

Communicating Global Income Rank Increases Charitable Donations

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Abstract

People in high-income countries underestimate their affluence relative to the global population, potentially limiting their willingness to donate to charity. We test whether a rank-based nudge (RBN) informing individuals how their post-tax income ranks globally increases charitable donations. Further, because people have been shown to shift their reference point for who should give to charity based on their current income, we investigate whether donations can be boosted by asking how much people with different income ranks should give to charity (injunctive distribution task, IDT) before administering the RBN. Participants ($N = 1,217$) were randomly assigned to one of four conditions: control, RBN, IDT, or IDT+RBN. Those in the RBN conditions donated significantly more and reduced overestimation of others' income across all percentiles of the global income distribution. However, the addition of the IDT did not further increase donations. These findings suggest that RBNs effectively boost generosity by correcting misperceptions of relative affluence.

Keywords: Rank-based judgment; Charitable giving; Altruism; Donations; Boosting; Nudging.

Introduction

The COVID-19 pandemic led to the largest increase in income inequality between countries in the past three decades and is expected to hinder the achievement of *Sustainable Development Goal 10: Reduced Inequalities* by 2030 (Mahler, Yonzan, & Lakner, 2022). Currently, there are still 692 million people living in extreme poverty, surviving on less than \$2.15 per day, and nearly half the global population falls below the poverty line of most upper-middle-income countries, set at \$6.85 per day (World Bank, 2024). The World Bank has labeled the 2020-2030 period as a “lost decade” for poverty alleviation efforts, underscoring the heightened urgency of addressing global inequality (World Bank, 2024).

Despite these stark economic realities, research has shown that people in wealthier nations systematically underestimate both the extent of global poverty and their own position (their rank) in the world income distribution (Nair, 2018; Fehr, Mollerstrom, & Perez-Truglia, 2022). This misperception may hinder generosity toward global causes, as individuals fail to appreciate the privileged position they are in.

Understanding one's own income rank position relative to others' may greatly influence subsequent (donation) decisions. One prominent theory that explains why people's perceived ranks can have considerable influence on judgments and decisions is decision by sampling (DbS; Stewart, Chater, & Brown, 2006). This theory purports that when making judgments and decisions individuals derive a value of an object by ranking the object within a sample of other objects drawn from the immediate context or memory. In other words, according to DbS, judgments are not made according to their absolute value, but relative to rank. By deriving one's perceived rank position relative to others, the theory can predict a variety of psychological phenomena. For instance, based on the distribution of real-world events, such as credits and debits to people's current accounts, DbS explains predictions made by prospect theory while only utilizing two (simple) cognitive mechanisms: ordinal comparisons and frequency accumulation (i.e., keeping a frequency count of the number of comparison outcomes that favor the target; Stewart et al., 2006; Stewart, 2009). Relative rank further predicts satisfaction with one-off payments (Tripp & Brown, 2016), concern with indebtedness (Aldrovandi, Wood, Maltby, & Brown, 2015), and income rank, specifically, predicts: life satisfaction (Boyce, Brown, & Moore, 2010; Quispe-Torreblanca, Brown, Boyce, Wood, & De Neve, 2021), economic satisfaction (Clark, Westergård-Nielsen, & Kristensen, 2009), well-being (Brown, Gardner, Oswald, & Qian, 2008; Macchia, 2024), work-related effort (Clark, Masclet, & Villeval, 2010), job satisfaction (Kifle, 2014), children's behavioral problems (Garratt, Chandola, Purdam, & Wood, 2017), general health (Hounkpatin, Wood, & Dunn, 2016; Daly, Boyce, & Wood, 2015) and mental health (Euteneuer, Salzmann, & Süssenbach, 2024; Hounkpatin, Wood, Brown, & Dunn, 2015; Wetherall, Daly, Robb, Wood, & O'Connor, 2015; Wood, Boyce, Moore, & Brown, 2012).

