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From Partisanship to Preference: How Identity Shapes Dependence Aversion

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Abstract

We study how individuals' willingness to delegate choice is affected by heterogeneity in identity between the delegee and the delegate. While it is straightforward that such heterogeneity can affect delegation for instrumental reasons, we show experimentally that divergent identity also causes delegation aversion through purely intrinsic channels. More specifically, we demonstrate that Republicans (Democrats) are intrinsically less averse to delegate decisions over their own outcomes when the delegate also identifies as a Republican (Democrat), compared to when the delegate identifies as a Democrat (Republican). By design, beliefs about the actions of the delegate cannot explain the observed treatment effect. Our finding suggests that contrasting identities impede the creation — or the continuation — of shared institutions that rely on centralization of control beyond what can be explained by purely instrumental reasons.

JEL-Codes: D020, D910.

Keywords: identity, autonomy, experiments.

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1 Introduction

How do political jurisdictions and organizations form and what determines their acceptance among constituents and stakeholders? It is well understood that the trade-off between efficiency gains from centralization and costs due to heterogeneity in preferences is fundamental to answer these questions, both with respect to political jurisdictions (Alesina and Spolaore, 1997; Alesina and La Ferrara, 2000; Alesina, Baqir and Hoxby, 2004) and organizations (Aghion and Tirole, 1997; Alonso, Dessein and Matouschek, 2008). The reasoning is instrumental in that centralization has costs for those constituents or stakeholders whose preferences are misaligned with the actions taken by the decision authority.

In this paper, we go beyond instrumental reasoning and study whether delegating choice autonomy to a delegate decision maker also has *intrinsic* costs, and how such potential intrinsic costs are moderated by divergent identity. Understanding whether such a relationship exists may help better understand political integration and (de)centralization. For example, Theresa May called Brexit an expression of the desire to be “a sovereign nation in which British people are in control” (May, 2017). Although this statement could be consistent with a purely instrumental viewpoint, a YouGov poll asking British voters about Brexit revealed that 61% of leave voters consider “significant damage to the British economy to be a price worth paying for bringing Britain out of the EU” (Smith, 2017). We thus hypothesize that dependence generates direct intrinsic utility consequences and that a purely instrumental analysis of the welfare implications of the allocation of control rights may be incomplete.

To study intrinsic utility components of dependence, we utilize the measurement tool for intrinsic preferences for choice autonomy developed in Freundt, Herz and Kopp (2023), which follows a two-step procedure: First, a choice set is identified that contains only alternatives between which an individual is revealed indifferent. Second, an individual’s willingness to pay to make a choice from the choice set herself, rather than letting someone else choose on her behalf, is elicited. Due to the revealed indifference between the

choice alternatives, there is no instrumental value attached to choosing oneself. Step 2 thus elicits the intrinsic preference to remain autonomous in choice, independent of *any* preference over outcomes or beliefs about the actions of the delegate.

We focus on political identity to identify how the delegate’s identity affects the intrinsic costs of delegation. To this end, we exogenously vary the information about the political party which the delegate identifies with. The experiment matches US individuals that associate with the Democratic Party or the Republican Party either with a delegate who identifies with the same party or with the opposite party. Confirming our hypothesis, we find that individuals’ intrinsic desire to remain autonomous in choice is significantly higher, about twice as large, when the delegate belongs to the political out-group rather than the ingroup. The relative size of the treatment effect is comparable for Democrat and Republican delegees.

To substantiate the mechanism through which political identity affects dependence aversion, we collected a survey measure of “closeness” felt between the delegee and the delegate at the end of the experiment, using the “inclusion of the other in the self” scale (Aron, Aron and Smollan, 1992; Gächter, Starmer and Tufano, 2015). Delegees express significantly more closeness towards delegates who share their political identity. Moreover, the individual measure of closeness is significantly and negatively correlated with the willingness to pay for choice in Part 2. Thus, a stronger feeling of closeness to the delegate is significantly associated with less dependence aversion.

Our finding implies that individuals are indeed *dependence averse*. The willingness to pay in part 2 of the elicitation procedure measures the difference in value between choosing oneself versus having the delegate make the choice. A positive willingness to pay could in principle reflect that the act of choosing oneself generates intrinsic utility; or, it could reflect that being dependent on the decision making of another person generates disutility. However, our treatment manipulation only varies the contingency in which the choice is delegated; the contingency in which an individual decides oneself is unaffected by the treatment. The observed treatment effect must thus be driven by a re-

duction in the perceived value of delegated decisions when the delegate belongs to the political outgroup, reflecting dependence aversion that is moderated by political identity.

A question that arises is to what extent the observed treatment effects depend on identity per se and whether polarization between the respective groups, which arguably is present in the political context studied here, is a prerequisite to generate behavioral effects. To provide some initial insight into this question, we conducted two additional experiments in which group identity is exogenously varied along less polarized dimensions. First, we use a minimal group paradigm and assigned participants to two different groups via preferences for paintings (Tajfel et al., 1979). For example, Kranton and Sanders (2017) argue that some behavioral effects of political group identity are simply the consequence of a general tendency to be “groupy”, and thus one may expect to observe differential dependence aversion even for relatively arbitrary groups. Second, we vary group affiliation by gender of the participant. Gender may constitute a stronger group identity than the minimal group paradigm, but, certainly in the online setting of our study with a US subject pool, less polarized than party affiliation. For both variations, participants again show intrinsic preferences to retain autonomy. However, the strength of the preference is not moderated by the treatments, suggesting that dependence aversion is not moderated simply by groupiness (minimal group paradigm), or by characteristics that, in the study population, may not be polarizing (gender).

2 Related Literature

Our findings are informative for various streams of the literature as well as current societal debates. First, Alesina and Spolaore (1997) and Alesina, Baqir and Hoxby (2004) argue that the (instrumental) trade-off between economies of scale and the costs of a heterogeneous population (due to implied heterogeneity in preferences) are one important determinant of the formation of political jurisdictions. Supporting this argument, Alesina, Spolaore and Wacziarg (2000)

find that participation in social activities is significantly lower in racially or ethnically fragmented localities. We suggest that heterogeneity in the population could also influence the formation of political jurisdictions through non-instrumental costs, such as dependence aversion.

Our results thus speak to the limits and constraints faced in the expansion of political jurisdictions, or even catalysts of segregation, as seen in the European Union. Such attempts may critically depend on shared identity among its potential constituents, as divergent identity may constitute a barrier to centralization not only because of heterogeneity in preferences, but also because of potentially heightened dependence aversion. For example, a lack of European identity among the British could be seen as one reason that facilitated Brexit in 2016. The British Social Attitudes Survey found in 2014 that only 15% of the British population feel European, and the Eurobarometer 2015 found that 64% were unlikely to embrace any sense of European identity, compared with only 25% of Germans (Ormston, 2015). If one assumes that identity is to some extent malleable, our results thus suggest a role for identity politics in either fostering integrative efforts through the creation of a unifying identity or hampering and undermining such efforts through differentiation and polarization.

Second, our results apply similarly to organizations. The distribution of decision rights along the organizational hierarchy is a fundamental characteristic of any organization. Consequently, some (if not most) members of an organization are subjected to decisions taken by their principals. Shared (corporate) identity may thus be important to not alienate those without decision rights. Indeed, proponents of identity leadership argue that the ability to lead is fostered by shared identity because it increases employees acceptance of leader influence (Haslam, Reicher and Platow, 2020; Steffens et al., 2020). In turn, the ability to create shared identity may be an essential part of effective leadership (Akerlof and Kranton, 2005; Zehnder, Herz and Bonardi, 2017).

Third, our paper contributes to the literature on identity economics and the consequences of increased political polarization, which has been documented in the United States (Bertrand and Kamenica, 2023). Own social identity and

the social identity of the people we interact with has been shown to be an important determinant of behavior in many different contexts (Gächter et al. (2022); Bicchieri et al. (2022); Charness and Chen (2020); Kranton and Sanders (2017); LeCoq, Tremewan and Wagner (2015); Goette, Huffman and Meier (2012); Benjamin, Choi and Strickland (2010); Chen and Li (2009), among others). (Shared) political identity has received particular attention and it has been shown to have a substantial influence on cooperation and pro-social behavior, e.g. Kranton et al. (2020); Fowler and Kam (2007). Several studies explore the mechanisms behind such an influence and suggest that much of the effect of political identity on cooperation is driven by pessimist beliefs about the cooperativeness of the out-group member (Dimant, 2023; Balliet et al., 2018). Zhang and Rand (2023) focus on information processing when news sources are partisan, and differentiate between preference- and belief-based channels explaining differences in updating conditional on the partisanship of the source. Bauer et al. (2023) further study the role of partisan identity for belief formation and find that the source of information matters for how they are used in belief updating, independent of the strength or trustworthiness of the signal. Our experiment takes an entirely different approach: We provide evidence that dependence aversion is moderated by identity, suggesting a non-instrumental explanation for aversion to delegation and centralization in heterogeneous societies or organizations.

Finally, our paper contributes to the literature on the origins of intrinsic preferences for decision rights. In previous studies, people have been shown to, on average, intrinsically value the possibility to make own choices (Bartling, Fehr and Herz, 2014; Owens, Grossman and Fackler, 2014; Meemann, 2023; Ferreira, Hanaki and Tarroux, 2020). Neri and Rommeswinkel (2016) (and similarly Ferreira, Hanaki and Tarroux (2020)) microfound such preferences in preferences for freedom, power and non-interference, and find empirical support that a dislike for others interfering in own outcomes is an important source of such value. Sloof and von Siemens (2017) link it to illusion of control. Our experimental setup provides clean evidence that dependence aversion is another microfoundation of intrinsic preferences for autonomy, and that it can

be moderated by the identity of the delegate.

3 Experimental Design

The experiment consists of a two-part behavioral task plus a questionnaire. The behavioral task assesses the intrinsic value of choice autonomy using the preference measurement tool developed in Freundt, Herz and Kopp (2023), extended with an experimental political identity manipulation. The working of the elicitation tool is introduced in Freundt, Herz and Kopp (2023) and described in detail in Appendix B. We provide a short summary of the mechanisms here.

3.1 Measuring intrinsic preferences for choice autonomy

We define intrinsic preferences for choice autonomy as a preference for taking decisions oneself rather than having someone else decide over own consequences on one’s behalf. The preference elicitation tool consists of two parts that elicit an individual’s willingness to pay for choice autonomy after excluding instrumental value as a potential explanation. The latter is ensured by part 1, in which participants are repeatedly asked to make a choice between two options. The goal is to identify two alternatives A and B between which an individual is revealed indifferent ($A \sim B$). In part 2, a choice set is constructed that contains exactly these two alternatives. We elicit participants’ willingness to pay to make a choice over the options in this set themselves, rather than having someone else make a choice on their behalf. Because of revealed indifference between the available alternatives, choice does not contain instrumental value in this setting and hence a positive willingness to pay must be the consequence of an intrinsic value component of choice autonomy or dependence aversion.

Part 1. We use lotteries as choice alternatives because this allows us to incrementally adjust the value of the alternatives, which is essential to approximate an individual’s point of indifference in part 1 as closely as possible.

In part 1, each participant goes through an individual sequence of 10 choice situations in each of which she faces the simple binary choice between two lotteries A and B . Lottery A is fixed and always provides a payoff of 600 points with 25% probability and a payoff of 1600 points with 75% probability. Lottery B provides a payoff of 600 points with 50% probability and a payoff of $X \in \{1890, \dots, 2840\}$ points with 50% probability. The value X is adjusted from choice situation to choice situation using DOSE (Wang, Filiba and Camerer, 2010; Chapman et al., 2022), a method that not only provides a structural estimate of an individual’s risk preference, and in turn their indifference point, but also an estimate of a choice consistency parameter at the individual level (denoted by μ in the following, where higher values of μ imply higher choice consistency). The latter is important because it provides us with information about the accuracy with which we have identified an individual’s point of indifference, and we can utilize this information as an important control variable in our analysis. Further details about the implementation of DOSE as well as the estimation of the indifference point and the consistency parameter are presented in Appendix B. The exact decision screens that participants faced are displayed in Appendix E.

Part 2. In part 2, participants are again shown two lotteries, A and \hat{B} . Lottery A is identical to part 1. Lottery \hat{B} is selected such that the participant is just indifferent between the two choice alternatives ($A \sim \hat{B}$), given their own preference, as revealed in part 1 of the elicitation task. Participants are told that either A or \hat{B} will determine their payoff, and that the choice between A and \hat{B} is either made by themselves, or by another study participant. The identity of this other participant is key to this experiment and will be modified between treatments. Participants are again faced with a sequence of 10 choice situations, in each of which they must decide between choosing themselves (phrased “I choose”) and paying a price p , or delegating the choice to an anonymous study participant (phrased “I delegate”). The price $p \in \{-600, -590, \dots, -10, 10, 20, \dots, 600\}$ in points varies from situation to situation and can either be positive or negative.¹ Again, an estimated preference

¹Negative prices are framed as “bonuses” that the participant receives if they choose

parameter for the individual’s value of choice and an estimate of her degree of choice consistency are obtained using DOSE. The estimated willingness to pay for choosing oneself in part 2 is our key outcome variable and interpreted as an individual-level measure of the intrinsic preference for choice autonomy, given that the instrumental value of choice is zero due to indifference between alternatives.

3.2 Experimental procedure

The experiment was run on Prolific.com and consists of the two-part task described above. Before starting the task, subjects answered a short questionnaire with socio-demographic information, part of which is used to later construct the treatments (see Figures A.7 and A.8). At the end, everyone fills out another questionnaire with more demographic and general attitude questions, see Figures A.45 to A.48. In both parts 1 and 2 of the experiment, one decision is randomly selected and paid. The final payoff thus consists of the payments of part 1 plus part 2 plus a base payment of £2. There is no feedback about the outcomes of random draws or about choices until the very end of the survey. Choices of the "other participant" were collected beforehand on Prolific via the strategy method to ensure a smooth experience without delay in the online experiment.² The payments are indicated in points, the exchange rate is 1000 points = £0.75. Each subject is informed that the "other participant" is another study participant who earns a fixed base payment that is independent of whether or not they delegate and that is not affected by the choices he or she makes on the subject’s behalf. In parts 1 and 2, control questions make sure that everyone understood the instructions. For each set of control questions, the participants had three tries to answer them correctly.

themselves.

²Before the start of the main experiment, we recruited two subjects for the role of the "other participant". One participant identified as being Democratic, and the other participant identified as Republican. They received instructions for the experiment and their role, and then made a total of 128 choices between a lottery *A* and a lottery *B*, such that all possible choice situations that could be delegated were covered. They received a fix £3 base payment.

They were excluded from the study after they failed a third time. In addition, we used two attention checks to ensure reliable responses, one in part 1 and another one in the questionnaire at the end. Both were clearly marked as attention checks and participants had two chances to give the right answer. They were excluded after the second wrong try.³

Treatments. Part 1 of the experiment is identical across all treatments. Treatment variation is only introduced to participants at the beginning of part 2 (for an illustration, see Figures A.22 to A.28). We implemented three treatments: (i) Ingroup, (ii) Outgroup, and (iii) Baseline. Participants are randomized into treatments. Between treatments, we vary the political identity of the person to whom one can delegate choices. In Ingroup (Outgroup), a participant who reported their political affiliation to be Democrat is matched with a participant who identifies with the Democrat (the Republican) Party, and vice versa for the Outgroup treatment. In treatment Baseline, there is no information about the other participant’s political affiliation, the decision-maker is just informed that they are matched with another study participant. In order to keep the sample composition constant, the Baseline sample consists of 50% Democrats and 50% Republicans. A treatment overview is given in Table A.1.

Implementation. The data were collected on Prolific.com on August 31, 2023. The average payout was £4.12 and completing the experiments took on average just below 20 minutes. IRB approval was granted by the Institutional Review Board of the Faculty of Management, Economics and Social Sciences, University of Fribourg, Switzerland on June 2, 2023 (application no 2023-05-01). The pre-registration was initially submitted on August 11, 2023 and then updated on August 29, 2023 reflecting minor adaptations solely in the sampling procedures for the different treatment groups through pre-screens on Prolific.com (aspredicted no 140648 and 142099).

