PREFERENCE REVERSALS IN EQUIVALENT CHOICES BETWEEN INDIVIDUALS AND POLICIES THAT AFFECT INDIVIDUALS

DAVID M. MUNGUIA GOMEZ
University of Chicago Booth School of Business
5807 South Woodlawn Avenue, Chicago, IL 60637

EMMA E. LEVINE
University of Chicago Booth School of Business

ABSTRACT

We examine whether people’s preferences systematically diverge when choosing between individuals and policies. In an admissions context, people favor applicants with higher objective achievements over less privileged applicants, but they exhibit the opposite preference when choosing between policies. This research helps understand why our choices frequently violate our espoused policies.

INTRODUCTION

Elite universities such as Harvard or the University of Chicago, and elite corporations such as Google or Facebook seem to have one thing in common—they do not have enough spots for everyone. Consequently, Harvard admitted five percent of the forty-two thousand applications it received in 2018 and in a typical year Google hires less than one percent of more than one million job candidates. Even entire countries, and the United States in particular, have to make difficult decisions about whom to grant access to; for example, the U.S. Immigration and Nationality Act allows employment-based immigration for only 140,000 foreigners each year. What guides gatekeepers’ decisions to admit, hire, and allow individuals to immigrate?

One could make predictions about an institution’s selection decisions by looking at their stated policies. For example, one could look at the policies put forth by Harvard’s admissions office and use that to make predictions about who will be admitted. However, these policies may not align with the actual admission decisions that are made. This could occur for a number of reasons – perhaps admissions policies are intentionally vague or are considered cheap talk; or perhaps individual admissions officers do not fully endorse the university’s stated policy. In the present research, we suggest that such a divergence may persist, even when people are fully aware of and in support of an admissions policy. Specifically, we propose that decisions about policies and decisions about individual cases activate fundamentally different psychological processes, and thus, systematically diverge.

To illustrate why this might be the case, consider the following example. Imagine an admissions officer at a university deciding between two policies. Policy A admits students based solely on their objective achievements to date and Policy B considers not only objective achievements but also life circumstances, giving more weight to achievements that occurred in the face of adversity. The officer considers his institution’s values and also the types of applicants who would be favored by each policy, and ultimately opts for Policy B. Later that day, the officer is deciding between two applicants: one applicant has an SAT score of 1600 and the other applicant a score of 1500. The choice could be simple, but the applicants’ backgrounds are
very different. The higher-scoring applicant comes from a very wealthy school district and probably had access to better academic opportunities (e.g., SAT prep courses), whereas the lower-scoring applicant comes from a poor public school where most students do not go to college. Despite the stark difference in life circumstances, the officer cannot ignore the difference in scores—the first applicant is objectively more qualified than the second one. It feels unfair not to admit the more qualified applicant who presumably did not choose to be privileged but still chose to work hard. What does the officer do? The officer may choose to admit the top-scoring, privileged applicant over the lower-scoring, underprivileged applicant, even though the choice is inconsistent with his earlier policy.

Our objective in the present investigation is to test whether decisions about policies lead to different choices than decisions about individuals. We draw on two differences between policy and individual decisions—how many people they apply to and how abstractly they are construed—to inform our prediction. We postulate that, in contrast to decisions about individuals, decisions about policies cause decision-makers to engage in group-level attributions (thus, recognizing that income systematically constrains achievement) and to consider the high-level goals of their decision. As a result, we hypothesize that individual achievement is favored at a higher rate in decisions about individuals than decisions about policies.

We focus on college admissions decisions in which decision-makers must choose between more “objectively” qualified applicants (who have also benefited from greater privileges) and individuals who have faced greater adversity (and are qualified, but less so). However, we believe the underlying psychology applies to a wide range of consequential policy and individual decisions, including selection decisions (e.g., hiring and immigration) and allocation decisions (e.g., allocating bonuses and organs).

