some time, but only for more superficial or professional purposes."

Interactions with friends. Respondent's report on how often they are able to spend time with one of their friends during a typical week, elicited by asking respondents: "Thinking about a typical week, approximately how often per week do you get to spend time with one of your friends?"

Times given and received help. Combination of the approximate number of times over the month prior to completing the survey that a respondent "relied on someone you know from your local community for help (e.g., assisting with some household chore, watching after a child, etc.)" and in turn "helped someone you know from your local community (e.g., assisting them with some household chore, watching after a child, etc.)".

Quality of social life. Respondent's self-description of the quality of their social life on a scale from 0 ("I feel rather lonely") to 10 ("I have a fulfilling social life").

C Additional Analyses on the Structure of Universalism

C.1 Consistency in Universalism and the Existence of Types

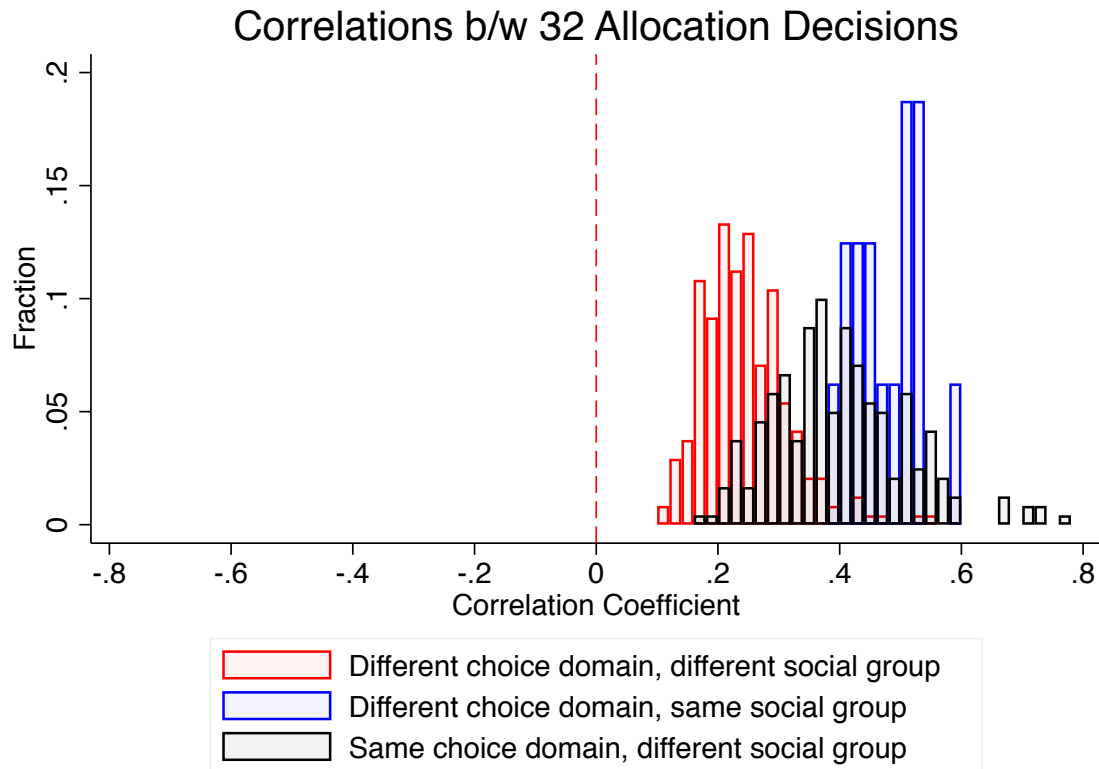


Figure 8: This figure presents the distribution of all pairwise correlation coefficients for the entire set of money allocations and trust point allocations in our survey. In red, we plot the correlation coefficients for decisions involving different choice domains *and* a different social group (for example, how money allocations to a member of one's extended family correlate with trust points allocated to someone of one's same religion who lives anywhere in the world). In blue, the correlation coefficients for decisions involving the same social group but a different choice domain. Finally, in black we plot the correlation coefficients involving the same choice domain, but different social groups.

Table 3: Correlations between Universalism Measures

	(1)								
	Altruism: domestic	Altruism: global	Altruism: foreign	Altruism: all	Trust: domestic	Trust: global	Trust: foreign	Trust: all	Summary
Altruism: domestic	1								
Altruism: global	0.664***	1							
Altruism: foreign	0.320***	0.441**	1						
Altruism: all	0.767***	0.838***	0.798***	1					
Trust: domestic	0.543***	0.464***	0.235***	0.487***	1				
Trust: global	0.459***	0.559***	0.268***	0.511***	0.732***	1			
Trust: foreign	0.227***	0.306***	0.404***	0.405***	0.387***	0.459***	1		
Trust: all	0.479***	0.526***	0.378***	0.563***	0.825***	0.863***	0.788***	1	
Summary	0.722***	0.790***	0.691***	0.910***	0.720***	0.754***	0.650***	0.855***	1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

C.2 Histograms of Allocation Decisions

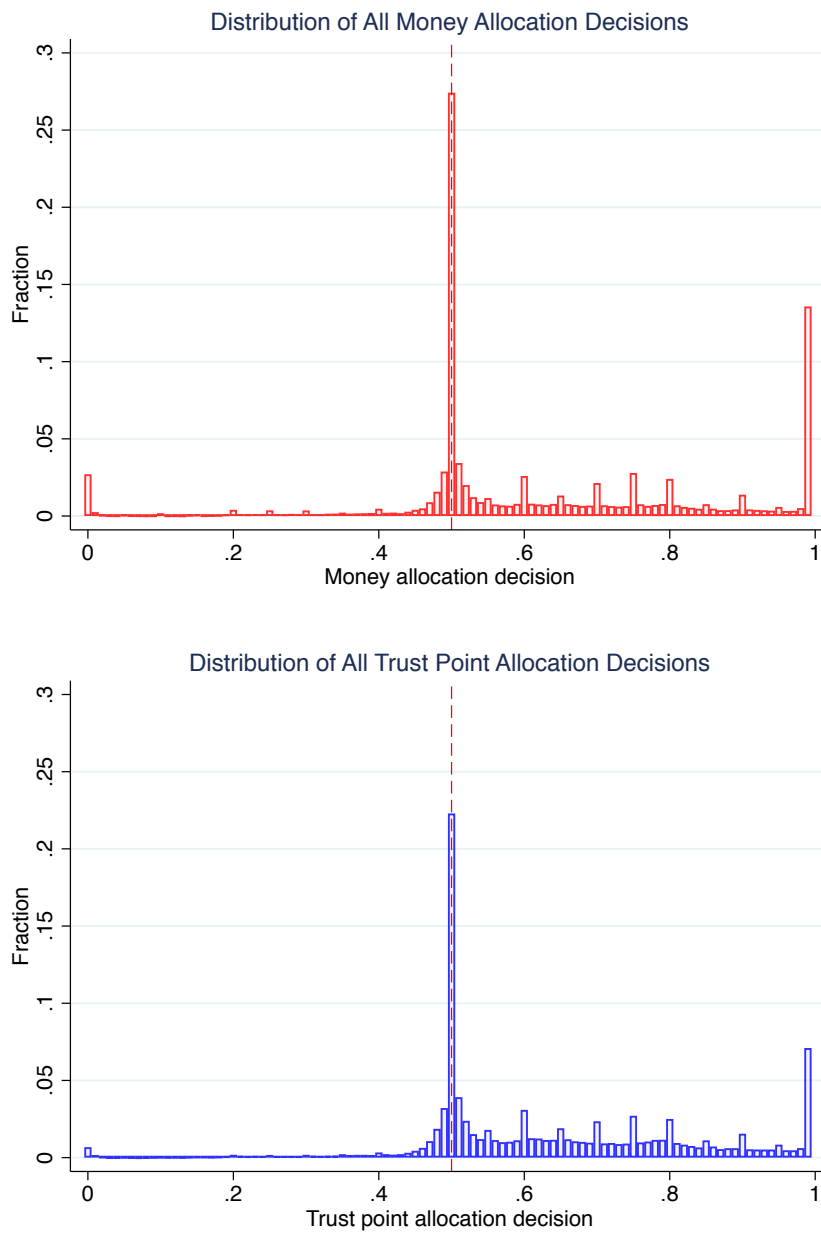


Figure 9: Distributions of all money and trust point allocation decisions in our full sample.

C.3 Short Measurement Module

In this section, we make the case that modular, five-group versions of our measurement tool – including two domestic social groups, two global social groups, and the decision between a randomly-selected person from the subject’s country vis-à-vis a randomly-selected person from anywhere in the world – suffice to accurately elicit subjects’ universalism in altruism and universalism in trust, and are thus easily portable to a wide variety of experimental settings or as a short series of questionnaire items.

As previewed in Section 4.4, to formulate these short measures we rely on our results on the internal structure of universalism, by which a large degree of consistency within-subject ensures nearly universally-groupish and highly-correlated treatment of social groups across decision tasks. This consistency ensures that multiple variants of universalism – including *shorter* versions – elicit highly-correlated if not nearly identical measurements of universalism from every given subject.

