Groups are more Libertarian than Individuals

Philipp Doerrenberg, Christoph Feldhaus, Felix Kölle, Axel Ockenfels

November 06, 2023

Abstract

Using a series of controlled laboratory experiments involving decisions to intervene in others' choice opportunities, we find that groups grant more autonomy to others than individuals. This finding is robust across two decision contexts, one of which is predicted to yield more group interventions, and the other of which is predicted to yield fewer group interventions. Analyses of the group chat logs and two additional experiments show that subjects tend to shy away from proposing interventions in social contexts, even when they intervene individually. This suggests that interventions differ systematically between individual and social contexts, and that transferring decision-making power to groups can lead to a "liberal shift".

Keywords: Teams, decision making, autonomy, interventions, experiment

JEL: C92, D70, D91, M21

Doerrenberg: University of Mannheim. doerrenberg@uni-mannheim.de. Feldhaus: Ruhr-University Bochum. christoph.feldhaus@ruhr-uni-bochum.de. Kölle: University of Cologne. felix.koelle@uni-koeln.de. Ockenfels: University of Cologne and Max Planck Institute for Research on Collective Goods in Bonn. ockenfels@uni-koeln.de. Ockenfels gratefully acknowledges support of the German Research Foundation (DFG) through the excellence strategy (grant agreement number: EXC 2126/1-390838866) and the European Research Council (ERC) (grant agreement number: EU Horizon 2020 741409). We thank Sandro Ambuehl, Jan Schmitz, as well as participants at several seminars, conferences, and workshops for helpful comments and suggestions. Jorida Jolla provided excellent research assistance.

1. Introduction

Business success depends on the adoption of good management practices and an effective organizational structure (Bloom and van Reenen, 2007). In recent years, companies have increasingly relied on group decision-making to manage and organize tasks (Deloitte, 2016; Cross et al., 2016; O'Neill and Salas, 2018). At the same time, there has been a growing trend towards greater decision-making autonomy for employees, particularly evident in agile organizations (Rajan and Wulf, 2006; Rigby et al., 2018; Doz and Guadalupe, 2019).

In this paper, we identify a relationship between these two trends. Specifically, we explore whether the increasing prevalence of managerial group decisions affects the autonomy granted to other decision makers. To this end, we study when, why, and how groups are willing to restrict the choice autonomy of others, and examine how group interventions compare to those of individuals. Recent literature has investigated the extent to which *individuals* are willing to respect the decision autonomy of others, revealing considerable heterogeneity in individuals' views and attitudes. While some individuals fully respect the decision autonomy of others, others exhibit a willingness to (paternalistically) intervene in others' decisions (Uhl, 2011; Krawczyk and Wozny, 2017; Ackfeld and Ockenfels, 2021; Ambuehl et al., 2021; Bartling et al., 2022; Kölle et al., 2022). To date, however, little is known about how *groups* resolve these conflicting views on decision autonomy and whether collective decisions accurately aggregate the individual intervention preferences.

To shed light on these questions, we conduct pre-registered laboratory experiments in which participants act as either *Decision Makers* (DM) or *Choice Architects* (CA). CAs can intervene in each of two decisions that DMs have to make: an *Internality* decision where the CA decides how much impatience she is willing to accept when the DM allocates money between today and six months later, and an *Externality* decision where the CA decides how much selfishness she is willing to accept when the DM allocates money between himself and for a sustainability purpose. *Internality* interventions only affect the DM and can thus be characterized as purely "paternalistic" (Ambuehl et al., 2021), whereas *Externality* interventions involve positive externalities and can thus be driven by other concerns, including sustainability preferences of the CAs (Ackfeld and Ockenfels, 2021).[1]

[1] Studying how groups aggregate individual preferences, our paper also relates to recent work that studies situations in which an external spectator is required to aggregate the preferences from a group of individuals (Ambuehl and Bernheim, 2021; Ambuehl et al., 2023).

We study these two intervention decisions under two conditions using a between-subjects design. In the *Individual* treatment, CAs decide individually whether and how to intervene in DMs' choices. In the *Group* treatment, two CAs are randomly assigned to a group and are required to make a joint (unanimous) intervention decision which they can discuss using a free-form chat. In both treatments, we elicit the individual intervention preference of all participants.[2] Our hypotheses are based both on rational decision making and on what has been learned from the previous literature on group decision-making (see Charness and Sutter, 2012; Kocher et al., 2020; Kugler et al., 2012, for reviews). They suggest that – if there is a difference at all – groups will intervene less than individuals in the *Internality* decision and more in the *Externality* decision.

Our results reveal strong and significant differences in the propensity of groups and individuals to intervene in the choices of others. On aggregate, individuals are about twice as likely as groups to intervene into the DM's choice set (51% vs. 26%). Contrary to the predictions above, the finding of fewer group interventions is prevalent and significant in both *Internality* and *Externality*. Furthermore, in both decision contexts we find that the actual fraction of group interventions is significantly lower than what would be expected based on the individual preferences of the group members. This suggests that individual preferences for interventions are not fully represented in group decisions, which tend to settle on the libertarian view.

The chat logs from the group discussions provide valuable insights into the underlying reasons for the disparities between individual and group decisions. Specifically, they show that the observed differences can neither be explained by the exchange of arguments between group members and learning during the group discussion, nor by a selection mechanism whereby liberal types are more persistent or persuasive in enforcing their preference. Instead, the chat logs reveal that already the first proposal made in the group discussion contains significantly fewer intervention proposals than interventions observed in the *Individual* treatment. These results suggest that CAs with an individual preference for intervening often shy away from proposing an intervention when having to decide in the social context of a group.

To test the robustness of this finding, we conduct two additional experiments. The first experiment consists of two stages. In stage 1, as before, we elicit participants' individual intervention decisions, and in stage 2, we let participants choose whether they want to make

[2] From a methodological perspective, our experimental design overlaps with, and contributes to, studies using so-called spectator designs (Cappelen et al., 2013) to investigate third-parties' willingness to intervene in others' outcomes (rather than choices), most often in redistribution settings (Ackfeld and Ockenfels, 2021).

another intervention decision. In one treatment, the second stage decision is again an individual decision, while in the other treatment this decision must be made as a group. The second experiment manipulates social image concerns, following the methodology of previous social image experiments such as Ewers and Zimmermann (2015). In one treatment CAs decide about their individual intervention decisions privately, while in the other treatment they must publicly announce their decisions to the other CAs in the same session.

In the first experiment, we find that participants with a preference for intervening in others' choices are less likely to opt into making a second decision when this additional decision must be made as a member of a group than when it must be made individually. No such difference is found for libertarian types who prefer not to intervene. In the second experiment, we find that individuals intervene less often when they must publicly announce their decisions. Overall, these results support the finding from our main experiment that interventionist types tend to shy away from pursuing their individual views in a social context. We discuss our findings and potential explanations in Section 6.

Our paper relates to a literature studying the implications of group decision-making in business contexts (e.g., Kerr and Tindale, 2004; Salas et al., 2008; Mathieu et al., 2008; Chen and Lim, 2013; Maciejovsky et al., 2013). We contribute to this literature by showing that the trend toward more managerial team decision making tends to affect the level of autonomy granted to subordinates. In particular, we find that allocating more decision-making power to groups can lead to a "liberal shift" in the strictness of oversight and constraints that are implemented. Thus, our findings highlight a link between the trend toward more group decision-making and the adoption of less hierarchical organizational structures and less autocratic leadership styles (Bass, 2009).[3]

Our paper also contributes to the behavioral economics literature that studies preferences for autonomy and paternalism (see, e.g., Ambuehl et al., 2021; Bartling et al., 2022 and references therein). We add to this literature by showing that in social contexts, i.e., when decisions must be made in groups or when they can be observed by peers, individuals become more liberal and less willing to interfere with the decisions of others. This effect may have implications beyond

[3] The degree of employee decision autonomy within an organization can have important implications: it may improve employees' motivation and job satisfaction, but it may come at the cost of less control possibilities for supervisors (Spector, 1986; Ryan and Deci, 2000; Seibert et al. 2011). Our findings imply that managers considering more group decision making should be aware of these (potentially unanticipated) consequences.

organizations, suggesting, for example, that policy preferences for a strong state or leadership are less likely to be expressed in public than in private.

The paper proceeds as follows. In Section 2 we describe the design and procedures of our main experiment. Section 3 derives hypotheses for intervention decisions by groups and individuals. Section 4 presents our empirical analysis and our main finding. In Section 5, we present empirical evidence (including our two additional experiments) on the mechanisms that drive our main finding. Section 6 discusses our findings and concludes the paper.

2. The Experiment

2.1 Experimental Design

General Setup. We build on established designs from the literature on group decision-making and intervention behavior, such as Luhan et al. (2009), Kocher et al. (2018), and Ambuehl et al. (2021), and set up an experiment with two types of players. The first type is the 'Decision Maker' (DM - *he*) who faces two decisions, one where he can choose between different amounts of money now and later (*Internality*), and one where he can choose between different amounts of money for himself and a non-profit organization (*Externality*). The main focus of our study is on the second type of player, the 'Choice Architect' (CA – *she*). The CA's task is to decide whether or not to intervene in the DM's choice options, as described below.

Decision Makers. The DM's task is to rank all options within each decision situation from the best to the worst option. The choice options are shown in Table 1. In the *Internality* decision (left panel), the DM faces four choice options that pay him different amounts of money at two different points in time – immediately after the experiment or six months later. The options are constructed such that the more money the DM wants to receive immediately, the less money he will receive in total. In the *Externality* decision (right panel), the DM faces four choice options that differ in the amount of money he receives himself and the amount of money that is transferred to *Atmosfair*, a non-profit organization that uses the money to fund projects in developing countries to reduce CO_2 emissions (www.atmosfair.de). The options are designed such that the more money the DM keeps for himself, the less money is distributed in total. The order in which the two situations were presented was randomized.

After determining his preferred ranking over the four options in both decision situations, one of the two situations is randomly selected to be payoff-relevant. As a payment, the DM receives the best option from his ranking that is made available to him by the CA (see below).

TABLE 1: DECISION SITUATION OF THE DECISION MAKERS

Internality		*Externality*	
Option	Rank	**Option**	Rank
0€ today, 15€ in 6 months		0€ self, 15€ Atmosfair	
3€ today, 10€ in 6 months		3€ self, 10€ Atmosfair	
4€ today, 6€ in 6 months		6€ self, 6€ Atmosfair	
5€ today, 1€ in 6 months		9€ self, 0€ Atmosfair	

Choice Architects. The CA's task is to decide whether to intervene in the DM's choice options. To this end, the CA is informed that her decisions may affect the payoffs of another participant from the same subject pool, whose decisions will be elicited in a future experiment (the DM). The CA learns that for each of the options in the two decision situations as shown in Table 1, she can either choose to make it 'available', i.e., the DM will be able to choose that option, or 'not available', i.e., the DM will not be able to choose that option. The CA makes an active choice for each option in the two decisions, i.e., neither making an option available nor making it unavailable is a default. She is also told that there are no right or wrong answers and is asked to make her decisions based on her genuine views. The only restriction for the CA is that she must leave at least one of the four options available to the DM in each decision situation.

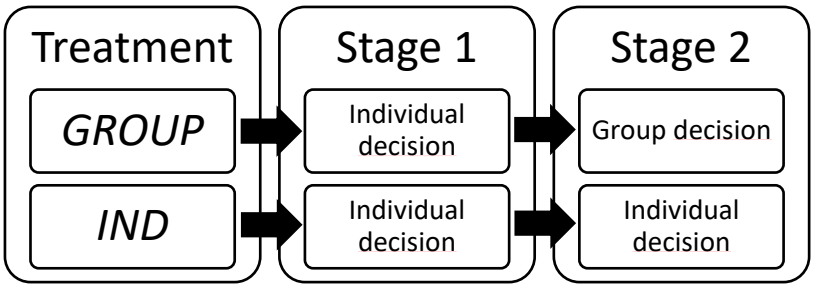
TABLE 2: THE DECISION ENVIRONMENT OF THE CHOICE ARCHITECTS (INTERNALITY DECISION)

Option	Available	Not available	Not recommended
0€ today, 15€ in 6 months	○	○	□
3€ today, 10€ in 6 months	○	○	□
4€ today, 6€ in 6 months	○	○	□
5€ today, 1€ in 6 months	○	○	□

Before taking her intervention decisions, the CA learns about the exact decision procedure of the DM. In particular, the CA is informed that the DM will have to provide a complete preference ranking over the four choice options, and that, in the end, he will be paid according to the highest ranked option from his ranking that is available to him. This procedure ensures that the CA can only affect the DM's outcomes but not his decision process. In particular, the CA's decisions do not alter the number of options the DM need to rank and, thus, have no effect on the complexity of the DM's task. Table 2 provides an overview of the decision-making environment of the CA using the example of the *Internality* decision.

To avoid that participants in the role of the CA simply intervene because they have no other way of giving advice or communicating their opinion, the CA can send a message to the DM stating that she does 'not recommend' choosing the respective option. The CA is told that if making use of this opportunity, the DM will be informed upon his decision situation that a participant of a previous part of the experiment (the CA) has thought about the option and decided to not recommend choosing it.

FIGURE 1: THE FLOW OF THE EXPERIMENT



Each CA makes intervention decisions in random order for both kinds of decision situations that the DM faces. CAs act in the role of (impartial) spectators that have no direct personal stakes in the decisions of the DM: they receive a fixed payment for their participation.

Treatments. We consider two treatments, *GROUP* and *IND,* using a combination of a within- and a between-subjects design. Figure 1 provides an overview. The between-subjects part provides a clean comparison between the intervention behavior of individuals and groups. The within-subjects part serves as a means to shed light on the mechanisms that drive the decision-making process within groups. We explain the details of our design in turn.

In the *GROUP* treatment*,* two participants in the role of a CA are randomly matched into a group to make a joint intervention decision (in Stage 2 of the overview figure). To arrive at a

joint group decision, the two group members are given the possibility to discuss their decisions using a free-form chat. They are not allowed to discuss unrelated issues during the chat sessions and are asked to focus on coming up with a joint decision. Groups are required to make an unanimous decision, and only if both members enter the exact same decision for their group on their decision screen, they can proceed with the experiment. In case the two group members do not enter the same decision, they remain on the chat screen and are given the opportunity to discuss their decision.

Prior to the group decision stage, we elicit participants' individual intervention preferences in Stage 1. The options for the CAs and DMs are the same as in the second (group) stage of the experiment, but intervention decisions are made individually by all future group members. This feature allows us to investigate how individual intervention preferences relate to group interventions.

To investigate the extent to which groups and individuals differ in their intervention decisions, we implement the *IND* treatment in which intervention decisions in both stages of the experiment are taken individually. The comparison of Stage 2 choices across *IND* and *GROUP* allows us to cleanly identify differences in intervention choices between individuals and groups using a between-subjects design.

2.2 Procedures

All experimental sessions were conducted online (due to Covid-related restrictions) using the facilities and the standard subject pool of the Cologne Laboratory for Economic Research (CLER). Student participants from various disciplines were recruited via ORSEE (Greiner, 2015). The experiment was programmed with z-Tree (Fischbacher, 2007) and implemented using z-Tu (Duch et al., 2020). The experiment received ethics approval from the Ethics Committee of the Economics Department of the University of Cologne (Reference: 200029FK) and was pre-registered under AEARCTR-0006953 (https://www.socialscienceregistry.org/trials/6953).

In total, we collected data from $n = 303$ choice architects, $n = 192$ in the *GROUP* treatment and $n = 111$ in the *IND* treatment. Participants were invited to take part in the online experiment in real-time sessions with about 30 participants. That is, they arrived at the same time in an online room to take part in the experiment and to receive the instructions. Shortly after the appointed time of a session, the experiment was started by displaying the experimental instructions on-

screen. Appendix B1 provides the original German and an English translation of the instructions. The instructions explained the two-part nature of the experiment, the task of the DMs as well as their own task. The instructions further explained that one of the CA's decisions, either from the first or the second stage, will be randomly selected to be relevant for the DMs. After reading the instructions, but before taking their decisions, participants were required to answer several comprehension questions to make sure that they understood the rules of the experiment and the impact of their decisions on future participants. Only after all questions were answered correctly by all participants, the experiment started. After the end of stage 2, sessions concluded with a brief demographic questionnaire in which we elicited CAs' beliefs about the DMs' choices. Sessions lasted for about 35 minutes and participants earned on average 11.85€, including a show-up fee of 2.50€, a lump-sum payment of 7.50€, and a payment for the incentivized beliefs. All payments were sent via PayPal.