Yet, the process of estimating one's own rank position in the global income distribution, which contains billions of households, is a difficult problem, given that people's intu-

itions are primarily adapted for small-scale groups (Tooby & Cosmides, 2016). This difficulty is further amplified because the samples of incomes that people perceive are biased towards people in their country, socio-economic situation, or an even smaller group of their peers and friends (e.g., Cruces, Perez-Truglia, & Tetaz, 2013; Galesic, Olsson, & Rieskamp, 2012). For people in rich countries, reliance on these biased samples likely results in an underestimation of the true extent of economic inequality within or between nations (Bogard, West, & Fox, 2022). For instance, wealthy individuals underestimate their own position in the national income distribution (Cruces et al., 2013).

Rank-based nudges (RBN; Aldrovandi, Brown, & Wood, 2015) provide individuals with information about their rank relative to others, leveraging the theory of decision-by-sampling (DbS; Stewart et al., 2006), for example by informing participants that: "...there are X million households with a lower income than yours, while you stated that there were Y." (Cruces et al., 2013; p.103). RBNs, however, have resulted in mixed effectiveness, potentially because people do not always misestimate their rank (Coulson & Harris, 2024); the greater the rank misestimation, the more effective the RBN (Aldrovandi, Brown, & Wood, 2015). Cruces et al. (2013) found that participants who overestimated their national income rank were more likely to support income redistribution policies after a RBN, and more so if they overestimated by more than 10 percentiles. Since individuals may considerably underestimate their income relative to the world population (see above), RBNs are a promising tool in this domain. However, previous research communicating relative global rank of income led to mixed results: of the two papers directly testing this question (that we are aware of: Nair, 2018; Fehr et al., 2022) one RBN increased donations to charity, support for spending on foreign aid, and support for cuts in agricultural trade protections (Nair, 2018), while the other did not affect support for policies to reduce global inequality (Fehr et al., 2022). Given the conflicting results, this paper aims to shed further light on whether providing information about one's rank in the global income distribution can increase charitable donations.

H1: A RBN providing information about income rank relative to the global population increases donations compared to a simple control condition.

One possible concern that may limit the effectiveness of only providing income-rank information is that people's perceptions of spare money and donation ability are highly reference-dependent. Work by Berman, Bhattacharjee, Small, and Zauberman (2020) suggests that individuals tend to believe that those richer than them have more spare money and greater obligations to donate, while those within their own income group are perceived as less able to do so. However, people hold this belief regardless of their current income (i.e., people at all levels of the income ladder indicate that those above them should have money to spare, but people at their rank do not, Berman et al., 2020). This raises a possi-

ble limitation of RBNs in this domain: due to the reference-dependent nature of judgments about disposable income and donation ability, the nudge may simply shift people's reference point and change their beliefs about whether people in their current rank should donate to charity, rather than their willingness to donate.

A shift in reference point could be mitigated by asking participants how much people with different income ranks should donate to charity *before* providing them with information about their own rank (we refer to this elicitation as an injunctive distribution task, IDT). The IDT uses people's desire for consistency to avoid a shift in the reference point after learning about their own income. Previous research within other domains has successfully leveraged people's desire for consistency, which suggests that this may be a promising tool to avoid a reference shift and increase donations (Hsee, Zhang, Lu, & Xu, 2013; Maier, Caviola, Schubert, & Harris, 2023; Moche, Erlandsson, Dickert, & Västfjäll, 2023; Freedman & Fraser, 1966; Cialdini, Cacioppo, Bassett, & Miller, 1978). Combining the IDT with the RBN results in three additional hypotheses:

H2: A combination of RBN and IDT increases donations compared to a simple control condition.

H3: A combination of RBN and IDT increases donations compared to a condition with RBN only.

H4: A combination of RBN and IDT increases donations compared to a condition with IDT only.