³86% of subjects answered the control questions correctly on the first try in part 1; 79% in part 2. 20% of subjects failed an attention check. In our analyses, we control for the number of wrong control questions as well as missed attention checks.

Sample and Exclusion Restrictions. We collected a sample of 1206 US American participants on Prolific.co. We aimed at 200 participants per treatment. All samples are balanced w.r.t. gender within each treatment group. The Baseline treatment is also balanced with respect to party affiliation to match the sampling of the Ingroup and Outgroup treatments. In all treatments, those who reported to be Independents are excluded.

From this dataset, we follow Freundt, Herz and Kopp (2023) and exclude participants who chose the lottery A even in the choice situation in their individual sequence in which the most attractive lottery B (the lottery B with the highest value of X) was presented. Similarly, we exclude participants who chose the lottery B even in the choice situation in their individual sequence in which the least attractive lottery B (the lottery B with the lowest value of X) was presented. These are individuals who either never switch between lotteries in part 1 (always choose A or B), or individuals who switch at least once but display choice inconsistencies and extreme choice behavior at the boundary of the parameter space. There are different explanations for such choices: subjects might not pay attention and just click the same button, they might have extreme risk preferences, or they might use a simple heuristic for making the choices between lotteries. Although we cannot distinguish these possibilities, the key reason for excluding them is that we cannot identify an indifference set for these participants, and therefore the elicitation of the willingness to pay in part 2 does not work accurately (330 observations). This leaves us with 876 participants, roughly 150 per treatment cell.

Note that the exclusion restriction applied here slightly deviates from the pre-registered exclusion restriction. The pre-registration stated that *We exclude all subjects who never switch between lotteries A and B in part 1. All other subjects are included in the analysis.* We adapted the restriction because, after the pre-registration had been submitted, we realized that the criterion continues to include participants who switch at least once but are inconsistent and display extreme choice behavior at the boundary of the parameter space. However, such choice behavior at the extremes provides little confidence regarding the eventual identification of an indifference point. We thus ex post

considered a more conservative exclusion restriction to be more appropriate. For completeness and transparency, in Appendix C, we replicate our main analysis using the pre-registered exclusion restriction.

3.3 Predictions and Hypotheses

Our main pre-registered hypothesis is that political identity shapes the willingness to retain autonomy in choice. More specifically, that the willingness to pay to retain choice autonomy is higher when the decision maker is matched with an Outgroup delegate as compared to an Ingroup delegate.

Hypothesis 1 *The willingness to pay to keep choice autonomy is higher when the delegate is a political outgroup member rather than an ingroup member.*

The baseline condition was included to analyze additional exploratory questions: In particular, can a potential treatment effect be explained by reduced dependence aversion when the delegate is an ingroup member, or is it driven by increased aversion to being subjected to an outgroup delegate? Moreover, the baseline treatment allows us to assess differences in the autonomy preferences between Republicans and Democrats in a politically neutral context.

4 Results

To assess our main hypothesis, we test whether the willingness to pay to keep the right to choose varies conditional on the political identity of the delegate. The left panel of Figure 1 displays the mean willingness to pay for all participants in the experiment by experimental condition. It can be seen that, in all treatments, individuals are on average willing to pay significantly positive amounts to make autonomous choices. Moreover, the willingness to pay is significantly higher, roughly twice as large, when the delegate belongs to the political outgroup rather than the ingroup (75.4 vs. 36.2, MWU: $p < 0.01$, t -test: $p < 0.01$).

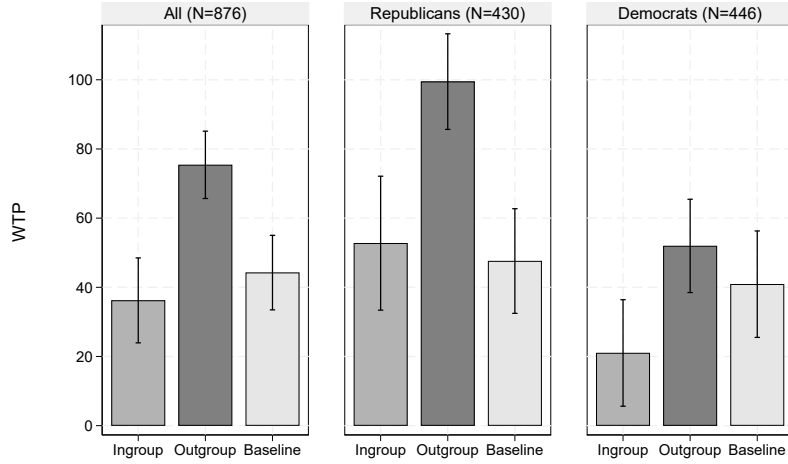


Figure 1: Mean willingness to pay in points by treatment. “Baseline” denotes the treatment in which the delegate was “another study participant”. “Ingroup” denotes the treatment in which the delegate had the same party association. “Outgroup” denotes the treatment in which the delegate had the opposite party association. The left panel shows all data pooled. The middle panel shows results for Republican delegates only, and the right panel for Democrat delegates only.

The middle and the right panel of Figure 1 show the results separately for Democrat and Republican delegates. For Republicans, the value increases from 52.76 points in Ingroup to 99.48 points in Outgroup (MWU: $p=.01$, $ttest: p<.05$). Among Democrats, the mean value is 21.02 in Ingroup versus 51.97 points in Outgroup. For Democrats, the difference between Ingroup and Outgroup is significant according to a ranksum test, but not in a $ttest$ (MWU: $p=0.03$, $ttest: p=0.13$).

We next move to regression analyses, which allow us to additionally control for socio-economic characteristics as well as other potential confounds, such as the estimated consistency in choice which is indicative of the precision of the measured indifference in part 1 of the preference elicitation task. The regression specification presented in column (1) of Table 1 is the primary pre-registered specification to test our main hypothesis. It includes a dummy for the Baseline and the Outgroup treatments and additionally controls for age, income, education, ethnicity (using 7 dummies) and self-reported risk attitude. Additional controls, that are not reported in Table 1, are the number of failed

control questions, a dummy for failing an attention check, and two dummy variables for very low consistency scores in part 1 and part 2.⁴

The regression results confirm the previous analysis. Column (1) again shows a significant and sizeable increase in the willingness to pay for choice autonomy when the delegate belongs to the political outgroup relative to the ingroup. When analysing the treatment effect separately for Republicans and Democrats in columns (2) and (3), the effect remains positive, but becomes insignificant when analysing the Democrat subsample only, and only marginally significant for the Republican subsample only. Finally, Column (4) again considers all observations and includes an interaction term between Democrat and Outgroup, confirming previous results.

⁴3 percent of subjects had the lowest consistency score in part 1 of the experiment, and 50 percent had the highest. In part 2, 7 percent had the lowest consistency score and 68 percent had the highest.

Table 1: OLS regressions on willingness to pay

	(1)	(2)	(3)	(4)
	All	Democrats	Republicans	All
Outgroup	37.690** (15.417)	28.510 (20.432)	46.424* (23.988)	46.816** (23.600)
Baseline	7.959 (16.297)	21.314 (22.217)	-4.518 (24.026)	-4.357 (24.339)
age	0.445 (0.541)	0.919 (0.798)	-0.564 (0.807)	0.290 (0.559)
income	0.277 (1.604)	0.102 (2.592)	0.187 (2.096)	-0.044 (1.631)
education	-11.856 (7.682)	-1.679 (11.111)	-18.879* (11.014)	-10.499 (7.695)
risktaking	2.218 (3.157)	0.943 (4.571)	2.684 (4.409)	1.874 (3.173)
Democrat				-25.055 (25.778)
Outgroup*Democrat				-19.535 (31.316)
Baseline*Democrat				23.107 (32.915)
Constant	114.219* (65.896)	-44.722 (49.703)	239.384*** (78.328)	131.531** (63.279)
Additional controls	yes	yes	yes	yes
R^2	0.03	0.03	0.05	0.03
N	876	446	430	876

Robust standard errors in parentheses. Additional controls include: dummies for ethnicity; dummy for the lowest consistency score in part 1, dummy for the lowest consistency score in part 2, dummy for a failed attention check. Regression specification (1) is the pre-registered analysis for the main hypothesis (with the altered exclusion criterion as explained in section 3.2. Specifications (2)-(4) are further exploratory analyses. Significance levels: *** : $p < 0.01$, ** : $p < 0.05$, * : $p < 0.1$.

Result 1 *The willingness to pay to keep choice autonomy is shaped by political identity and dependence aversion. When the delegate is a political outgroup member, the willingness to pay to keep choice autonomy is about twice as high compared to a situation where one can delegate to a delegate who identifies with the same political party.*

We conduct several robustness checks to substantiate our main result. First, Table A.2 in Appendix A replicates Table 1 using median regressions. Second, we replicate our analysis using the originally pre-registered exclusion restriction in Appendix C, as well as when additionally conditioning the sam-

ple on those subjects that display at most moderate choice inconsistencies in Appendix D.⁵ All three robustness exercises generate comparable results and thus substantiate the findings presented here.

Our data also allows us to compare the willingness to pay in the Ingroup and Outgroup treatments to the Baseline treatment. We find that the Outgroup treatment is (marginally) significantly different from the Baseline when considering all participants (MWU: $p = 0.07$, ttest: $p = 0.03$) as well as Republicans only (MWU: $p = 0.06$, ttest: $p = 0.01$). For democrats, however, this difference remains insignificant. Regarding Baseline vs. Ingroup, we never find significant differences for any of the subgroups. Overall, our data thus provides some suggestive evidence towards an increased aversion towards outgroups, but ultimately remains inconclusive.⁶

Finally, we study the willingness to pay to make the choice oneself across the two political party affiliations in the Baseline treatment, when the delegate is simply described as “another study participant”. While we find that the willingness to pay to remain autonomous in choice is positive and significantly different from zero for both groups (t-test, Wilcoxon signrank test: $p < 0.01$), the difference in the willingness to pay between Democrats and Republicans is not statistically significant (Mean Dem: 40.9, mean Rep: 47.6, $p > 0.4$ for t-test, MWU).

It is noteworthy that there is substantial heterogeneity in the intrinsic value of choice autonomy across individuals. 46.6% of subjects in the baseline treatment have a positive willingness to pay, 30.5% have a willingness to pay of zero, and for 23% the willingness to pay is negative. Thus, the question arises whether our treatments cause systematic shifts in the share of participants exhibiting a positive or negative willingness to pay, which would indicate that not only the strength, but also the number of subjects showing a preference for or an aversion to remaining autonomous in choice changes depending on

⁵We follow Freundt, Herz and Kopp (2023) in determining the threshold for moderate choice consistency in our task.

⁶The relative comparison to Baseline will also depend on the subjective perception of the anonymous other participant in Baseline, which could in principle vary by party affiliation of the decision maker

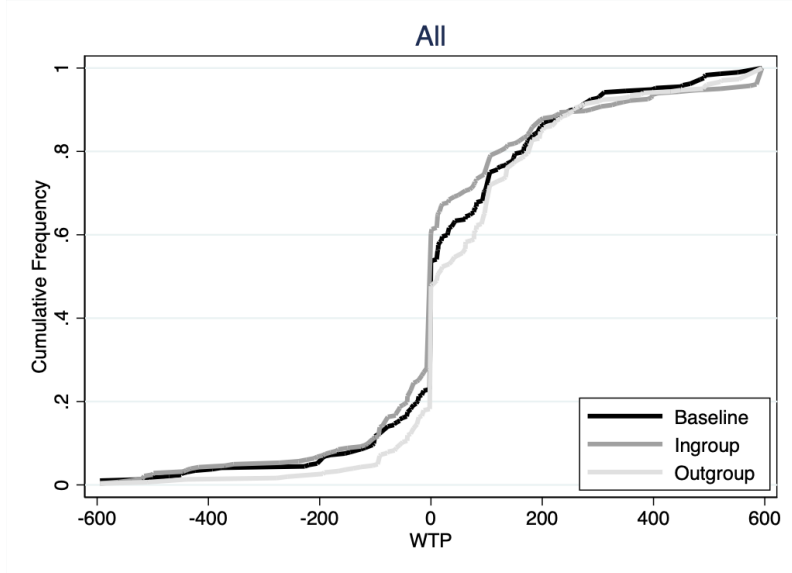


Figure 2: Cumulative Distribution of the willingness to pay in points by treatment. Cumulative distributions for Democrats and Republicans separately are displayed in Figure A.1 in the Appendix.

whom one can delegate to.

Figure 2 shows the cumulative distribution of the willingness to pay by treatment and party affiliation. One can see that the distribution is shifted towards higher values when the delegate is an outgroup member rather than an ingroup member, and differences in distributions between Ingroup and Outgroup are significant ($p < 0.01$, Kolmogorov-Smirnov tests).⁷ The Baseline treatment lies in between and its distribution is not significantly different from either Ingroup or Outgroup. Also, the graph indicates that the treatment manipulations did not trigger extreme behavior. While a few participants display very low or very high valuations for remaining autonomous in choice, there is little difference across treatments in this respect.

Figure 3 displays the shares of participants with a negative, zero, or positive willingness to pay to make the choice themselves, by treatment. The share

⁷Cumulative distributions for Democrats and Republicans separately are displayed in Figure A.1 in the Appendix. The distributions for Ingroup and Outgroup are also (marginally) significantly different for these subsamples (Reps: $p = 0.02$, Dems: $p = 0.06$, Kolmogorov-Smirnov tests).

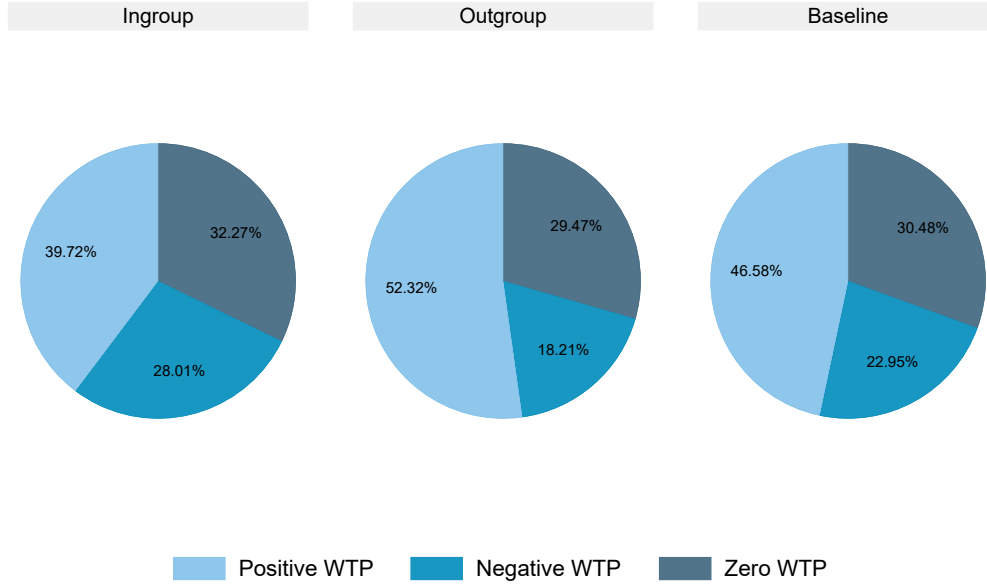


Figure 3: Share of participants showing a positive, zero or negative willingness to pay in each treatment.

of subjects with a positive willingness to pay tends to be higher in the Outgroup treatments. Similarly, the share of subjects with a negative willingness to pay tends to be higher in the Ingroup treatments. When considering all participants together, the difference in the distribution between the Ingroup and Outgroup treatments is highly significant ($p < 0.01$, Fisher's exact test). When analyzed for Democrats and Republicans separately, the difference is only statistically significant for Republicans ($p = 0.014$, Fisher's exact test). Thus, on the aggregate, a higher fraction of participants display a preference for autonomous choice when the delegate decision maker does not share their political identity.