We also elicited choices from n = 83 participants in the role of DMs. DMs faced both the internality and the externality decision and were asked to rank the four options from the most to the least preferred one. In case their respective CA decided to recommend not choosing a particular option, this was shown to the DM. At the end of the experiment, one of the two decision situations was randomly selected, and DMs were paid according to their highest-ranked option that the CA left available in that situation. All payments were carried out via PayPal, either shortly after the experiment (in case of the donation decision or when choosing the sooner payment in the intertemporal decision) or after six months (in case the later payment in the intertemporal decision was chosen). Sessions lasted about 10 minutes and DMs earned on average 9.98€. A further total of 229€ was donated to *Atmosfair* and verification of this transaction was published on a prespecified homepage that was announced to the participants at the beginning of the experiment. We collected fewer observations for the DMs. CAs knew that only the decisions of a randomly selected subset of CAs would be implemented for DMs.

3. Hypotheses: Individual versus Group Interventions

We selected our decision situations, *Internality* and *Externality*, to represent potentially different motivations and decision-making processes underlying interventions, which lead to widely differing hypotheses across treatments. The hypotheses are based on rational decision making on the one hand (*H0*) and the literature on group decision making on the other hand (*H1*).

Internality Decision. In the case of the *Internality* decision, rational choice theory does not readily provide a motivation for interventions, since an intervention neither affects the CA's own outcome, nor would it be normatively justified as a correction of an inefficiency. This holds both for groups and individuals:[4]

H0 (Internality): *Neither individuals nor groups intervene.*

Previous literature has shown that groups tend to behave more rationally, because they can combine more cognitive capacities and learn about or reflect upon additional arguments in the course of the group discussion (Kocher and Sutter, 2005; Feri et al., 2010; Charness and Sutter, 2012; Kugler et al., 2012; Kocher et al., 2020). Assuming that our subjects are not all fully rational, this suggests that groups intervene less than individuals. Moreover, it is known that people may suffer from a *presence bias* (see, e.g., Ericson and Laibson, 2019; Frederick et al., 2002, for reviews) and/or believe that others suffer from present bias (Fedyk, 2021; Kiessling et al., 2021). In this light, a paternalistic CA may wish to intervene to prevent the DM from making an impatient decision that is not optimal for him. Indeed, in a similar decision situation in Ambuehl et al. (2021), some individual CAs prevent impatient choices – and they are shown to do so motivated by a desire to altruistically increase the DM's welfare. Because the literature on group decision-making also shows that groups tend to behave less prosocially than individuals (Charness and Sutter, 2012; Kocher et al., 2020; Kugler et al., 2007; Luhan et al., 2009), groups might see less reason to intervene. Taken together these arguments, we hypothesize:

H1 (Internality): *Groups intervene less frequently than individuals.*

Externality Decision. Reducing CO_2 emissions is a contribution to a global public good and thus has the potential to increase efficiency and to benefit CAs, who benefit from less emissions or who just like to endorse climate action. Since a purely selfish DM will take all the money for himself, CAs may want to restrict the choice set of the DM such that the DM is forced to invest in climate action (see Kölle et al., 2022). With standard economic preferences, there is no reason to believe that the underlying reasoning differs between groups and individuals, leading to the following null hypothesis:

[4] Strictly speaking, rational decision makers are indifferent between intervening and not intervening because their own outcome is not affected by interventions, but since interventions can only Pareto reduce welfare under standard assumptions of rationality, we use the Pareto criterion as a tiebreaker here.

H0 (Externality): *Individuals and groups both intervene, and they do so equally.*

However, assuming that there is noise and that not all subjects are fully rational along these lines, not everybody will intervene. The fact that groups tend to be more selfish and more rational than individuals suggests that groups intervene more than individuals to maximize their outcomes. We thus hypothesize:

H1 (Externality): *Groups intervene more frequently than individuals.*

4. Results

Individual Interventions in Stage 1. We start our analysis by describing the results of the first stage of our experiment, in which all CAs make individual intervention decisions. We observe that intervening in the choice options of DMs is the modal behavioral pattern of CAs: 68% of our participants remove at least one option from at least one of the two decision situations. Interventions are particularly pronounced for the *Externality* decision, where CAs may have a self-interested reason to enforce climate action by the DMs. Here, more than half of all CAs intervene (54%). But even for the *Internality* decision, where there is no selfish reason to intervene, about a third (32%) of the CAs decide to restrict the DM's choice set. At the individual level, we find pronounced heterogeneity in intervention preferences with some overlap between the two decision situations: 17% of CAs intervene in both decision situations, 36% intervene only in the *Externality* decision, and 15% intervene only in the *Internality* decision. The remaining 32% do not intervene at all.

Intervention decisions by CAs are primarily directed towards impatient (*Internality*) and selfish (*Externality*) choice options, as shown in Table 3. For the *Externality* decision, we find that the least removed option is the one that provides the same payoff to both the DM and *Atmosfair*, suggesting that CAs compromise on the outcome of both beneficiaries, perhaps out of concern for some notion of fairness. In both decision situations, we find that the modal CA among CAs who intervene removes one choice option (see Figure A1 in Appendix A for the full distribution).

In the following, we refer to individuals who, in this Stage 1, decide to leave all choice options available to the DM in a given decision situation as 'libertarian' types, and those who decide to remove at least one choice option as 'interventionist' types.

TABLE 3: *INDIVIDUAL INTERVENTIONS IN STAGE 1*

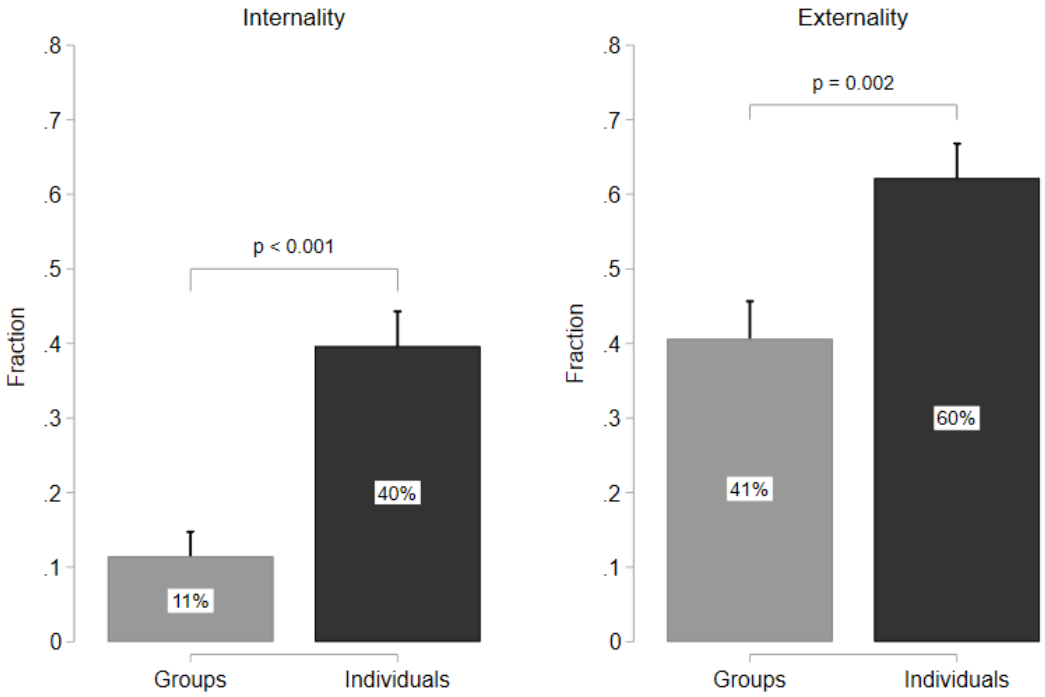
Internality		*Externality*	
Option	% unavailable	**Option**	% unavailable
0€ today, 15€ in 6 months	6.6	0€ self, 15€ Atmosfair	11.2
3€ today, 10€ in 6 months	5.9	3€ self, 10€ Atmosfair	8.3
4€ today, 6€ in 6 months	9.2	6€ self, 6€ Atmosfair	4.6
5€ today, 1€ in 6 months	21.1	9€ self, 0€ Atmosfair	41.6
At least one option unavailable	31.7	At least one option unavailable	53.5
Mean (Median) # of options made unavailable conditional on removing at least one option	1.35 (1)	Mean (Median) # of options made unavailable conditional on removing at least one option	1.22 (1)

Individual and Group Interventions in Stage 2. Next, we turn to the results of the second stage of our experiment. We find that groups are considerably less likely to intervene in the choices of others than individuals. Specifically, while the modal behavior in our *IND* treatment is to intervene (72% of the CAs remove at least one option from at least one of the two decision situations), in our GROUP treatment the modal behavior is not to intervene: 53% of all groups decide to leave all choice options available to the DM. This difference in interventions is not economically large and statistically significant (χ^2-test, $p < 0.001$).

The pattern of fewer interventions in groups is robust and large in magnitude, even for the *Externality* decision, where ex ante we had reason to hypothesize the opposite effect. This is illustrated in Figure 2, which plots treatment differences separately for both decision contexts. For the *Internality* decision (left panel), we find that only 11% of the groups decide to intervene compared to 40% of the individuals, a difference that is highly significant (χ^2-test, $p < 0.001$). Similar differences are observed for the *Externality* decision (right panel), where 41% of the groups decide to intervene compared to 62% of the individuals (χ^2-test, $p = 0.002$).[5]

[5] One might think that the observed treatment differences might be due to the fact that groups do not make an effort to reach a consensus. Two facts speak against this hypothesis. First, by design, group members were required to actively agree on a decision; there is no default for groups who fail to reach an agreement. Second, and more importantly, rather than not intervening at all, groups simply decide to coordinate on softer interventions. Specifically, we find that groups are significantly more likely than individuals to use the option of advising DMs against choosing specific options, in both the *Internality* (62.5% vs. 39.6%, χ^2 – test, $p = 0.001$) and the *Externality*

FIGURE 2: *INDIVIDUAL AND GROUP INTERVENTIONS IN STAGE 2*



Notes: The figure shows the fraction of groups and individuals deciding to intervene into the DM's decision by removing at least one choice option in Stage 2 of the experiment. The left panel shows the results for the *Internality* decision and the right panel shows the results for the *Externality* decision. P-values are obtained from χ^2-tests comparing treatments. Vertical lines indicate standard errors of the mean.

We confirm our main finding in regression analyses using a dummy variable indicating whether a choice option was made unavailable as the dependent variable and a group treatment dummy as the independent variable. The results are shown in Table 4. As indicated by the negative and significant group dummy, we find that groups are less likely than individuals to make choice options unavailable. This result holds both when we pool all the data (Model 1) and when we consider the *Internality* and *Externality* decisions separately (Models 2 and 3). To test whether the observed effects are driven by differences at the intensive or extensive margin, in Models (4) and (5) we restrict our sample to those individuals and groups that decided to intervene at all. As indicated by the insignificant group dummy, we find no evidence that groups and individuals differ in the intensity of their interventions. That is, conditional on intervening at least once, there are no differences in the number of removed options between individuals and groups. This shows that the overall lower intervention rate in our group treatment is mainly due

decision (39.6% vs. 24.3%, χ^2 – test, $p = 0.018$). As a result, when combining both types of interventions, choice removals and advice, we find no differences in the share of groups and individuals who do not intervene at all (*Internality*: 26.0% vs. 20.7%, χ^2 – test, $p = 0.336$; *Externality*: 19.8% vs. 13.5%, χ^2 – test, $p = 0.224$).

to differences at the extensive rather than the intensive margin.[6] We summarize our results as follows:

> **Result 1**: *Groups are significantly less likely than individuals to intervene in others' choices.*

TABLE 4: DIFFERENCES IN INTERVENTIONS ACROSS TREATMENTS

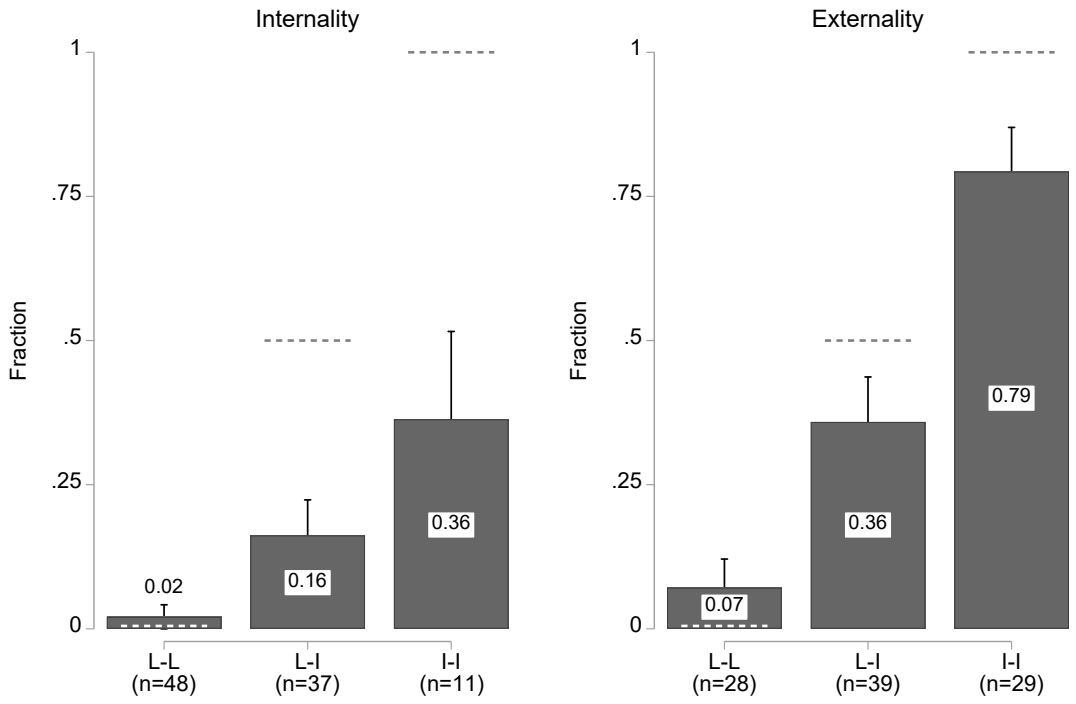
				If intervention > 0	
	Pooled	Internality	Externality	Internality	Externality
	(1)	(2)	(3)	(4)	(5)
Group	-0.082***	-0.094***	-0.070***	0.006	-0.015
	(0.017)	(0.021)	(0.023)	(0.042)	(0.021)
Constant	0.159***	0.133***	0.185***	0.335***	0.297***
	(0.014)	(0.018)	(0.016)	(0.021)	(0.014)
Observations	1656	828	828	220	432
# Clusters	207	207	207	55	108

Notes: OLS regressions. The dependent variable takes the value 1 if an option was removed and 0 otherwise. In models (1), (2), and (3) we use data from all individuals and groups. In models (4) and (5) we use only data from those individuals and groups who decided to intervene by removing at least one option. Robust standard errors clustered at the group level are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

To put the low frequency of group interventions into perspective, we now compare our results to a benchmark that assumes that individual preferences, as elicited in the first stage of the experiment, are straightforwardly aggregated and ties are broken randomly. Specifically, assuming that groups consisting of two libertarians never intervene, groups consisting of two interventionists always intervene, and groups consisting of one libertarian and one interventionist intervene in half of the time, we would have expected 31% of group interventions in the *Internality* decision and 51% of group interventions in the *Externality* decision. In both cases, the actual fractions are significantly lower than this benchmark (Binomial-tests, $p < 0.001$ and $p = 0.066$, respectively).

[6] As we show in Figure A2 in Appendix A, the observed treatment differences are also not driven by different intervention patterns; both groups and individuals make the impatient (*Internality*) and selfish (*Externality*) options unavailable most frequently. Instead, for each of the choice options we observe a pronounced level shift with groups being less likely to intervene than individuals.

FIGURE 3: INTERVENTION DECISION BY GROUP TYPE



Notes: The figure shows the fraction of groups that decide to intervene into the DM's decision by removing at least one choice option. The left panel shows the results for the *Internality* decision and the right panel shows the results for the *Externality* decision. "L-L" corresponds to groups consisting of two individuals classified as libertarian, "L-I" indicates groups consisting of one libertarian and one interventionist type, and "I-I" refers to groups consisting of two interventionists. Dashed lines show the expected level of interventions if individual preferences were straightforwardly aggregated and ties were broken randomly. Vertical lines indicate standard errors of the mean.

Looking at the decisions at the group level helps explain this finding. Consistent with their individual preferences, groups consisting of two libertarian types decide not to intervene in 96% of the cases. In sharp contrast, groups consisting of two interventionist types agree to intervene in only 68% of the cases.[7] The difference in the alignment of the individual preferences and the eventual group decision between liberal and interventionist groups is highly significant ($p < 0.001$).[8] This asymmetry between libertarian and interventionist types in the implementation of their individual preferences when interacting in groups is further demonstrated when looking

[7] This number does not change much if we consider only the subset of groups consisting of two interventionists who not only agree to intervene at all, but also agree on which choice option to remove. In this case, 75% of the groups decide to intervene.