To highlight the degree of consistency, from the superset of all social groups in our survey we take all possible combinations of five groups consisting of two domestic social groups, two global social groups, and the “domestic” social group. For each of these combinations of groups and for both altruism and trust, we calculate the corresponding universalism measure as described in Section 2.2. With ten domestic social groups, five global foreign groups, and the same one “domestic” group in our full measure, this amounts to 450 possible modular versions for each of universalism in altruism and universalism in trust.

We compute each of these alternative measurements and correlate them with our full measures. Figure 10 plots these correlation coefficients for the case of universalism in altruism. Even the “worst” of the alternative, short versions of our measurement tool performs extremely well relative to the full measure, with a correlation coefficient of $\rho = 0.92$. The results are identical for the case of universalism in trust.

Meanwhile, the largest of these correlation coefficients ($\rho = 0.97$) corresponds to the following combination of groups that make up the short module for universalism in altruism: (i) a former or current colleague at work or school; (ii) someone who shares your interests or hobbies; (iii) someone who shares your religious beliefs and lives anywhere in the world; (iv) someone who speaks your same language and lives anywhere in the world; and, as requisite, (v) a randomly-selected person from the subject’s country vis-à-vis a randomly-selected person from anywhere in the world.

For universalism in trust, the recommended short module (for which the correlation coefficient with the full measure of universalism in trust is $\rho = 0.97$) is:

Short module.

1. *Domestic: Split 100 trust points between a former or current colleague at work or*

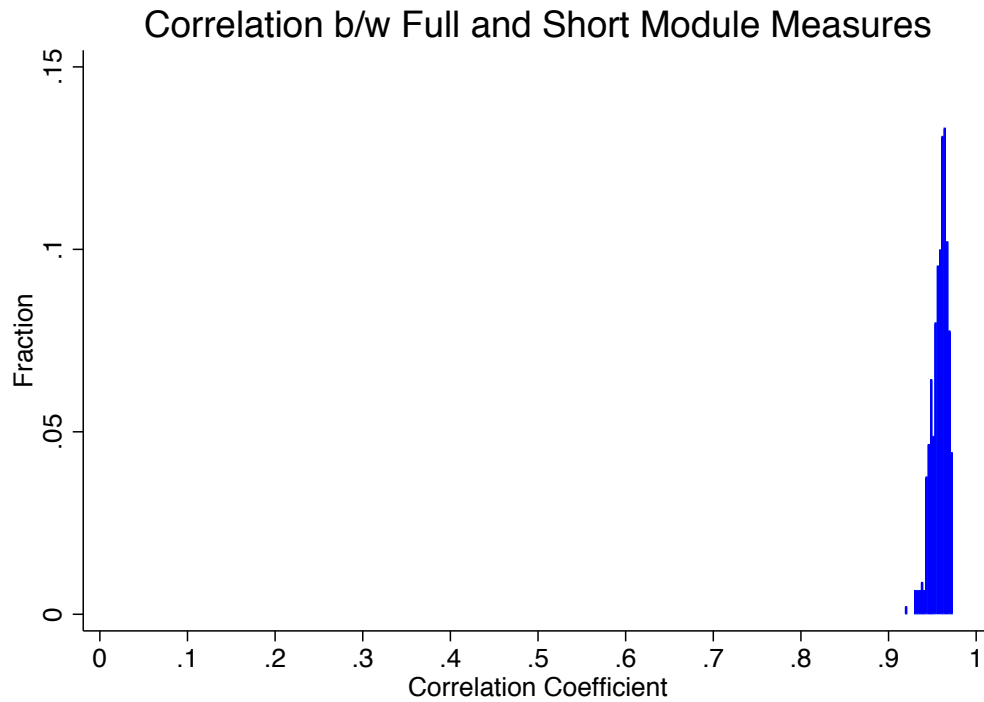


Figure 10: Distribution of correlation coefficients for all possible variants of a modular version of our measurement tool for universalism in altruism. Coefficients present the correlation between the given short measure and our full survey measure. The minimum of these correlation coefficients is $\rho = 0.92$, while the largest is $\rho = 0.98$.

school and randomly-selected U.S. person

2. *Domestic: Split 100 trust points between someone who shares your interests or hobbies and randomly-selected U.S. person*
3. *Foreign: Split 100 trust points between randomly-selected U.S. person and randomly selected person from anywhere in world*
4. *Global: Split 100 trust points between someone of your same race/ ethnicity who lives anywhere in the world and randomly selected person from anywhere in world*
5. *Global: Split 100 trust points between someone who shares your religious beliefs and lives anywhere in the world and randomly selected person from anywhere in world*

Note this short module for universalism in trust is nearly identical to the short module for universalism in altruism, where the only difference is replacing the “same language” social group with the “same race/ ethnicity” group.

However, as documented extensively in the sections of this paper related to validation of our measure, robustness to composition of social groups, and consistency in decision-making underlying the structure of universalism, for the purposes of both eliciting universalism as a general, individual-level “trait” or eliciting universalism in a specific choice

domain, our measurement tool is incredibly robust to both the *number* and *composition* of social groups included in a modular version of this tool and even to the particular choice domain itself. This should give the researcher ample degrees of freedom to tailor the tool to their specific contexts. A general recommendation, however, involves selecting an adequate number of social groups to account for potential measurement error.

Principal component analysis. In this subsection, we document principal component analyses of both trust and money allocation decisions to complement our discussion of the structure of universalism. The analyses indeed uncover that allocations to all social groups load nearly identically on the first principal component, suggesting it identifies moral universalism as a level factor that moves allocations of money and of trust to all social groups roughly in level. It also underlies our results of consistency across social groups; despite variation covered in Section 4.2, variation in allocation decisions between-subjects appear to be driven primarily by one principal component that indeed affects all groups equally.

In Figure 11, we present the loadings from PCAs of all money and trust point allocation decisions separately. These indicate that the first principal components shift allocations to all in-groups in *level* across categories, indicating that no one social group in particular differs from all others when it comes to how an individual considers them. The corresponding first principal component accounts for approximately 44% of the variance in the data for both money and trust point allocation decisions separately.

Note additionally that it is the *second* principal component (which generally explains about 10% of the variance in the data) that seems to drive differences in allocations across the social groups. Specifically, the loadings for these second principal components are strikingly monotonic when social groups are organized by domestic in-groups, the randomly-selected person who lives in the subject's country, and finally global groups, and within these three broad categories roughly by "level of interaction" (i.e. those social groups consisting of people each subject would actually *know* and interact with, like a family member, versus ones each subject would *not* necessarily interact with, such as someone who shares one's religion). Note that this structure in the data emerges entirely organically from subjects' decisions. That is, both within the ten domestic social groups and the five global social groups the order in which the groups are presented is entirely random between-subjects; we do not conceptually differentiate social groups between levels of interaction within categories, nor do we sort them such that we nudge subjects to generate data consistent with the loadings for the second principal components.