Closeness to the delegate. Sharing political identity may be associated – among other things – with feeling closer to the other person, even if it is a stranger. In order to explore the role of this element of group identity in our context, we added a question to the post-experimental survey that

measures perceived closeness to the other participant. Participants are asked to indicate how “close they felt to the delegate they were matched with” on a Likert scale from 1 to 7, using a graphical image (“inclusion of the other in the self” scale (Aron, Aron and Smollan, 1992; Gächter, Starmer and Tufano, 2015)), see Figure A.48. Since the experiment is online and anonymous, it is not surprising that closeness scores are rather low. On a scale from 1 to 7, the median is 2 and the mean is 2.6. However, there is a highly statistically significant difference in perceived closeness by treatment, with closeness being substantially higher in Ingroup compared to Outgroup (3.34 vs. 2.29, $p < 0.001$, t-test, MWU). Thus, the political identity treatments successfully manipulate the perceived closeness between the delegee and the delegate.⁸

Table 2 shows coefficients of a regression of the individual willingness to pay on individually perceived closeness, and it shows that closeness is significantly associated with a lower willingness to pay to choose oneself, even after controlling for party affiliation and a series of other individual characteristics. This corroborates our previous findings, and suggests that perceived distance to the other participant is one channel through which political identity affects preferences for autonomous choice.

Overall, our data provides evidence that political identity moderates dependence aversion. The willingness to pay in part 2 of the elicitation procedure captures the utility difference between choosing oneself versus having

⁸We elicited two additional survey measures aimed to capture individuals’ attachment to the political party they identify with. First, each participant answered the following question on a 5-point Likert scale (*party strength*): “How strongly do you associate with the Democratic Party [Republican Party]?”. Second, we asked participants whether they were registered as Democrat/Republican (*registered*). Table A.3 in the Appendix reports results of regressions of perceived closeness on an Outgroup treatment dummy, interacted with *party strength* in columns (1) and (2), and interacted with *registered* in columns (3) and (4). It can be seen that the strength of the association with the own party is a significant moderator of the effect of being matched with a delegate from the political Ingroup or Outgroup on perceived closeness: A stronger association with the own party is significantly predictive of a higher perceived closeness when the delegee is from the ingroup, and a significantly lower perceived closeness when the delegee is from the outgroup. Being registered moderates the treatment effects on closeness in the same directions, albeit insignificantly so. However, close to 90% of our subjects are registered, which may limit our ability to identify moderating effects using this binary measure.

	(1)	(2)
Closeness	-9.431*	-10.797**
	(5.200)	(5.224)
Democrat		-28.139**
		(13.999)
age		0.316
		(0.561)
income		-0.163
		(1.630)
education		-8.818
		(7.651)
risktaking		2.564
		(3.135)
Constant	77.189***	162.165**
	(14.145)	(64.504)
R^2	0.004	0.008
Observations	0	0
N	876	876

Table 2: Willingness to pay explained by perceived closeness to the other participant. Experiment P. OLS regressions with robust standard errors. Column (2) includes the following control variables: party affiliation, age, income, white, education, risk taking, lowest consistency in part 1, lowest consistency in part 2, failed attention check in the survey. Significance levels: *** : $p < 0.01$, ** : $p < 0.05$, * : $p < 0.1$.

the delegate make the choice, which can have different microfoundations. A positive willingness to pay can reflect an intrinsic utility generated from the act of choosing oneself, or it can express a disutility from being dependent on the decision making of another person. However, our treatment manipulation only varies the contingency in which the choice is delegated, while the contingency in which an individual decides oneself remains unaffected. The observed treatment effect must thus be driven by a reduction in the perceived value of delegated decisions when the delegate belongs to the political outgroup.

4.1 Gender and Minimal Group Paradigm

Having established that divergent political identity affects dependence aversion, we now turn to additional experiments in which we manipulate divergent identity by potentially less polarized attributes, namely a minimal group paradigm (MGP, (Tajfel et al., 1979)) and gender. We designed these experiments with the purpose to explore the limits of identity and group affiliation in changing dependence aversion. For example, Kranton et al. (2020) suggests that "groupy" behavior resulting from political identities may simply reflect a more general tendency for "groupiness". Our minimal group paradigm thus allows us to assess whether the observed moderation of dependence aversion by political identity is also just an expression of a general tendency to be "groupy", even if group affiliation is (close to) random. Similarly, the Gender experiment allows us to assess whether individuals show similar tendencies to be dependence averse conditional on own gender and the gender of the delegate.

Procedures. The two additional experiments follow the same procedure and structure as the main experiment, and were conducted on Prolific.com on September 5, 2023 (Gender) and on September 8 and 11, 2023 (MGP). The only difference concerns the construction of ingroups and outgroups in the treatments. In the Gender experiment, we inform participants about the other participant's gender, see Figures A.25 and A.26. In the MGP experiment, we use preferences over paintings, following the minimal group paradigm (Tajfel et al., 1979). All participants select their preferred one out of two paintings (*Blue* or *Green*) and the decision-maker receives information about the other participant's picture choice, see Figures A.27 and A.28.⁹ We did not conduct Baseline treatments. We again recruited 200 participants per treatment cell, collecting 801 in the Gender and 805 in the MGP experiment, and applied the same inclusion criteria as for the main experiment. Average payouts and

⁹When we recruited "other participants" for the main experiment, the one who identified as being Democratic was also Female, and she preferred Picture 2, whereas the one who identified as Republican was also Male and preferred Picture 1. We thus used their decisions again for the respective treatment groups.

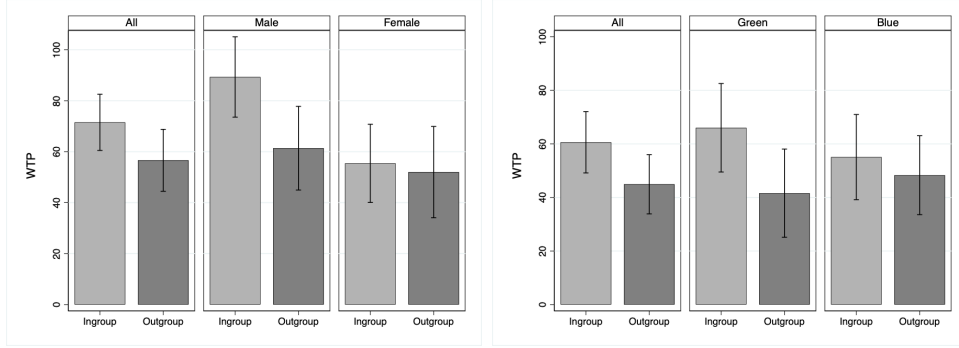


Figure 4: Mean willingness to pay in points by treatment, panel 1: Gender experiment, panel 2: MGP experiment.

completion times were very similar to the main experiment. Both these experiments were also pre-registered, but, given their exploratory nature, explicitly without a directed hypothesis.

Minimal group paradigm. The right panel of Figure 4 shows the mean willingness to pay by treatment in the MGP experiment. It is significantly positive in both treatments (WSR with $p < 0.01$), but we do not find any significant difference between Ingroup and Outgroup. The average willingness to pay in Ingroup amounts to 66.03 and 55.08 point for pictures Blue and Green, respectively. In the Outgroup treatments, the average willingness to pay is 41.6 and 48.32 points for picture Blue and picture Green. There is thus no evidence for groupiness in dependence aversion.

Gender. The mean willingness to pay by treatment in the Gender experiment is displayed in the left panel of Figure 4. It is also significantly larger than zero in all treatments (WSR with $p < 0.01$), but not significantly different between Outgroup and Ingroup. For male participants, the average willingness to pay in Ingroup amounts to 89.32 points, in Outgroup it is 61.37 points. For female participants, the average willingness to pay in Ingroup is 55.42, in Outgroup it is 51.99 points. There is thus no evidence for groupiness in gender identity driving dependence aversion.

Result 2 *There is no evidence for gender identity or for group identity created exogenously via the minimal group paradigm influencing dependence aversion.*

In both additional experiments, we also elicited the perceived closeness measure (Aron, Aron and Smollan, 1992; Gächter, Starmer and Tufano, 2015). In the minimal group paradigm treatment, participants do not feel significantly closer to the delegate when the delegate is from the Ingroup rather than the Outgroup. In the gender treatment, we find that participants felt significantly closer to the delegate in the Ingroup than in the Outgroup treatment (2.86 vs. 2.48, $p < 0.01$), but to a much smaller extent than in the party treatment (the difference between Ingroup and Outgroup in the gender identity treatment is 0.39 vs. 1.05 in the political identity treatment, $p < 0.01$). A reluctance to delegate to a person who does not share the same political identity thus seems to not reflect general groupiness, but requires a feeling of connectedness or of distance and potentially polarization between groups that goes beyond simple groupiness.

5 Conclusion

In an online experiment, we study whether individuals’ intrinsic aversion to giving up choice autonomy is moderated by the political identity of the delegate. Indeed, we find that US Americans are less willing to delegate choices to individuals who associate with a different political party. Importantly, our elicitation method fully controls for all instrumental value components of choice generated by preferences over outcomes or beliefs about the actions of the delegate. Two other manipulations of identity along less polarized dimensions – informing participants about the delegate’s gender and the minimal group paradigm Tajfel et al. (1979) – do not produce the same effect.

The results of our study contribute important insights to understanding the consequences of political polarization in the US—and probably in other Western countries where the political climate is becoming increasingly polarized (Guriev and Papaioannou, 2022). The fact that individuals show dependence

aversion when outcomes are determined by political outgroup members suggests that political identity itself may be a determinant of satisfaction with government decision making, independent of the actual policy and its consequences for individual outcomes. Thus, it suggests another role for identity politics for opposition parties as a strategic tool to create discontent with incumbent parties (Wendt, 1999; Ruggie, 1998; Cerulo, 1997; Mukand and Rodrik, 2018), and similarly points to the benefits of creating shared identity for incumbents.

Creating shared identity is also considered an important task for leaders in economic organizations. One argument why identity matters in organizations has been that shared identity can help align incentives and increase intrinsic motivation of employees (Akerlof and Kranton, 2005). Our results suggest that identity may also increase the acceptance of centralized decision making, something that has been argued by proponents of identity leadership (Haslam, Reicher and Platow, 2020; Steffens et al., 2020).

Although our gender identity treatment had no effect in the US context in which we studied preferences for choice autonomy, it may well be that gender serves as a stronger moderator of dependence aversion in other cultural contexts or decision environments. For example, Conlon et al. (2021) find that men are less likely to learn from women in a household decision-making and learning context. Which types of identities affect the willingness to delegate choices across different cultural and decision contexts is therefore an important avenue for future research.

References

- Aghion, Philippe, and Jean Tirole.** 1997. “Formal and real authority in organizations.” *Journal of political economy*, 105(1): 1–29.
- Akerlof, George A, and Rachel E Kranton.** 2005. “Identity and the Economics of Organizations.” *Journal of Economic perspectives*, 19(1): 9–32.
- Alesina, Alberto, and Eliana La Ferrara.** 2000. “Participation in heterogeneous communities.” *The quarterly journal of economics*, 115(3): 847–904.
- Alesina, Alberto, and Enrico Spolaore.** 1997. “On the number and size of nations.” *The Quarterly Journal of Economics*, 112(4): 1027–1056.
- Alesina, Alberto, Enrico Spolaore, and Romain Wacziarg.** 2000. “Economic integration and political disintegration.” *American economic review*, 90(5): 1276–1296.
- Alesina, Alberto, Reza Baqir, and Caroline Hoxby.** 2004. “Political jurisdictions in heterogeneous communities.” *Journal of political Economy*, 112(2): 348–396.
- Alonso, Ricardo, Wouter Dessein, and Niko Matouschek.** 2008. “When does coordination require centralization?” *American Economic Review*, 98(1): 145–179.
- Aron, Arthur, Elaine N Aron, and Danny Smollan.** 1992. “Inclusion of other in the self scale and the structure of interpersonal closeness.” *Journal of personality and social psychology*, 63(4): 596.
- Balliet, Daniel, Joshua M Tybur, Junhui Wu, Christian Antonellis, and Paul AM Van Lange.** 2018. “Political ideology, trust, and cooperation: In-group favoritism among Republicans and Democrats during a US national election.” *Journal of Conflict Resolution*, 62(4): 797–818.

- Bartling, Björn, Ernst Fehr, and Holger Herz.** 2014. “The intrinsic value of decision rights.” *Econometrica*, 82(6): 2005–2039.
- Bauer, Kevin, Yan Chen, Florian Hett, and Michael Kosfeld.** 2023. “Group Identity and Belief Formation: A Decomposition of Political Polarization.”
- Benjamin, Daniel J, James J Choi, and A Joshua Strickland.** 2010. “Social identity and preferences.” *American Economic Review*, 100(4): 1913–1928.
- Bertrand, Marianne, and Emir Kamenica.** 2023. “Coming apart? Cultural distances in the United States over time.” *American Economic Journal: Applied Economics*, 15(4): 100–141.
- Bicchieri, Cristina, Eugen Dimant, Simon Gächter, and Daniele Nosenzo.** 2022. “Social proximity and the erosion of norm compliance.” *Games and Economic Behavior*, 132: 59–72.
- Cerulo, Karen A.** 1997. “Identity construction: New issues, new directions.” *Annual review of Sociology*, 23(1): 385–409.
- Chapman, Jonathan, Erik Snowberg, Stephanie W Wang, and Colin Camerer.** 2022. “Looming large or seeming small? Attitudes towards losses in a representative sample.” National Bureau of Economic Research.
- Chapman, Jonathan, Mark Dean, Pietro Ortoleva, Erik Snowberg, and Colin Camerer.** 2018. “Econographics.” *NBER Working Paper*, , (w24931).
- Charness, Gary, and Yan Chen.** 2020. “Social identity, group behavior, and teams.” *Annual Review of Economics*, 12: 691–713.
- Chen, Yan, and Sherry Xin Li.** 2009. “Group identity and social preferences.” *American Economic Review*, 99(1): 431–457.

- Conlon, John J, Malavika Mani, Gautam Rao, Matthew W Ridley, and Frank Schilbach.** 2021. “Learning in the Household.” National Bureau of Economic Research.
- Dimant, Eugen.** 2023. “Hate trumps love: The impact of political polarization on social preferences.” *Management Science*.
- Ferreira, João V, Nobuyuki Hanaki, and Benoît Tarrow.** 2020. “On the roots of the intrinsic value of decision rights: Experimental evidence.” *Games and Economic Behavior*, 119: 110–122.
- Fowler, James H, and Cindy D Kam.** 2007. “Beyond the self: Social identity, altruism, and political participation.” *The Journal of politics*, 69(3): 813–827.
- Freundt, Jana, Holger Herz, and Leander Kopp.** 2023. “Intrinsic preferences for autonomy.”
- Gächter, Simon, Chris Starmer, and Fabio Tufano.** 2015. “Measuring the closeness of relationships: a comprehensive evaluation of the ‘inclusion of the other in the self’ scale.” *PloS one*, 10(6): e0129478.
- Gächter, Simon, Chris Starmer, Christian Thöni, Fabio Tufano, and Till O Weber.** 2022. “Social closeness can help, harm and be irrelevant in solving pure coordination problems.” *Economics Letters*, 216: 110552.
- Goette, Lorenz, David Huffman, and Stephan Meier.** 2012. “The impact of social ties on group interactions: Evidence from minimal groups and randomly assigned real groups.” *American Economic Journal: Microeconomics*, 4(1): 101–115.
- Guriev, Sergei, and Elias Papaioannou.** 2022. “The political economy of populism.” *Journal of Economic Literature*, 60(3): 753–832.
- Haslam, S Alexander, Stephen D Reicher, and Michael J Platow.** 2020. *The new psychology of leadership: Identity, influence and power*. Routledge.