[8] Statistical inference is obtained using the following approach. We first restrict the sample to groups that contain only members of the same type (either two libertarians or two interventionists). Using a linear probability model (LPM), we then regress a dummy indicating if the group made a group choice that aligns with individual preferences of its members on a dummy indicating whether the group consists of libertarians or interventionists. We account for the dependency of decisions that are made by the same group by clustering standard errors at the group level ($N = 116$ observations, 85 clusters).

at the decisions of heterogeneous groups composed of one of each type. They decide to intervene in only 26% of the cases, which is significantly lower than the benchmark of 50% that would be expected if liberals and interventionists were equally likely to implement their views ($p < 0.001$).[9] As we show in Figure 3, these results are present in both decision situations, but are particularly pronounced for the *Internality* decision.[10]

5. Why are Groups more Libertarian?

The observation that groups are more libertarian than individuals confirms our hypothesis H1 (*Internality*), but is inconsistent with all other hypotheses. In this section, we use the data from our chat logs and provide evidence from two additional experiments to further explore this core finding and to shed light on possible explanations.

5.1 Chat Log Analyses

Role of First Proposal. The group outcome is strongly predicted by the initial proposals made in the group chat.[11] Indeed, in our data, the proportion of interventions that are initially proposed in the group discussion is strikingly similar to the proportion of interventions that are ultimately agreed upon by the group members, as shown in Figure 4. For the *Internality* decision, we find that 14% of initial proposals involve the removal of at least one option from the DM's choice menu, which is very similar to and not significantly different from the 11% we observe for the final group decision ($p = 0.482$).[12] Similarly, the share of initial proposals for the *Externality* decision that involve the removal of at least one option is 42%, which is very close to the 41% of final group interventions ($p = 0.810$). These results indicate that the observed differences in

[9] To obtain statistical inference we again rely on a LPM regression approach. In our analysis, we restrict the sample to heterogeneous groups (i.e., containing a liberal and an intervention type) and regress a dummy indicating the group's intervention decisions on a constant. We then test whether this coefficient is different from 0.5 and account for the dependency of observations that are made by the same group by clustering standard errors at the group level ($N = 76$ observations, 65 clusters).

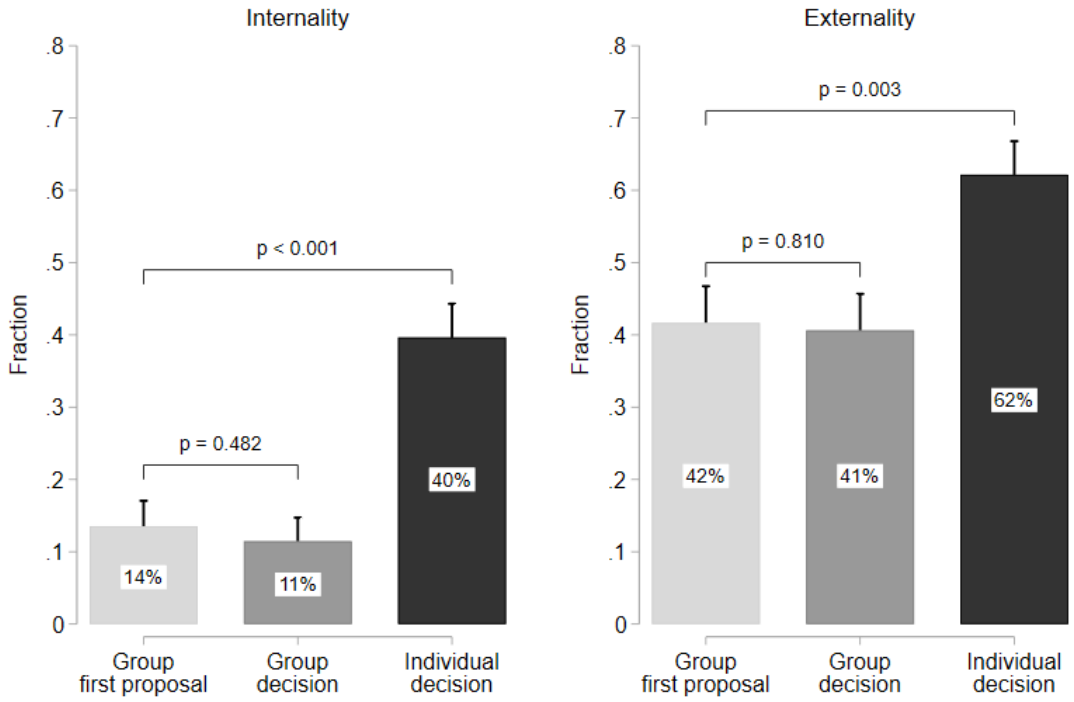
[10] In the *Internality* decision, 98% of liberal groups decide not to intervene, while only 36% of interventionists groups decide to intervene. The difference in the alignment of individual views and group decisions is highly significant (χ2-test, $p<0.001$). Furthermore, heterogeneous groups decide to intervene only 16% of the time, which is significantly lower than what would be expected if liberals and interventionists were equally likely to implement their view (t-test, $p<0.001$). In the *Externality* decision, the difference in the consistency rate between the liberal and interventionist groups is still noticeable but somewhat less pronounced (93% vs. 79%, χ2-test, $p=0.141$). Furthermore, we observe a liberal shift in heterogeneous groups in this decision situation as well: they intervene in only 36% of the cases, which is again lower than the 50% that would be expected if the liberal and interventionist views had equal weight (t-test, $p = 0.080$).

[11] This effect is reminiscent of the so-called anchoring effect which have been shown to matter in various contexts including individual valuations (Ariely et al., 2003) and bargaining (Phillips and Menkhaus, 2010). However, more recent studies suggest that anchoring effects may be less important than initally thought (Fudenberg et al., 2012; Maniadis et al., 2014).

[12] The *p*-values come from regressions which compare the share of interventions across the three bars in the figure.

interventions between groups and individuals are not driven by arguments exchanged or information revealed during the group discussion; the share of interventions is already lower among the first proposals being made (Section 5.2 will provide further evidence).

FIGURE 4: *FIRST PROPOSALS AND FINAL DECISIONS*



Notes: The figure shows the fraction of initial proposals and final decisions entailing an intervention into the DM's decision. The left panel shows the results for the *Internality* decision and the right panel shows the results for the *Externality* decision. P-values are obtained from OLS regressions (with clustered standard errors). Vertical lines indicate standard errors of the mean.

Role of Selection Effects. Given the important role of the first proposal, a natural next question is whether the low frequency of initial interventionist proposals is due to a selection effect such that interventionists are more likely to take the initiative in the group discussion. To test this, we conduct regression analyses in which we regress a dummy indicating whether an individual made the first proposal on a dummy indicating the intervention type (interventionist vs. libertarian, as defined based on individual stage 1 behavior – see above). The results are reported in Table 5. The first model contains the pooled data for both decision situations, while models (2) and (3) show the results separately for the *Internality* and the *Externality* decision, respectively. As indicated by the small and insignificant coefficients for the intervention type variable, we find no evidence for selection effects: in neither model we find an individual's type to have a significant association with the likelihood of making the first proposal in the group discussion.

TABLE 5: *RELATIONSHIP BETWEEN AN INDIVIDUAL'S TYPE AND THE LIKELIHOOD OF MAKING THE FIRST PROPOSAL IN GROUPS*

	Pooled	Internality	Externality
	(1)	(2)	(3)
Interventionist *(=1 if a participant is classified as interventionist, 0 otherwise)*	-0.011 (0.054)	-0.061 (0.078)	0.031 (0.073)
Constant	0.504*** (0.032)	0.519*** (0.044)	0.484*** (0.052)
Observations	384	192	192

Notes: OLS regressions. The dependent variable takes the value 1 if an individual was the first within their group to make a proposal and 0 otherwise. As independent variables, we use a dummy variable indicating whether based on their stage 1 decisions, an individual is classified as an interventionist or libertarian. Robust standard errors clustered at the group level are in parentheses. The results reported here are robust to using logistic regressions. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Interventionists shy away from defending their preference. Taking together, the evidence so far suggests that interventionists shy away from defending their individual preferences when they are part of a group. Indeed, aggregating across both decision situations, we find that only 61.0% of interventionists propose to intervene in the group discussion, which is much lower than the analogous share observed for libertarians, who propose not to intervene in 94.8% of the cases. Regression analyses, reported in Table 6, show that this difference is highly significant. As shown by models (2) and (3), this effect is observed in both decision situations, but is particularly pronounced for the *Internality* decision.

Table 6: *OLS REGRESSIONS OF WHETHER THE FIRST PROPOSAL IS CONGRUENT WITH PARTICIPANTS' OWN TYPE BASED ON THEIR STAGE 1 DECISIONS*

	Pooled	Internality	Externality
	(1)	(2)	(3)
Interventionist *(=1 if a participant is classified as interventionist, 0 otherwise)*	-0.337*** (0.061)	-0.586*** (0.097)	-0.195*** (0.073)
Constant	0.948*** (0.021)	0.957*** (0.025)	0.935*** (0.037)
Observations	192	96	96

Notes: OLS regressions. The dependent variable takes the value 1 if the type of the first proposal is congruent with an individual's type as revealed in Stage 1, and 0 otherwise. As an independent variable we use a dummy variable indicating whether based on their stage 1 decisions, an individual is classified as an interventionist or libertarian. Robust standard errors clustered at the group level are in parentheses. The results reported here are robust to using logistic regressions. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

5.2 Two Further Experiments

Our analysis so far suggests that it is not the structure or content of the group discussion that is responsible for the lower frequency of intervention in groups with unwilling preferences. Instead, it appears that it is the social context of group decision making *per se* that makes interventionists more reluctant to reveal and defend their preferences than libertarians. Building on these observations, we hypothesize:

H1 (**Social context**)*: In social contexts, individuals are less likely to reveal their preferences for interventions.*

To test for direct, causal evidence for this hypothesis, we conduct two additional experiments, one involving a decision in which participants can self-select into a situation in which they can make an intervention decision, and one in which we manipulate whether intervention decisions are made in private or in public. We explain both experiments in turn.

Experiment 1: Selection into Intervention Decisions

In our first additional experiment, we test whether, when given the choice, libertarians and interventionists differ in their likelihood to select into a situation in which they can decide on the choice set of a third party. To this end, we design an experiment similar to our main experiment. As before, in Stage 1 all participants in the role of a CA have to make individual intervention decisions for the two decision situations described above, *Internality* and *Externality*. As in our main experiment, Stage 2 differs in whether intervention decisions have to be made individually (*IND* treatment) or as part of a group (*GROUP* treatment). However, in contrast to our main experiment, participation in Stage 2 is now voluntary. That is, at the beginning of Stage 2, CAs are asked whether they want to participate in Stage 2 and make additional intervention decisions for both decision situations, or whether they want to opt out and not make any further intervention decisions.[13]

The procedures of this experiment including the payment, participant recruitment, and timing of events, are identical to those of our main experiment (as described in Section 2). In total, we collected data from n = 184 CAs, n = 89 in the *IND* treatment and n = 95 in the *GROUP*

[13] To prevent that CAs opt-in merely because they have a preference for talking to another person, even if they decided to opt-out, they were given the possibility to chat with another (idle) CA. To prevent that CAs opt-out merely because they want to finish the experiment sooner, we ensured that opting out did not shorten the experiment.

treatment.[14] As before, the decisions of the DMs were elicited as part of an upcoming experiment.

We find a strong relationship between an individual's intervention type (based on their Stage 1 decision) and their willingness to select into the role of a CA. Specifically, at the aggregate level, we find that while libertarians are equally likely to serve as CAs regardless of whether decisions must to be made individually (61.0%) or as part of a group (64.5%), interventionists are less likely to select into a situation in which they know they must interact with others to make an intervention decision: the proportion of interventionists who select into the role drops from 80.1% in the *IND* treatment to 60.2% in the *GROUP* treatment.

TABLE 7: *OLS REGRESSIONS OF THE CHOICE TO MAKE A DECISION AS A CA*

	Pooled	Internality	Externality
	(1)	(2)	(3)
Interventionist *(=1 if a participant is classified as interventionist, 0 otherwise)*	0.198*** (0.075)	0.172*** (0.102)	0.197*** (0.088)
Group *(=1 if treatment is GROUP, 0 otherwise)*	0.035 (0.077)	0.055 (0.092)	0.015 (0.100)
Interventionist × Group	-0.240** (0.104)	-0.134 (0.146)	-0.310** (0.133)
Constant	0.610*** (0.058)	0.564*** (0.068)	0.667*** (0.071)
Observations	368	184	184

Notes: OLS regressions. The dependent variable takes the value 1 if a participant decided to make another decision as a CA, and 0 otherwise. Robust standard errors clustered at the group level are in parentheses. The results reported are robust to using logistic regressions. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

To test the statistical significance of these results, we rely on regressions in which we relate the decision whether to opt-in to make another intervention decision in Stage 2 to three right-hand-side variables: a *GROUP* treatment dummy, an interventionist dummy, and an interaction term between the two. We run this regression for the pooled data (Model 1) as well as separately for the two decision situations, *Internality* (Model 2) and *Externality* (Model 3). The results of

[14] The original German instructions as well as an English translation can be found in Appendix B2. The experiment was pre-registered along with the main experiment. Ethical approval was also granted along with the main experiment.

these regressions are shown in Table 7. As can be seen in Model 1, the interaction term between the treatment and type dummies is negative and significant, indicating that participants with an individual preference for interventions shy away from making another intervention decision when that other decision is a group decision. The results of Models (2) and (3) further show that this effect occurs in both decision situations, but that it is particularly pronounced for the *Externality* decision. Overall, these observations are consistent with our social context hypothesis, as they show that interventionists are less likely to reveal their type in a group-discussion context.

Experiment 2: Public Disclosure of Intervention Decision

Our second additional experiment aims to test the causal impact of social context more directly. Building on previous studies that have investigated the role of social image concerns in other contexts (see, e.g., Ariely et al., 2009; Ewers and Zimmermann, 2015), we design an experiment in which we exogenously manipulate whether decisions are made either in private or in public. Specifically, in our *PRIVATE* treatment, individuals in the role of CAs make their intervention decisions individually and in private (as in Stage 1 of our previous experiments). In our *PUBLIC* treatment, CAs also make their intervention decisions individually, but are told before the intervention decision that they must publicly reveal their decisions to the other CAs in the session at the end of the experiment. As in our previous experiments, CAs were asked to make decisions for both the *Internality* and *Externality* decision situation. Unlike our previous designs, this experiment consists of only one stage.

The experiment was conducted in person in the Cologne Laboratory for Economic Research (CLER).[15] In total, we collected data from $n = 203$ CAs, $n = 101$ in the *PRIVATE* treatment and $n = 102$ in the *PUBLIC* treatment. As before, the decisions of the DMs were elicited as part of an upcoming experiment. All participants received a show-up fee of EUR 4 plus EUR 6 as a fixed payment for completing the experiment. A typical experimental session lasted about 20 minutes.

We find that individuals are less likely to intervene in the decision-making of others when they have to publicly disclose their decision. In our *PUBLIC* treatment, we find that 56% of our participants remove at least one option from at least one of the two decision situations, which

[15] See Appendix B3 for the original German instructions as well as an English translation. We pre-registered this experiment separately after we obtained the results from our main experiment: AEARCTR-0009523 (https://www.socialscienceregistry.org /trials/9523). We also received a separate ethical approval from the Ethics Committee of the Economics Department of the University of Cologne (Reference: 210034CF).

is lower than the 69% that we observe in our *PRIVATE* treatment. The results from regression analyses, reported in Table 8, reveal that the difference in interventions between treatments is significant. As can be seen from the results of Models (2) and (3), the coefficient of the *PUBLIC* dummy is negative in both decision situations, but particularly pronounced for the *Externality* decision.

TABLE 8: *RELATIONSHIP BETWEEN THE LIKELIHOOD OF INTERVENING AND THE ANONYMITY OF THE DECISION*

	All	Internality	Externality
	(1)	(2)	(3)
Public *(=1 if treatment is PUBLIC, 0 otherwise)*	-0.134** (0.068)	-0.043 (0.066)	-0.153** (0.070)
Constant	0.693*** (0.048)	0.347*** (0.048)	0.564*** (0.050)
Observations	203	203	203
R^2	0.019	0.002	0.023

Notes: OLS regressions. The dependent variable takes the value 1 if a participant decided to intervene by removing at least one of the DM's choice options, and 0 otherwise. Robust standard errors clustered at the individual level are in parentheses. The results reported are robust to using logistic regressions. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Result 2 summarizes our findings and confirms our hypothesis:

> **Result 2**: *In social contexts, subjects shy away from interventions.*

6. Discussion and Conclusion

Our study delves into the questions of why, when, and how groups choose to intervene in decisions of others, and how group intervention behavior differs from that of individuals. We find that a substantial disparity in the intervention tendencies of groups and individuals, with groups being significantly more liberal than individuals. Contrary to our hypotheses, which made opposing predictions regarding the influence of group decision making, we observe a robust "liberal shift" in groups across two distinct decision scenarios: one involving an intertemporal decision task (*Internality*) and another concerning the allocation of funds between oneself and a third party (*Externality*).