This investigation makes a number of significant theoretical and practical contributions. First, this research sheds light on the psychology of policy-making. Though there is a growing desire among behavioral scientists to influence policy (as evidenced, for example, by the creation of the peer-reviewed Behavioral Science and Policy journal and a growing number of nudge units around the world; Benartzi et al., 2017), very little research actually examines how people think about creating policies (e.g., what psychological constructs are salient when thinking about policies and how policy-making differs from typical decision-making). The present research fills this gap. In doing so, we also deepen our understanding of judgment and decision-making by introducing a new source of preference reversals (for examples of preference reversals see, e.g., Bohnet, van Geen, & Bazerman, 2016; Hsee, G. Loewenstein, Blount, & Bazerman, 1999; Shafir et al., 1993; Tversky & Kahneman, 1981; Tversky & Kahneman, 1986). Practically, this research unearthed novel insights on diversity initiatives and other organizational policies, clarifies why our policies may so frequently fail to influence practice, and importantly, suggests ways to close this gap.

**OVERVIEW OF STUDIES**

We have tested this hypothesis, and explored the underlying mechanisms as well as the boundaries of the effect, across 12 experiments (total N = 7,726). For the sake of brevity and clarity, we focus on three preregistered studies in the present manuscript. In the studies described here, we test our prediction, explore the robustness of our findings, and shed light on potential mechanisms. Across all our studies, participants made a choice either between two specific
applicants for college admission or between two admissions policies that would lead to equivalent or similar outcomes.

We made three important design choices to test our hypothesis as cleanly as possible. First, we sought to create a dilemma between selecting an applicant with the highest scores and selecting an applicant that represents other qualities (e.g., achievement in the face of adversity, need, economic diversity). In the individual condition, participants admitted either a top-scoring, economically privileged applicant or a high-scoring, economically underprivileged applicant. In the policy condition, participants selected an admissions policy that would favor the top-scoring, economically privileged applicant or one that would favor the high-scoring, economically underprivileged applicant. Initially, we conducted two pretests to identify a pair of scores that provided enough latitude to shift preferences in either direction. Once we found evidence for the basic effect using these profiles, we then experimentally tested 25 pairs of applicant profiles (Study 2).

Second, we restricted the decision to just two applicants or policies and we described those options on the basis of easily quantifiable information (e.g., SAT scores, GPA, household income). One applicant had higher scores and household income, while the other had lower scores and household income. The applicants were identical in all other respects. Without a doubt, in an admissions or other selection context, there is more than one way to select an option (e.g., ranking, from a pool, in isolation) and there is more and richer information about the options. However, by creating a barer decision environment we were able to cleanly test the causal effect of policy versus individual frames (this method is consistent with other research on preference reversals).

Lastly, in order to hold information constant across conditions, we used the same information to describe the applicants and policies. Before making their individual (policy) decision, participants examined a table of information about two applicants (admissions policies) they could choose from. Participants saw the same table of information for both types of decisions, we simply framed the information as describing, “two specific applicants for admission, Applicant A and Applicant B” (in the individual decision) or the “types of applicants that are typically admitted under Policy A (Applicant Type A) and Policy B (Applicant Type B)” (in the policy decision). Procedures for all studies were approved by the SBS IRB and all studies were preregistered.