- Holt, Charles A, and Susan K Laury.** 2002. "Risk aversion and incentive effects." *American economic review*, 92(5): 1644–1655.
- Kranton, Rachel E, and Seth G Sanders.** 2017. "Groupy versus non-groupy social preferences: Personality, region, and political party." *American Economic Review*, 107(5): 65–69.
- Kranton, Rachel, Matthew Pease, Seth Sanders, and Scott Huetzel.** 2020. "Deconstructing bias in social preferences reveals groupy and not-groupy behavior." *Proceedings of the National Academy of Sciences*, 117(35): 21185–21193.
- LeCoq, Chloé, James Tremewan, and Alexander K Wagner.** 2015. "On the effects of group identity in strategic environments." *European Economic Review*, 76: 239–252.
- May, Theresa.** 2017. "PM's Florence speech: a new era of cooperation and partnership between the UK and the EU." <https://www.gov.uk/government/speeches/pms-florence-speech-a-new-era-of-cooperation-and-partnership-between-the-uk-and-the-eu>, accessed on March 23, 2023.
- Meemann, Christine.** 2023. "On the economic value of decision rights: An experimental test." PhD diss. Helmut-Schmidt-Universität/Universität der Bundeswehr Hamburg.
- Mukand, Sharun, and Dani Rodrik.** 2018. "The political economy of ideas: On ideas versus interests in policymaking." National Bureau of Economic Research.
- Neri, Claudia, and Hendrik Rommeswinkel.** 2016. "Freedom, Power and Interference."
- Ormston, Rachel.** 2015. "Do we feel European and does it matter." *NatCen British Social Attitudes*.

- Owens, David, Zachary Grossman, and Ryan Fackler.** 2014. “The control premium: A preference for payoff autonomy.” *American Economic Journal: Microeconomics*, 6(4): 138–61.
- Ruggie, John Gerard.** 1998. “What makes the world hang together? Neoliberalism and the social constructivist challenge.” *International organization*, 52(4): 855–885.
- Sloof, Randolph, and Ferdinand A von Siemens.** 2017. “Illusion of control and the pursuit of authority.” *Experimental Economics*, 20: 556–573.
- Smith, Matthew.** 2017. “The ‘extremists’ on both sides of the Brexit debate.” YouGov <https://yougov.co.uk/topics/politics/articles-reports/2017/08/01/britain-nation-brexit-extremists>, accessed on March 23, 2023.
- Steffens, Niklas K, S Alexander Haslam, Kim Peters, and John Quiggin.** 2020. “Identity economics meets identity leadership: Exploring the consequences of elevated CEO pay.” *The Leadership Quarterly*, 31(3): 101269.
- Tajfel, Henri, John C Turner, William G Austin, and Stephen Worchel.** 1979. “An integrative theory of intergroup conflict.” *Organizational identity: A reader*, 56(65): 9780203505984–16.
- Wang, Stephanie W, Michelle Filiba, and Colin F Camerer.** 2010. “Dynamically optimized sequential experimentation (dose) for estimating economic preference parameters.” *Manuscript submitted for publication*.
- Wendt, Alexander.** 1999. *Social theory of international politics*. Vol. 67, Cambridge University Press.
- Zehnder, Christian, Holger Herz, and Jean-Philippe Bonardi.** 2017. “A productive clash of cultures: Injecting economics into leadership research.” *The Leadership Quarterly*, 28(1): 65–85.
- Zhang, Yunhao, and David G Rand.** 2023. “Sincere or motivated? Partisan bias in advice-taking.” *Judgment and Decision Making*, 18: e29.

Appendix

A Additional Figures and Tables

		Decision-maker is...			
		Democrat	N	Republican	N
Other participant is ...	Democrat	D Ingroup	147	R Outgroup	149
	Republican	D Outgroup	153	R Ingroup	135
	No info	D Baseline	146	R Baseline	146
		Female	N	Male	N
	Female	F Ingroup	155	M Outgroup	144
	Male	F Outgroup	148	M Ingroup	140
		Picture Green	N	Picture Blue	N
	Picture Green	G Ingroup	147	B Outgroup	150
	Picture Blue	G Outgroup	153	B Ingroup	144

Table A.1: Treatment overview. N denotes number of subjects in each treatment group used in the analyses, after applying the exclusion restrictions outlined in section 3.2.

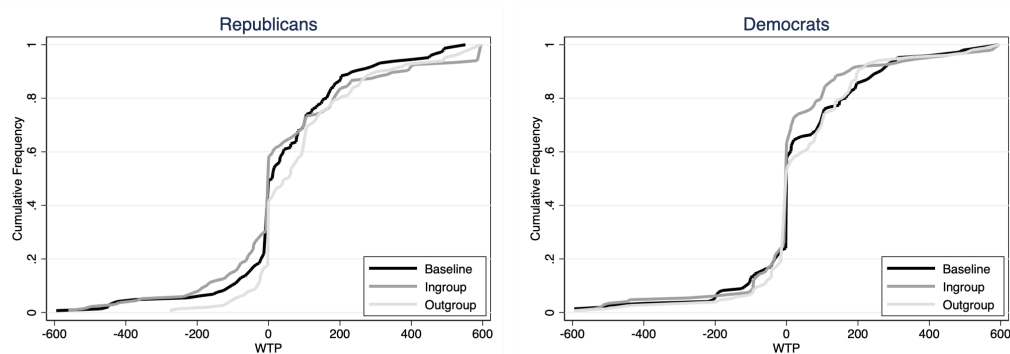


Figure A.1: Cumulative Distribution of the willingness to pay in points by treatment and party affiliation. Panel 1: Republicans. Panel 2: Democrats.

	(1)	(2)	(3)	(4)
	All	Democrats	Republicans	All
Outgroup	31.285*** (8.806)	15.344 (9.383)	39.818*** (14.359)	41.535*** (12.655)
Baseline	17.137* (8.832)	-0.486 (9.408)	19.414 (14.288)	
age	-0.053 (0.288)	-0.004 (0.324)	-0.621 (0.459)	-0.126 (0.293)
income	0.393 (0.888)	0.610 (1.017)	0.705 (1.355)	0.287 (0.895)
education	-2.110 (4.197)	-3.716 (4.686)	0.396 (6.582)	-2.114 (4.227)
risktaking	2.001 (1.658)	2.007 (1.883)	1.226 (2.545)	2.021 (1.670)
Democrat				0.958 (12.900)
Outgroup*Democrat				-19.051 (17.584)
Baseline				20.807 (12.680)
Baseline*Democrat				-7.272 (17.707)
Additional controls	yes	yes	yes	yes
Constant	87.639 (57.500)	-0.364 (83.223)	145.693* (78.089)	90.901 (57.912)

Table A.2: Median Regressions replicating table 1. Standard errors in parentheses. Additional controls include: dummies for ethnicity; dummy for the lowest consistency score in part 1, dummy for the lowest consistency score in part 2, dummy for a failed attention check. Significance levels:

*** : $p < 0.01$, ** : $p < 0.05$, * : $p < 0.1$.

	(1)	(2)	(3)	(4) c4
Ingroup	-0.509** (0.249)	-0.486** (0.241)	0.664** (0.336)	0.767** (0.337)
Strength of Party Association	-0.210*** (0.062)	-0.210*** (0.059)		
Ingroup*Strength	0.609*** (0.089)	0.599*** (0.087)		
Registered			-0.272 (0.217)	-0.211 (0.220)
Ingroup*registered			0.437 (0.355)	0.318 (0.356)
Constant	2.841*** (0.192)	1.454* (0.829)	2.536*** (0.206)	0.875 (0.881)
Controls?	No	Yes	No	Yes
R^2	0.215	0.250	0.142	0.176
N	584	584	570	570

Table A.3: Closeness explained by treatment interacted with the strength of party affiliation and being registered with either party. Baseline treatment excluded. OLS regressions with robust standard errors. The following additional control variables are included (the same as in the regression specifications in the main part of the paper): age, income, race, education, risk taking, lowest consistency in part 1, lowest consistency in part 2, failed attention check in the survey. Significance levels:

*** : $p < 0.01$, ** : $p < 0.05$, * : $p < 0.1$.

B Experimental Design: DOSE Method

In this section, we describe the DOSE procedure used in both parts of the experiment in detail. DOSE has originally been used in Wang, Filiba and Camerer (2010); Chapman et al. (2018) and in our previous work Freundt, Herz and Kopp (2023) we discuss the experimental mechanisms and the structural estimations in detail, including the assumptions that we needed to make, and we provide evidence for the internal validity of this experimental procedure. The description below is copied from Freundt, Herz and Kopp (2023) with very few modifications.

B.1 DOSE method for part 1 of the elicitation procedure

In part 1, each participant goes through an individual sequence of 10 choice situations in each of which they face the binary choice between two lotteries A and B . Lottery A is fixed and always provides a payoff of 600 points with 25% probability and a payoff of 1600 points with 75% probability. Lottery B provides a payoff of 600 points with 50% probability and a payoff of $X \in \{1890, \dots, 2840\}$ points with 50% probability. The value X is adjusted from choice situation to choice situation using DOSE Wang, Filiba and Camerer (2010); Chapman et al. (2018). DOSE adjusts the value of X in such a way that given an individual's decision pattern in choice situations 1 to t , the choice between alternatives A and B in choice situation $t + 1$ maximizes the information regarding the individual's degree of risk aversion as well as their choice consistency. In particular, we assume that the participant's risk preferences and choice behavior can be characterized by the following two equations:

$$u_i(w) = \frac{w^{1-r_i}}{1-r_i} \quad (1)$$

where w is the payoff in points and r_i is the individual's risk aversion parameter.

$$Pr(A) = \frac{1}{1 + e^{-\mu_i(U_i(A) - U_i(B))}} \quad (2)$$

where $Pr(A)$ is the probability of choosing lottery A over B , μ_i specifies the individual's degree of stochastic response in choice, and U_i denotes the expected utility of a lottery given u_i .

For estimating \hat{r}_i and $\hat{\mu}_i$, DOSE uses sequential Bayesian updating and combines it with information entropy to increase speed of inference. To initialize DOSE, we first decided on the appropriate discrete parameter space for r given by $\mathcal{R} \in (r_1, r_2, \dots, r_n)$ and μ , given by $\mathcal{M} \in (\mu_1, \mu_2, \dots, \mu_m)$ whereby we define $\mathcal{R} \times \mathcal{M} = \mathcal{K}$ models k , one for each possible combination of r and μ . We then assign to each model k a prior probability $p_k = Pr(r_k, \mu_k) = Pr(r_k)Pr(\mu_k)$.

Like Wang, Filiba and Camerer (2010), we use a similar range for the risk parameter as Holt and Laury (2002), namely from -1.2 to 1.2. The range for μ is sensitive to the chosen payoff values for A and B . Based on precision in estimating parameters of simulated subjects, we found that $\mathcal{M} \in \{1, 10, 20, \dots, 120\}$ provides a sensible parameter space for our setup. Finally, regarding the assumed prior distribution over models, we choose a uniform prior, i.e. $\forall j, i : p_j = p_i$, given that estimates that are made using different priors only slightly differ (Wang, Filiba and Camerer, 2010; Chapman et al., 2018) and given that data on the distribution of the choice consistency parameter in our setting is non-existent.

Second, we define a reference lottery¹⁰ A that pays a high payoff of 1600 points with 75% probability and a low payoff of 600 points with 25% probability, and a set of lotteries $\mathcal{B} = \{B_1, B_2, \dots, B_n\}$ with B_j paying a high payoff of X_j points with 50% probability and a low payoff of 600 points with 50% probability. We then define the set of all binary combinations of lottery A and some lottery B as $\mathcal{Q} \in \{(A, B_1), (A, B_2), \dots, (A, B_n)\}$.

This setup allows updating prior probabilities for every model k with Bayes' rule when asking a participant to make a choice for a choice situation $Q_i \in \mathcal{Q}$

¹⁰Henceforth, a lottery L is defined by $L = (x^{high}, x^{low}, p)$ where x^{high} and x^{low} are two monetary payoffs and p is the probability of receiving x^{high} .

as follows:

$$p(k|a) = p(r_k, \mu_k|a) = \frac{p(a|r_k, \mu_k)p(r_k, \mu_k)}{\sum_j^k p(a|r_j, \mu_j)p(r_j, \mu_j)} \quad (3)$$

where $a \in \{\text{choosing A, choosing B}\}$ denotes the individual's choice.

Iterating this procedure of asking a question and updating beliefs leads to a lower variance in the posterior probability distribution over models, i.e. a more precise estimation of an individual's true parameters. To optimize the sequence of questions with respect to the speed of inference, an information criterion is used: Following Wang, Filiba and Camerer (2010) and Chapman et al. (2018), we define a Kullback-Leibler information number for each model k for question $Q_i \in \mathcal{Q}$:

$$I(k; Q_i) = \sum_a \log\left(\frac{l_k(a; Q_i)}{\sum_{j=1}^k p_j l_j(a; Q_i)}\right) p_k l_k(a; Q_i) \quad (4)$$

where $a \in \{\text{choosing A, choosing B}\}$ denotes the binary choice between choosing lottery A or B and l_k is the associated likelihood of choosing a in Q_i under model k . $I(k; Q_i)$ measures how informative question Q_i is if k is the correct model. By summing up $I(k; Q_i)$ for every model and weighing according to the model's probability p_k , we get the Kullback-Leibler information number for a given question $Q_i \in \mathcal{Q}$:

$$KL(Q_i) = \sum_k^n p_k I(k; Q_i) \quad (5)$$

Asking a participant the question $Q^* = \max_Q KL(Q)$ maximizes information gained from the observed choice. In other words, Q^* is the question that in expectation updates the prior the strongest. Iterating the process of (i) choosing Q^* given the current probability distribution and (ii) updating beliefs delivers the most informative sequence of questions at the participant level. It is important to note that, after every iteration, the current Q^* is excluded from \mathcal{Q} for the next round.

Each participant makes a total of 10 choices, where one choice is chosen at

random for payment at the end of the experiment. In each round, questions were selected according to the DOSE procedure explained above, except for rounds 5 and 10. For participants that are very consistent in their choice patterns, the DOSE algorithm quickly converges to a narrow range of lotteries B_j , in order to fine-tune the risk aversion parameter at incremental levels. Thus, to break the monotonicity of the choice situation sequence, in round 5 a lottery B_j was chosen for which the expected value of the corresponding lottery B is significantly different¹¹ to the prior choice situations.

In round 10, we have an additional reason for selecting a different choice situation. In step 2 of our elicitation procedure, we will use the lottery B_j^* that makes the individual indifferent to lottery A . DOSE would likely choose a lottery in round 10 that is very close to B_j^* , which we wanted to avoid, and rather create more variety in the lotteries the individual faced in the final choice of part 1.¹²

Because every participant starts with the same prior distribution over models k , the most informative choice situation in the first round is always the same for each participant. Because each choice situation has 2 options (choosing lottery A or lottery B), there are a total of $2^{10} = 1024$ possible decision paths in our elicitation procedure. We pre-specified and stored the optimal sequence of choice situations for each decision path in our experimental implementation, which made intensive computations during the experiment unnecessary.¹³

¹¹Based on simulations, we decided to randomly select a lottery B in choice situation 5 whose value X differed between 50 and 150 points from the B_j in the previous choice situation.

¹²While we lose some information relative to the application of DOSE in 10 rounds, simulations have shown that the 8 rounds in which DOSE is applied deliver sufficient information on the parameters r and μ to obtain precise parameter estimates at the individual level, at least for high levels of consistency.

¹³The fact that using an information criterion like Kullback-Leibler needs a lot of computing power to calculate the optimal question for a given round makes the calculation of optimal decision paths in real time a major implementation challenge for experiments.

B.2 DOSE Method for part 2 of the elicitation procedure

In part 2, participants are again shown two lotteries, A and \hat{B} . Lottery A is identical to part 1. lottery \hat{B} is selected such that the participant is just indifferent between the two choice alternatives ($A \sim \hat{B}$), given their own preference, as revealed in step 1 of our elicitation task. Participants are told that either A or \hat{B} will determine their payoff, and that the choice between A and \hat{B} is either made by themselves, or by another study participant. Participants are faced with a sequence of 10 choice situations, in each of which they must choose between choosing themselves and paying a price p , or delegating the choice to an anonymous study participant. The price $p \in \{-600, -590, \dots, -10, 10, 20, \dots, 600\}$ in points varies from situation to situation and can either be positive or negative.