The transcripts of the group discussions and the results from additional experiments suggest that that a key contributing factor to the observed effect is the reluctance of interventionists to

advocate their individual preferences in a social context. When we synthesize our results, we provide three pieces of evidence supporting this hypothesis: (*i*) interventionists are less likely to make a proposal in the group discussion that matches their individually made choice; (*ii*) interventionists are less likely to self-select into an intervention decision when it is a group decision; (*iii*) individuals are less likely to intervene when they must disclose their decision to others.

A potential reason for group members to shy away from proposing an intervention in the social context of a group is that interventionists may believe that granting autonomy, rather than intervening in others' choices, is generally viewed as desirable by others. Indeed, scholars in old philosophical debates have already attributed both an instrumental and intrinsic value to autonomous decision making (Feinberg, 1978; Rawls, 1971, 1980; Young, 1982), and recent empirical evidence shows that people in fact value autonomy per se (Benz and Frey, 2008; Bartling et al., 2014).[16] This potentially adds to a perception that interventions in the freedom of choice of others, and corresponding proposals, may not be viewed favorably by peers. Therefore, even when interventions are supported by a majority of individuals (as is the case in our externality decision), the aggregation of preferences in groups may favor libertarianism.[17]

Our findings may have implications for management practices and leadership in organizations. Specifically, our results suggest that shifting decision-making authority from individuals to groups may lead to a "liberal shift" because groups are less likely to impose strict oversight or constraints. While granting more decision autonomy has been shown to have positive effects on work motivation and job satisfaction (Ryan and Deci, 2000; Bass, 2009), it may also come at the cost of less control for supervisors. Regardless of whether the positive or negative effects predominate, companies should be aware that giving more decision-making power to groups may promote more employee autonomy beyond what individual preferences would suggest.

[16] The extent to which one should, or should not, intervene in the choices of others is often the subject of debate. Consider, for example, contexts where interventions address self-control problems; e.g., sugar taxes, smoking bans, savings for the future, or gun control. See also Al Roth's market design blog, with its many hundreds of posts tagged with the label "repugnance", for an overview of the rich and quickly growing debates and papers on repugnance.

[17] The outcome of our study – less interventions in groups – is reminiscent of, and complementary to, the so-called "bystander effect" (Darley and Latane 1968; Fischer et al. 2011), where an intervention can be socially desirable but is less likely in the presence of (more) other people. However, the underlying mechanism for which we find support is different than in the coordination challenge in the context of the bystander effect, which can typically be overcome by facilitating communication among individuals, while in our case communication in groups does not increase the tendency to intervene.

Finally, in addition to our contribution to the literature on management practices and the economics literature on intervention behavior and paternalism (cited in the Introduction), we contribute to the literature that focuses on the differences between individual and group decision-making. Groups have been shown to be often more selfish, more rational and smarter than individuals (see Charness and Sutter 2012, Kugler et al. 2012, and Kocher et al. 2020 for reviews). Complementing this literature, our paper emphasizes that, the social context created by group decision making may *per se* dominate such other findings. This mechanism may also be an important mechanism in other contexts where groups and individuals behave differently, and where perhaps decision making is influenced by judgments of others (Bursztyn and Jensen, 2015; DellaVigna et al., 2017; Perez-Truglia and Cruces, 2017; Bursztyn et al., 2020). We leave this to future research.

References

Ackfeld, V. and Ockenfels, A. 2021. Do people intervene to make others behave prosocially?, *Games and Economic Behavior*, vol. 128, 58–72

Ambuehl, S., Bernheim, B. D., and Ockenfels, A. 2021. What Motivates Paternalism? An Experimental Study, *American Economic Review*, vol. 111, no. 3, 787–830

Ambuehl, S. and Bernheim, B. D.. 2021. Interpreting the Will of the People: A Positive Analysis of Ordinal Preference Aggregation. *NBER Working Paper* No. 2938

Ambuehl, S. Blesse, S., Doerrenberg, P., Feldhaus, C. and Ockenfels, A.. 2023. Politicians' Social Welfare Criteria: An Experiment with German Legislators. *CESifo Working Paper No*. 10329

Ariely, D., Bracha, A., and Meier, S. 2009. Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially, *American Economic Review*, vol. 99, no. 1, 544–55

Ariely, D., Loewenstein, G., and Prelec, D. 2003. "Coherent Arbitrariness": Stable Demand Curves Without Stable Preferences, *The Quarterly Journal of Economics*, vol. 118, no. 1, 73–106

Bartling, B., Cappelen, A. W., Hermes, H., Skivenes, M., and Tungodden, B. 2022. Free to fail? Paternalistic preferences in the united states: mimeo

Bartling, B., Fehr, E., and Herz, H. 2014. The Intrinsic Value of Decision Rights, *Econometrica*, vol. 82, no. 6, 2005–39

Bass, B.M., 2009. The Bass Handbook of Leadership: Theory, Research, and Managerial Applications. *Free Press, New York*.

Benz, M. and Frey, B. S. 2008. The value of doing what you like: Evidence from the self-employed in 23 countries, *Journal of Economic Behavior & Organization*, vol. 68, no. 3, 445–55

Bloom, N., & Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. *The Quarterly Journal of Economics*, 122(4), 1351-1408.

Bursztyn, L., González, A. L., and Yanagizawa-Drott, D. 2020. Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia, *American Economic Review*, vol. 110, no. 10, 2997–3029

Bursztyn, L. and Jensen, R. 2015. How Does Peer Pressure Affect Educational Investments?, *The Quarterly Journal of Economics*, vol. 130, no. 3, 1329–67

Cappelen, A. W., Konow, J., Sørensen, E. Ø., and Tungodden, B. 2013. Just Luck: An Experimental Study of Risk-Taking and Fairness, *American Economic Review*, vol. 103, no. 4, 1398–1413

Charness, G. and Sutter, M. 2012. Groups Make Better Self-Interested Decisions, *Journal of Economic Perspectives*, vol. 26, no. 3, 157–76

Chen, H., and Lim, N. (2013). Should managers use team-based contests? *Management Science*, 59(12), 2823-2836

Cross, R., R., & Grant, A. (2016). Collaborative overload. *Harvard Business Review*.

Darley, J. M. and Latane, B. 1968. Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 8(4, Pt.1), 377–383.

Della Vigna, S., List, J. A., Malmendier, U., and Rao, G. 2017. Voting to Tell Others, *The Review of Economic Studies*, vol. 84, no. 1, 143–81

Deloitte, B. (2016). Global human capital trends 2016, the new organization: different by design. *Deloitte University Press*.

Doz, Y. L. and Guadalupe, Maria. 2019. Escaping the 'S-Curve' – Is the 'Agile' Organization the Answer? *INSEAD Working Paper* No. 2019/15/STR/EPS

Duch, M. L., Grossmann, M. R. P., and Lauer, T. 2020. z-Tree unleashed: A novel client-integrating architecture for conducting z-Tree experiments over the Internet, *Journal of Behavioral and Experimental Finance*, vol. 28,

Ericson, K. M. and Laibson, D. 2019. Chapter 1 - Intertemporal choice, pp. 1–67, in Bernheim, B. D., DellaVigna, S., and Laibson, D. (eds.), *Handbook of Behavioral Economics: Applications and Foundations 1*, North-Holland

Ewers, M. and Zimmermann, F. 2015. Image and Misreporting, *Journal of the European Economic Association*, vol. 13, no. 2, 363–80

Fedyk, A. 2021. Asymmetric naivete: Beliefs about self-control, *Available at SSRN 2727499*, Advance Access published 2021

Feinberg, J. 1978. Voluntary Euthanasia and the Inalienable Right to Life, *Philosophy & Public Affairs*, vol. 7, no. 2, 93–123

Feri, F., Irlenbusch, B., and Sutter, M. 2010. Efficiency Gains from Team-Based Coordination—Large-Scale Experimental Evidence, *American Economic Review*, vol. 100, no. 4, 1892–1912

Fischbacher, U. 2007. z-Tree: Zurich toolbox for ready-made economic experiments, *Experimental Economics*, vol. 10, no. 2, 171–78

Fischer, P., Krueger, J., Greitemeyer, T., Vogrincic, C., Kastenmüller, A., Frey, D., Heene, M., Wicher, M. and Kainbacher, M. 2011. The bystander-effect: a meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychological Bulletin*, vol. 137, no. 4, 517.

Frederick, S., Loewenstein, G., and O'Donoghue, T. 2002. Time Discounting and Time Preference: A Critical Review, *Journal of Economic Literature*, vol. 40, no. 2, 351–401

Fudenberg, D., Levine, D. K., and Maniadis, Z. 2012. On the Robustness of Anchoring Effects in WTP and WTA Experiments, *American Economic Journal: Microeconomics*, vol. 4, no. 2, 131–45

Gavetti, G., Levinthal, D., & Ocasio, W. (2007). Perspective—Neo-Carnegie: The Carnegie school's past, present, and reconstructing for the future. *Organization Science*, 18(3), 523-536.

Greiner, B. 2015. Subject pool recruitment procedures: organizing experiments with ORSEE, *Journal of the Economic Science Association*, vol. 1, no. 1, 114–25

Kerr, N. L., & Tindale, R. S. (2004). Group performance and decision making. *Annual Review Psychology*, 55, 623-655.

Kiessling, L., Chowdhury, S., Schildberg-Hörisch, H., and Sutter, M. 2021. Parental paternalism and patience, *Available at SSRN 3767701*, Advance Access published 2021

Kocher, M. G., Praxmarer, M., and Sutter, M. 2020. Team Decision-Making, pp. 1–25, in Zimmermann, K. F. (ed.), *Handbook of Labor, Human Resources and Population Economics*, Cham, Springer International Publishing

Kocher, M. G. and Sutter, M. 2005. The Decision Maker Matters: Individual Versus Group Behaviour in Experimental Beauty-Contest Games, *The Economic Journal*, vol. 115, no. 500, 200–223

Kocher, M. G., Schudy, S. and Spantig, L. 2018. I lie? We lie! Why? Experimental evidence on a dishonesty shift in groups. *Management Science* 64, no. 9, 3995-4008.

Kölle, F., Kübler, D., and Ockenfels, A. 2022. Impartial Policymakers Prefer to Impose Carbon Offset Measures Over Other Climate Policies, *Available at SSRN 4273576*, Advance Access published 2022

Krawczyk, M. and Wozny, L. P. 2017. An Experiment on Temptation and Attitude Towards Paternalism: Social Science Research Network ID 2912427, date last accessed February 22, 2022, at https://papers.ssrn.com/abstract=2912427

Kugler, T., Bornstein, G., Kocher, M. G., and Sutter, M. 2007. Trust between individuals and groups: Groups are less trusting than individuals but just as trustworthy, *Journal of Economic Psychology*, vol. 28, no. 6, 646–57

Kugler, T., Kausel, E. E., and Kocher, M. G. 2012. Are groups more rational than individuals? A review of interactive decision making in groups, *WIREs Cognitive Science*, vol. 3, no. 4, 471–82

Locke, J. 1764. *Two Treatises of Government: By Iohn Locke*, printed MDCLXXXVIIII reprinted, the sixth time, by A. Millar, H. Woodfall, I. Whiston and B. White, I. Rivington, L. Davis and C. Reymers [and 16 others in London]

Luhan, W. J., Kocher, M. G., and Sutter, M. 2009. Group polarization in the team dictator game reconsidered, *Experimental Economics*, vol. 12, no. 1, 26–41

Maciejovsky, B., Sutter, M., Budescu, D. V., & Bernau, P. (2013). Teams make you smarter: How exposure to teams improves individual decisions in probability and reasoning tasks. *Management Science*, 59(6), 1255-1270.

Maniadis, Z., Tufano, F., and List, J. A. 2014. One Swallow Doesn't Make a Summer: New Evidence on Anchoring Effects, *American Economic Review*, vol. 104, no. 1, 277–90

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, *34*(3), 410-476.

Mill, J. S. 1869. *On Liberty*, Fields, Osgood & Company

O'Neill, T. A., & Salas, E. (2018). Creating high performance teamwork in organizations. *Human Resource Management Review*, 28(4), 325-331.

Perez-Truglia, R. and Cruces, G. 2017. Partisan Interactions: Evidence from a Field Experiment in the United States, *Journal of Political Economy*, vol. 125, no. 4, 1208–43

Phillips, O. R. & Menkhaus, D. J. 2010. The culture of private negotiation: Endogenous price anchors in simple bilateral bargaining experiments, *Journal of Economic Behavior & Organization*, vol. 76, no. 3, 705–15

Rajan, R. G., & Wulf, J. (2006). The flattening firm: Evidence from panel data on the changing nature of corporate hierarchies. *The Review of Economics and Statistics*, 88(4), 759-773.

Rawls, J. 1971. A Theory of Justice, Advance Access published 1971

Rawls, J. 1980. Kantian Constructivism in Moral Theory, *The Journal of Philosophy*, vol. 77, no. 9, 515–72

Rigby, D. K., Sutherland, J., & Noble, A. 2018. Agile at scale. *Harvard Business Review*, 96(3), 88-96.

Ryan, R. M. and Deci, E. L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68

Salas, E., Cooke, N. J., & Rosen, M. A. (2008). On teams, teamwork, and team performance: Discoveries and developments. *Human Factors*, 50(3), 540-547.

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review. *Journal of Applied Psychology*, 96(5), 981.

Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39(11), 1005-1016.

Thaler, R. H. and Sunstein, C. R. 2003. Libertarian Paternalism, *American Economic Review*, vol. 93, no. 2, 175–79

Uhl, M. 2011. Do Self-Committers Mind Other-Imposed Commitment? An Experiment on Weak Paternalism, *Rationality, Markets and Morals*, vol. 2, no. 40

Wong, E. M., Ormiston, M. E., & Tetlock, P. E. (2011). The effects of top management team integrative complexity and decentralized decision making on corporate social performance. *Academy of Management Journal*, 54(6), 1207-1228.

Young, R. 1982. Autonomy and Paternalism, *Canadian Journal of Philosophy Supplementary Volume*, vol. 8, 47–66

(Online) Appendix

A. Additional Tables and Figures

FIGURE A1: *DISTRIBUTION OF THE NUMBER OF REMOVED OPTIONS IN STAGE 1 OF THE EXPERIMENT*

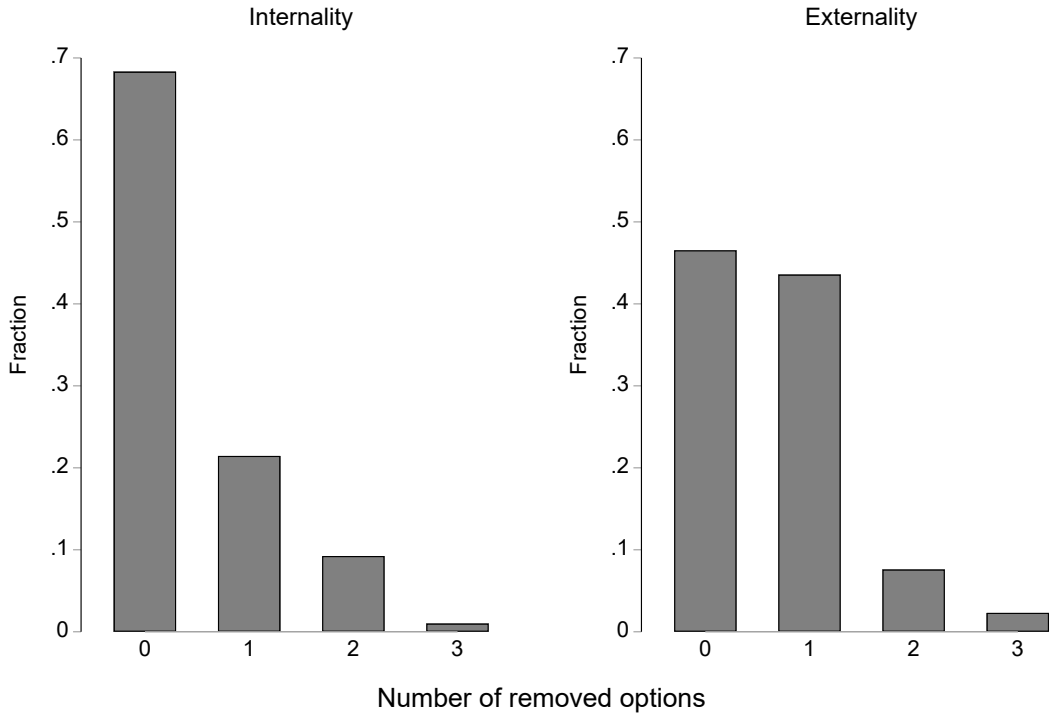
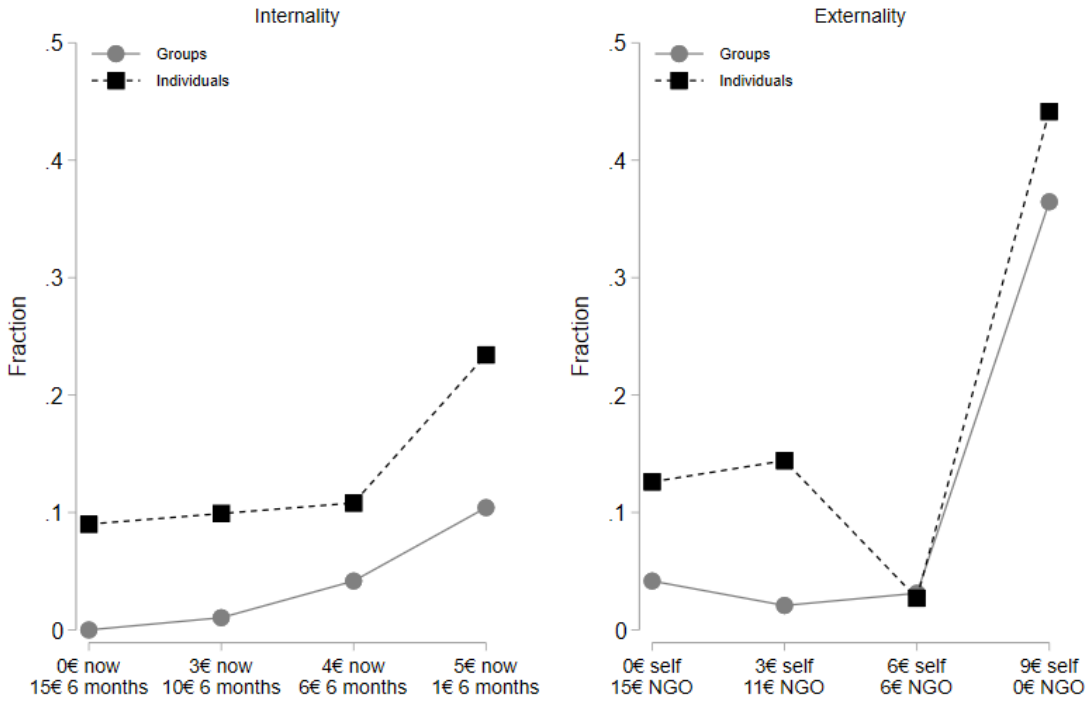


FIGURE A2: *INTERVENTION PATTERNS BY GROUPS AND INDIVIDUALS*



B. Experimental Instructions

B1. Main Experiment (English translation)

Instructions are shown for choice architects in the GROUP treatment. The instructions for the Individual treatment are very similar and available upon request.