Method

Participants & Exclusions

We pre-registered our study on the OSF.¹ We obtained ethics approval from UCLA's Institutional Review Board (IRB-24-5694). Informed consent was obtained from all participants. An a priori power analysis ($1 - \beta = .8$, $d = 0.2$) indicated a required sample size of 1,280 across four experimental conditions (320 participants per condition). To account for potential attrition, we aimed to collect 1,400 participants. We recruited our sample of 1,371 US participants via Prolific.² We filtered for participants that had a minimum approval rating of 95%, were fluent in English, had a minimum household income of \$40,000 (this ensured participants earned enough relative to the global population so that the intervention could in principle be effective), and were 21 or older (matching the age used in the reference income data used to calculate ranks). We excluded participants based on three different preregistered attention checks, which asked: (1) what charity they donated to in the experiment (73 participants failed this check), (2) what kind of work the charity does (105 participants failed this check), and (3) how much money they could allocate to that charity (77 participants failed this check). After these preregistered exclusions, we retained a sample of 1,217 par-

¹All materials, including our pre-registration, can be found on our project page: <https://osf.io/uxzh8/>.

²We had to exclude some participants from whom we received multiple submissions under the same Prolific ID.

participants. In addition to the preregistered attention checks, we excluded another 76 participants for whom the rank information had not been displayed correctly.³ This left us with a final sample size of 1,142 participants (326 in the control condition, 299 in the IDT condition, 261 in the RBN condition, and 256 in the IDT+RBN condition).⁴ The mean age was 41.35 years (SD = 13.15). 584 participants were female, 557 were male, and one did not disclose this information.

Design, Materials & Procedure

Participants were randomized into one of four conditions: control, injunctive distribution task (IDT), global income rank-based nudge (RBN), or a joint condition with both the IDT and RBN. After the respective intervention, all participants were taken to an incentive-compatible donation task, where they decided how much of \$100 they wanted to keep for themselves versus donate to the Against Malaria Foundation (AMF, see Figure 1).

In this experiment, we will randomly give a \$100 bonus to one of our participants.
You can choose how much of this bonus you would like to keep for yourself and how much you want to give to the Against Malaria Foundation if you win the raffle.
Around 625,000 people die from malaria each year, and 240+ million fall ill from malaria. 70% of them are children under 5. The Against Malaria Foundation is a charity that combats malaria by distributing insecticide-treated bed nets in malaria areas. This has been shown to be a very effective method to treat malaria, and the foundation has been recommended by the independent charity evaluator GiveWell as a highly effective charity.
Please indicate how much of the money you want to keep to yourself and how much you want to donate to the Against Malaria Foundation.

Figure 1: Instructions for the donation decision task.

At the end of the survey, all participants answered attention checks, comprehension checks, and qualitative questions about how they made their decisions. Further, we collected a number of exploratory variables such as household income (measured for all conditions through Prolific demographics), how much spare money they believed they had (“How much spare money would you say you have in USD? [Spare money is the highest one-time payment you would be able to make, without having to dip into a retirement fund, borrow money,

³Some participants entered their income using decimals or commas, which led to wrong rank information being provided by the calculator. Further, for some participants the rank information stored in the embedded data in Qualtrics was NA. We removed these participants, as it is possible that they could not see the displayed rank information during the experiment.

⁴The actual power achieved to detect an effect of $d = 0.2$ for a comparison of the two groups with the smallest sample sizes (261 vs 256) would be 73% (estimated using the G*Power software for independent samples t -test.)

sell any physical assets such as a house or a car, or charge it to a credit card]”) and how much they currently donated to charity per year (“How much money (in USD) do you currently donate to charity (per year)?”). Finally, all participants were asked how much they believe people in different deciles of the global income distribution earn⁵ (we refer to this measure as *social distribution task (SDT)* to delineate it from the *injunctive distribution task (IDT)*, which asks how much people at different ranks of the income distribution *should* donate).

IDT. Before moving to the incentive-compatible donation task, participants in the IDT and IDT+RBN conditions answered a series of six questions asking them to think about the yearly income distribution of everyone in the world. Specifically, we asked them to picture someone who would be placed at the top 40%, 30%, 20%, 10%, 5%, and 1% of their imagined distribution and state how much they think each of those individuals should give to charity annually (see Figure 2).

Think about the yearly income distribution of everyone in the world. Now imagine someone who is placed at the top 40% of that distribution. This person would therefore have a higher income than 60% of people in the world. In your view, what is a suitable amount of money (in USD) that this person should give to charity per year? This amount should reflect what you think is morally appropriate.