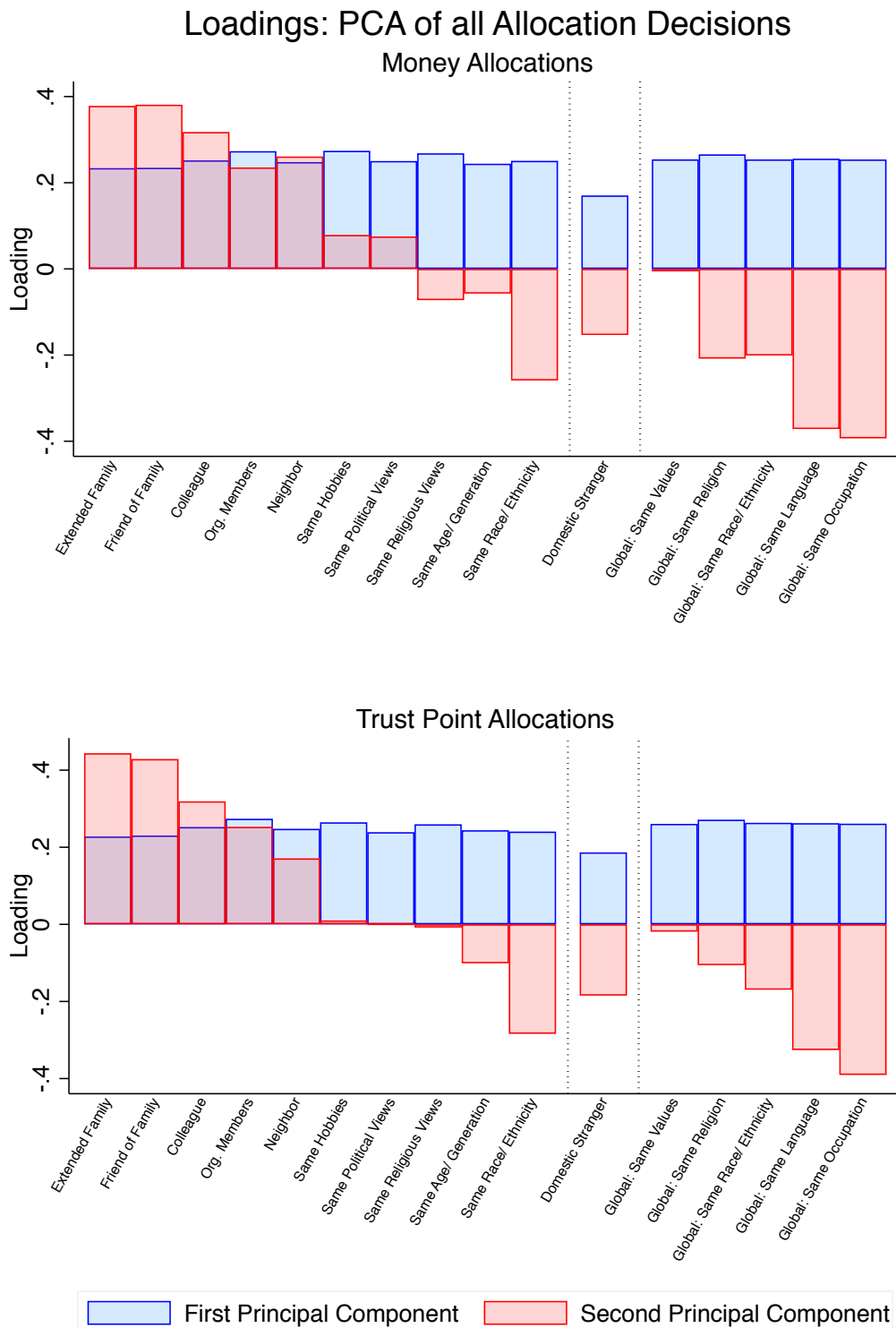


Figure 11: This figure presents the loadings on the first and second principal components for all money allocation and all trust point allocation decisions, respectively. The loadings on the first factor reveal that moral universalism acts as a level factor that moves all allocations in level.

D Additional Analyses on Heterogeneity and Correlates

D.1 Heterogeneity

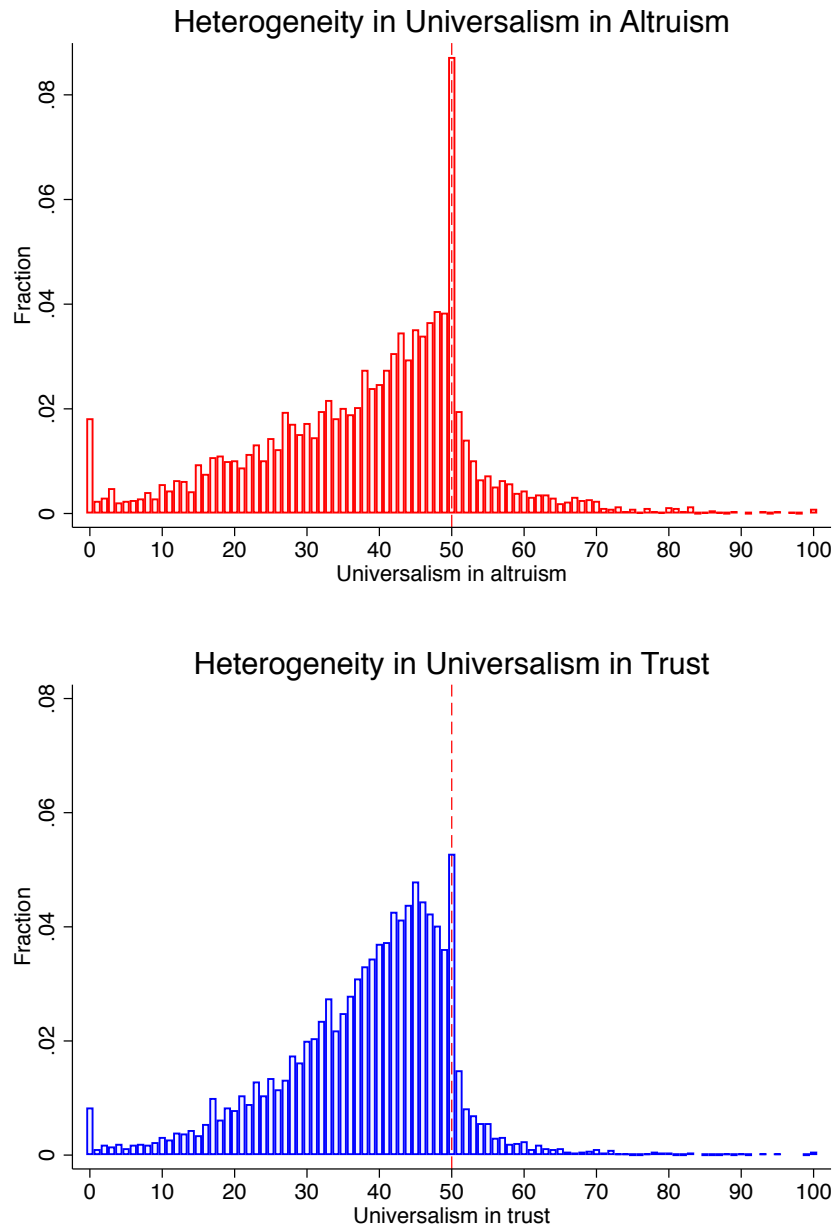


Figure 12: Distributions of universalism in altruism and in trust across our sample of the U.S. population. The measures averages each subject's money allocation and trust point decisions, respectively, across a variety of social groups. These average amounts reflect allocations to random strangers, so that the measure is decreasing in subjects' in-group favoritism. As such, note the large amount of mass located to the left of an average allocation of 50:50, indicating a substantial degree of in-group favoritism across the population. Data underlying figure is from the full, non-representative study sample.

D.2 Sociodemographics

Table 4: Determinants

	<i>Dependent variable: Moral universalism w.r.t. altruism, all groups</i>									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Age	-0.19*** (0.01)								-0.15*** (0.01)	-0.15*** (0.01)
Male	-1.27*** (0.39)								-1.24*** (0.39)	-1.26*** (0.39)
White		-2.04*** (0.44)							-0.75* (0.45)	-0.75* (0.45)
Cognitive skills			0.97*** (0.15)						0.30* (0.15)	0.28* (0.16)
College-educated				-0.16 (0.37)		0.91** (0.39)				0.58 (0.39)
Income and Wealth Index					-1.36*** (0.16)	-1.47*** (0.17)			-0.76*** (0.16)	-0.83*** (0.17)
Urbanicity Index							0.56*** (0.16)		0.21 (0.16)	0.17 (0.16)
Religiosity Index								-1.66*** (0.13)	-1.34*** (0.13)	-1.34*** (0.13)
Observations	6591	6591	6591	6591	6591	6591	6491	6591	6491	6491
R ²	0.05	0.00	0.01	0.00	0.01	0.01	0.00	0.03	0.07	0.07

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The dependent variable is the measure of moral universalism with respect to altruism and all groups, corresponding to the average of all allocation decisions across social groups and across altruism. Moral universalism decreases with in-group favoritism. In columns 7, 9, and 10, we have a smaller number of observations as population densities could not be obtained for all subjects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Determinants

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Dependent variable: Moral universalism w.r.t. trust, all groups</i>										
Age	-0.11*** (0.01)								-0.074*** (0.01)	-0.074*** (0.01)
Male	-0.57* (0.32)								-0.60* (0.31)	-0.61* (0.31)
White		-1.56*** (0.37)							-0.85** (0.38)	-0.85** (0.38)
Cognitive skills			0.57*** (0.12)						0.13 (0.13)	0.12 (0.13)
College-educated				-0.37 (0.30)		0.48 (0.32)				0.24 (0.32)
Income and Wealth Index					-1.10*** (0.14)	-1.16*** (0.15)			-0.74*** (0.14)	-0.76*** (0.14)
Urbanicity Index							0.46*** (0.13)		0.19 (0.13)	0.17 (0.13)
Religiosity Index								-1.66*** (0.10)	-1.49*** (0.10)	-1.49*** (0.10)
Observations	6591	6591	6591	6591	6591	6591	6491	6591	6491	6491
R ²	0.03	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.06	0.06

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The dependent variable is the measure of moral universalism with respect to trust and all groups, corresponding to the average of all allocation decisions across social groups and across trust. Moral universalism decreases with in-group favoritism. In columns 7, 9, and 10, we have a smaller number of observations as population densities could not be obtained for all subjects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