SCREEN 1

Welcome to this experiment.

To start the experiment, please click on 'Next'.

SCREEN 2

Participant information

Experiment title: XXX

Person responsible for the experiment: XXX

Experiment description: You will take part in a scientific decision-making experiment. During the experiment, you will read instructions, answer questions and make various decisions that can affect your payoff and the payoff of other participants. Many participants will take part in this experiment at the same time. To ensure a smooth and speedy process for all participants, you must respond within a reasonable time frame. If you exceed the time limit, you will not be able to continue the experiment. In this case, you will receive your participation reward, but not the additional amount you could have earned during the experiment.

Participant rights: Your participation in this experiment is voluntary. In order for us to use your data for research purposes, it is necessary that you complete all parts of the experiment. You can withdraw from participation in the experiment at any time without giving any reason. If you decide to withdraw from the experiment, you will receive 2.50 € for participating, but not the additional amount you would have earned during the experiment.

Data protection: All information in this experiment is anonymous and does not allow any conclusions to be drawn about individual participants. There is no connection between your anonymous information in the experiment and the personal data stored about you in the participant portal of the Cologne Laboratory for Economic Research (CLER) for the purpose of inviting you to the experiment. The data collected in the course of this experiment will be used exclusively for research purposes and stored only for scientific evaluation. To ensure transparency in science and within the framework of scientific cooperation projects, the collected data may be made available for subsequent use by third parties.

I am aware that I may contact the person responsible for this experiment if I wish to receive further information about the experiment, and that I may contact her/him or the relevant ethics committee if I wish to make a complaint about my participation.

I agree with these conditions. YES/NO

SCREEN 3

General information

Welcome and thank you for participating in this experiment. For showing up on time for the experiment, you will receive a participation bonus of 2.50 €. In addition, you will receive 7.50 € as a fixed payment if you complete the experiment.

The payment from this experiment will be made via PayPal. To receive your payment, at the end of the experiment you will be asked to enter your email address, which you have deposited with PayPal. Your PayPal email address will be deleted by us after the payment has been completed.

By clicking 'Continue' you agree to the terms and conditions.

SCREEN 4

Today's experiment

Today's experiment is divided into two parts, Part A and Part B. Afterwards, we will ask you a few questions about yourself. At the end of the experiment, one of the two parts will be randomly selected and implemented. In the following, we will first explain to you your task in Part A. After you have completed this part, you will receive the instructions for Part B. Please make well-considered decisions in all situations as each decision could be the one that counts.

Your task in Part A

Your task in Part A is to determine under which conditions a participant in a future experiment can make decisions. In doing so, your decisions can influence the future participant's decision-making options and payoff. You are the only person who determines the decision-making possibilities of this future participant.

The other experiment will be conducted in the next four weeks. The participants in this experiment, just like you, are registered for experiments at the Cologne Laboratory for Economic Research (CLER). This excludes the possibility that participants are selected for both experiments. In the event that there are fewer participants in the other experiment than in today's experiment, we will randomly select from all today's participants with equal probability whose decisions will be implemented.

IMPORTANT: We will conduct the partner studies with the future participants within the next 4 weeks and your decisions will influence future participants exactly with the rules described here.

Before we explain your task in detail, we will first describe the decision-making situation of the participants in the future experiment.

SCREEN 5

Task of the participants in the future experiment

The participants in the future experiment have to make a total of two decisions. One of these decisions is randomly selected at the end of the experiment. The decision made in this decision situation then

determines the participant's payment. In each of the two decision situations, the future participant can choose between four options. This looks as follows:

☐	Option A
☐	Option B
☐	Option C
☐	Option D

In the decision situations, options A, B, C and D are replaced by concrete payoffs. The options can influence both the participant's own payment as well as the payoff of someone else.

SCREEN 6

Your task

You can influence the decision-making situation of the participant in the future experiment as follows.

1. you can decide whether all options should be available to the future participant or whether one or more of them should not be available. You must make at least one option available in each situation.

2. you can advise the future participant not to choose certain options. If you do this, the future participant will see the following when making decisions about their options:

☐	Option A
☐	Option B
☐	Option C*
☐	Option D*

* A previous participant who has thought about these options recommends against choosing that option

The screen where you can decide to make certain options available or not, or to advise against certain options or not, looks like this:

Option	Available	Not available	Recommend against
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

Hint:

There are no right or wrong answers. We ask you to make exactly those choices that reflect your genuine views.

SCREEN 7

How the future participant chooses

Here you can see how the future participant will make his/her choices. We will ask the future participant to rank all four options, starting with the option he/she prefers the most and ending with the option he/she prefers the least. To do this, the future participant will assign a rank between 1 and 4 to each option.

At the end of the experiment, the future participant will then be given the option that he/she ranked highest within those options that are available. In his/her decision on the ranking of the options, the future participant will not yet know which of the options are available and which are not.

Rank	Option
☐	Option A
☐	Option B
☐	Option C
☐	Option D

Example:

Assume that the future participant assigns rank 1 to option A, rank 3 to option B, rank 4 to option C, and rank 2 to option D. Assume further that you do not make option A available to the future participant. In this case, the future participant will receive option D. The reason is that A is not available, and the participant ranks D higher than B and C.

SCREEN 8

Comprehension questions

Before you make your decision, we ask you to answer some comprehension questions about the instructions and the experiment. This is to ensure that all participants understand how their decisions affect the future participant. Please note that you will have a maximum of 5 minutes to answer the questions.

Assume that the future experiment participant ranks option B highest, followed by C and D, and that he/she ranks option A lowest.

Question 1: If all options are available, which option will the future participant receive?

Question 2: If option A is not available, which option will the future participant receive?

Question 3: If option B is not available, which option will the future participant receive?

Question 4: If option C is not available, which option will the future participant receive?

Question 5: If options B, C, and D are not available, which option will the future participant receive?

SCREEN 9

Comprehension Questions - Part 2

Please select all true statements (and only these).

Statement 1: I can make some options available and others unavailable if I think that is right.

Statement 2: I can make all options available if I think that is right.

Statement 3: I can make all but one option unavailable if I think that is right.

Statement 4: There are no right or wrong choices, I can make options available or unavailable and I can advise against options or not, depending on what I think is right (as long as at least one option remains available to the future experiment participant).

Statement 5: There are right or wrong choices, I cannot simply make options available or unavailable if I think that is right.

Statement 6: The future participant will only see those options that I make available and will not even see the options that I make unavailable.

Statement 7: The future participant will rank all options. He will not know which options are available and which are not. His payment will be based on the highest-ranked option among the available options.

Statement 8: The computer will carry out all the decisions I make in this experiment.

Statement 9: The computer randomly selects one of the two parts (part A or B). The decision made in this part is then implemented. Each part is equally probable.

SCREEN 10 – 11: *Decision Screens Part A*

SCREEN 12

Instructions Part B

The general decision situation and your task in Part B is similar to the one in Part A. You again have the opportunity to specify the conditions under which a participant in a future experiment can make decisions. As before, you can decide whether all options should be available to the future participant or whether you want to advise him against choosing certain options. However, the person will be a different one than in Part A.

In contrast to Part A, however, you now make these decisions not alone, but in a group. For this purpose, you will be randomly assigned another participant from this experiment. Together with this participant, you will (with the aim of making a joint decision) first have the opportunity to exchange and consult via chat. Afterwards, you and your group member have to enter the decision you agreed on. Only if both

group members enter the exact same decision, the experiment will continue. If you and your group member enter a different decision, the chat discussion will continue until there is an agreement.

Important: Please discuss only your decision in the chat. Sharing other information, especially private information, by which you can be identified, is not allowed. Failure to comply with this rule may result in exclusion from all payments.

As before, when the future participant makes his/her decision, he/she does not yet know whether all options are available to him/her or not. Instead, as before, he/she is asked to rank all the options, starting with the option he/she most prefers and ending with the option he/she least prefers. If you advise the prospective participant against an option, this will be indicated to him/her as follows, as in Part A.

* A participant of a previous experiment, who has thought about these options, suggests not to choose this option

At the end of the experiment, the future participant receives the option that he/she has ranked highest, within those options that are available.

As a reminder, at the end of the experiment, one of the two parts, Part A or Part B, will be randomly selected and actually implemented. This means that the decisions you make in this part may have actual consequences for a participant in the future experiment. Therefore, please make each decision as if it were the one that counts, because it could be!

SCREEN 13 – 14: *Decision Screens Part B*

Main Experiment (German Original)

Instructions are shown for choice architects in the GROUP treatment. The instructions for the Individual treatment are very similar and available upon request.

SCREEN 1

Herzlich willkommen zu diesem Experiment.

Um mit dem Experiment zu beginnen, klicken Sie bitte auf ‚Weiter'.

SCREEN 2

Informationen zur Teilnahme

Experimenttitel: XXX

Experimentleiter/innen: XXX

Experimentbeschreibung: Sie nehmen an einem wissenschaftlichen Entscheidungsexperiment teil. Sie werden während des Experiments Instruktionen lesen, Fragen beantworten und verschiedene Entscheidungen treffen, die Ihre Auszahlung und die Auszahlung anderer Teilnehmer/innen beeinflussen können. An diesem Experiment nehmen viele Teilnehmer gleichzeitig teil. Um allen Teilnehmern einen reibungslosen und zügigen Ablauf zu garantieren, müssen Sie innerhalb eines angemessenen Zeitrahmens reagieren. Bei Überschreitung des Zeitlimits ist keine Fortsetzung des

Experiments möglich. In diesem Fall erhalten Sie Ihre Teilnahmeprämie, nicht aber den zusätzlichen Betrag, den Sie während des Experiments hätten verdienen können.

Teilnehmerrechte: Ihre Teilnahme an diesem Experiment ist freiwillig. Damit wir Ihre Daten zu Forschungszwecken verwenden können, ist es nötig, dass Sie alle Teile des Experiments bearbeiten. Sie können jederzeit ohne Angabe von Gründen von der Teilnahme am Experiment zurücktreten. Wenn Sie sich entschließen, das Experiment abzubrechen, erhalten Sie 2,50 Euro für die Teilnahme, jedoch nicht den zusätzlichen Betrag, den Sie während des Experiments verdient hätten.

Datenschutz: Alle Angaben in diesem Experiment sind anonym und ermöglichen keine Rückschlüsse auf einzelne Teilnehmer/innen. Es besteht keine Verbindung zwischen Ihren anonymen Angaben im Experiment und den personenbezogenen Daten, die über Sie im Teilnehmerportal des Kölner Laboratoriums für Wirtschaftsforschung (CLER) zum Zwecke der Experimenteinladung hinterlegt sind. Die im Rahmen dieses Experiments erhobenen Daten werden ausschließlich für Forschungszwecke genutzt und nur für die wissenschaftliche Auswertung gespeichert. Zur Gewährleistung der Transparenz in der Wissenschaft und im Rahmen von wissenschaftlichen Kooperationsprojekten werden die erhobenen Daten ggf. für eine Nachnutzung durch Dritte zur Verfügung gestellt.

Ich bin mir bewusst, dass ich den/die Experimentleiter/in kontaktieren kann, wenn ich weitere Informationen zum Experiment erhalten möchte, und dass ich den/die Experimentleiter/in oder die zuständige Ethikkommission kontaktieren kann, wenn ich Beschwerde bzgl. meiner Teilnahme einlegen möchte.

Ich bin mit diesen Bedingungen einverstanden. JA/NEIN

SCREEN 4

Das heutige Experiment

Das heutige Experiment ist in zwei Teile unterteilt, Teil A und Teil B. Anschließend folgen noch ein paar Fragen zu Ihrer Person. Am Ende des Experiments wird zufällig einer der beiden Teile ausgewählt und tatsächlich umgesetzt. Im Folgenden erklären wir Ihnen zunächst Ihre Aufgabe in Teil A. Nachdem Sie diesen Teil abgeschlossen haben, erhalten Sie die Instruktionen für den darauffolgenden Teil. Bitte treffen Sie in allen Situationen eine wohlüberlegte Entscheidung, da jede Entscheidung die sein könnte, die am Ende zählt.

Ihre Aufgabe in Teil A

Ihre Aufgabe in Teil A besteht darin, zu bestimmen, unter welchen Bedingungen ein Teilnehmer an einem zukünftigen Experiment Entscheidungen treffen kann. Ihre Entscheidungen können dabei die Entscheidungsmöglichkeiten und die Auszahlung des zukünftigen Teilnehmers beeinflussen. Sie sind die einzige Person, die die Entscheidungsmöglichkeiten dieses zukünftigen Experimentteilnehmers bestimmt.

Das andere Experiment wird in den nächsten vier Wochen durchgeführt. Die Teilnehmer an diesem Experiment sind, genau wie Sie, für Experimente im Kölner Laboratorium für Wirtschaftsforschung (CLER) registriert. Dabei ist ausgeschlossen, dass Teilnehmer für beide Experimente ausgewählt werden. Für den Fall, dass es weniger Teilnehmer beim anderen als beim heutigen Experiment gibt, wählen wir unter allen heutigen Teilnehmern zufällig und mit gleicher Wahrscheinlichkeit aus, wessen Entscheidungen umgesetzt werden.

Im Anschluss an Ihre heutige Entscheidung über die Bedingungen, unter denen der Teilnehmer des zukünftigen Experiments seine Entscheidungen treffen kann, bitten wir Sie einen Zoom-Raum zu betreten. In diesem Zoom-Raum werden Sie und eine weitere Person sein. Es ist Ihre Aufgabe, der anderen Person im Zoom-Raum mitzuteilen, welche Entscheidung Sie im Experiment getroffen haben. Sie teilen der anderen Person also mit, welche Bedingungen Sie für den Teilnehmer des zukünftigen Experiments festgelegt haben.

WICHTIG: Wir werden die Partnerstudien mit den zukünftigen Experimentsteilnehmern innerhalb der nächsten 4 Wochen durchführen und Ihre Entscheidungen werden zukünftige Experimentteilnehmer genau mit den hier beschriebenen Regeln beeinflussen.

Bevor wir Ihnen Ihre Aufgabe im Detail erklären, beschreiben wir Ihnen im Folgenden zunächst die Entscheidungssituation der Teilnehmer am zukünftigen Experiment.