In part 2, we thus estimate the value of choosing oneself d_i and a consistency parameter γ_i . Thus, we initialize DOSE by defining the parameter space for d , given by $\mathcal{D} \in (d_1, d_2, \dots, d_n)$ and the parameter space for γ , given by $\Gamma \in (\gamma_1, \gamma_2, \dots, \gamma_m)$ and assign prior probabilities to all $n \times m = k$ models. Second, we define the parameter space for prices p given by $\mathcal{P} \in (p_1, p_2, \dots, p_n)$. The set of choice situations is defined by all combinations of a price p as $Q = \{([p_1, \text{"I choose"}], [0, \text{"I delegate"}]), \dots, ([p_n, \text{"I choose"}], [0, \text{"I delegate"}])\}$. We again chose a uniform prior distribution over all models. Based on pilot data and simulations, we chose a discrete parameter space of $\mathcal{P} \in \{-600, -590, \dots, -10, 10, 20, \dots, 600\}$ and $\gamma \in \{1, 2, \dots, 15\}$.¹⁴ As in step 1, we pre-specified and stored the optimal sequence of choice situations in our experimental implementation, creating 1024 predetermined decision paths.

¹⁴The values of γ have to be interpreted in connection with $v_i(d_i, p)$, as it simply scales up differences in expected utility, and values cannot be interpreted in isolation. We again chose the range of γ such that highly inconsistent and highly consistent choice behaviors are covered.

C Replication with originally pre-registered exclusion restriction

The experiment has originally been pre-registered (AsPredicted.org #142099) with a different exclusion restriction. We adapted this restriction to be more conservative after the pre-registration had been submitted. The pre-registration stated that *We exclude all subjects who never switch between lotteries A and B in part 1. All other subjects are included in the analysis.* The reason for this exclusion restriction was that, for our preference elicitation mechanism to work, identification of an indifference point in part 1 of the experiment was indispensable. If a subject never switches (that is, chooses lottery A or lottery B at every decision), an indifference point cannot be identified.

However, after submission of the pre-analysis plan, we realized that this exclusion criterion was too soft. In particular, some participants did display switching between lotteries, but in a way that also made it dubious that we could confidently claim identification of an indifference point. We therefore altered the exclusion condition and excluded all participants who chose lottery A in the choice situation with the highest value of X (the high payoff of lottery B) in their individual sequence, or lottery B in the choice situation with the lowest value of X in their individual sequence. This criterion includes individuals that either never switch between lotteries in part 1 (which was our previous criterion), but also individuals who do switch, but are inconsistent, and display extreme behaviors at the boundary of the parameter space.

Figure A.2 shows a subject that is excluded according to our adopted exclusion criterion, but not according to our pre-registration. The subject once switched to choosing lottery A in round 6, but chose lottery B again in round 9 despite lottery B having a lower high payoff in round 9 than in round 6, which indicates that the choice in round 6 could have been an error. But if this were the case, no indifference point can be identified from this choice sequence. We therefore decided to exclude such choice patterns as well, given that the choice behavior at the extremes provides little confidence regarding the eventual identification of a true indifference point.

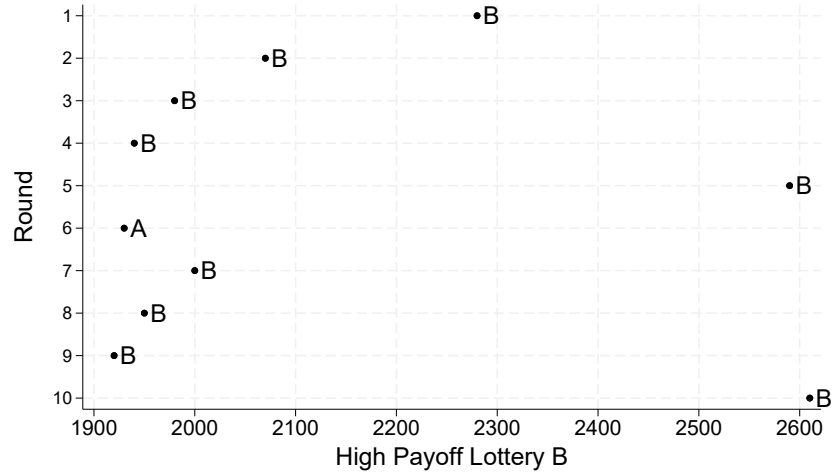


Figure A.2: Example of a choice path of a subject that was excluded in the main analysis, but not according to the pre-registration.

In this Appendix, we replicate the main results with the original exclusion restriction, to show that this ex post decision does not fundamentally affect our results.

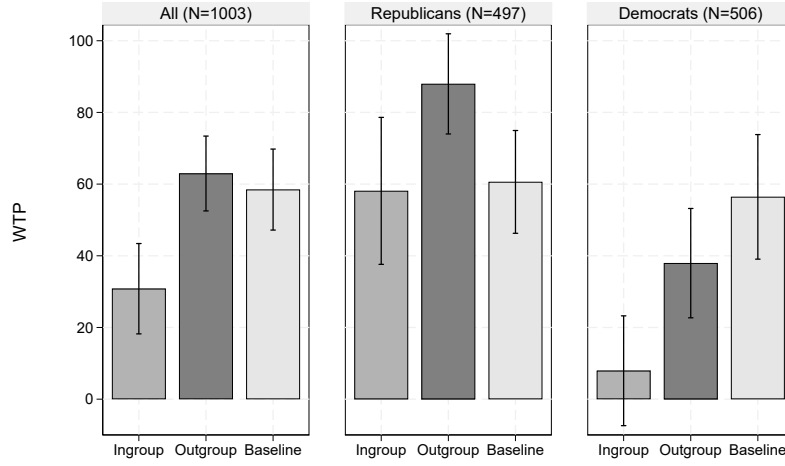


Figure A.3: Mean willingness to pay in points by treatment. “Baseline” denotes the treatment in which the delegate was “another study participant”. “Ingroup” denotes the treatment in which the delegate had the same party association. “Outgroup” denotes the treatment in which the delegate had the opposite party association. The left panel shows all data pooled. The middle panel shows results for Republican delegates only, and the right panel for Democrat delegates only. Participants who never switch between lotteries A and B in part 1 of the elicitation task are excluded.

The left panel of Figure A.3 displays the mean willingness to pay for all participants in the experiment by experimental condition that satisfied the pre-registered exclusion restriction. As in the main analysis, the willingness to pay remains significantly larger when the delegate belongs to the political outgroup rather than the ingroup (74.3 vs. 39.6, MWU: $p < 0.01$, ttest: $p = 0.03$).

	Democrats	Republicans	All	All
Outgroup	37.596** (15.542)	31.152 (20.277)	46.187* (24.049)	43.833* (24.060)
Baseline	19.865 (16.242)	20.695 (21.823)	20.064 (24.632)	19.170 (24.410)
age	0.825 (0.528)	1.125 (0.732)	0.236 (0.804)	0.713 (0.540)
income	1.277 (1.643)	1.883 (2.563)	0.659 (2.241)	1.039 (1.671)
education	-11.134 (7.516)	-4.214 (10.563)	-17.576 (11.209)	-10.171 (7.563)
risktaking	5.101 (3.109)	3.453 (4.526)	6.429 (4.366)	4.748 (3.143)
Democrat				-14.924 (25.483)
Outgroup*Democrat				-12.988 (31.826)
Baseline*Democrat				0.864 (32.595)
Constant	-74.307 (144.847)	-67.682 (49.631)	-17.743 (181.005)	-65.817 (146.556)
Additional controls	yes	yes	yes	yes
R^2	0.028	0.044	0.005	0.031
N	1003	506	497	1003

Table A.4: Robust standard errors in parentheses. Additional controls include: dummies for ethnicity; dummy for the lowest consistency score in part 1, dummy for the lowest consistency score in part 2, dummy for a failed attention check. The exclusion criterion for participants follows precisely the pre-registration. Significance levels: *** : $p < 0.01$, ** : $p < 0.05$, * : $p < 0.1$.

The regression results presented in table A.4 also confirm the main analysis.

Column (1) shows a significant and sizeable increase in the willingness to pay for choice autonomy when the delegate belongs to the political outgroup relative to the ingroup. When analysing the treatment effect separately for Republicans and Democrats in columns (2) and (3), the effect remains positive, but only remains marginally significant for the republican subsample. Column (4) again considers all observations and includes an interaction term between Democrat and Outgroup, confirming previous results.

D Replication when including moderately consistent subjects only

In this Appendix, we further reduce the analyzed sample in order to make sure that the results are not driven by highly inconsistent subjects, for whom we can identify the willingness to pay for choice autonomy less precisely. Thus, we only include subjects that are classified as at least “moderately consistent”. We follow Freundt, Herz and Kopp (2023) and set the threshold for “moderately consistent” at $\mu = 40$. For an in-depth discussion of this classification and the role of choice consistency in the estimation of the willingness to pay for choice autonomy, as well as the rationale behind the threshold of $\mu = 40$, see Freundt, Herz and Kopp (2023). 21.3% of the sample in the experiment have an estimated consistency score of $\mu < 40$ in part 1, and are thus dropped from the sample.

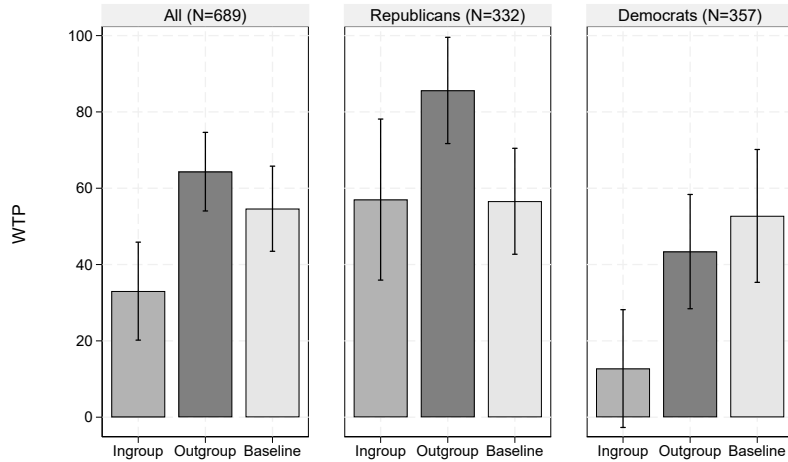


Figure A.4: Mean willingness to pay in points by treatment. “Baseline” denotes the treatment in which the delegate was “another study participant”. “Ingroup” denotes the treatment in which the delegate had the same party association. “Outgroup” denotes the treatment in which the delegate had the opposite party association. The left panel shows all data pooled. The middle panel shows results for Republican delegates only, and the right panel for Democrat delegates only. Participants with a consistency estimate in part 1 of the elicitation task below 40 are excluded.

The left panel of Figure A.4 displays the mean willingness to pay for all

participants in the experiment by experimental condition. As in the main analysis, the willingness to pay remains roughly twice as large when the delegate belongs to the political outgroup rather than the ingroup (64.3 vs. 33.0, MWU: $p = 0.01$, ttest: $p = 0.06$).

	All	Democrats	Republicans	All
Outgroup	27.628*	28.575	28.425	27.085
	(16.210)	(21.792)	(25.388)	(24.739)
Baseline	20.416	38.582	-1.451	1.681
	(17.170)	(23.601)	(25.204)	(25.020)
age	0.799	0.745	0.326	0.637
	(0.552)	(0.840)	(0.778)	(0.568)
income	1.226	-0.197	1.897	0.916
	(1.583)	(2.610)	(2.096)	(1.614)
education	-16.425**	-5.555	-23.063**	-15.474*
	(8.127)	(11.863)	(11.351)	(8.168)
risktaking	-1.938	-4.689	0.095	-2.079
	(3.309)	(4.972)	(4.602)	(3.366)
Democrat				-33.408
				(26.973)
Outgroup*Democrat				-1.744
				(32.903)
Baseline*Democrat				34.761
				(34.220)
Constant	146.378*	-8.132	266.930***	166.220**
	(80.372)	(50.871)	(87.395)	(77.022)
Additional controls	yes	yes	yes	yes
R^2	0.038	0.038	0.066	0.044
N	689	357	332	689

Table A.5: OLS Regressions in WTP. Robust standard errors in parentheses.

Additional controls include: dummies for ethnicity; dummy for the lowest consistency score in part 1, dummy for the lowest consistency score in part 2, dummy for a failed attention check. Participants with an estimated consistency parameter of $\mu < 40$ in part 1 of the elicitation procedure are excluded. Significance levels: *** : $p < 0.01$, ** : $p < 0.05$, * : $p < 0.1$.

The regression results presented in Table A.5 also confirm the main analysis, although significance is reduced. Column (1) shows a sizeable and marginally significant increase in the willingness to pay for choice autonomy when the delegate belongs to the political outgroup relative to the ingroup. When analyzing the treatment effect separately for Republicans and Democrats in columns (2) and (3), the effect remains positive but becomes insignificant. Column (4) again considers all observations and includes an interaction term between Democrat and Outgroup, confirming previous results.

E Supplementary Material: Experimental Instructions and Questionnaires (for online publication only)

Participation and privacy policy

Consent form

Welcome to the study! Thank you very much for your participation. This study belongs to a project conducted by Prof. Dr. Holger Herz from the University of Fribourg in Switzerland and it is funded by the European Research Council. The study has been approved by the Ethics Committee of the Faculty of Management, Economics and Social Sciences at the University of Fribourg.

Study
This study takes about 20 minutes. It consists of making a series of choices involving lotteries. There will be control questions to check your understanding of the study as well as attention checks. Repeated failure can lead to exclusion from the study and payment.

Confidentiality
Data obtained will be used for research purposes only. Your prolific-ID number will be deleted immediately upon completion of the study. The researchers will at no point receive any personally identifying information about you. The data is therefore anonymous and cannot be linked to personal data. The anonymous data will later be stored in open access repositories.

Benefits
For your participation in the study, you will receive a base payment of 2€, plus an additional amount based on your decisions.

Costs
Your participation will take approximately 20 minutes. We do not consider there to be any foreseeable risks, discomforts, inconveniences or harms associated with participation.

Voluntary participation
Participation in this study is voluntary, and you can choose to withdraw your participation without stating a reason at any time. If you decide to withdraw, your data will be deleted. Please note that it is impossible to delete your data once the study is finished, because then the data is anonymized and can no longer be linked to you.

Questions and Comments
Should you have questions regarding this study, please contact FriLab at the University of Fribourg, Switzerland: frilab@unifr.ch.

☐ I confirm that I have received the information about the project, that I am willing to participate and that I am at least 18 years old.

[Download Consent Form](#)

[Confirm](#)

Figure A.5: Screenshot: consent form

Prolific ID

Please enter your Prolific ID:

Note that your prolific ID needs to be correct, otherwise we cannot link your payment to your account.

Continue

Figure A.6: Screenshot: prolific ID

Questionnaire

Before the begin of the study, we would like to ask you a few general questions. Your answers to these questions are important to our research, please make sure to answer them carefully and honestly. Thank you!

1. How old are you?

 ▾

2. What is your sex, as recorded on legal/official documents?

- ☐ Male
☐ Female
☐ Do not wish to answer

3. Which state do you live in?

 ▾

4. Which picture do you like better?



Green Picture



Blue Picture

- ☐ Green Picture
☐ Blue Picture

5. In general, what is your political affiliation?

- ☐ Democrat
☐ Republican
☐ Independent
☐ Other
☐ None

Continue

Figure A.7: Screenshot: questionnaire

Questionnaire

You answered that your political affiliation is Republican.

How strongly do you associate with the Republican Party?

☐ Not at all strongly
☐ Not very strongly
☐ Average
☐ Somewhat strongly
☐ Very strongly

[Continue](#)

Figure A.8: Screenshot: follow up question in questionnaire

Thank you for your participation!