**STUDIES**

In Study 1 (N=388), we tested our central thesis with a sample of college admissions practitioners. We asked participants to imagine that they were the head of admissions at a four-year university and had to make decisions about which applicants to admit. Then, participants made a single admissions decision, followed by a policy decision, or a policy decision, followed by a single admissions decision. That is, all participants made a decision about admissions policies and about individual decisions, but the order of the decisions varied. This design allowed us to examine both the between-subjects individual/policy effect (by comparing participants’ first choice, between-subjects) and to examine the within-subjects individual/policy effect (by comparing participants’ first and second choice). Consistent with our hypothesis, participants were more likely to choose the top-scoring, privileged option in the Individual condition (70.11%) than in the Policy condition (36.56%; χ²[1, 180] = 20.31, p < .001). Interestingly, this divergence also occurred within-subjects (Individual: 66.08% vs. Policy 39.18%; McNemar test [n = 171], χ²[1] = 31.13, p < .001).
This study provides evidence that preferences for decisions about individuals diverge from decisions about policies. Specifically, current and former college admissions officers prefer to grant admission to a top-scoring, privileged applicant over a lower-scoring, underprivileged applicant. However, when considering policies that would favor those types of applicants they prefer a policy that favors the underprivileged. Strikingly, we observed this divergence not only when we compared choices between subjects but also within subjects. Forty percent of people made a subsequent choice about individuals (policies) that diverged from their initial choice about policies (individuals). This result is even more striking given we used the exact same information to describe the individual applicants and the types of applicants that the policies would admit, and participants made these two decisions in close succession.

In Study 2 \((N=2,016)\), which we conducted on Amazon Mechanical Turk, we replicate and test the robustness of the individual versus policy effect. Specifically, we were interested in whether the divergence between individual and policy decisions changes as a function of the difference between the two applicants’ scores and incomes. In Study 1, the top-scoring, applicant had an SAT score of 1350 and an income of $120,000, whereas the lower-scoring, underprivileged applicant had a 1200 score and $60,000 income. In Study 2, we compare twenty-five pairs of profiles by pairing five new profiles for the top-scoring, privileged applicant with five new lower-scoring, underprivileged applicant profiles. We generated the applicant profiles based on three sources: the official SAT score report from 2016, the official SAT score data from 2015 and estimates for 2018 household income brackets. As evident in the 2016 SAT score report, there is a positive correlation between income and SAT scores. We created applicant profiles based on this relationship and made their scores and income vary linearly in equal increments in order to facilitate our analysis. Participants saw applicant profiles that varied in SAT score from 60 to 540 points and income differences from $20,000-$180,000.

We found a significant overall effect of Decision Type on participants’ choice \((\chi^2[1, 2016] = 196.419, p < .001)\), collapsed across applicant profiles. Participants making a decision about individuals were more likely to select the top-scoring, privileged applicant (70.08%) than participants making a choice about policies (39.00%). The results of this study provide evidence that the divergent choices in the Individual and Policy conditions are robust to a variety of applicant profiles. Participants were more likely to favor the top-scoring, privileged applicant over the lower-scoring, underprivileged applicant across varying levels of scores and income.

In Study 3 \((N=807)\), which we conducted on Amazon Mechanical Turk, we disentangle two potential mechanisms underlying our effect: 1) differences in the number of people affected by individual versus policy decisions (i.e., individuals versus larger groups) and 2) differences in the level of construal of the decision itself. We randomly assigned participants to one of four conditions (Decision Type: Individual, Policy Narrow, Policy Broad, and Policy Abstract) in a between-subjects design. As in Studies 1 and 2, all participants were asked to imagine that they were the head of admissions at a four-year university and had to make decisions about which applicants to admit.

In the Individual condition, participants made a choice between “these two applicants”, as in Study 1. In the Policy-Narrow condition, we sought to narrow the scope of the policy choice to just two individuals, thereby holding the number of people affected constant across the individual and policy condition. In this condition, participants learned that the table depicted two specific applicants that their policy would apply to, and that their choice would be applied to just “these two applicants, NOT to a broader pool of applicants”. Therefore, the only difference between the Individual condition and the Policy-Narrow condition was the frame of the decision.
(and the concepts that frame evokes). In the Policy-Broad condition, we informed participants that the table depicted two specific applicants that their policy would apply to, and we informed them that their choice would also apply to “a broader pool of these types of applicants.” Therefore, the only difference between the Policy-Narrow and Policy-Broad condition was whether the decision affected multiple cases (i.e., a larger group of people). We also included a Policy-Abstract condition (which was most similar to the policy condition of Study 1). In the Policy-Abstract condition, we described the table as depicting the “types of applicants” that would be admitted under either policy and that their policy choice would be applied to “a broader pool of these types of applicants”.