SCREEN 5

Aufgabe der Teilnehmer am zukünftigen Experiment

Die Teilnehmer am zukünftigen Experiment müssen insgesamt zwei Entscheidungen treffen. Eine dieser Entscheidungen wird am Ende des Experiments zufällig ausgewählt. Die in dieser Entscheidungssituation getroffene Entscheidung bestimmt dann die Auszahlung des Teilnehmers. In jeder der beiden Entscheidungssituationen kann der zukünftige Experimentsteilnehmer aus vier Optionen wählen. Dies sieht wie folgt aus:

☐	Option A
☐	Option B
☐	Option C
☐	Option D

In den Entscheidungssituationen werden die Optionen A, B, C und D durch konkrete Auszahlungen ersetzt. Die Optionen können dabei sowohl die eigene Auszahlung des Experimentsteilnehmers als auch die Auszahlung von jemand anderem beeinflussen.

SCREEN 6

Ihre Aufgabe

Sie können die Entscheidungssituation des Teilnehmers am zukünftigen Experiment wie folgt beeinflussen.

1. Sie können entscheiden, ob dem zukünftigen Experimentsteilnehmer alle Optionen zur Verfügung stehen sollen, oder ob eine oder mehrere davon nicht verfügbar sein sollen. Sie müssen dabei in jeder Situation mindestens eine Option zur Verfügung stellen.

2. Sie können dem zukünftigen Experimentsteilnehmer davon abraten, bestimmte Optionen zu wählen. Falls Sie dies tun, wird der zukünftige Experimentteilnehmer Folgendes sehen, wenn er Entscheidungen über seine Optionen trifft:

☐	Option A
☐	Option B
☐	Option C*
☐	Option D*

* Ein früherer Experimentsteilnehmer, der über diese Optionen nachgedacht hat, rät von dieser Option ab.

Der Bildschirm, auf dem Sie entscheiden können, bestimmte Optionen verfügbar zu machen oder nicht bzw. von bestimmten Optionen abzuraten oder nicht, sieht wie folgt aus:

Option	Verfügbar	Nicht verfügbar	Abraten
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

Hinweis:

Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie, genau jene Entscheidungen zu treffen, die Ihre echten Ansichten reflektieren.

SCREEN 7

Wie der zukünftige Experimentsteilnehmer wählt

Hier sehen Sie, wie der zukünftige Experimentsteilnehmer seine Entscheidungen treffen wird. Wir werden den zukünftigen Experimentsteilnehmer bitten, alle vier Optionen in eine Reihenfolge zu bringen, beginnend mit der von ihm/ihr am meisten bevorzugten Option und endend mit der von ihm/ihr am wenigsten bevorzugten Option. Dazu wird der zukünftige Experimentsteilnehmer jeder Option einen Rang zwischen 1 und 4 zuweisen.

Am Ende des Experiments erhält der zukünftige Experimentsteilnehmer dann jene Option, die er/sie am höchsten eingestuft hat, innerhalb jener Optionen, die verfügbar sind. Bei seiner/ihrer Entscheidung über die Rangfolge der Optionen wird der zukünftige Teilnehmer noch nicht wissen, welche der Optionen verfügbar sind und welche nicht.

Rang	Option
☐	Option A
☐	Option B
☐	Option C
☐	Option D

Beispiel:

Nehmen Sie an, der zukünftige Experimentsteilnehmer weist Option A den Rang 1, Option B den Rang 3, Option C den Rang 4 und Option D den Rang 2 zu. Nehmen Sie weiterhin an, dass Sie Option A für den zukünftigen Experimentsteilnehmer nicht verfügbar machen. In diesem Fall wird der zukünftige Experimentsteilnehmer Option D erhalten. Der Grund ist, dass A nicht verfügbar ist und dass der Teilnehmer D höher einstuft als B und C.

SCREEN 8

Verständnisfragen

Bevor Sie Ihre Entscheidung treffen, bitten wir Sie noch, einige Verständnisfragen zu den Instruktionen und dem Experiment zu beantworten. Dies soll sicherstellen, dass alle Teilnehmer verstehen, wie sich ihre Entscheidungen auf den anderen Experimentteilnehmer auswirken. Bitte beachten Sie, dass Ihnen zur Beantwortung der Fragen maximal 5 Minuten zur Verfügung stehen.

Nehmen Sie an, dass der zukünftige Experimentsteilnehmer Option B zuoberst einstuft, gefolgt von C und D, und dass er Option A am niedrigsten einstuft.

Frage 1: Wenn alle Optionen verfügbar sind, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 2: Wenn Option A nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 3: Wenn Option B nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 4: Wenn Option C nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 5: Wenn Optionen B, C und D nicht verfügbar sind, welche wird der zukünftige Experimentsteilnehmer erhalten?

SCREEN 9

Verständnisfragen - Teil 2

Bitte wählen Sie alle wahren Aussagen aus (und nur diese).

Aussage 1: Ich kann einige Optionen zur Verfügung stellen und andere nicht, wenn ich das für richtig halte.

Aussage 2: Ich kann alle Optionen zur Verfügung stellen, wenn ich das für richtig halte.

Aussage 3: Ich kann alle bis auf eine Option nicht verfügbar machen, wenn ich das für richtig halte.

Aussage 4: Es gibt keine richtigen oder falschen Entscheidungen, ich kann Optionen verfügbar oder unverfügbar machen und ich kann von Optionen abraten oder nicht, je nachdem was ich für richtig halte (solange mindestens eine Option für den zukünftigen Experimentsteilnehmer verfügbar bleibt).

Aussage 5: Es gibt richtige oder falsche Entscheidungen, ich kann nicht einfach verfügbar oder unverfügbar machen, was ich für richtig halte.

Aussage 6: Der zukünftige Experimentsteilnehmer wird nur jene Optionen sehen, die ich zur Verfügung stelle, und wird die Optionen, die ich nicht zur Verfügung stelle, nicht einmal sehen.

Aussage 7: Der zukünftige Experimentsteilnehmer wird alle Optionen einstufen. Er wird nicht wissen, welche verfügbar oder nicht verfügbar sind. Seine Auszahlung richtet sich nach der am höchsten eingestuften Option unter den verfügbaren Optionen.

Aussage 8: Der Computer wird alle Entscheidungen, die ich in diesem Experiment treffe, ausführen.

Aussage 9: Der Computer wählt zufällig einen der beiden Teile (Teil A oder B) aus. Die in diesem Teil getroffen Entscheidung wird dann umgesetzt. Jeder Teil ist dabei gleich wahrscheinlich.

SCREEN 10 – 11: *Decision Screens Part A*

SCREEN 12

Instruktionen Teil B

Die Ausgangssituation und Ihre Aufgabe in Teil B ist ähnlich wie in Teil A. Sie haben wiederum die Möglichkeit, die Bedingungen, unter denen ein Teilnehmer eines zukünftigen Experiments Entscheidungen treffen kann, festzulegen. Wie zuvor können Sie entscheiden, ob dem zukünftigen Teilnehmer bestimmte Auswahloptionen nicht zur Verfügung stehen sollen oder ob Sie ihm von bestimmten Optionen abraten möchten. Die Person ist dabei jedoch eine andere als in Teil A.

Im Unterschied zu Teil A treffen Sie diese Entscheidung jedoch nun nicht allein, sondern in einer Gruppe. Dazu wird Ihnen ein anderer Teilnehmer aus diesem Experiment zufällig zugeordnet. Gemeinsam mit diesem Teilnehmer haben Sie dann zunächst die Möglichkeit, sich per Chat auszutauschen und zu beraten, mit dem Ziel, eine gemeinsame Entscheidung zu treffen. Anschließend müssen Sie und ihr Gruppenmitglied die Entscheidung eingeben, auf die sie sich geeinigt haben. Nur wenn beide Gruppenmitglieder exakt die gleiche Entscheidung eingeben wird das Experiment fortgesetzt. Sollten Sie und ihr Gruppenmitglied eine unterschiedliche Entscheidung eingeben, wird die Diskussion über den Chat solange fortgesetzt, bis es eine Einigung gibt.

WICHTIG: Bitte diskutieren Sie im Chat nur über Ihre Entscheidung. Das Austauschen anderer, insbesondere privater Informationen, durch die Sie identifiziert werden können, ist nicht gestattet. Eine Nichtbeachtung dieser Regel kann zum Ausschluss aller Zahlungen führen.

Wie zuvor gilt, dass der zukünftige Teilnehmer bei seiner Entscheidung noch nicht weiß, ob ihm alle Optionen zur Verfügung stehen oder nicht. Stattdessen wird er wie zuvor gebeten, alle Optionen in eine Reihenfolge zu bringen, beginnend mit der von ihm/ihr am meisten bevorzugten Option und endend mit

der von ihm/ihr am wenigsten bevorzugten Option. Falls Sie dem zukünftigen Teilnehmer von einer Option abraten, wird ihm dies wie in Teil A wie folgt angezeigt:

* Ein früherer Experimentsteilnehmer, der über diese Optionen nachgedacht hat, rät von dieser Option ab.

Am Ende des Experiments erhält der zukünftige Experimentsteilnehmer dann jene Option die er/sie am höchsten eingestuft hat, innerhalb jener Optionen, die verfügbar sind.

Zur Erinnerung: Am Ende des Experiments wird zufällig einer der beiden Teile, Teil A oder Teil B, ausgewählt und tatsächlich umgesetzt. Das bedeutet, dass die von Ihnen in diesem Teil getroffenen Entscheidungen tatsächliche Konsequenzen für einen Teilnehmer am zukünftigen Experiment haben können. Bitte treffen Sie daher jede Entscheidung so, als ob sie diejenige wäre, die zählt, denn sie könnte es sein!

SCREEN 13 – 14: *Decision Screens Part B*

B2. Selection Experiment (English translation)

Instructions are shown for choice architects in the GROUP treatment. The instructions for the Individual treatment are very similar and available upon request.

SCREEN 1

Welcome to this experiment.

To start the experiment, please click on 'Next'.

SCREEN 2

Participant information

Experiment title: XXX

Person responsible for the experiment: XXX

Experiment description: You will take part in a scientific decision-making experiment. During the experiment, you will read instructions, answer questions and make various decisions that can affect your payoff and the payoff of other participants. Many participants will take part in this experiment at the same time. To ensure a smooth and speedy process for all participants, you must respond within a reasonable time frame. If you exceed the time limit, you will not be able to continue the experiment. In this case, you will receive your participation reward, but not the additional amount you could have earned during the experiment.

Participant rights: Your participation in this experiment is voluntary. In order for us to use your data for research purposes, it is necessary that you complete all parts of the experiment. You can withdraw from participation in the experiment at any time without giving any reason. If you decide to withdraw from the experiment, you will receive 2.50 € for participating, but not the additional amount you would have earned during the experiment.

Data protection: All information in this experiment is anonymous and does not allow any conclusions to be drawn about individual participants. There is no connection between your anonymous information in the experiment and the personal data stored about you in the participant portal of the Cologne Laboratory for Economic Research (CLER) for the purpose of inviting you to the experiment. The data collected in the course of this experiment will be used exclusively for research purposes and stored only for scientific evaluation. To ensure transparency in science and within the framework of scientific cooperation projects, the collected data may be made available for subsequent use by third parties.

I am aware that I may contact the person responsible for this experiment if I wish to receive further information about the experiment, and that I may contact her/him or the relevant ethics committee if I wish to make a complaint about my participation.

I agree with these conditions. YES/NO

SCREEN 3

General information

Welcome and thank you for participating in this experiment. For showing up on time for the experiment, you will receive a participation bonus of 2.50 €. In addition, you will receive 7.50 € as a fixed payment if you complete the experiment.

The payment from this experiment will be made via PayPal. To receive your payment, at the end of the experiment you will be asked to enter your email address, which you have deposited with PayPal. Your PayPal email address will be deleted by us after the payment has been completed.

By clicking 'Continue' you agree to the terms and conditions.

SCREEN 4

Today's experiment

Today's experiment is divided into two parts, Part A and Part B. Afterwards, we will ask you a few questions about yourself. At the end of the experiment, one of the two parts will be randomly selected and implemented. In the following, we will first explain to you your task in Part A. After you have completed this part, you will receive the instructions for Part B. Please make well-considered decisions in all situations as each decision could be the one that counts.

Your task in Part A

Your task in Part A is to determine under which conditions a participant in a future experiment can make decisions. In doing so, your decisions can influence the future participant's decision-making options and payoff. You are the only person who determines the decision-making possibilities of this future participant.

The other experiment will be conducted in the next four weeks. The participants in this experiment, just like you, are registered for experiments at the Cologne Laboratory for Economic Research (CLER). This excludes the possibility that participants are selected for both experiments. In the event that there are fewer participants in the other experiment than in today's experiment, we will randomly select from all today's participants with equal probability whose decisions will be implemented.

IMPORTANT: We will conduct the partner studies with the future participants within the next 4 weeks and your decisions will influence future participants exactly with the rules described here.

Before we explain your task in detail, we will first describe the decision-making situation of the participants in the future experiment.

SCREEN 5

Task of the participants in the future experiment

The participants in the future experiment have to make a total of two decisions. One of these decisions is randomly selected at the end of the experiment. The decision made in this decision situation then determines the participant's payment. In each of the two decision situations, the future participant can choose between four options. This looks as follows:

☐	Option A
☐	Option B
☐	Option C
☐	Option D

In the decision situations, options A, B, C and D are replaced by concrete payoffs. The options can influence both the participant's own payment as well as the payoff of someone else.

SCREEN 6

Your task

You can influence the decision-making situation of the participant in the future experiment as follows.

1. you can decide whether all options should be available to the future participant or whether one or more of them should not be available. You must make at least one option available in each situation.

2. you can advise the future participant not to choose certain options. If you do this, the future participant will see the following when making decisions about their options:

☐	Option A
☐	Option B
☐	Option C*
☐	Option D*

* A previous participant who has thought about these options recommends against choosing that option

The screen where you can decide to make certain options available or not, or to advise against certain options or not, looks like this:

Option	Available	Not available	Recommend against
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

Hint:

There are no right or wrong answers. We ask you to make exactly those choices that reflect your genuine views.

SCREEN 7

How the future participant chooses

Here you can see how the future participant will make his/her choices. We will ask the future participant to rank all four options, starting with the option he/she prefers the most and ending with the option he/she prefers the least. To do this, the future participant will assign a rank between 1 and 4 to each option.

At the end of the experiment, the future participant will then be given the option that he/she ranked highest within those options that are available. In his/her decision on the ranking of the options, the future participant will not yet know which of the options are available and which are not.

Rank	Option
☐	Option A
☐	Option B
☐	Option C
☐	Option D

Example:

Assume that the future participant assigns rank 1 to option A, rank 3 to option B, rank 4 to option C, and rank 2 to option D. Assume further that you do not make option A available to the future participant. In this case, the future participant will receive option D. The reason is that A is not available, and the participant ranks D higher than B and C.

SCREEN 8

Comprehension questions

Before you make your decision, we ask you to answer some comprehension questions about the instructions and the experiment. This is to ensure that all participants understand how their decisions affect the future participant. Please note that you will have a maximum of 5 minutes to answer the questions.

Assume that the future experiment participant ranks option B highest, followed by C and D, and that he/ she ranks option A lowest.

Question 1: If all options are available, which option will the future participant receive?

Question 2: If option A is not available, which option will the future participant receive?

Question 3: If option B is not available, which option will the future participant receive?

Question 4: If option C is not available, which option will the future participant receive?

Question 5: If options B, C, and D are not available, which option will the future participant receive?

SCREEN 9

Comprehension Questions - Part 2

Please select all true statements (and only these).

Statement 1: I can make some options available and others unavailable if I think that is right.

Statement 2: I can make all options available if I think that is right.

Statement 3: I can make all but one option unavailable if I think that is right.

Statement 4: There are no right or wrong choices, I can make options available or unavailable and I can advise against options or not, depending on what I think is right (as long as at least one option remains available to the future experiment participant).

Statement 5: There are right or wrong choices, I cannot simply make options available or unavailable if I think that is right.

Statement 6: The future participant will only see those options that I make available and will not even see the options that I make unavailable.

Statement 7: The future participant will rank all options. He will not know which options are available and which are not. His payment will be based on the highest-ranked option among the available options.

Statement 8: The computer will carry out all the decisions I make in this experiment.

Statement 9: The computer randomly selects one of the two parts (part A or B). The decision made in this part is then implemented. Each part is equally probable.

SCREEN 10 – 11: *Decision Screens Part A*

SCREEN 12

Instructions Part B

The general decision situation and your task in Part B is similar to the one in Part A. You again have the opportunity to specify the conditions under which a participant in a future experiment can make decisions. As before, you can decide whether all options should be available to the future participant or whether you want to advise him against choosing certain options. However, the person will be a different one than in Part A.

In contrast to Part A, however, this decision is now made in a group rather than alone. For this purpose, two participants from this experiment are randomly assigned to each other. The group members then first have the opportunity to exchange ideas and consult via chat. The goal is to reach a joint group decision. Following the exchange via chat, both group members must enter the decision they previously agreed upon. Only if both group members enter exactly the same decision will the experiment continue. If the two group members enter a different decision, the chat discussion will continue until an agreement is reached.