The study consists of **2 parts** plus a very short questionnaire at the end. The instructions for each part will be shown on your screen. During part 1 and 2 of the study you have the possibility to earn additional money. The additional payoffs will be calculated in points. They will be converted into £ at the end of the study. The exchange rate is:

1000 points = 0.75 £

Therefore, your total earnings from the study consist of your payoff from part 1 plus your payoff from part 2 plus your base payment of 2 £ for your participation.

Total earnings = payoff part 1 + payoff part 2 + 2 £

Note that there will be checks that ensure everybody's understanding of the study as well as clearly visible attention checks to make sure participants are reading the instructions and questions. Failing these attention checks can lead to an exclusion from the study.

[Continue](#)

Figure A.9: Screenshot: payoffs

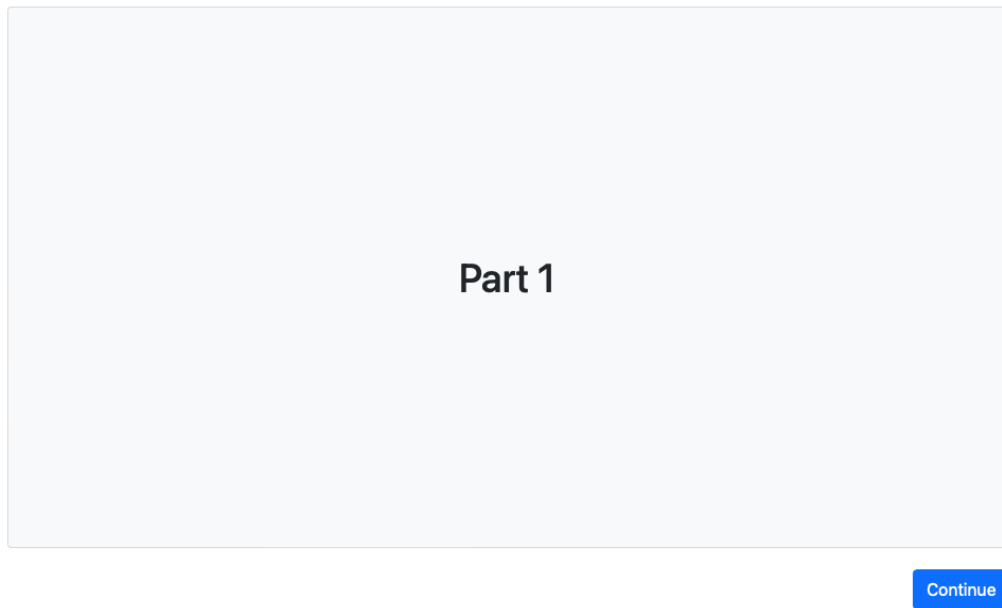


Figure A.10: Screenshot: begin of part 1

The choice situation in part 1

In part 1, you will face a total of **10 choice situations**, in each of which you are asked to choose between two lotteries: lottery A and lottery B. Your task is to choose the lottery you prefer. Lottery A is the same in all choice situations. Lottery B varies between situations.

In **lottery A** you can either receive


a **high outcome of 1600 points**



1600 points

or

a **low outcome of 600 points**




600 points

In lottery A, the chance to receive the high outcome is 75% ($\frac{3}{4}$). The chance to receive the low outcome is 25% ($\frac{1}{4}$).


In **lottery B** you can either receive

a **high outcome**



or

a **low outcome of 600 points**



600 points

The high outcome differs from situation to situation. The low outcome is always 600 points.

In lottery B, the chance to receive the high outcome is 50% ($\frac{1}{2}$). The chance to receive the low outcome is 50% ($\frac{1}{2}$).

To determine the outcome of a lottery, the computer spins a wheel of fortune. The wheel has 16 segments. When spinning the wheel, the arrow turns around the wheel and randomly stops. The arrow has the same chance to stop in any segment.



Figure A.11: Screenshot: description of the lotteries (Elements of the screen appear sequentially. When the participant clicks a "Continue" button below the text or picture element, the next picture and description appears.

The outcome of lottery A is determined by wheel A. On wheel A, 12 of the 16 segments (75%) are **red**, 4 segments (25%) are **blue**.

If the arrow stops on a **red segment** you receive **1600 points**.
If the arrow stops on a **blue segment** you receive **600 points**.

The outcome of lottery B is determined by wheel B. On wheel B, 8 of the 16 segments (50%) are **yellow**, 8 segments (50%) are **green**.

If the arrow stops on a **yellow segment** you receive the **high outcome**
If the arrow stops on a **green segment** you receive **600 points**.

☒ I understood the instructions

[Continue to control questions](#)

Control Questions

The following questions ensure that you have understood the instructions. Once you have answered all questions correctly, you will be directed to the next screen.
Note: You have **three** tries to answer the questions correctly. After the third wrong answer you will not be able to finish the study and you will not receive any payment.

Which of the following is correct?	Wrong	Correct
If a participant chooses lottery B...		
<i>it is equally likely that he or she receives the high or the low outcome.</i>	<input type="radio"/>	<input type="radio"/>
If a participant chooses lottery A...		
<i>he or she always gets a payout of 1600 points.</i>	<input type="radio"/>	<input type="radio"/>
<i>the computer spins a wheel of fortune which determines if he or she receives 1600 or 600 points.</i>	<input type="radio"/>	<input type="radio"/>
<i>he or she gets a payoff of 600 points with a likelihood of 25%.</i>	<input type="radio"/>	<input type="radio"/>

[Confirm my answers](#)

Figure A.12: Screenshot: description of the lotteries continued and control questions part 1 (The control questions appear directly below the description of the lotteries after the participant clicks "continue to control questions").

Practice stage to get to know the wheels

Before the study begins, you will have the chance to familiarize yourself with how the lottery outcomes are determined. Each time you click *Start*, the computer spins the arrow.

This is a mere illustration to help you understand the mechanism. You can click *Start* as many times as you wish, until you feel familiar with the way the wheels work. This will have no consequences for your payoff or the choices you will face in this study. When you feel ready, click *Continue* to start the study.

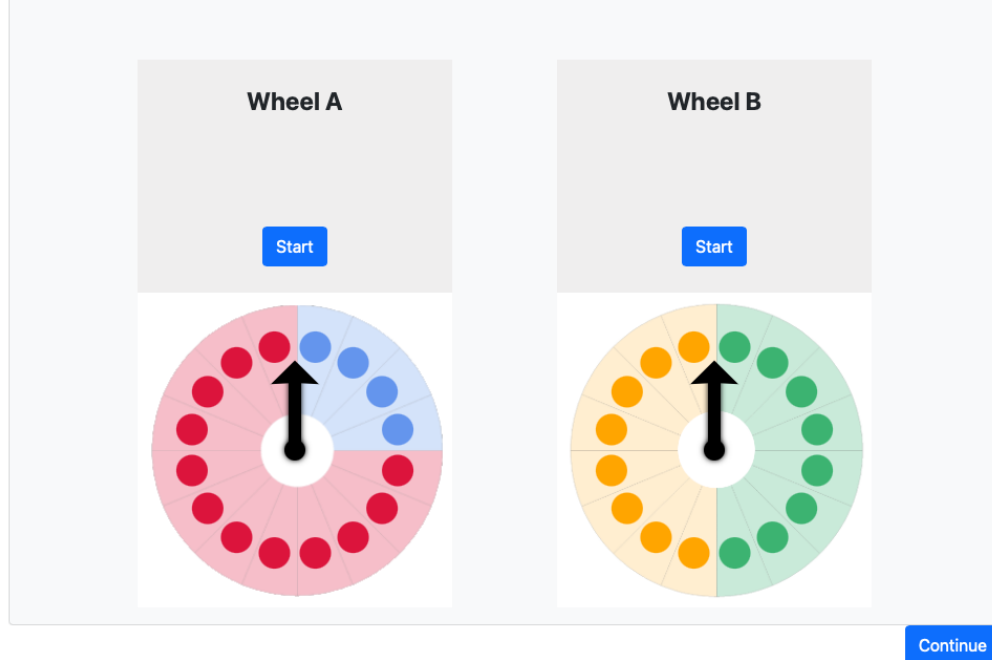


Figure A.13: Screenshot: practice wheels (The participant can spin each wheel as often as she wishes. After each spin, the outcome is displayed together with an explanation how often this happens to prevent biases.)

How your payoff is chosen

There will be **10 choice situations** in total, in each of which you are asked to choose between lotteries A and B. At the end of the study, one of the 10 situations will be selected and the lottery that you chose in this situation will determine your payment from part 1.

☒ I understood the instructions

Continue

Figure A.14: Screenshot: procedure part 1

You have now completed the instructions and correctly answered the control questions from part 1. Please click *Continue* to proceed to the choice situations.

Continue

Figure A.15: Screenshot: transition to choice situations part 1

Choice situation 1 of 10

In choice situation 1, the high outcome of lottery B is **2280 points**.

Continue


Figure A.16: Screenshot: announcement of the next choice situation in part 1 (for choice situations 1 to 10)

Choice situation 1 of 10

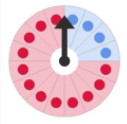
In choice situation 1, the high outcome of lottery B is **2280 points**.


Please choose between lottery A or lottery B.

Lottery A



1600 points






600 points

You get


1600 points with a chance of 75% (if the arrow stops on a **red segment**)
or
600 points with a chance of 25% (if the arrow stops on a **blue segment**).


Lottery A

Lottery B



2280 points





600 points

You get

2280 points with a chance of 50% (if the arrow stops on a **yellow segment**)
or
600 points with a chance of 50% (if the arrow stops on a **green segment**).

Lottery B

Figure A.17: Screenshot: choice situation 1 in part 1 (the same for choice situations 1 to 10)

56

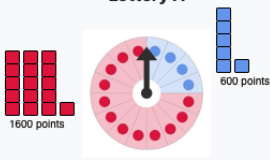
Choice situation

In this choice situation, the high outcome of lottery B is **2130 points**.

Please choose Lottery A to show that you are paying attention. This lottery will not affect your payments!

Please choose between lottery A or lottery B.

Lottery A



1600 points

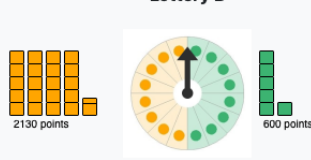
600 points

You get

1600 points with a chance of 75% (if the arrow stops on a **red segment**)
or
600 points with a chance of 25% (if the arrow stops on a **blue segment**).

Lottery A

Lottery B



2130 points

600 points

You get

2130 points with a chance of 50% (if the arrow stops on a **yellow segment**)
or
600 points with a chance of 50% (if the arrow stops on a **green segment**).

Lottery B

Figure A.18: Screenshot: attention check part 1

End of part 1

You have completed part 1. The payoff relevant choice situation will be selected at the end of the study. You will then be informed about the selected situation as well as your payoff from part 1. Please click *Continue* to proceed to part 2.

Continue

Figure A.19: Screenshot: end of part 1

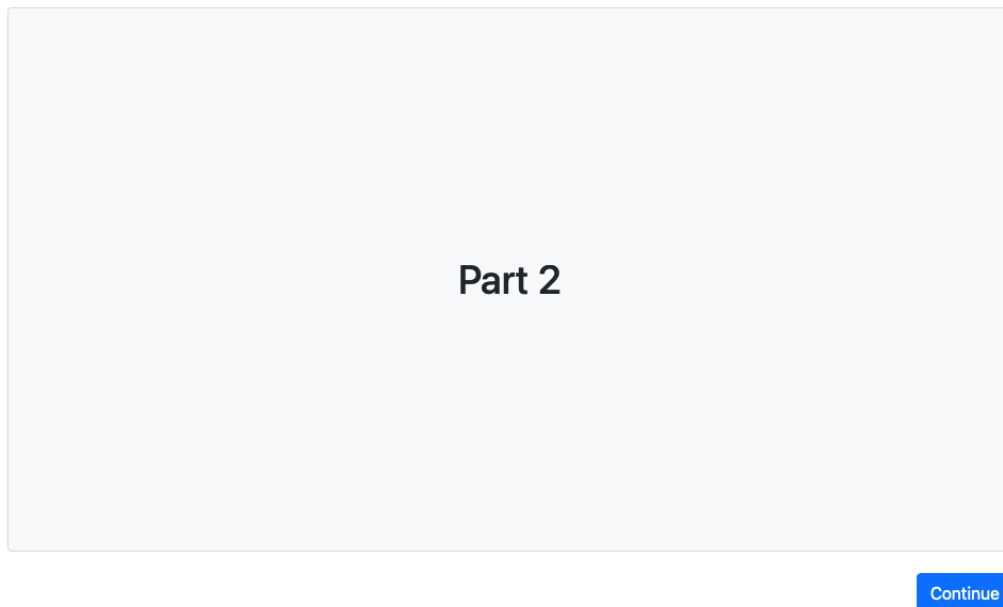


Figure A.20: Screenshot: begin of part 2

General Instructions

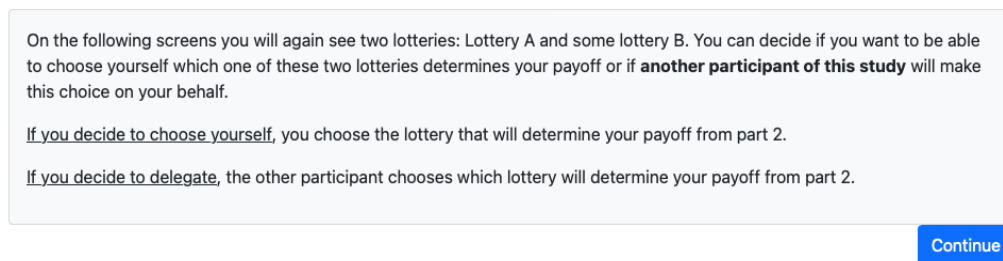


Figure A.21: Screenshot: general instructions for part 2

The other participant

The other participant earns a fixed base payment that is independent of whether or not you delegate. His or her payment is not affected by the choices he or she makes on your behalf.

Continue

Figure A.22: Screenshot: the other participant (baseline treatment)

The other participant

All participants answered the same questions about their party affiliation that you saw in the very beginning. There are two groups of participants in this study, one with followers of the Democratic and one with followers of the Republican Party.

The other participant that you are matched with is a member of the **Democratic group**.



You



The other participant

The other participant earns a fixed base payment that is independent of whether or not you delegate. His or her payment is not affected by the choices he or she makes on your behalf.

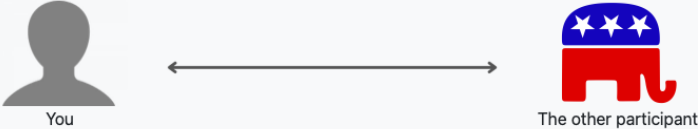
Continue

Figure A.23: Screenshot: the other participant if other participant is described as a democrat

The other participant

All participants answered the same questions about their party affiliation that you saw in the very beginning. There are two groups of participants in this study, one with followers of the Democratic and one with followers of the Republican Party.

The other participant that you are matched with is a member of the **Republican group**.



The other participant earns a fixed base payment that is independent of whether or not you delegate. His or her payment is not affected by the choices he or she makes on your behalf.

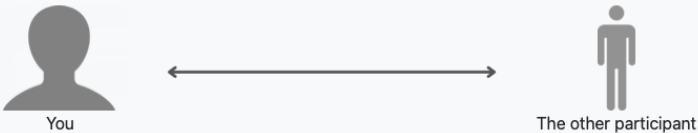
Continue

Figure A.24: Screenshot: the other participant if other participant is described as a republican)

The other participant

All participants answered the same questions about their gender that you saw in the very beginning. There are two groups of participants in this study, one with only male and one with only female group members.

The other participant that you are matched with is part of the **male group**.



The other participant earns a fixed base payment that is independent of whether or not you delegate. His payment is not affected by the choices he makes on your behalf.

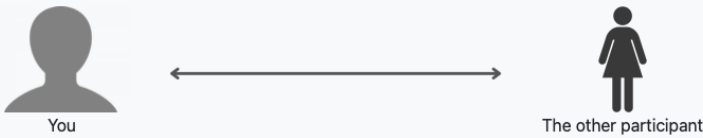
Continue

Figure A.25: Screenshot: the other participant if other participant is described as male

The other participant

All participants answered the same questions about their gender that you saw in the very beginning. There are two groups of participants in this study, one with only male and one with only female group members.