We found a significant overall effect of Decision Type on participants’ choice ($\chi^2 [3, 807] = 24.967, p < .001$). Examining all pairwise comparisons, we find that Individual participants were more likely to select the top-scoring, privileged applicant (64.73%) than participants in the Policy-Narrow (51.26%; $\chi^2 [1, 406] = 7.573, p = .006$), Policy-Broad (48.24%; $\chi^2 [1, 406] = 11.239, p = .001$), and Policy-Abstract (40.59%; $\chi^2 [1, 409] = 23.907, p < .001$) conditions. The significant difference between the Individual and Policy-Narrow conditions suggests that individual and policy decisions may be construed at different levels, even when their consequences are constant. We find that participants’ choices are not significantly different in the Policy-Narrow and Policy-Broad conditions ($\chi^2 [1, 398] = 0.362, p = .547$), suggesting that the number of individuals affected does not significantly influence choice. Participants in the Policy-Broad and Policy-Abstract conditions also do not make significantly different choices ($\chi^2 [1, 401] = 2.375, p = .123$), suggesting that the concreteness of the individuals affected does not influence our identified effect.

The results of this study shed light on whether people’s preferences between individual and policy decisions are influenced by the number of individuals affected and differences in the level of construal of the decisions. Participants in the Individual and Policy-Narrow conditions still made significantly different choices even though these decisions were identical in how many individuals they affected and how concretely those individuals were depicted. This divergence in preferences suggests that there is something fundamentally different about simply thinking one is making a decision about policies versus a decision about individuals. This result is consistent with a construal account of policies, namely that policy decisions may be focused on why to make a decision and broader, value-laden goals (e.g., leveling the playing field).

**GENERAL DISCUSSION**

In this paper, we examine whether people make systematically different choices when choosing between individuals and policies. Across the three studies reported here (and across other nine studies) we find that when making decisions about individuals, people favor individual achievement, whereas when making policy decisions, people favor adversity. We find this to be true with admissions practitioners in between- and within-subjects comparisons (Study 1), as well as with a range of applicant profiles (Study 2). This effect does not appear to be driven simply by associations cued by the word “policy,” as we replicate the effect when participants make decisions about “admissions rules” (study not reported here).

Informed by existing research about individuals versus groups and how abstractness influences decision-making, we test a series of potential mechanisms. We find that the number of individuals affected by the decisions does not explain the effect of policy framing (Study 3). Rather, it appears that policies are construed differently (even when the consequences are
identical to those of individual decisions) and thus, lead to more abstract and value-laden representations of the decision (study not reported here). Consistent with this account, across eight other studies, we find that policy decisions are seen as concerning morality and values more than individual decisions ($t\ [2305] = 8.71, \ p < 0.001$), and individual decisions are seen as concerning objective, concrete criteria more than policy decisions ($t\ [2305] = -7.38, \ p < 0.001$). We also find that preferences in the policy condition are predicted by political attitudes and values pertaining to equality of opportunity, but individual decisions are not. In fact, conservatives and liberals’ choices are indistinguishable in individual decisions. Only in policy decisions do political attitudes and values come to bear.

Our work suggests that policy-making entails a decision-making process that is different from the process involved in the decisions that policies are meant to guide. Furthermore, while it may appear that policy-makers and decision-makers “on the ground” hold different preferences, their disagreement may stem instead from the different psychological processes that these decision frames cue. Hence, our work suggests that a new perspective is needed to make policies and individual decisions compatible. One way to close the gap between policy and practice may be to remind individual decision-makers about their values and what their individual choices represent. In summary, our research documents a new type of preference reversal in an important, real-world choice context, and has practical and theoretical implications for understanding why our choices so frequently violate our espoused policies.

REFERENCES