Figure 2: Example question in the IDT.

RBN. Participants in the global income RBN and IDT+RBN conditions were asked for their yearly post-tax household income, the number of adults, and the number of children in their household, allowing for the calculation of their per capita income and income rank.⁶ Participants were subsequently informed about both their income rank in the global population and how much they earned in terms of multiples of the global median for a single person (see Figure 3).

To calculate participants’ income rank relative to the global population, we sourced data from `wid.world` (World Inequality Database, 2024). For the purposes of our study, we used the most recent series of post-tax disposable income data available at the time. Importantly, we wanted to ensure that income data was adjusted for differences in cost of living between countries. To this end, the data was converted to USD while adjusting for Purchasing Power Parity (PPP).⁶ With this adjustment, the calculated income rank for our participants accounts for the fact that goods and services can be cheaper outside the United States. In other words, our rank information told participants that they placed in a particular percentile

⁵We elicited this with the following question: “The highest earning $x\%$ of people in the world have a household income (post-tax) of at least _ USD each year.” with x containing all deciles between, and including, 10 and 90.

⁶For the detailed conversion and household income equalization methodology used, see: <https://osf.io/ns9ue>.

Since you have a household income of **\$109,000** in a household of **2 adults and 4 children**, you are richer than **77%** of people in the world. In other words, you are in the richest **23%** of the global population.

In addition, your household's per head income is **3 times** the global median income of a single person. Note that these numbers already take into account that certain goods and services are cheaper outside the United States. In other words, you are in the top **23%** in terms of how much your money can actually buy you, not only in dollar terms.

The income data was sourced from official and reputable sources, such as the World Inequality Database (WID).

Figure 3: Example RBN for a household with \$109,000 post-tax income, 2 adults and 4 children.

in terms of how much their money can *actually* buy them, not merely in US dollar terms.

Results

Global Income RBN Increases Donations

Main Analysis (Preregistered). Figure 4 visualizes participants' donations to the AMF in the four experimental conditions. Donations were highest in the RBN condition ($M = 48.6$; 95% CI = [52.7, 44.6]), followed by the IDT+RBN condition ($M = 47.1$, 95% CI = [42, 51.2]) and the IDT-only condition ($M = 43.4$, 95% CI = [39.7, 47.2]), and lowest in the control condition ($M = 40.4$, 95% CI = [36.8, 44.0]).

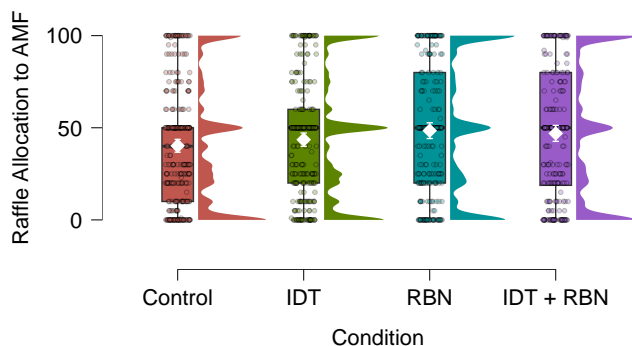


Figure 4: Allocations of Raffle to Charity in Experiment 1. Participants decided how much of a \$100 raffle to keep for themselves and how much to donate to the Against Malaria Foundation (AMF). IDT = Injunctive Distribution Task, RBN = Rank-Based Nudge (i.e., communicating global income rank).

In line with the descriptive statistics, we found that the RBN increased donations in comparison to the control condition, ($t(531.89) = 2.93$, $p = .002$, one-sided;⁷ $d = 0.25$,

⁷All one-sided tests were preregistered as such.

supporting H1. Further, in line with H2, we found that a combination of IDT + RBN was effective at increasing donations, ($t(519.63) = 2.39$, $p = .009$, one-sided; $d = 0.21$). However, we did not find evidence that the combined intervention was more effective than RBN alone or IDT alone (RBN+IDT vs. RBN only: $t(514.68) = 0.48$, $p = .684$, one-sided; $d = 0.04$, IDT+RBN vs. IDT only $t(519.22) = 1.19$, $p = .117$, one-sided; $d = 0.10$). Consequently, our data did not support H3 and H4. Overall, these results suggest that providing income rank information is effective at increasing donations, whereas there is no evidence that the IDT influences donations.