The other participant that you are matched with is part of the **female group**.



The other participant earns a fixed base payment that is independent of whether or not you delegate. Her payment is not affected by the choices she makes on your behalf.


Continue

Figure A.26: Screenshot: the other participant if other participant is described as female

The other participant

All participants answered the same questions about their picture preference that you saw in the very beginning. There are two groups of participants in this study, one with people who like the green picture better and one with people who like the blue picture better.

The other participant that you are matched with is a part of the group that likes the **Green Picture**.



The other participant earns a fixed base payment that is independent of whether or not you delegate. His or her payment is not affected by the choices he or she makes on your behalf.

Continue

Figure A.27: Screenshot: the other participant if other participant is described as preferring the green picture

The other participant

All participants answered the same questions about their picture preference that you saw in the very beginning. There are two groups of participants in this study, one with people who like the green picture better and one with people who like the blue picture better.

The other participant that you are matched with is a part of the group that likes the **Blue Picture**.



You



The other participant

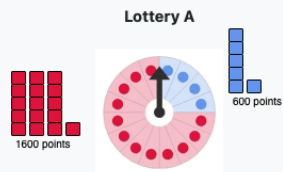
The other participant earns a fixed base payment that is independent of whether or not you delegate. His or her payment is not affected by the choices he or she makes on your behalf.

Continue

Figure A.28: Screenshot: the other participant if other participant is described as preferring the blue picture

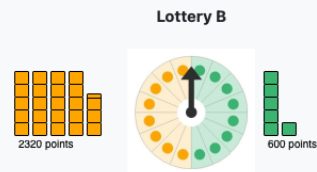
The Lotteries

In the following you will again see lottery A as well as a lottery B. Lottery A and lottery B remain constant throughout part 2 of this study. You will make 10 choices. The choice is whether you want to choose between these lotteries yourself or whether you let the other participant make this choice for you.



You get

1600 points with a chance of 75% (if the arrow stops on a **red segment**)
or
600 points with a chance of 25% (if the arrow stops on a **blue segment**).



You get

2320 points with a chance of 50% (if the arrow stops on a **yellow segment**)
or
600 points with a chance of 50% (if the arrow stops on a **green segment**).

☐ I understood the instructions

[Continue](#)

Figure A.29: Screenshot: choice set with lotteries for part 2

The Decision Situation

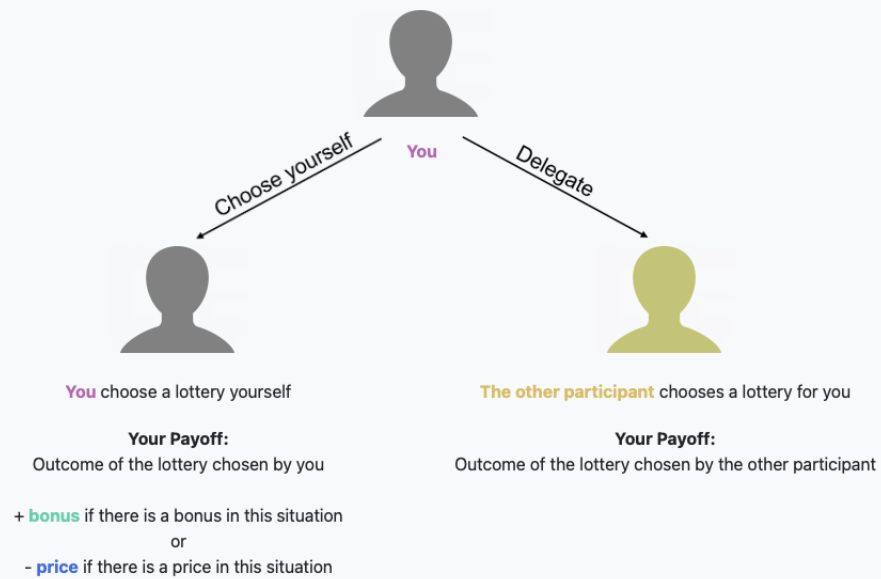
You will make **10 decisions** in total, where you decide to choose yourself or to delegate. The decision whether you choose a lottery yourself or delegate and let the other participant choose a lottery for you may have additional payoff consequences:

If you choose yourself, you may either have to pay a **price** or you may receive a **bonus payment**.

If you delegate, there is no price or bonus.

On the next screens, you will be asked to decide if you want to choose yourself or delegate the choice between lotteries A and B. In the 10 decision situations, lotteries A and B remain the same, while the **price** or **bonus** may change between situations.

The following picture illustrates the payoff consequences of your choice in a given decision situation:



☐ I understood the instructions

[Continue to control questions](#)

Figure A.30: Screenshot: description of the delegation decision

Control Questions

The following questions ensure that you have understood the instructions. Once you have answered the questions correctly, you will be directed to the next screen.

Note: You have **three** tries to answer the questions correctly. After the third wrong answer you will not be able to finish the study and you will not receive any payment.

Is it correct that...?

Wrong Correct

The price for choosing a lottery is the same in all situations.

☐ ☐

There can be either a price or a bonus payment associated with choosing a lottery yourself.

☐ ☐

Please choose the correct answer:

Consider a situation in which there is a bonus when you choose yourself. If you choose to let the other participant choose a lottery for you, then your payoff will be...

one of the outcomes of the lottery that the other person chooses.

☐

one of the outcomes of the lottery that the other person chooses plus the bonus.

☐

Consider a situation in which you have to pay a price if you choose yourself. If you decide to choose a lottery yourself, then your payoff will be...

one of the outcomes of the lottery that you choose.

☐

one of the outcomes of the lottery that you choose minus the price.

☐

Confirm my answers

Figure A.31: Screenshot: control questions part 2 (baseline treatment)

Control Questions

The following questions ensure that you have understood the instructions. Once you have answered the questions correctly, you will be directed to the next screen.
Note: You have **three** tries to answer the questions correctly. After the third wrong answer you will not be able to finish the study and you will not receive any payment.

Is it correct that...?	Wrong	Correct
<i>The price for choosing a lottery is the same in all situations.</i>	<input type="radio"/>	<input type="radio"/>
<i>There can be either a price or a bonus payment associated with choosing a lottery yourself.</i>	<input type="radio"/>	<input type="radio"/>

Please choose the correct answer:

Consider a situation in which there is a bonus when you choose yourself. If you choose to let the other participant choose a lottery for you, then your payoff will be...

<i>one of the outcomes of the lottery that the other person chooses.</i>	<input type="radio"/>
<i>one of the outcomes of the lottery that the other person chooses plus the bonus.</i>	<input type="radio"/>

Consider a situation in which you have to pay a price if you choose yourself. If you decide to choose a lottery yourself, then your payoff will be...

<i>one of the outcomes of the lottery that you choose.</i>	<input type="radio"/>
<i>one of the outcomes of the lottery that you choose minus the price.</i>	<input type="radio"/>

The participant that is matched with you is..

<i>a member of the Republican group.</i>	<input type="radio"/>
<i>a member of the Democratic group.</i>	<input type="radio"/>

[Confirm my answers](#)

Figure A.32: Screenshot: control questions part 2 (experimental treatments, with adjusted last question)

How your payoff is chosen

At the end of the study, one of the 10 situations will be selected to determine your payment from part 2.

If you decided to choose yourself in this situation, you will be asked to select lottery A or B at the end of part 2. The chosen lottery will then be played to determine your payment from part 2.

If you decided to delegate in this situation, the other participant will be asked to select lottery A or B for you. The choice of the other participant will be implemented while you answer the short questionnaire at the end of the study. You will be then be informed about his/her choice and the lottery he/she chose will be played to determine your payment from part 2.

☐ I understood the instructions

Continue

Figure A.33: Screenshot: payoffs in part 2

You have now completed the instructions and correctly answered the control questions from part 2. Please click *Continue* to proceed to the choice situations.

Continue

Figure A.34: Screenshot: transition to choice situations part 1

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.

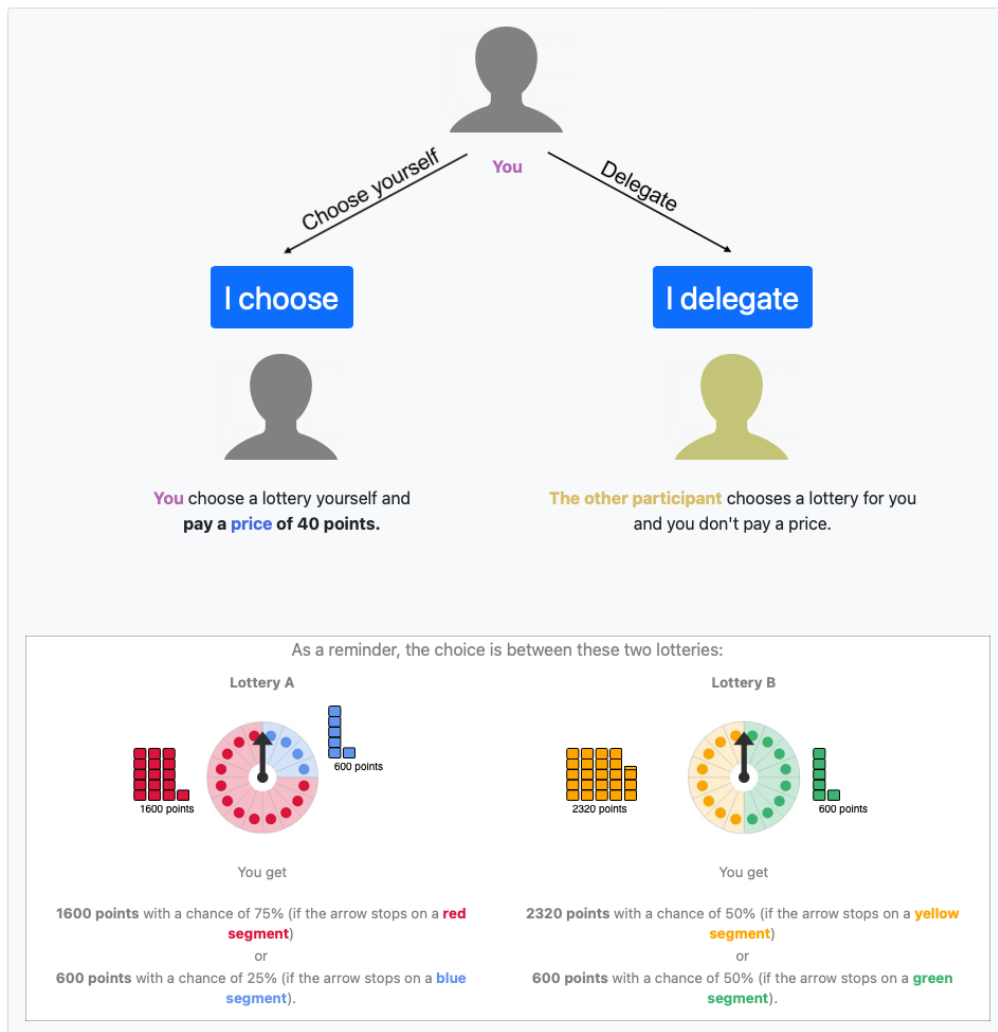


Figure A.35: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, control treatment)

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.

Choose yourself

You

Delegate

I choose

I delegate

You choose a lottery yourself and pay a **price** of 40 points.

The other participant chooses a lottery for you and you don't pay a price.

As a reminder, the choice is between these two lotteries:

Lottery A

1600 points

600 points

You get

1600 points with a chance of 75% (if the arrow stops on a **red segment**) or 600 points with a chance of 25% (if the arrow stops on a **blue segment**).

Lottery B

2328 points

600 points

You get

2328 points with a chance of 50% (if the arrow stops on a **yellow segment**) or 600 points with a chance of 50% (if the arrow stops on a **green segment**).

Figure A.36: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, democrat)

69

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.

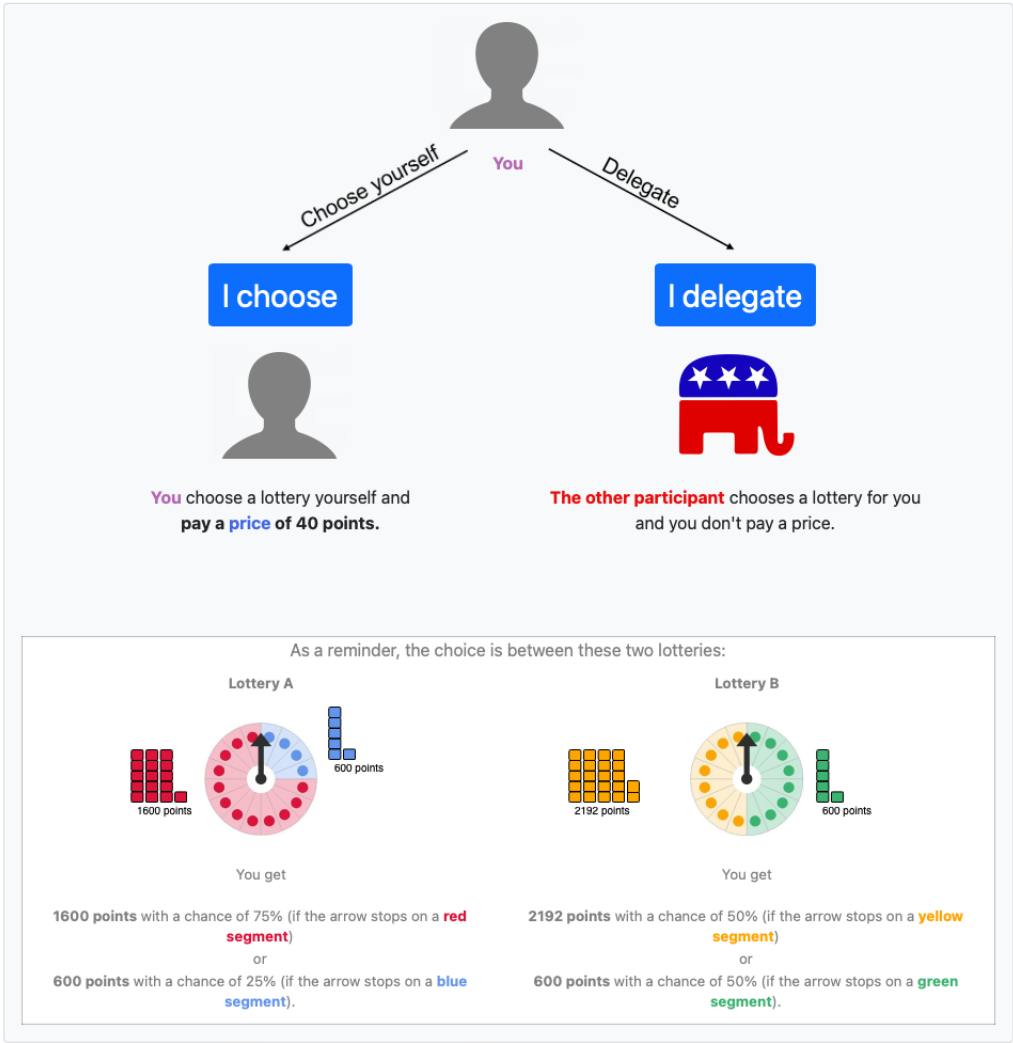


Figure A.37: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, republican)

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.