In Part B, there are fewer future participants whose decision options can be influenced than in Part A. You can decide in Part B whether you want to be part of a group that determines the choice options for a future participant.

If more participants want to make this decision as part of a group than there are future participants, we will make a selection of participants to be part of a group. The selection will be made regardless of your decision. If fewer participants want to make this decision than there are future experiment participants, the remaining future participants will each get the choice options that were made available to the majority.

If you are part of a group that sets the conditions for a future participant, you can communicate with the other person as described above to make a joint decision. If you do not belong to a group that sets the conditions for a future participant, you can also exchange with another person in the chat, but you do not make a decision.

SCREEN 13 – 16: *Decision Screens Part B*

Selection Experiment (German original)

Instructions are shown for choice architects in the GROUP treatment. The instructions for the Individual treatment are very similar and available upon request.

SCREEN 1

Herzlich willkommen zu diesem Experiment.

Um mit dem Experiment zu beginnen, klicken Sie bitte auf ‚Weiter'.

SCREEN 2

Informationen zur Teilnahme

Experimenttitel: XXX

Experimentleiter/innen: XXX

Experimentbeschreibung: Sie nehmen an einem wissenschaftlichen Entscheidungsexperiment teil. Sie werden während des Experiments Instruktionen lesen, Fragen beantworten und verschiedene Entscheidungen treffen, die Ihre Auszahlung und die Auszahlung anderer Teilnehmer/innen beeinflussen können. An diesem Experiment nehmen viele Teilnehmer gleichzeitig teil. Um allen Teilnehmern einen reibungslosen und zügigen Ablauf zu garantieren, müssen Sie innerhalb eines angemessenen Zeitrahmens reagieren. Bei Überschreitung des Zeitlimits ist keine Fortsetzung des Experiments möglich. In diesem Fall erhalten Sie Ihre Teilnahmeprämie, nicht aber den zusätzlichen Betrag, den Sie während des Experiments hätten verdienen können.

Teilnehmerrechte: Ihre Teilnahme an diesem Experiment ist freiwillig. Damit wir Ihre Daten zu Forschungszwecken verwenden können, ist es nötig, dass Sie alle Teile des Experiments bearbeiten. Sie können jederzeit ohne Angabe von Gründen von der Teilnahme am Experiment zurücktreten. Wenn Sie

sich entschließen, das Experiment abzubrechen, erhalten Sie 2,50 Euro für die Teilnahme, jedoch nicht den zusätzlichen Betrag, den Sie während des Experiments verdient hätten.

Datenschutz: Alle Angaben in diesem Experiment sind anonym und ermöglichen keine Rückschlüsse auf einzelne Teilnehmer/innen. Es besteht keine Verbindung zwischen Ihren anonymen Angaben im Experiment und den personenbezogenen Daten, die über Sie im Teilnehmerportal des Kölner Laboratoriums für Wirtschaftsforschung (CLER) zum Zwecke der Experimenteinladung hinterlegt sind. Die im Rahmen dieses Experiments erhobenen Daten werden ausschließlich für Forschungszwecke genutzt und nur für die wissenschaftliche Auswertung gespeichert. Zur Gewährleistung der Transparenz in der Wissenschaft und im Rahmen von wissenschaftlichen Kooperationsprojekten werden die erhobenen Daten ggf. für eine Nachnutzung durch Dritte zur Verfügung gestellt.

Ich bin mir bewusst, dass ich den/die Experimentleiter/in kontaktieren kann, wenn ich weitere Informationen zum Experiment erhalten möchte, und dass ich den/die Experimentleiter/in oder die zuständige Ethikkommission kontaktieren kann, wenn ich Beschwerde bzgl. meiner Teilnahme einlegen möchte.

Ich bin mit diesen Bedingungen einverstanden. JA/NEIN

SCREEN 4

Das heutige Experiment

Das heutige Experiment ist in zwei Teile unterteilt, Teil A und Teil B. Anschließend folgen noch ein paar Fragen zu Ihrer Person. Am Ende des Experiments wird zufällig einer der beiden Teile ausgewählt und tatsächlich umgesetzt. Im Folgenden erklären wir Ihnen zunächst Ihre Aufgabe in Teil A. Nachdem Sie diesen Teil abgeschlossen haben, erhalten Sie die Instruktionen für den darauffolgenden Teil. Bitte treffen Sie in allen Situationen eine wohlüberlegte Entscheidung, da jede Entscheidung die sein könnte, die am Ende zählt.

Ihre Aufgabe in Teil A

Ihre Aufgabe in Teil A besteht darin, zu bestimmen, unter welchen Bedingungen ein Teilnehmer an einem zukünftigen Experiment Entscheidungen treffen kann. Ihre Entscheidungen können dabei die Entscheidungsmöglichkeiten und die Auszahlung des zukünftigen Teilnehmers beeinflussen. Sie sind die einzige Person, die die Entscheidungsmöglichkeiten dieses zukünftigen Experimentteilnehmers bestimmt.

Das andere Experiment wird in den nächsten vier Wochen durchgeführt. Die Teilnehmer an diesem Experiment sind, genau wie Sie, für Experimente im Kölner Laboratorium für Wirtschaftsforschung (CLER) registriert. Dabei ist ausgeschlossen, dass Teilnehmer für beide Experimente ausgewählt werden. Für den Fall, dass es weniger Teilnehmer beim anderen als beim heutigen Experiment gibt, wählen wir unter allen heutigen Teilnehmern zufällig und mit gleicher Wahrscheinlichkeit aus, wessen Entscheidungen umgesetzt werden.

Im Anschluss an Ihre heutige Entscheidung über die Bedingungen, unter denen der Teilnehmer des zukünftigen Experiments seine Entscheidungen treffen kann, bitten wir Sie einen Zoom-Raum zu betreten. In diesem Zoom-Raum werden Sie und eine weitere Person sein. Es ist Ihre Aufgabe, der anderen Person im Zoom-Raum mitzuteilen, welche Entscheidung Sie im Experiment getroffen haben. Sie teilen der anderen Person also mit, welche Bedingungen Sie für den Teilnehmer des zukünftigen Experiments festgelegt haben.

WICHTIG: Wir werden die Partnerstudien mit den zukünftigen Experimentsteilnehmern innerhalb der nächsten 4 Wochen durchführen und Ihre Entscheidungen werden zukünftige Experimentteilnehmer genau mit den hier beschriebenen Regeln beeinflussen.

Bevor wir Ihnen Ihre Aufgabe im Detail erklären, beschreiben wir Ihnen im Folgenden zunächst die Entscheidungssituation der Teilnehmer am zukünftigen Experiment.

SCREEN 5

Aufgabe der Teilnehmer am zukünftigen Experiment

Die Teilnehmer am zukünftigen Experiment müssen insgesamt zwei Entscheidungen treffen. Eine dieser Entscheidungen wird am Ende des Experiments zufällig ausgewählt. Die in dieser Entscheidungssituation getroffene Entscheidung bestimmt dann die Auszahlung des Teilnehmers. In jeder der beiden Entscheidungssituationen kann der zukünftige Experimentsteilnehmer aus vier Optionen wählen. Dies sieht wie folgt aus:

☐	Option A
☐	Option B
☐	Option C
☐	Option D

In den Entscheidungssituationen werden die Optionen A, B, C und D durch konkrete Auszahlungen ersetzt. Die Optionen können dabei sowohl die eigene Auszahlung des Experimentsteilnehmers als auch die Auszahlung von jemand anderem beeinflussen.

SCREEN 6

Ihre Aufgabe

Sie können die Entscheidungssituation des Teilnehmers am zukünftigen Experiment wie folgt beeinflussen.

1. Sie können entscheiden, ob dem zukünftigen Experimentsteilnehmer alle Optionen zur Verfügung stehen sollen, oder ob eine oder mehrere davon nicht verfügbar sein sollen. Sie müssen dabei in jeder Situation mindestens eine Option zur Verfügung stellen.

2. Sie können dem zukünftigen Experimentsteilnehmer davon abraten, bestimmte Optionen zu wählen. Falls Sie dies tun, wird der zukünftige Experimentteilnehmer Folgendes sehen, wenn er Entscheidungen über seine Optionen trifft:

☐	Option A
☐	Option B
☐	Option C*
☐	Option D*

* Ein früherer Experimentsteilnehmer, der über diese Optionen nachgedacht hat, rät von dieser Option ab.

Der Bildschirm, auf dem Sie entscheiden können, bestimmte Optionen verfügbar zu machen oder nicht bzw. von bestimmten Optionen abzuraten oder nicht, sieht wie folgt aus:

Option	Verfügbar	Nicht verfügbar	Abraten
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

Hinweis:

Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie, genau jene Entscheidungen zu treffen, die Ihre echten Ansichten reflektieren.

SCREEN 7

Wie der zukünftige Experimentsteilnehmer wählt

Hier sehen Sie, wie der zukünftige Experimentsteilnehmer seine Entscheidungen treffen wird. Wir werden den zukünftigen Experimentsteilnehmer bitten, alle vier Optionen in eine Reihenfolge zu bringen, beginnend mit der von ihm/ihr am meisten bevorzugten Option und endend mit der von ihm/ihr am wenigsten bevorzugten Option. Dazu wird der zukünftige Experimentsteilnehmer jeder Option einen Rang zwischen 1 und 4 zuweisen.

Am Ende des Experiments erhält der zukünftige Experimentsteilnehmer dann jene Option, die er/sie am höchsten eingestuft hat, innerhalb jener Optionen, die verfügbar sind. Bei seiner/ihrer Entscheidung über die Rangfolge der Optionen wird der zukünftige Teilnehmer noch nicht wissen, welche der Optionen verfügbar sind und welche nicht.

Rang	Option
☐	Option A
☐	Option B
☐	Option C
☐	Option D

Beispiel:

Nehmen Sie an, der zukünftige Experimentsteilnehmer weist Option A den Rang 1, Option B den Rang 3, Option C den Rang 4 und Option D den Rang 2 zu. Nehmen Sie weiterhin an, dass Sie Option A für den zukünftigen Experimentsteilnehmer nicht verfügbar machen. In diesem Fall wird der zukünftige Experimentsteilnehmer Option D erhalten. Der Grund ist, dass A nicht verfügbar ist und dass der Teilnehmer D höher einstuft als B und C.

SCREEN 8

Verständnisfragen

Bevor Sie Ihre Entscheidung treffen, bitten wir Sie noch, einige Verständnisfragen zu den Instruktionen und dem Experiment zu beantworten. Dies soll sicherstellen, dass alle Teilnehmer verstehen, wie sich ihre Entscheidungen auf den anderen Experimentteilnehmer auswirken. Bitte beachten Sie, dass Ihnen zur Beantwortung der Fragen maximal 5 Minuten zur Verfügung stehen.

Nehmen Sie an, dass der zukünftige Experimentsteilnehmer Option B zuoberst einstuft, gefolgt von C und D, und dass er Option A am niedrigsten einstuft.

Frage 1: Wenn alle Optionen verfügbar sind, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 2: Wenn Option A nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 3: Wenn Option B nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 4: Wenn Option C nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 5: Wenn Optionen B, C und D nicht verfügbar sind, welche wird der zukünftige Experimentsteilnehmer erhalten?

SCREEN 9

Verständnisfragen - Teil 2

Bitte wählen Sie alle wahren Aussagen aus (und nur diese).

Aussage 1: Ich kann einige Optionen zur Verfügung stellen und andere nicht, wenn ich das für richtig halte.

Aussage 2: Ich kann alle Optionen zur Verfügung stellen, wenn ich das für richtig halte.

Aussage 3: Ich kann alle bis auf eine Option nicht verfügbar machen, wenn ich das für richtig halte.

Aussage 4: Es gibt keine richtigen oder falschen Entscheidungen, ich kann Optionen verfügbar oder unverfügbar machen und ich kann von Optionen abraten oder nicht, je nachdem was ich für richtig halte (solange mindestens eine Option für den zukünftigen Experimentsteilnehmer verfügbar bleibt).

Aussage 5: Es gibt richtige oder falsche Entscheidungen, ich kann nicht einfach verfügbar oder unverfügbar machen, was ich für richtig halte.

Aussage 6: Der zukünftige Experimentsteilnehmer wird nur jene Optionen sehen, die ich zur Verfügung stelle, und wird die Optionen, die ich nicht zur Verfügung stelle, nicht einmal sehen.

Aussage 7: Der zukünftige Experimentsteilnehmer wird alle Optionen einstufen. Er wird nicht wissen, welche verfügbar oder nicht verfügbar sind. Seine Auszahlung richtet sich nach der am höchsten eingestuften Option unter den verfügbaren Optionen.

Aussage 8: Der Computer wird alle Entscheidungen, die ich in diesem Experiment treffe, ausführen.

Aussage 9: Der Computer wählt zufällig einen der beiden Teile (Teil A oder B) aus. Die in diesem Teil getroffen Entscheidung wird dann umgesetzt. Jeder Teil ist dabei gleich wahrscheinlich.

SCREEN 10 – 11: *Decision Screens Part A*

SCREEN 12

Instruktionen Teil B

Die Ausgangssituation und Ihre Aufgabe in Teil B ist ähnlich wie in Teil A. Sie haben wiederum die Möglichkeit, die Bedingungen, unter denen ein Teilnehmer eines zukünftigen Experiments Entscheidungen treffen kann, festzulegen. Wie zuvor können Sie entscheiden, ob dem zukünftigen Teilnehmer bestimmte Auswahloptionen nicht zur Verfügung stehen sollen oder ob Sie ihm von bestimmten Optionen abraten möchten. Die Person ist dabei jedoch eine andere als in Teil A.

Im Unterschied zu Teil A treffen Sie diese Entscheidung jedoch nun nicht allein, sondern in einer Gruppe. Dazu werden zwei Teilnehmer aus diesem Experiment einander zufällig zugeordnet. Gemeinsam mit diesem Teilnehmer haben Sie dann zunächst die Möglichkeit, sich per Chat auszutauschen und zu beraten, mit dem Ziel, eine gemeinsame Entscheidung zu treffen. Im Anschluss an den Austausch per Chat müssen beide Gruppenmitglieder die Entscheidung eingeben, auf die sie sich zuvor geeinigt haben. Nur wenn beide Gruppenmitglieder exakt die gleiche Entscheidung eingeben wird das Experiment fortgesetzt. Sollten Sie und ihr Gruppenmitglied eine unterschiedliche Entscheidung eingeben, wird die Diskussion über den Chat solange fortgesetzt, bis es eine Einigung gibt.

In Teil B gibt es weniger zukünftige Experimentsteilnehmer, deren Entscheidungsmöglichkeiten beeinflusst werden können, als in Teil A. Sie können in Teil B entscheiden, ob Sie Teil einer Gruppe sein möchten, die Auswahloptionen für einen zukünftigen Experimentsteilnehmer festlegt oder nicht.

Falls mehr Teilnehmer diese Entscheidung als Teil einer Gruppe treffen möchten als es zukünftige Experimentsteilnehmer gibt, werden wir eine Auswahl von Teilnehmern vornehmen, die Teil einer Gruppe sind. Die Auswahl erfolgt unabhängig von Ihrer Entscheidung. Falls weniger Teilnehmer diese

Entscheidung treffen möchten als es zukünftige Experimentteilnehmer gibt, werden die übrigen zukünftigen Entscheidungsteilnehmer jeweils die Auswahloptionen bekommen, die mehrheitlich verfügbar gemacht wurden.

Wenn Sie zu einer Gruppe gehören, die die Bedingungen für einen zukünftigen Teilnehmer festlegt, können Sie sich wie oben beschrieben mit der anderen Person austauschen, um eine gemeinsame Entscheidung zu treffen. Wenn Sie nicht zu einer Gruppe gehören, die die Bedingungen für einen zukünftigen Teilnehmer festlegt, können Sie sich ebenfalls mit einer anderen Person im Chat austauschen, treffen aber keine Entscheidung.

WICHTIG: Bitte diskutieren Sie im Chat nur über Ihre Entscheidung. Das Austauschen anderer, insbesondere privater Informationen, durch die Sie identifiziert werden können, ist nicht gestattet. Eine Nichtbeachtung dieser Regel kann zum Ausschluss aller Zahlungen führen.

SCREEN 13 – 16: *Decision Screens Part B*

B3. Social Image Experiment (English translation)

Instructions are shown for choice architects in the PUBLIC treatment. The instructions for the PRIVATE treatment are very similar and available upon request.

SCREEN 1

Welcome to this experiment.

To start the experiment, please click on 'Next'.

SCREEN2

Participant information

Experiment title: XXX

Person responsible for the experiment: XXX

Experiment description: You will take part in a scientific decision-making experiment. During the experiment, you will read instructions, answer questions and make various decisions that can affect your payoff and the payoff of other participants. Many participants will take part in this experiment at the same time.