D.3 Correlation b/w Universalism and Other Social Attitudes

Table 6: Correlations between Universalism and Social Preferences

Social preference	Universalism w.r.t...	Social group(s) considered	ρ
Dictator game behavior	Altruism	All	0.305
Dictator game behavior	Altruism	Domestic	0.349
Dictator game behavior	Altruism	Foreign	0.179
Dictator game behavior	Altruism	Global	0.237
Dictator game behavior	Composite Summary	All	0.287
Dictator game behavior	Trust	All	0.190
Dictator game behavior	Trust	Domestic	0.216
Dictator game behavior	Trust	Foreign	0.0953
Dictator game behavior	Trust	Global	0.175
Generalized trust	Altruism	All	0.0871
Generalized trust	Altruism	Domestic	0.0874
Generalized trust	Altruism	Foreign	0.0510
Generalized trust	Altruism	Global	0.0794
Generalized trust	Composite Summary	All	0.0996
Generalized trust	Trust	All	0.0895
Generalized trust	Trust	Domestic	0.0878
Generalized trust	Trust	Foreign	0.0543
Generalized trust	Trust	Global	0.0840
Preference for efficiency over inequity	Altruism	All	-0.0557
Preference for efficiency over inequity	Altruism	Domestic	-0.0512
Preference for efficiency over inequity	Altruism	Foreign	-0.0408
Preference for efficiency over inequity	Altruism	Global	-0.0440
Preference for efficiency over inequity	Composite Summary	All	-0.0677
Preference for efficiency over inequity	Trust	All	-0.0652
Preference for efficiency over inequity	Trust	Domestic	-0.0298
Preference for efficiency over inequity	Trust	Foreign	-0.0567
Preference for efficiency over inequity	Trust	Global	-0.0727
Rel. importance of communal moral values	Altruism	All	-0.157
Rel. importance of communal moral values	Altruism	Domestic	-0.0809
Rel. importance of communal moral values	Altruism	Foreign	-0.134
Rel. importance of communal moral values	Altruism	Global	-0.155
Rel. importance of communal moral values	Composite Summary	All	-0.171
Rel. importance of communal moral values	Trust	All	-0.145
Rel. importance of communal moral values	Trust	Domestic	-0.0898
Rel. importance of communal moral values	Trust	Foreign	-0.147
Rel. importance of communal moral values	Trust	Global	-0.112

Notes. We purposefully make the distinction between altruism and dictator game behavior, as both the dictator game and the generalized trust questions were formulated as being vis-à-vis a randomly-selected person. Thus, in our framework the dictator game does not only measure altruism but instead a combination of altruism and universalism. As such, the correlations between universalism and both dictator game behavior and generalized trust could be interpreted as upper bounds on the true correlations between universalism and *deep* altruism and generalized trust, respectively.

E Additional Analyses on Economic Behaviors and Outcomes

E.1 Tabular presentation of results: Summary measure of universalism

Table 7: Outcomes from Universalism

	Dependent variable: <i>Log (1 + Donations to ...)</i>														
	Local Church			Local Communities			American Non-Profits			Global Non-Profits			Diff. in nonlocal vs. local		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Composite universalism	-0.015*** (0.00)	-0.011*** (0.00)	-0.0015* (0.00)	-0.0037*** (0.00)	0.00098 (0.00)	0.0027** (0.00)	-0.00033 (0.00)	0.0051*** (0.00)	0.0062*** (0.00)	0.0036*** (0.00)	0.0081*** (0.00)	0.010*** (0.00)	0.013*** (0.00)	0.013*** (0.00)	0.0065*** (0.00)
Age	0.0093*** (0.00)	0.0048*** (0.00)	0.0062*** (0.00)	0.0054*** (0.00)	0.0097*** (0.00)	0.0092*** (0.00)	0.0097*** (0.00)	0.0097*** (0.00)	0.0092*** (0.00)	0.0062*** (0.00)	0.0068*** (0.00)	0.0062*** (0.00)	-0.0023*** (0.00)	-0.0023*** (0.00)	0.00085 (0.00)
Male	0.043* (0.02)	0.11*** (0.02)	0.033 (0.03)	0.036 (0.02)	0.035 (0.02)	0.036 (0.02)	0.035 (0.02)	0.035 (0.02)	0.028 (0.02)	0.028 (0.02)	0.091*** (0.03)	0.091*** (0.02)	0.011 (0.03)	0.011 (0.03)	-0.046* (0.02)
Cognitive skills	-0.016 (0.01)	0.020*** (0.01)	-0.0039 (0.01)	-0.0054 (0.01)	0.021** (0.01)	0.014 (0.01)	0.014 (0.01)	0.021** (0.01)	0.014 (0.01)	0.014 (0.01)	0.0043 (0.01)	0.0032 (0.01)	0.013 (0.01)	0.013 (0.01)	-0.016* (0.01)
Income and Wealth Index	0.13*** (0.01)	0.093*** (0.01)	0.21*** (0.01)	0.18*** (0.01)	0.22*** (0.01)	0.18*** (0.01)	0.18*** (0.01)	0.22*** (0.01)	0.18*** (0.01)	0.18*** (0.01)	0.19*** (0.01)	0.16*** (0.01)	0.0073 (0.01)	0.0073 (0.01)	0.014 (0.01)
African-American	0.28*** (0.04)	0.023 (0.04)	-0.088** (0.04)	-0.12*** (0.04)	0.039 (0.04)	-0.030 (0.04)	0.039 (0.04)	0.039 (0.04)	-0.030 (0.04)	-0.030 (0.04)	0.041 (0.04)	-0.044 (0.04)	-0.15*** (0.04)	-0.15*** (0.04)	-0.031 (0.04)
Native American	0.049 (0.13)	0.079 (0.11)	0.16 (0.13)	0.18 (0.13)	0.20 (0.14)	0.23* (0.13)	0.20 (0.14)	0.20 (0.14)	0.23* (0.13)	0.23* (0.13)	0.088 (0.13)	0.12 (0.13)	0.028 (0.13)	0.028 (0.13)	0.052 (0.12)
Asian	0.043 (0.05)	0.048 (0.04)	-0.048 (0.06)	-0.11** (0.06)	0.032 (0.06)	-0.066 (0.06)	0.032 (0.06)	0.032 (0.06)	-0.066 (0.06)	-0.066 (0.06)	0.17*** (0.06)	0.091 (0.06)	0.083 (0.06)	0.083 (0.06)	0.011 (0.06)
Hispanic	0.061 (0.05)	-0.059 (0.04)	-0.13*** (0.05)	-0.14*** (0.05)	-0.028 (0.05)	-0.076 (0.05)	-0.028 (0.05)	-0.028 (0.05)	-0.076 (0.05)	-0.076 (0.05)	-0.019 (0.05)	-0.068 (0.05)	-0.034 (0.05)	-0.034 (0.05)	0.0058 (0.05)
Other non-white	0.085 (0.09)	0.065 (0.07)	0.11 (0.10)	0.096 (0.10)	0.18* (0.10)	0.15 (0.10)	0.18* (0.10)	0.15 (0.10)	0.15 (0.10)	0.15 (0.10)	0.082 (0.10)	0.062 (0.10)	0.011 (0.09)	0.011 (0.09)	0.012 (0.08)
College-educated	0.16*** (0.02)	0.02 (0.02)	0.21*** (0.02)	0.21*** (0.02)	0.27*** (0.02)	0.21*** (0.02)	0.27*** (0.02)	0.27*** (0.02)	0.27*** (0.02)	0.27*** (0.02)	0.21*** (0.02)	0.21*** (0.02)	0.014 (0.02)	0.014 (0.02)	0.014 (0.02)
Urbanicity Index	-0.0022 (0.01)	0.44*** (0.01)	-0.022** (0.01)	0.072*** (0.01)	0.056*** (0.01)	0.056*** (0.01)	0.056*** (0.01)	0.056*** (0.01)	0.056*** (0.01)	0.056*** (0.01)	0.052*** (0.01)	0.052*** (0.01)	0.071*** (0.01)	0.071*** (0.01)	0.071*** (0.01)
Religiosity Index	0.44*** (0.01)	0.072*** (0.01)	0.072*** (0.01)	0.064*** (0.01)	0.064*** (0.01)	0.064*** (0.01)	0.064*** (0.01)	0.064*** (0.01)	0.064*** (0.01)	0.064*** (0.01)	0.095*** (0.01)	0.095*** (0.01)	-0.28*** (0.01)	-0.28*** (0.01)	-0.28*** (0.01)
Observations	6591	6591	6491	6591	6591	6491	6591	6591	6491	6591	6591	6491	6591	6591	6491
R ²	0.03	0.09	0.48	0.00	0.09	0.11	0.00	0.11	0.14	0.00	0.08	0.11	0.02	0.03	0.19

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The independent variable is our composite measure of universalism, which averages all decisions across all social groups and across both altruism and trust. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: Outcomes from Universalism