Robustness Check with Additional Exclusions. Of the 1142 participants who passed all preregistered attention and comprehension checks, 249 did not correctly answer a question asking them “If your income ranks in the top 10% of the global population, which proportion of the global population has a higher income than you?” and 190 participants of the 517 participants in the RBN conditions did not correctly remember what the calculator indicated (correct answer: “How rich you are in comparison to the world population, adjusted for the fact that the money buys more overseas.”).⁸ We had not originally preregistered these two questions as exclusions because participants’ ability to answer the former question would depend on the experimental condition they are assigned to (participants in the RBN conditions received more explanation of what the rank means)⁹, while the latter question is only applicable in two of the four conditions, and we wanted to avoid differential attrition between conditions. However, due to the large number of participants failing to answer these two questions correctly, we conducted an additional robustness check excluding participants who failed any of these two questions. This led to the same results in terms of the statistical significance patterns (H1: ($t(294.35) = 2.79$, $p = .003$, one-sided; $d = 0.33$; H2: ($t(236.16) = 1.74$, $p = .042$, one-sided; H3: ($t(268.61) = 0.73$, $p = .768$, one-sided; $d = 0.09$; H4: ($t(251.79) = 0.82$, $p = .206$, one-sided; $d = 0.10$). Notably, the effect size of the rank-based nudge increased after applying these exclusions ($d = 0.33$ vs. $d = 0.21$), suggesting that the intervention becomes more effective for participants that better understand rank information.

The RBN Affected Beliefs About the Global Income Distribution (Exploratory)

After the intervention, we included a SDT whereby participants were asked how much they think people at different per-

⁸Interestingly, 131 participants indicated that the RBN showed them “How rich you are in comparison to the world population, **not** adjusted for the fact that the money buys more overseas.”, even though we had explicitly mentioned the purchasing power adjustment when giving income rank information.

⁹We also found evidence for this hypothesized dependence on condition in the actual experimental data, where more participants failed this check in the conditions without RBN (control: 29.6%, IDT: 27.4%) than the conditions with RBN (RBN: 18.0%, RBN+IDT:20.7%), $\chi^2(3) = 8.23$, $p = .042$.

centiles of the global income distribution earn. Participants¹⁰ in the RBN conditions estimated lower global incomes than the conditions without RBN (Median No RBN: \$86,274, 95% CI=[\$75,308, \$98,838]; Median RBN: \$50,467, 95% CI=[\$43,672, \$58,320]; ($F(1,889) = 28.04, p < .001$);¹¹ however, even after the RBN the estimated median was still considerably higher than the actual global median (the purchasing power adjusted global median would be \$14,473).¹² Figure 5 shows that the RBN, in fact, shifted people's beliefs about the complete income distribution. After the RBN intervention, participants indicated lower incomes at all deciles of the income distribution.¹³

Discussion

Our findings show that providing individuals with global income rank information increases charitable donations. Specifically, participants in the conditions containing a rank-based nudge (RBN) donated significantly more than those in the control condition. Participants in the RBN conditions further updated their beliefs about how rich people are globally, indicating lower incomes across all deciles of the global income distribution. This suggests that communicating individuals' income information relative to others corrects misperceptions of affluence and increases generosity.

These results contribute to the growing literature on rank-based decision-making (Stewart et al., 2006) by demonstrating that communicating participants' income relative to others increased charitable donations. As RBN effectiveness depends on the extent of rank misestimation (Aldrovandi, Brown, & Wood, 2015) and people in our study overestimate global incomes considerably, interventions that provide actual global income rank are a promising type of RBN. Interestingly, providing global income rank information was effective even though the world population differs from participants in the broadest possible sense, both in terms of group identity and physical proximity, factors that have previously been found to reduce the influence of normative information (e.g., Xiao, Sparkman, & Constantino, 2023). Our findings thus offer an optimistic perspective on human impartiality

¹⁰For the following analyses, participants were additionally excluded if the SDT answers did not strictly monotonically decrease, after which, a total of 889 participants remained.