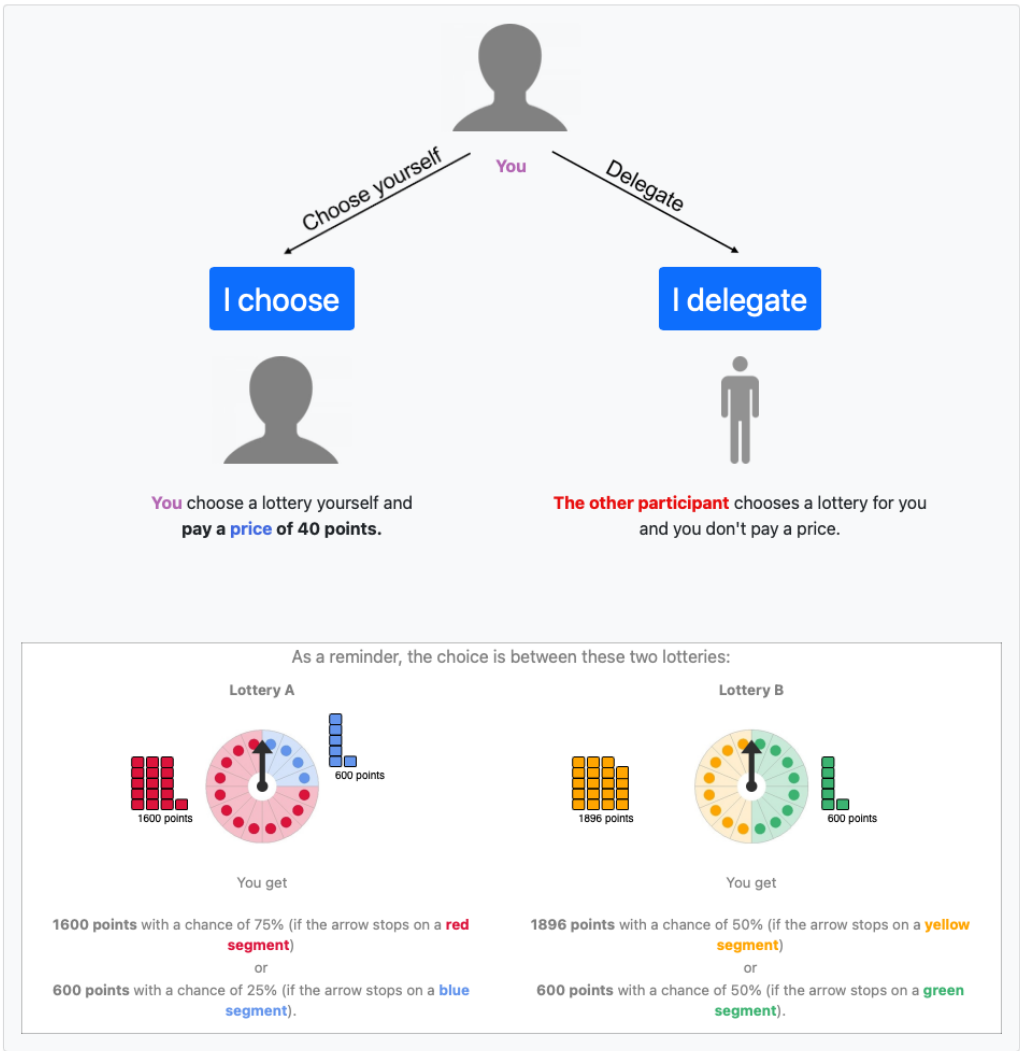


Figure A.38: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, male)

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.

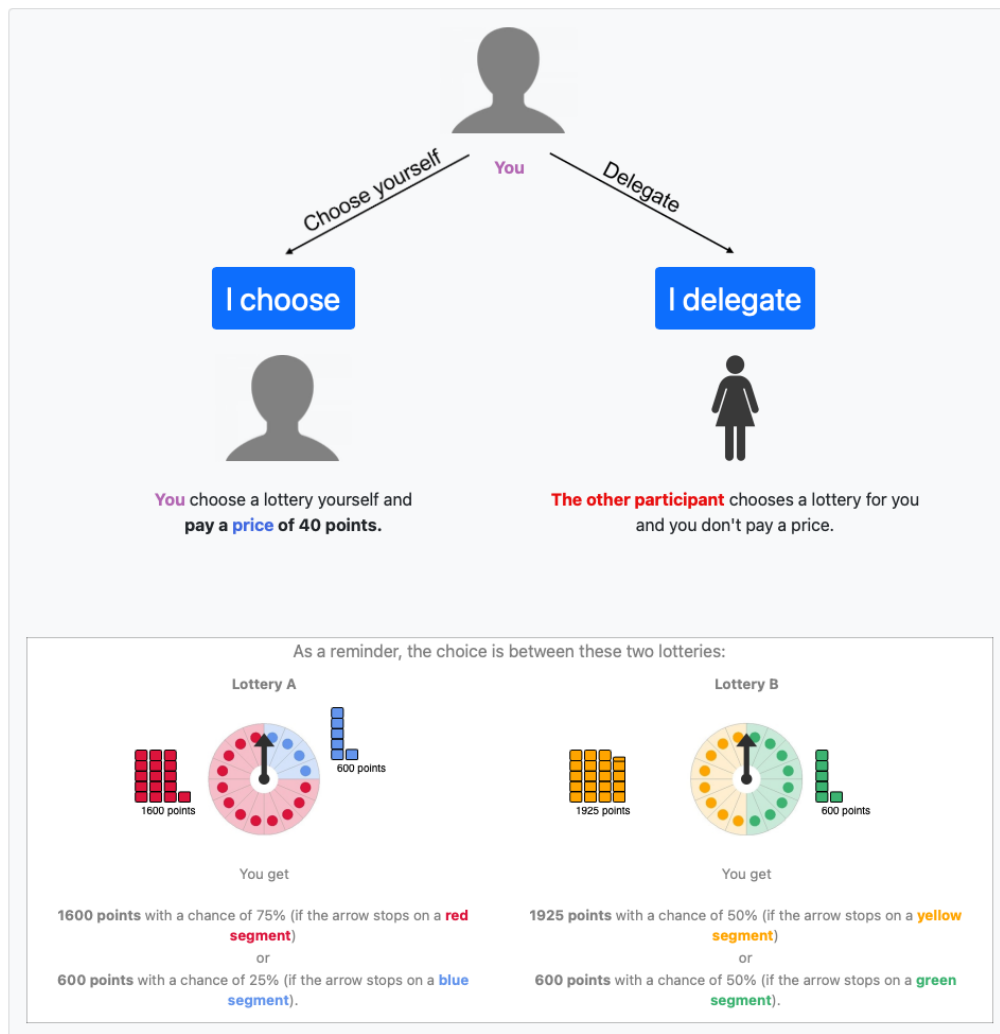


Figure A.39: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, female)

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.



Figure A.40: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, green picture)

Choice situation 1 of 10

In choice situation 1, you **pay 40 points** if you choose a lottery yourself.

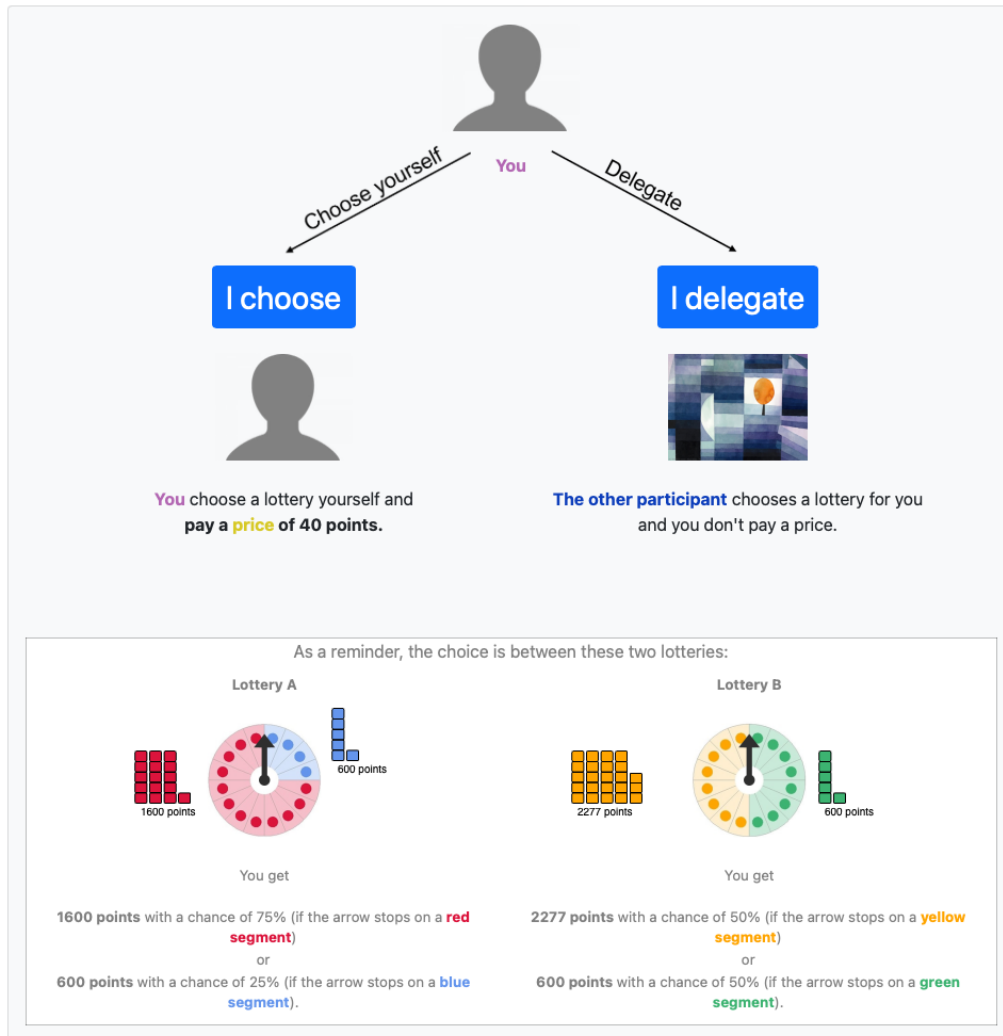


Figure A.41: Screenshot: choice situation 1 in part 2 (the same for choice situations 1 to 10, blue picture)

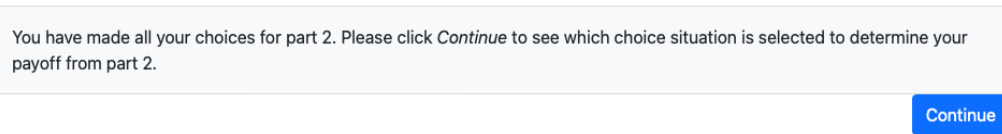


Figure A.42: Screenshot: end of choice situations part 2

Lottery Choice

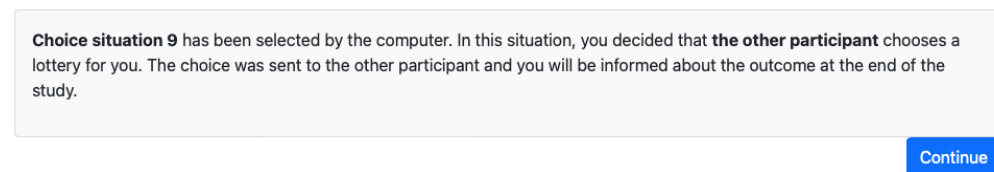


Figure A.43: Screenshot: information about delegation of the lottery choice
in case of delegation

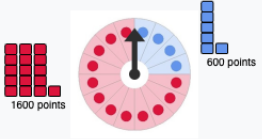
Lottery Choice

The computer selected **choice situation 7**. In this situation, you decided to choose a lottery **yourself** and pay a price of 560 points.

The lottery will be played and you will be informed about the outcome on the last screen.

Please choose one of the lotteries:

Lottery A



You receive

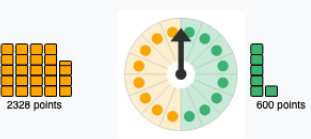
1600 points with a chance of 75% (if the arrow stops on a **red segment**)

or

600 points with a chance of 25% (if the arrow stops on a **blue segment**)

Lottery A

Lottery B



You receive

2328 points with a chance of 50% (if the arrow stops on a **yellow segment**)

or

600 points with a chance of 50% (if the arrow stops on a **green segment**)

Lottery B

Figure A.44: Screenshot: information and own lottery choice in case of choosing oneself (Note that the chosen lottery is then played by the computer. The decision-maker (or the other participant in case of delegation) do not spin the wheel of fortune. This is done in order to prevent the possibility of an "illusion of control".)

Questionnaire

Before you finish the study, we would like to ask you some general questions about yourself.

Your answers to these questions are important to our research, please make sure to answer them carefully and honestly. Thank you!

The first question is about the total income of you and your family members living in your household in 2022. This figure should include income from all sources including salaries, wages, pensions, social security, dividends, interest and any other income. Please select the category that represents your household income.

1.

2. Do you live in a rural or in an urban area? ☐ Rural ☐ Urban

3. Please indicate your marital status. ☐ Divorced ☐ Married ☐ Single ☐ Widowed

Figure A.45: Screenshot: questionnaire I

4. How many children do you have?

5. How many people live in your household (including family members and partners, not including roommates)?

6. What is your employment status?

7. What category do you identify with?

8. Please choose "Very Important" in order to show that you are paying attention to the questions.

☐ Not important at all
☐ Not important
☐ Somewhat important
☐ Important
☐ Very important

9. Are you a US citizen?

☐ Yes
☐ No
☐ Prefer not to answer

10. What is your highest level of education that you have achieved?

Figure A.46: Screenshot: questionnaire II

11.	Do you consider yourself religious?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prefer not to answer
12.	Which point on this scale best describes your political views when it comes to <i>social</i> issues? (Issues like same-sex marriage and abortion)	<input type="radio"/> Extremely liberal <input type="radio"/> Liberal <input type="radio"/> Slightly liberal <input type="radio"/> Moderate <input type="radio"/> Slightly conservative <input type="radio"/> Conservative <input type="radio"/> Extremely conservative
13.	Which point on this scale best describes your political views when it comes to <i>economic</i> issues? (Issues like taxes and the economy)	<input type="radio"/> Extremely liberal <input type="radio"/> Liberal <input type="radio"/> Slightly liberal <input type="radio"/> Moderate <input type="radio"/> Slightly conservative <input type="radio"/> Conservative <input type="radio"/> Extremely conservative
14.	Are you allowed to vote in national or local elections in the US?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prefer not to answer
15.	Are you registered as either a Democrat or Republican?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Prefer not to answer

Figure A.47: Screenshot: questionnaire III

16.

On a scale from 0 to 10, where 0 means you are "completely unwilling to take risks" and a 10 means you are "very willing to take risks", how willing are you to take risks in general?

----- ▾

17.

Generally speaking, how much do you trust other people?

☐ Completely distrust

☐ Distrust

☐ Neither distrust nor trust

☐ Trust

☐ Completely trust

18.

How much do you trust the government to take actions in the interest of its citizens?

☐ Completely distrust

☐ Distrust

☐ Neither distrust nor trust

☐ Trust

☐ Completely trust

19.

In the study you were matched with another participant who was a member of the **Republican group**.

Please select the pair of circles that best describe your closeness to this participant. The circle with an X describes the other participant.

1

2

3

4

5

6

7

YOU

X

YOU

X

YOU

X

YOU

X

YOU

X

YOU

X

YOU

X

Continue

Figure A.48: Screenshot: questionnaire IV

Summary of Payoffs

You have now completed the study.

This is an overview of your total earnings.

One decision from part 1 and one decision from part 2 are paid. In each part, a random draw selected one of the 10 situations to determine your total earnings.

Part 1

The computer selected Situation 5.

In Situation 5 you chose Lottery A.

In this lottery, the high outcome was 1600 points and the low outcome was 600 points.

The low outcome of 600 points has been selected by the wheel of fortune.

Your payoff from part 1 is **600 points (equals 0.45 £)**.

Part 2

The computer selected Situation 9.

In this situation, you decided to not receive the bonus payment of 270 points.

You decided to let the other participant choose a lottery on your behalf. The other participant chose lottery B for you.

In this lottery, the high outcome was 2320 points and the low outcome was 600 points.

The high outcome of 2320 has been selected by the wheel of fortune.

Your payoff from part 2 is **2320 points (equals 1.74 £)**.

Total Earnings

Thus, your total earnings from this study in £, including the base payment of 2.00 £, are:

$0.45 + 1.74 + 2.00 = 4.19$ £

Finish

Figure A.49: Screenshot: summary of payoffs