	Dependent variable:																												
	No. of friends					No. of acquaintances					Interaction w/ friends					Times rec'd and given help					Fulfilled social life								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Composite universalism	-0.0080** (0.00)	-0.0052*** (0.00)	-0.0039*** (0.00)	-0.0074*** (0.00)	-0.0044*** (0.00)	-0.0036*** (0.00)	-0.0042*** (0.00)	-0.0029*** (0.00)	-0.0022* (0.00)	-0.00062 (0.00)	-0.0015 (0.00)	0.0012 (0.00)	-0.0091*** (0.00)	-0.0047*** (0.00)	-0.0030*** (0.00)														
Age		0.0028** (0.00)	0.0020** (0.00)	0.0041*** (0.00)	0.0034*** (0.00)	0.0034*** (0.00)	-0.00020 (0.00)	-0.00020 (0.00)	-0.00062 (0.00)	-0.0043*** (0.00)	-0.0055*** (0.00)	0.0074*** (0.00)	0.0064*** (0.00)																
Male		0.028 (0.03)	0.031 (0.03)	0.069 (0.03)	0.065 (0.03)	0.065 (0.03)	0.11*** (0.03)	0.12*** (0.03)	0.12*** (0.03)	-0.033 (0.03)	-0.0078 (0.03)	-0.028 (0.03)	-0.018 (0.02)																
Cognitive skills		0.026*** (0.01)	0.025** (0.01)	0.091*** (0.01)	0.084*** (0.01)	0.084*** (0.01)	-0.021** (0.01)	-0.016 (0.01)	-0.016 (0.01)	-0.0042 (0.01)	0.0076 (0.01)	-0.028*** (0.01)	-0.024** (0.01)																
Income and Wealth Index		0.14*** (0.01)	0.11*** (0.01)	0.16*** (0.01)	0.12*** (0.01)	0.12*** (0.01)	0.052*** (0.01)	0.039*** (0.01)	0.039*** (0.01)	0.042*** (0.01)	0.034*** (0.01)	0.18*** (0.01)	0.15*** (0.01)																
African-American		-0.35*** (0.05)	-0.40*** (0.05)	-0.42*** (0.04)	-0.45*** (0.04)	-0.45*** (0.04)	-0.13*** (0.05)	-0.16*** (0.05)	-0.16*** (0.05)	0.040 (0.05)	-0.0052 (0.05)	0.10** (0.05)	0.044 (0.05)																
Native American		0.031 (0.17)	0.048 (0.16)	-0.064 (0.17)	-0.100 (0.17)	-0.100 (0.17)	-0.025 (0.19)	-0.0099 (0.19)	-0.0099 (0.19)	0.025 (0.16)	0.051 (0.16)	-0.13 (0.17)	-0.13 (0.16)																
Asian		0.043 (0.06)	-0.019 (0.06)	-0.19*** (0.06)	-0.25*** (0.06)	-0.25*** (0.06)	-0.17*** (0.06)	-0.19*** (0.06)	-0.19*** (0.06)	-0.28*** (0.05)	-0.23*** (0.05)	0.0070 (0.05)	-0.035 (0.05)																
Hispanic		-0.097* (0.05)	-0.12** (0.05)	-0.18*** (0.05)	-0.20*** (0.05)	-0.20*** (0.05)	-0.018 (0.05)	-0.034 (0.05)	-0.034 (0.05)	-0.013 (0.05)	-0.011 (0.06)	0.12** (0.05)	0.092* (0.05)																
Other non-white		-0.018 (0.11)	-0.042 (0.11)	0.031 (0.11)	0.0097 (0.11)	0.0097 (0.11)	0.034 (0.10)	0.0061 (0.10)	0.0061 (0.10)	0.23** (0.11)	0.25** (0.11)	-0.10 (0.09)	-0.14* (0.08)																
College-educated			0.25*** (0.03)		0.28*** (0.03)	0.28*** (0.03)		0.074*** (0.03)	0.074*** (0.03)		0.048* (0.03)		0.16*** (0.03)																
Urbanicity Index			0.020* (0.01)		-0.00022 (0.01)	-0.00022 (0.01)		0.0072 (0.01)	0.0072 (0.01)		-0.049*** (0.01)		0.022** (0.01)																
Religiosity Index			0.081*** (0.01)		0.059*** (0.01)	0.059*** (0.01)		0.050*** (0.01)	0.050*** (0.01)		0.12*** (0.01)		0.100*** (0.01)																
Observations	6591	6591	6491	6591	6591	6491	6591	6591	6491	6591	6591	6591	6591	6491															
R ²	0.01	0.06	0.09	0.01	0.09	0.11	0.00	0.01	0.02	0.00	0.01	0.04	0.01	0.08															

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The independent variable is our composite measure of universalism, which averages all decisions across all social groups and across both altruism and trust. The dependent variables in columns 1–10, ** $p < 0.05$, *** $p < 0.01$.

Table 9: Outcomes from Universalism

	<i>Dependent variable:</i>								
	Actual home bias			Hypothetical home bias			Educational Home Bias		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Composite universalism	-0.011*** (0.00)	-0.0094*** (0.00)	-0.0097*** (0.00)	-0.022*** (0.00)	-0.017*** (0.00)	-0.017*** (0.00)	-0.0047*** (0.00)	-0.0049*** (0.00)	-0.0036*** (0.00)
Age		0.0056*** (0.00)	0.0056*** (0.00)		0.013*** (0.00)	0.013*** (0.00)		0.0011 (0.00)	0.00057 (0.00)
Male		-0.0030 (0.04)	0.0017 (0.04)		-0.035 (0.02)	-0.028 (0.02)		0.019 (0.03)	0.044* (0.03)
Cognitive skills		0.015 (0.02)	0.015 (0.02)		-0.020** (0.01)	-0.015 (0.01)		-0.0088 (0.01)	0.0058 (0.01)
Income and Wealth Index		-0.033 (0.03)	-0.0098 (0.03)		-0.0023 (0.01)	0.0041 (0.01)		-0.074*** (0.01)	-0.042*** (0.01)
African-American		-0.11 (0.11)	-0.096 (0.11)		-0.30*** (0.05)	-0.29*** (0.05)		-0.17*** (0.05)	-0.15*** (0.05)
Native American		-0.044 (0.26)	0.094 (0.24)		-0.068 (0.15)	-0.084 (0.15)		0.036 (0.18)	-0.0091 (0.17)
Asian		0.038 (0.08)	0.074 (0.08)		-0.18*** (0.06)	-0.15** (0.06)		-0.17*** (0.06)	-0.055 (0.06)
Hispanic		0.057 (0.10)	0.057 (0.10)		-0.013 (0.05)	-0.0015 (0.05)		-0.13** (0.06)	-0.095 (0.06)
Other non-white		0.14 (0.13)	0.14 (0.12)		-0.058 (0.10)	-0.055 (0.10)		-0.12 (0.10)	-0.050 (0.10)
College-educated			-0.15*** (0.05)			-0.045* (0.03)			-0.25*** (0.03)
Urbanicity Index			-0.015 (0.02)			-0.028*** (0.01)			-0.069*** (0.01)
Religiosity Index			-0.023 (0.01)			0.023*** (0.01)			0.031*** (0.01)
Observations	2908	2908	2871	6591	6591	6491	6591	6591	6491
R ²	0.02	0.03	0.03	0.07	0.13	0.13	0.00	0.01	0.04

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The independent variable is our composite measure of universalism, which averages all decisions across all social groups and across both altruism and trust. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

E.2 Universalism in Altruism and Universalism in Trust

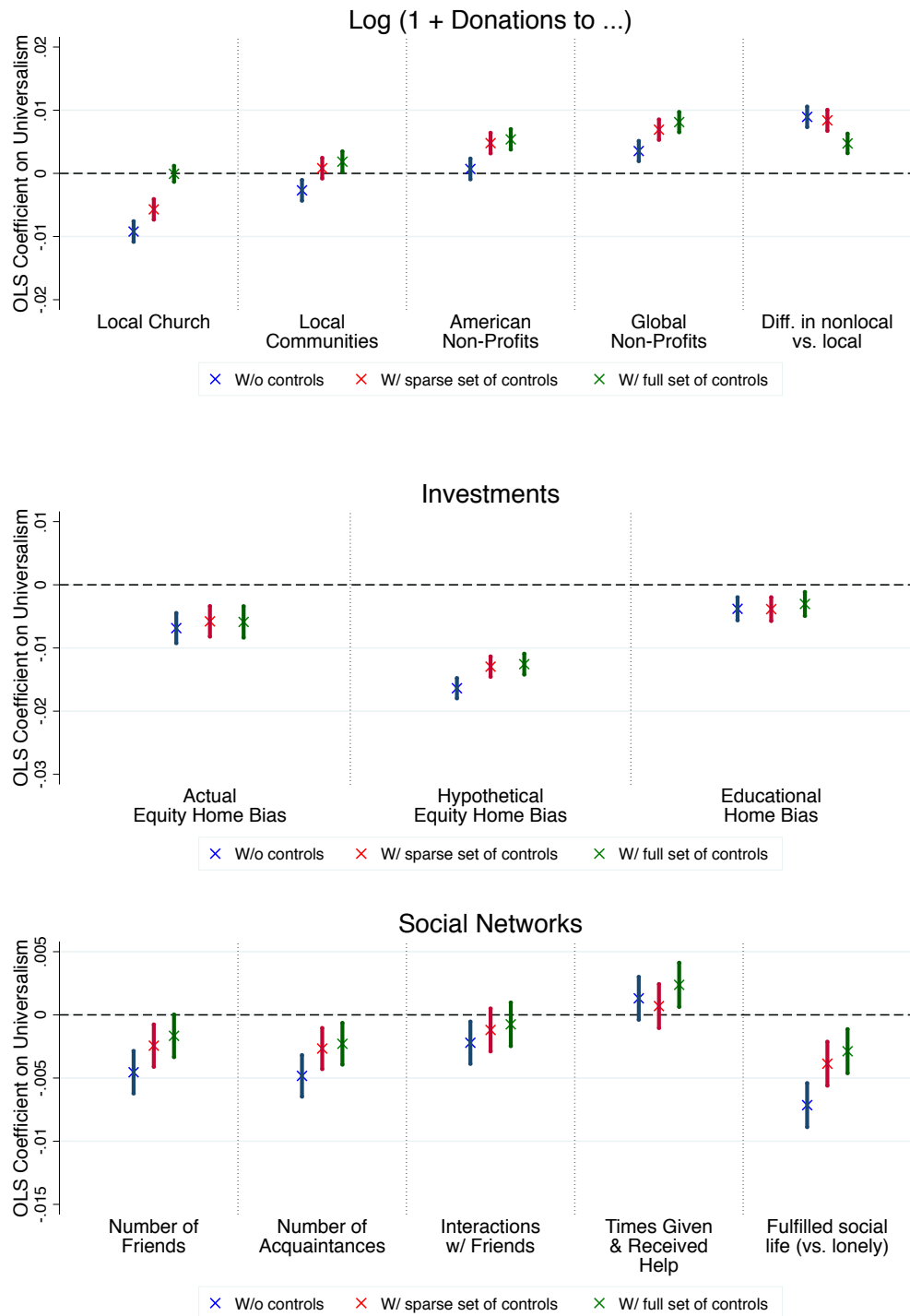


Figure 13: This figure presents OLS coefficients for the regression of the given outcome variable on our measure of universalism w.r.t. altruism. Other than the first panel, the following outcome variables are in logs: (1) number of friends, (2) number of acquaintances, (3) interactions with friends, and (4) times given and received help. The sparse set of controls consists of age, gender, race, cognitive skill, and our composite economic index (of log net worth and log income). To these, the full set of controls adds an indicator for college education, urbanicity, and religiosity.