¹¹The test is based on a linear mixed effects model with the following specification $\log(\text{SDTvalue}+1) \sim \text{RBN} \times \text{SDTdeciles} + (1 | \text{id})$, where SDTdeciles is supplied as a factor.

¹²Based on data from *wid.world*. Some participants may not have taken the purchasing power adjustment into account, in which case overestimation would be even stronger (as people in poorer countries are somewhat richer in PPP terms than they would be in nominal terms, given that the same amount of money can purchase more goods and services).

¹³We confirmed this visual expression by testing the effects of the RBN for each decile, using a follow-up test at each decile based on the linear mixed effects model ($\text{emmeans}(\text{fit}, \text{pairwise} \sim \text{RBN} | \text{SDTdeciles})$), which indicated a significant effect at each decile: $z_{10} = 7.774, p < .001$; $z_{20} = 7.064, p < .001$; $z_{30} = 5.808, p < .001$; $z_{40} = 4.452, p < .001$; $z_{50} = 3.688, p < .001$; $z_{60} = 3.307, p < .001$; $z_{70} = 2.875, p = .004$; $z_{80} = 2.756, p = .006$; $z_{90} = 2.960, p = .003$. These results also hold with the additional exclusions described in the Robustness Check section (see online repository for details).

and altruism by showing that people care about the rank of their income, even relative to distant others they will likely never interact with or be affected by.

Further, we show that participants in the RBN condition update their beliefs about incomes at every decile of the global income distribution, even though we prefiltered participants so that they would likely be in the top 25% of global earners (i.e., almost no participants actually received feedback about any of the income ranks in the lower half of the distribution). This suggests that people are skilled at extrapolating from data about two particular points in the distribution (their rank and the median),¹⁴ and adjust their estimates for global incomes across all deciles accordingly.

What Factors Moderate the Effectiveness of Global Income RBNs?

Nair (2018) and this manuscript found support for increased donations after a global income rank RBN, while Fehr et al. (2022) did not find any effect of this intervention. This raises the question of which factors may explain the opposing findings. As both our study and Nair (2018) used American participants, while Fehr et al. (2022) used German participants, cultural differences between these two countries could play a role. In Germany, taxation is relatively higher and social redistribution is usually considered the role of the state rather than private donors,¹⁵ which may reduce the potential for global income RBNs to affect willingness to redistribute or to donate. In contrast, taxation in the US is lower and private philanthropy plays a more important role.

Another plausible explanation is related to differences in the provided reference groups. Our paper and (Nair, 2018) only provided participants with their rank in the global income distribution, whereas (Fehr et al., 2022) additionally provided participants' rank within the national income distribution. As individuals are more influenced by reference groups proximally or personally closer to themselves (e.g., Rimal & Real, 2005; Terry & Hogg, 1996; Xiao et al., 2023), participants may rely more on the national sample when both national and global rank is provided. Overestimation of others' income within the same country is much lower (Fehr et al., 2022). Given the importance of misestimation for RBNs, reliance on the national income distribution may therefore have reduced the effectiveness of an income RBN.

Limitations and Future Directions

First, contrary to our expectations, the injunctive distribution task (IDT) did not enhance the RBN. One explanation is that our IDT, which asked about how much people at different income ranks should donate *annually*, lacked a strong enough connection with the donation task, which asked about a *one-off* raffle donation. Future studies could test

¹⁴We told participants how much they earn in terms of multiples of the global median, and they could have therefore inferred the income at the median.

¹⁵For data comparing charitable donations between the countries see Charities Aid Foundation (2022).