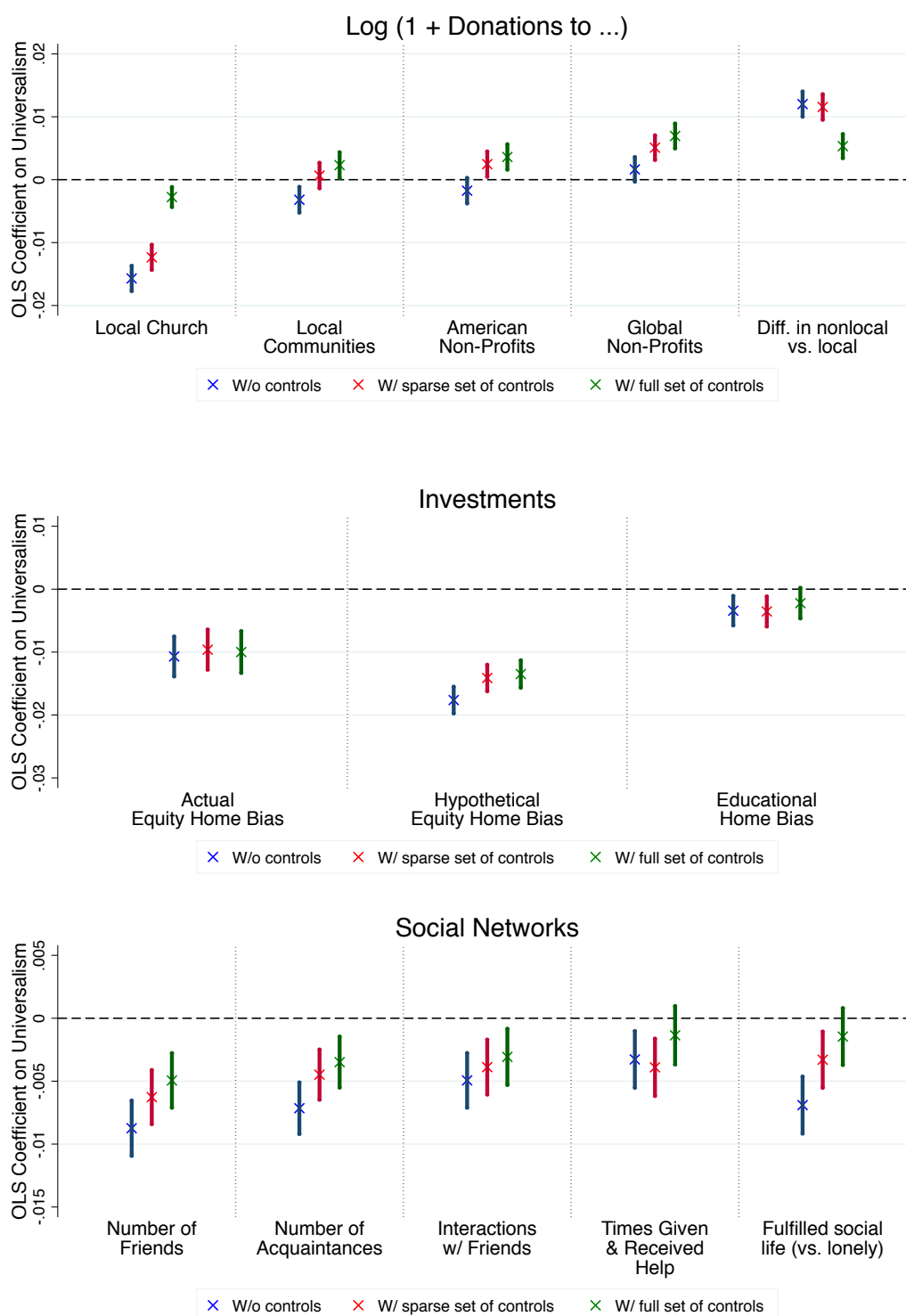


Figure 14: This figure presents OLS coefficients for the regression of the given outcome variable on our measure of universalism w.r.t. trust. Other than the first panel, the following outcome variables are in logs: (1) number of friends, (2) number of acquaintances, (3) interactions with friends, and (4) times given and received help. The sparse set of controls consists of age, gender, race, cognitive skill, and our composite economic index (of log net worth and log income). To these, the full set of controls adds an indicator for college education, urbanicity, and religiosity.

E.3 ORIV Analysis

In recent work, [Gillen et al. \(2019\)](#) lay out a series of instrumentation strategies to address measurement error in lab and survey elicitation of both outcome and explanatory variables. Measurement error not only attenuates estimates of relationships between experimentally-elicited variables, but can also bias these estimates towards identification of “new” traits.

To ensure our identification of heterogeneity in moral universalism and its relationship to outcome variables are neither attenuated by nor simply artefacts of measurement error, we employ the obviously-related instrumental variables (ORIV) estimator provided by [Gillen et al. \(2019\)](#). To do so, we treat different subsets of our universalism tasks as duplicate elicitation (in their notation, X^a and X^b) of universalism, X^* .

Specifically, as pre-registered, the order of social groups presented in our survey is randomized within the domestic and global categories. As such, the first measure of universalism (in the notation of [Gillen et al. \(2019\)](#), X^a) is constructed just like the main measure described in Section 2, except that it only uses the five domestic groups that (randomly) appear first and the three global groups that (randomly) appear first in the survey for each subject. We do not include the foreign decision as there was only *one* of these elicitation, and thus including this decision in both X^a and X^b would contribute to violating the assumption of independence between the errors $\nu_X^a = X^a - X^*$ and $\nu_X^b = X^b - X^*$ in both elicitation.

Analogously, the second measure of universalism (X^b) is constructed just like the main measure described in Section 2, except that it only uses the five domestic groups that (randomly) appear last and the two global groups that (randomly) appear last in the survey.

Replicating our analyses of outcome variables in Section 6 with the ORIV estimator and the two duplicate elicitation described above delivers the results in Figure 15, where we plot the ORIV coefficients from instrumenting for universalism in altruism, universalism in trust, and composite universalism. Since each subject appears twice when implementing ORIV, standard errors are clustered at the subject level.

In almost all cases the results with the ORIV estimator are qualitatively and often quantitatively very similar to those with OLS. With ORIV, the coefficients for the regression of donations to global non-profits and the regression of educational home bias both lose their significance, suggesting that measurement error contributed somewhat to identifying these effects. On the other hand, with the exception of times given and received help, the coefficients on the panel presenting outcome variables related to social networks all grew significantly stronger, suggesting that in this case measurement error contributed to attenuating the estimated relationships between these variables and

universalism.

In our case, that the difference between results derived from ORIV and OLS estimates is small should not be surprising. As covered in Section 4, all 32 decisions in our survey correlate positively with each other, with an average correlation coefficient of $\rho = 0.33$. Moreover, for the case of our composite universalism measure, the correlation between the proxies X^a and X^b in our data is $\widehat{\text{Corr}}[X^a, X^b] = 0.80$. As [Gillen et al. \(2019\)](#) document, this correlation is indicative of the degree of bias in OLS coefficients – $E[\hat{\beta}] \approx \beta^* (\widehat{\text{Corr}}[X^a, X^b])$ – where intuitively, the higher this correlation the lower the measurement error and the greater the amount of information about the true explanatory variable X^* in the elicitation of X .

Several points are in order regarding how our implementation of the ORIV strategy deviates from the recommendations in [Gillen et al. \(2019\)](#). Firstly, they recommend separating the duplicate elicitations of the explanatory variable X^* , and structuring each with a different scale or elicitation format, as this diminishes concerns about desires for consistency among subjects. By construction, our elicitations were all conducted with the same elicitation format and on the same scale, as all consisted of our bystander dictator games where we varied the particular social groups on either end of the game. Secondly, in this analysis our outcome variables are treated as if elicited without measurement error. This is likely not to be the case, as all our outcome variables consisted of self-reports by the subject of their donation activity, equity portfolio holdings, and social networks.

Nevertheless, we remind that elicitations of universalism in trust and universalism in altruism were separated in our survey, as well as elicitations of domestic and global universalism measures within these broader choice domains. Moreover, any one subject could have observed social groups on the left or on the right of each allocation task, and this was randomized within-subject. That is, a subject could have completed domestic money allocation tasks by observing the corresponding in-groups on the left, but then completed trust point allocations by observing the corresponding in-groups on the right, and any other such combination of elicitation layouts for the other measures of universalism. This, combined with the fact that averaging multiple decisions itself contributes to the reduction of measurement error, should to some extent reduce concern about the similarity of our elicitation formats in generating non-independent errors ν_X^a and ν_X^b in our proxies for universalism.

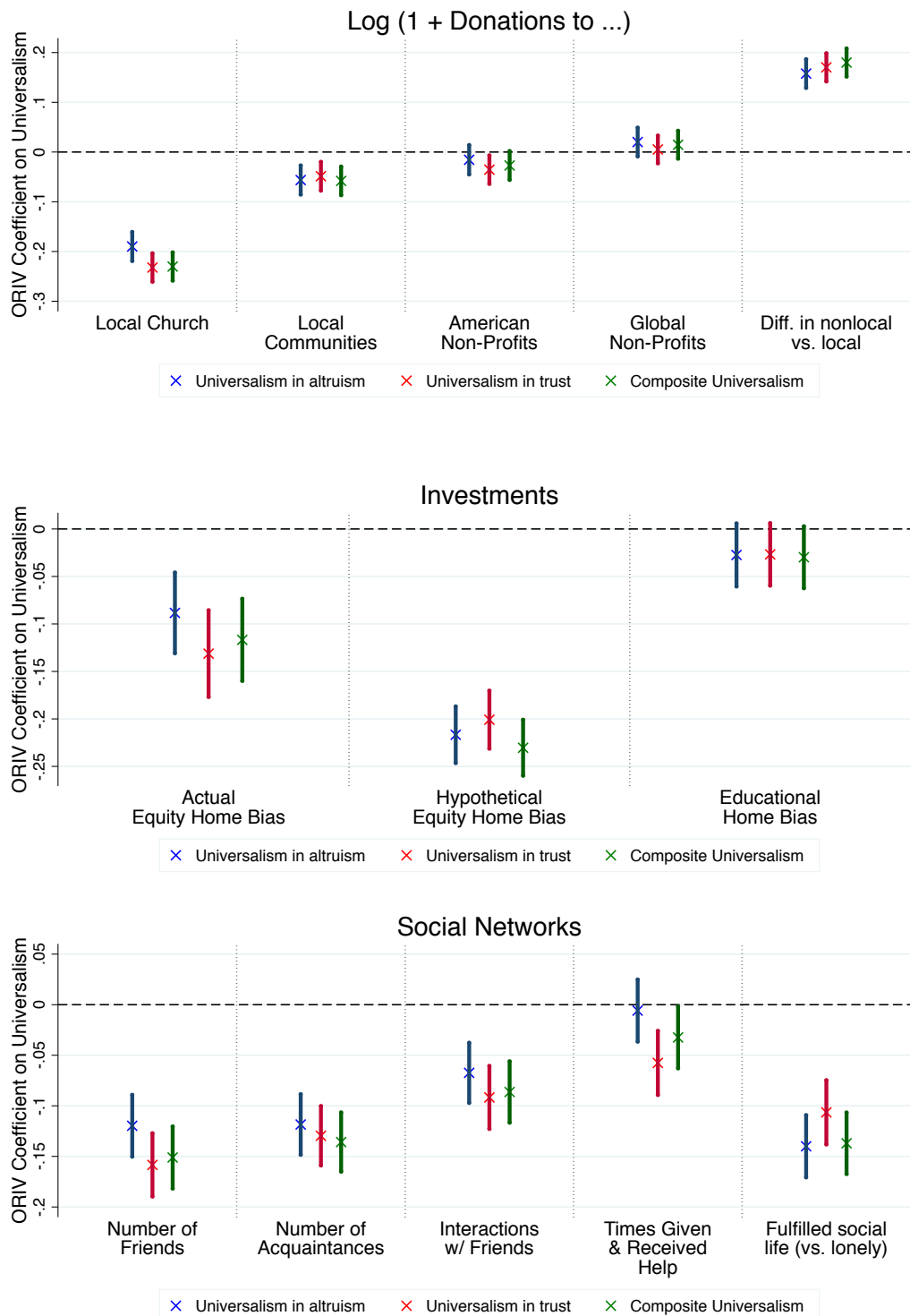


Figure 15: This figure presents coefficients for the stacked, ORIV regression of the given outcome variables on duplicate elicitations of our composite measure of moral universalism. As recommended by [Gillen et al. \(2019\)](#), both the universalism measures and outcome variables are standardized into z-scores so they have the same scale. Other than the first panel, the following outcome variables were originally in logs, before standardization: (1) number of friends, (2) number of acquaintances, (3) interactions with friends, and (4) times given and received help. Data underlying figure is from the full, non-representative study sample.

F Replication of analyses based on representative *Dynata* sample

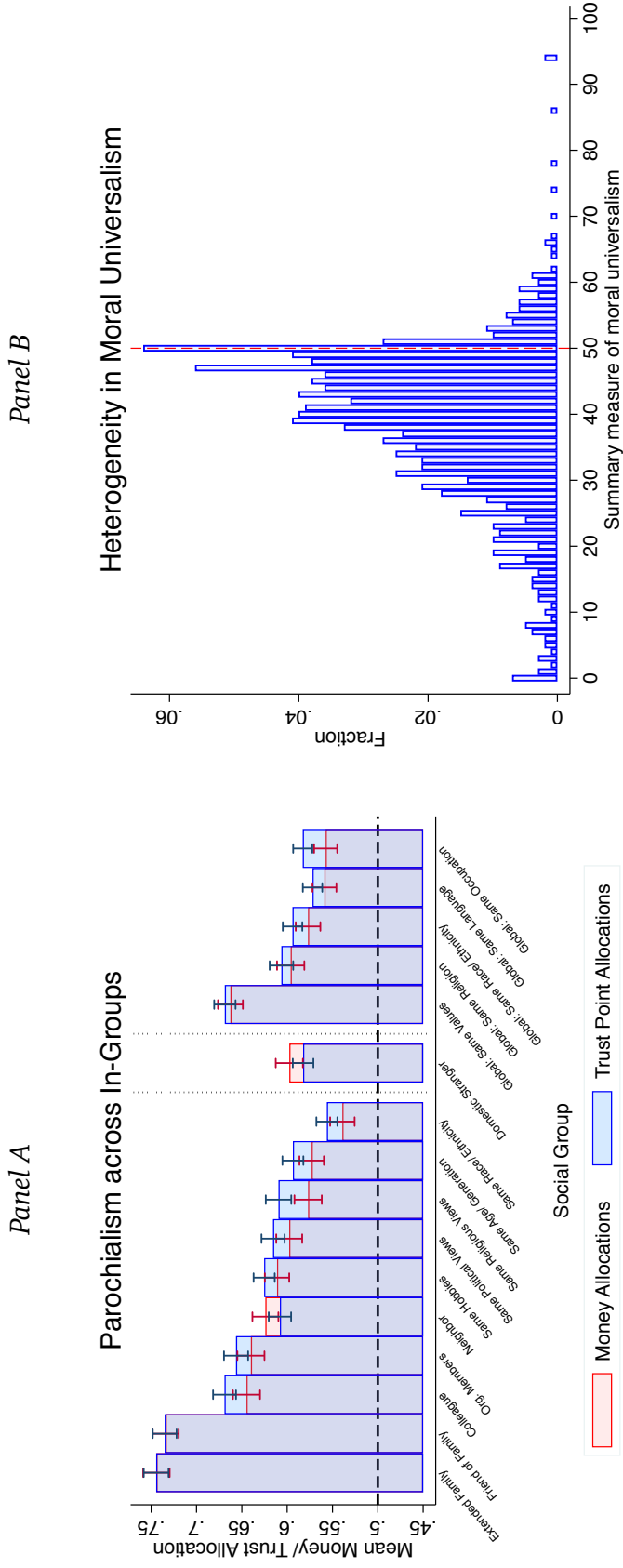


Figure 16: This figure presents heterogeneity in universalism within and across respondents. In Panel A, we present average allocations of money and trust points given to every social group across all subjects, along with standard error bars. The first ten bars show average allocations to domestic in-groups in tradeoffs vis-à-vis a domestic stranger. The 11th bar shows the average allocation to a domestic stranger relative to a global stranger. Bars 12–16 show average allocations to a global in-group member vis-à-vis a global stranger. Each bar is composed of $N = 999$ individuals. In Panel B, we present the distribution of composite measures of moral universalism across our representative sample of the U.S. population. The measure is a summary statistic averaging each subject's allocation decisions across both altruism and trust and across a variety of social groups. These average amounts reflect allocations to random strangers, so that the measure is decreasing in subjects' in-group favoritism. As such, note the large amount of mass located to the left of an average allocation of 50:50, indicating a substantial degree of in-group favoritism across the population.