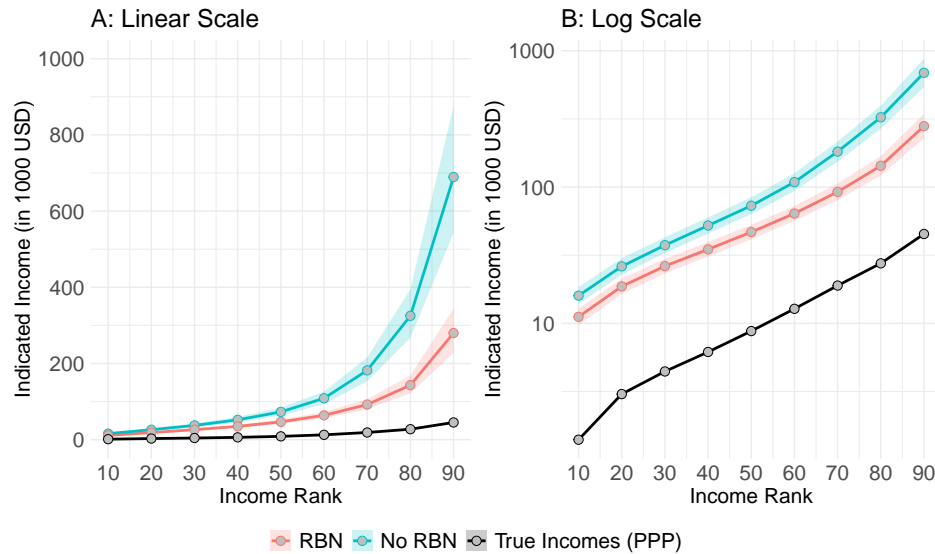


Figure 5: Providing income rank information shifts participants' beliefs about the entire income distribution. Means and CIs were calculated on the log scale and back-transformed.

whether a stronger link between injunctive norms and personal decision-making could enhance the effect of the IDT, for example, through pre-commitment mechanisms specifically related to one-off donation amounts.¹⁶ If these studies still show no effect of the IDT, an alternative explanation could be that participants do not feel bound to the donation amounts indicated in the IDT, given that many of them learn later that they underestimated their income rank at the time.

Second, while we show that participants on average misestimate the global income distribution, our design did not allow us to analyze the influence of misestimation at an individual level (as the subjective income distribution was elicited after the RBN intervention). As the degree of misestimation previously predicted RBN effectiveness (Aldrovandi, Brown, & Wood, 2015), investigating how individual differences in misestimation moderate the effectiveness of our intervention is a promising direction for future work.

Third, the RBN conditions not only communicated participants' rank but also how much they earned in terms of multiples of the global median. Depending on their assumptions about the shape of the global income distribution, participants may derive very different implications about their relative income based on whether they rely on rank or median (e.g., the top 1% versus 0.1% would not differ much in terms of rank, but differ considerably in terms of how much more they earn than the global median). While this study employed a combined approach to maximize the chances of the intervention being effective, it would be interesting to investigate the effect of communicating either rank or median in future studies.

Fourth, our study focused on income rather than wealth

(Meer & Priday, 2021). Individuals with high incomes may not perceive themselves as wealthy if they lack accumulated assets or are in debt.¹⁷ Future studies could explore whether rank-based nudges based on wealth (rather than income) yield different effects.

Finally, we examined a windfall donation scenario in which participants allocated money they had not earned. Prior research indicates that people donate less when they must give from their own earned income (Carlsson, He, & Martinsson, 2013). If participants had been asked to donate a portion of their actual earnings rather than a raffle, average donations might have been lower (though it is unclear whether this would affect differences between conditions). Future research could explore whether income rank interventions remain effective in real-world donation contexts (i.e., donations using earned income).

Conclusion

Our findings show that people are sensitive to relative economic position, even when comparisons are made on a global scale with distant, unfamiliar others. This challenges the notion that generosity is primarily driven by local social norms or immediate peer comparisons. The fact that a simple informational nudge can recalibrate beliefs about the global income distribution and, in turn, increase generosity suggests untapped potential for prosocial interventions that leverage social comparison on a global level. Given that individuals are largely unaware of their true affluence, efforts to correct these misperceptions are a promising tool to motivate action to reduce global inequality.

¹⁶In the current study, we avoided this to prevent participants from anticipating that a personal donation will follow.

¹⁷However, very rich individuals may be able to take on a lot of debt, in which case using the income ranks seems more appropriate than using wealth.

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