Variance Decomposition All Allocation Decisions

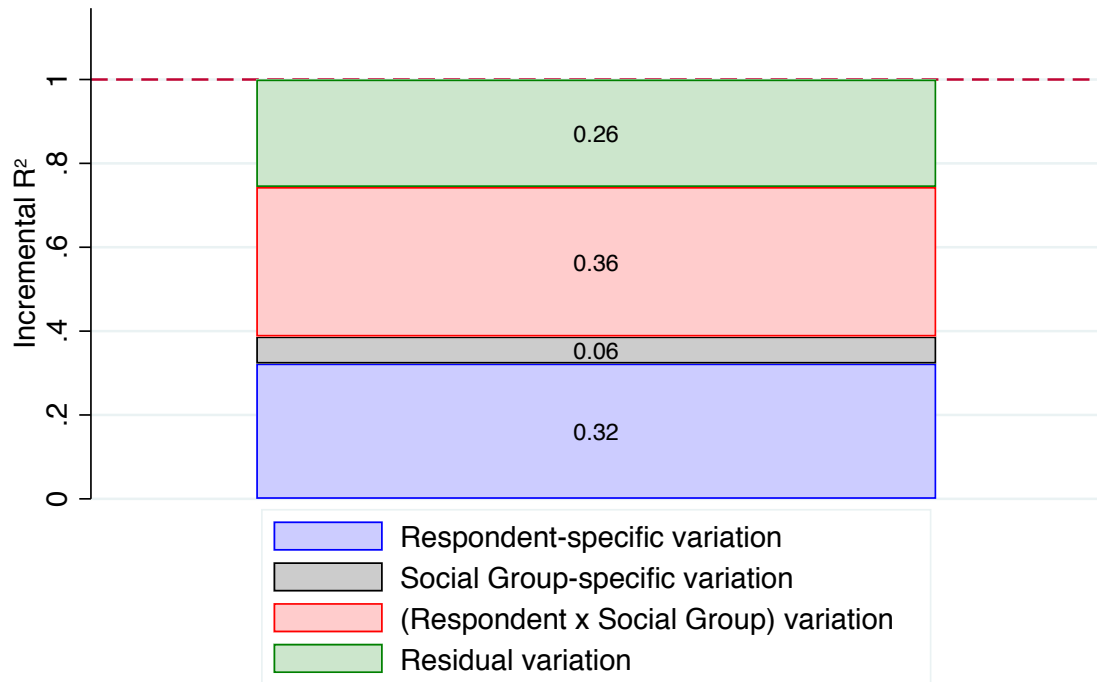


Figure 17: This figure presents the incremental R^2 for a stacked regression of all 32 allocation decisions made by all respondents in the representative sample of our survey on various features of our bystander dictator games. It shows that 32% of variation in the data can be explained by heterogeneity in respondents' average level of universalism (i.e., each respondent's "type"). Similarly, once social group fixed effects are added to the regression, an additional 6% of the variance in the data can be attributed to heterogeneity in average universalism across social groups (as discussed in Section 4.2, on average respondents are more parochial with respect to some social groups, like extended family members, than others). Finally, 36% of the variation in the data can be explained by how individual respondents choose allocations specific to the given task, beyond that which would be predicted by their average universalism level, the choice domain, and the specific social group. As such, the figure reveals that while a significant portion of the data can be explained simply by heterogeneity in average universalism across respondents (i.e., respondents of different "types" making fairly consistent decisions across tasks and thus implementing relatively domain-general choice rules), allocation decisions are nevertheless responsive to the specifics of each individual task (that is, even if of a fairly consistent "type", each respondent varies their allocation decisions depending on the given social group).

Table 10: Determinants of Universalism

	<i>Dependent variable: Composite measure of moral universalism</i>									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Age	-0.17*** (0.02)								-0.13*** (0.02)	-0.13*** (0.02)
Male	-0.85 (0.78)								-0.98 (0.78)	-0.88 (0.79)
White		-1.09 (0.78)							-1.23 (0.82)	-1.04 (0.87)
Cognitive skills			1.14*** (0.32)						0.55* (0.32)	0.53* (0.32)
College-educated				0.40 (0.77)		1.17 (0.77)				0.54 (0.83)
Income and Wealth Index					-1.28*** (0.29)	-1.35*** (0.29)			-0.85*** (0.30)	-0.89*** (0.31)
Urbanicity Index							0.39 (0.34)		0.13 (0.35)	0.11 (0.35)
Religiosity Index								-1.48*** (0.26)	-1.11*** (0.27)	-1.11*** (0.27)
Observations	999	999	999	999	999	999	984	999	984	984
R ²	0.06	0.00	0.01	0.00	0.02	0.03	0.00	0.03	0.10	0.10

Notes. OLS estimates, robust standard errors in parentheses. Each observation is one subject. The dependent variable is the composite measure of moral universalism, corresponding to the average of all allocation decisions across social groups and across both altruism and trust. Moral universalism decreases with in-group favoritism. In columns 7 and 9, we have a smaller number of observations as population densities could not be obtained for all subjects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

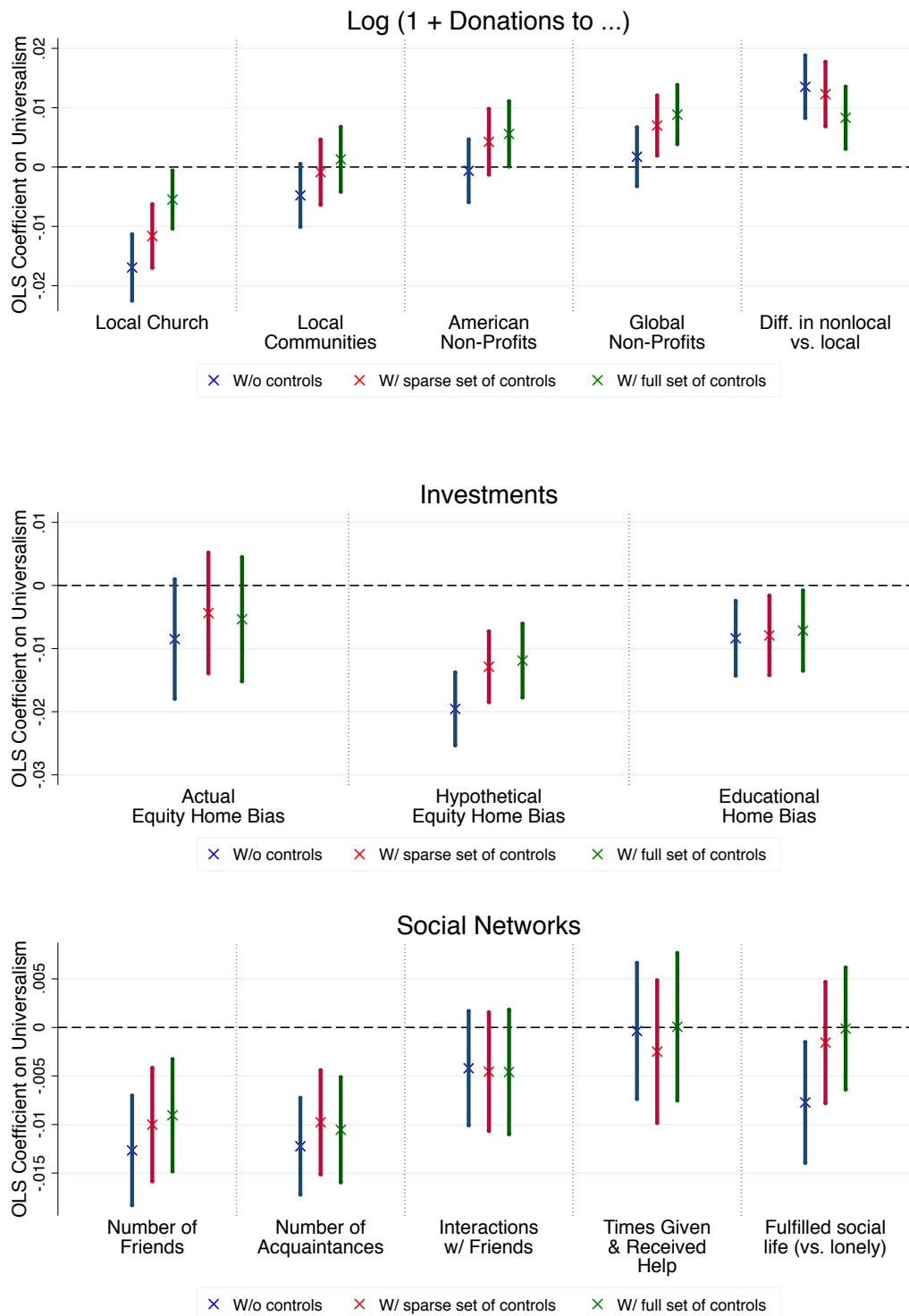


Figure 18: This figure presents OLS coefficients for the regression of the given outcome variable on our composite measure of moral universalism. As such, plotted coefficients indicate the change in the outcome variable associated with a one dollar or one trust point increase in an individual's moral universalism. Other than the first panel, the following outcome variables are in logs: (1) number of friends, (2) number of acquaintances, (3) interactions with friends, and (4) times given and received help. The sparse set of controls consists of age, gender, race, cognitive skill, and our composite economic index (of log net worth and log income). To these, the full set of controls adds an indicator for college education, urbanicity, and religiosity.