Participant rights: Your participation in this experiment is voluntary. In order for us to use your data for research purposes, it is necessary that you complete all parts of the experiment. You can withdraw from participation in the experiment at any time without giving any reason. If you decide to withdraw from the experiment, you will receive 5.00 € for participating, but not the additional amount you would have earned during the experiment.

Data protection: All information in this experiment is anonymous and does not allow any conclusions to be drawn about individual participants. There is no connection between your anonymous information in the experiment and the personal data stored about you in the participant portal of the Cologne Laboratory for Economic Research (CLER) for the purpose of inviting you to the experiment. The data collected in the course of this experiment will be used exclusively for research purposes and stored only for scientific evaluation. To ensure transparency in science and within the framework of scientific cooperation projects, the collected data may be made available for subsequent use by third parties.

I am aware that I may contact the person responsible for this experiment if I wish to receive further information about the experiment, and that I may contact her/him or the relevant ethics committee if I wish to make a complaint about my participation.

I agree with these conditions. YES/NO

SCREEN 3

General information

Welcome and thank you for participating in this experiment. For showing up on time for the experiment, you will receive a participation bonus of 4.00 €. In addition, you will receive 6.00 € as a fixed payment if you complete the experiment.

By clicking 'Continue' you agree to the terms and conditions.

SCREEN 4

Today's experiment

Your task in today's experiment is to determine under which conditions a participant in a future experiment can make decisions. In doing so, your decisions can influence the future participant's decision-making options and payoff. You are the only person who determines the decision-making possibilities of this future participant.

The other experiment will be conducted in the next four weeks. The participants in this experiment, just like you, are registered for experiments at the Cologne Laboratory for Economic Research (CLER). This excludes the possibility that participants are selected for both experiments. In the event that there are fewer participants in the other experiment than in today's experiment, we will randomly select from all today's participants with equal probability whose decisions will be implemented.

IMPORTANT: We will conduct the partner studies with the future participants within the next 4 weeks and your decisions will influence future participants exactly with the rules described here.

Before we explain your task in detail, we will first describe the decision-making situation of the participants in the future experiment.

SCREEN 5

Task of the participants in the future experiment

The participants in the future experiment have to make a total of two decisions. One of these decisions is randomly selected at the end of the experiment. The decision made in this decision situation then determines the participant's payment. In each of the two decision situations, the future participant can choose between four options. This looks as follows:

☐	Option A
☐	Option B
☐	Option C
☐	Option D

In the decision situations, options A, B, C and D are replaced by concrete payoffs. The options can influence both the participant's own payment as well as the payoff of someone else.

SCREEN 6

Your task

You can influence the decision-making situation of the participant in the future experiment as follows.

1. you can decide whether all options should be available to the future participant or whether one or more of them should not be available. You must make at least one option available in each situation.

2. you can advise the future participant not to choose certain options. If you do this, the future participant will see the following when making decisions about their options:

☐	Option A
☐	Option B
☐	Option C*
☐	Option D*

* A previous participant who has thought about these options recommends against choosing that option

The screen where you can decide to make certain options available or not, or to advise against certain options or not, looks like this:

Option	Available	Not available	Recommend against
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

Hint:

There are no right or wrong answers. We ask you to make exactly those choices that reflect your genuine views.

SCREEN7 (only in PUBLIC treatment)

Announcement of your decision

Following your decisions on the conditions under which a future participant can make decisions, each participant in today's experiment will personally communicate their decision to all other participants. For this purpose, we will call you and the other participants one after the other. Your decision will be displayed on your screen again at that time and the correctness of your statement will be checked by the experimenter.

Procedure of the announcement

To announce your decision, please stand up, state your first name, and tell the other participants what conditions you have set for the future participant. To do this, for each of the options A, B, C, and D, please say which of the following choices you have made for that option (here using option A as an example):

- "I have made option A available to the future participant." OR

- "I have made option A available to the future participant. However, I have advised against choosing the option." OR
- "I have made option A not available for the future participant."

Do the same for options B, C, and D. Once all participants in today's experiment have announced their decisions, the experiment is over.

SCREEN8

How the future participant chooses

Here you can see how the future participant will make his/her choices. We will ask the future participant to rank all four options, starting with the option he/she prefers the most and ending with the option he/she prefers the least. To do this, the future participant will assign a rank between 1 and 4 to each option.

At the end of the experiment, the future participant will then be given the option that he/she ranked highest within those options that are available. In his/her decision on the ranking of the options, the future participant will not yet know which of the options are available and which are not.

Rank	Option
☐	Option A
☐	Option B
☐	Option C
☐	Option D

Example:

Assume that the future participant assigns rank 1 to option A, rank 3 to option B, rank 4 to option C, and rank 2 to option D. Assume further that you do not make option A available to the future participant. In this case, the future participant will receive option D. The reason is that A is not available, and the participant ranks D higher than B and C.

SCREEN9

Comprehension questions

Before you make your decision, we ask you to answer some comprehension questions about the instructions and the experiment. This is to ensure that all participants understand how their decisions affect the future participant. Please note that you will have a maximum of 5 minutes to answer the questions.

Assume that the future experiment participant ranks option B highest, followed by C and D, and that he/she ranks option A lowest.

Question 1: If all options are available, which option will the future participant receive?

Question 2: If option A is not available, which option will the future participant receive?

Question 3: If option B is not available, which option will the future participant receive?

Question 4: If option C is not available, which option will the future participant receive?

Question 5: If options B, C, and D are not available, which option will the future participant receive?

SCREEN 10

Comprehension Questions - Part 2

Please select all true statements (and only these).

Statement 1: I can make some options available and others unavailable if I think that is right.

Statement 2: I can make all options available if I think that is right.

Statement 3: I can make all but one option unavailable if I think that is right.

Statement 4: There are no right or wrong choices, I can make options available or unavailable and I can advise against options or not, depending on what I think is right (as long as at least one option remains available to the future experiment participant).

Statement 5: There are right or wrong choices, I cannot simply make options available or unavailable if I think that is right.

Statement 6: The future participant will only see those options that I make available and will not even see the options that I make unavailable.

Statement 7: The future participant will rank all options. He will not know which options are available and which are not. His payment will be based on the highest-ranked option among the available options.

Statement 8: The computer will carry out all the decisions I make in this experiment.

Statement 9: After making my decisions, I must announce them to all other participants.

Social Image Experiment (German original)

Instructions are shown for choice architects in the PUBLIC treatment. The instructions for the PRIVATE treatment are very similar and available upon request.

SCREEN 1

Herzlich willkommen zu diesem Experiment.

Um mit dem Experiment zu beginnen, klicken Sie bitte auf ‚Weiter'.

SCREEN 2

Informationen zur Teilnahme

Experimenttitel: XXX

Experimentleiter/innen: XXX

Experimentbeschreibung: Sie nehmen an einem wissenschaftlichen Entscheidungsexperiment teil. Sie werden während des Experiments Instruktionen lesen, Fragen beantworten und verschiedene Entscheidungen treffen, die Ihre Auszahlung und die Auszahlung anderer Teilnehmer/innen beeinflussen können. An diesem Experiment nehmen viele Teilnehmer gleichzeitig teil. Um allen Teilnehmern einen reibungslosen und zügigen Ablauf zu garantieren, müssen Sie innerhalb eines angemessenen Zeitrahmens reagieren. Bei Überschreitung des Zeitlimits ist keine Fortsetzung des Experiments möglich. In diesem Fall erhalten Sie Ihre Teilnahmeprämie, nicht aber den zusätzlichen Betrag, den Sie während des Experiments hätten verdienen können.

Teilnehmerrechte: Ihre Teilnahme an diesem Experiment ist freiwillig. Damit wir Ihre Daten zu Forschungszwecken verwenden können, ist es nötig, dass Sie alle Teile des Experiments bearbeiten. Sie können jederzeit ohne Angabe von Gründen von der Teilnahme am Experiment zurücktreten. Wenn Sie sich entschließen, das Experiment abzubrechen, erhalten Sie 2,50 Euro für die Teilnahme, jedoch nicht den zusätzlichen Betrag, den Sie während des Experiments verdient hätten.

Datenschutz: Alle Angaben in diesem Experiment sind anonym und ermöglichen keine Rückschlüsse auf einzelne Teilnehmer/innen. Es besteht keine Verbindung zwischen Ihren anonymen Angaben im Experiment und den personenbezogenen Daten, die über Sie im Teilnehmerportal des Kölner Laboratoriums für Wirtschaftsforschung (CLER) zum Zwecke der Experimenteinladung hinterlegt sind. Die im Rahmen dieses Experiments erhobenen Daten werden ausschließlich für Forschungszwecke genutzt und nur für die wissenschaftliche Auswertung gespeichert. Zur Gewährleistung der Transparenz in der Wissenschaft und im Rahmen von wissenschaftlichen Kooperationsprojekten werden die erhobenen Daten ggf. für eine Nachnutzung durch Dritte zur Verfügung gestellt.

Ich bin mir bewusst, dass ich den/die Experimentleiter/in kontaktieren kann, wenn ich weitere Informationen zum Experiment erhalten möchte, und dass ich den/die Experimentleiter/in oder die zuständige Ethikkommission kontaktieren kann, wenn ich Beschwerde bzgl. meiner Teilnahme einlegen möchte.

Ich bin mit diesen Bedingungen einverstanden. JA/NEIN

SCREEN 3

Generelle Informationen

Herzlich willkommen und vielen Dank für Ihre Teilnahme an diesem Experiment. Für Ihr pünktliches Erscheinen zum Experiment erhalten Sie eine Teilnahmeprämie in Höhe von 2.50 €. Zusätzlich erhalten Sie 10.00 € als feste Auszahlung, wenn Sie das Experiment abschließen.

Die Auszahlung aus diesem Experiment erfolgt über PayPal. Um Ihre Auszahlung zu erhalten, werden Sie am Ende des Experiments gebeten Ihre Email-Adresse, welche Sie bei PayPal hinterlegt haben, einzugeben. Ihre PayPal-Email-Adresse wird unsererseits nach Abschluss der Zahlung gelöscht.

Indem Sie auf 'Weiter' klicken, erklären Sie sich mit den Auszahlungsbedingungen einverstanden.

SCREEN 4

Das heutige Experiment

Im Folgenden erklären wir Ihnen Ihre Aufgabe in diesem Experiment. Bitte treffen Sie in allen Situationen eine wohlüberlegte Entscheidung, da jede Entscheidung die sein könnte, die am Ende zählt. Im Anschluss an das Experiment folgen noch ein paar Fragen zu Ihrer Person.

Ihre Aufgabe

Ihre Aufgabe besteht darin, zu bestimmen, unter welchen Bedingungen ein Teilnehmer an einem zukünftigen Experiment Entscheidungen treffen kann. Ihre Entscheidungen können dabei die Entscheidungsmöglichkeiten und die Auszahlung des zukünftigen Teilnehmers beeinflussen. Sie sind die einzige Person, die die Entscheidungsmöglichkeiten dieses zukünftigen Experimentteilnehmers bestimmt.

Das andere Experiment wird in den nächsten vier Wochen durchgeführt. Die Teilnehmer an diesem Experiment sind, genau wie Sie, für Experimente im Kölner Laboratorium für Wirtschaftsforschung (CLER) registriert. Dabei ist ausgeschlossen, dass Teilnehmer für beide Experimente ausgewählt werden. Für den Fall, dass es weniger Teilnehmer beim anderen als beim heutigen Experiment gibt, wählen wir unter allen heutigen Teilnehmern zufällig und mit gleicher Wahrscheinlichkeit aus, wessen Entscheidungen umgesetzt werden.

Im Anschluss an Ihre heutige Entscheidung über die Bedingungen, unter denen der Teilnehmer des zukünftigen Experiments seine Entscheidungen treffen kann, bitten wir Sie einen Zoom-Raum zu betreten. In diesem Zoom-Raum werden Sie und eine weitere Person sein. Es ist Ihre Aufgabe, der anderen Person im Zoom-Raum mitzuteilen, welche Entscheidung Sie im Experiment getroffen haben. Sie teilen der anderen Person also mit, welche Bedingungen Sie für den Teilnehmer des zukünftigen Experiments festgelegt haben.

WICHTIG: Wir werden die Partnerstudien mit den zukünftigen Experimentsteilnehmern innerhalb der nächsten 4 Wochen durchführen und Ihre Entscheidungen werden zukünftige Experimentteilnehmer genau mit den hier beschriebenen Regeln beeinflussen.

Bevor wir Ihnen Ihre Aufgabe im Detail erklären, beschreiben wir Ihnen im Folgenden zunächst die Entscheidungssituation der Teilnehmer am zukünftigen Experiment.

SCREEN 5

Aufgabe der Teilnehmer am zukünftigen Experiment

Die Teilnehmer am zukünftigen Experiment müssen insgesamt zwei Entscheidungen treffen. Eine dieser Entscheidungen wird am Ende des Experiments zufällig ausgewählt. Die in dieser Entscheidungssituation getroffene Entscheidung bestimmt dann die Auszahlung des Teilnehmers. In jeder der beiden Entscheidungssituationen kann der zukünftige Experimentsteilnehmer aus vier Optionen wählen. Dies sieht wie folgt aus:

☐	Option A
☐	Option B
☐	Option C
☐	Option D

In den Entscheidungssituationen werden die Optionen A, B, C und D durch konkrete Auszahlungen ersetzt. Die Optionen können dabei sowohl die eigene Auszahlung des Experimentsteilnehmers als auch die Auszahlung von jemand anderem beeinflussen.

SCREEN 6

Ihre Aufgabe

Sie können die Entscheidungssituation des Teilnehmers am zukünftigen Experiment wie folgt beeinflussen.

1. Sie können entscheiden, ob dem zukünftigen Experimentsteilnehmer alle Optionen zur Verfügung stehen sollen, oder ob eine oder mehrere davon nicht verfügbar sein sollen. Sie müssen dabei in jeder Situation mindestens eine Option zur Verfügung stellen.

2. Sie können dem zukünftigen Experimentsteilnehmer davon abraten, bestimmte Optionen zu wählen. Falls Sie dies tun, wird der zukünftige Experimentteilnehmer Folgendes sehen, wenn er Entscheidungen über seine Optionen trifft:

☐	Option A
☐	Option B
☐	Option C*
☐	Option D*

* Ein früherer Experimentsteilnehmer, der über diese Optionen nachgedacht hat, rät von dieser Option ab.

Der Bildschirm, auf dem Sie entscheiden können, bestimmte Optionen verfügbar zu machen oder nicht bzw. von bestimmten Optionen abzuraten oder nicht, sieht wie folgt aus:

Option	Verfügbar	Nicht verfügbar	Abraten
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

Hinweis:

Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie, genau jene Entscheidungen zu treffen, die Ihre echten Ansichten reflektieren.

SCREEN 7

Mitteilung Ihrer Entscheidung im Zoom-Raum

Im Anschluss an Ihre Entscheidungen über die Entscheidungsbedingungen des zukünftigen Experimenteilnehmers kommen Sie auf einen Bildschirm, auf dem eine zufällig ausgewählte Ihrer Entscheidungen abgebildet ist.

Dort erhalten Sie auch einen Link zu einem Zoom-Raum, den Sie betreten.

In dem Raum befindet sich eine weitere Person. Wir bitten Sie Ihren Bildschirm, auf dem Ihre Entscheidung dargestellt ist, mit der Person zu teilen. Bitte nennen Sie der Personen außerdem Ihren Namen und teilen ihr mit, welche Bedingungen Sie für den zukünftigen Teilnehmer festgelegt haben.

Dazu teilen Sie der Person für jede der Optionen A, B, C und D jeweils Ihre Entscheidung mit, indem Sie **eine** der folgenden Entscheidungen für die jeweilige Option benennen (hier am Beispiel von Option A):

„Option A habe ich für den zukünftigen Teilnehmer ‚Verfügbar ' gemacht." **ODER**

„Option A habe ich für den zukünftigen Teilnehmer ‚Verfügbar ' gemacht. Ich habe aber von der Option abgeraten." **ODER**

„Option A habe ich für den zukünftigen Teilnehmer ‚Nicht verfügbar ' gemacht."

Das gleiche machen Sie für die Optionen B, C und D. Im Anschluss erhalten Sie von der Person im Raum per Chat ein Passwort, das sie unten eingeben, um auf den nächsten Bildschirm gelangen.

Option	Verfügbar	Nicht verfügbar	Abraten
Option A	o	o	☐
Option B	o	o	☐
Option C	o	o	☐
Option D	o	o	☐

SCREEN 8

Wie der zukünftige Experimentsteilnehmer wählt

Hier sehen Sie, wie der zukünftige Experimentsteilnehmer seine Entscheidungen treffen wird. Wir werden den zukünftigen Experimentsteilnehmer bitten, alle vier Optionen in eine Reihenfolge zu bringen, beginnend mit der von ihm/ihr am meisten bevorzugten Option und endend mit der von ihm/ihr am wenigsten bevorzugten Option. Dazu wird der zukünftige Experimentsteilnehmer jeder Option einen Rang zwischen 1 und 4 zuweisen.

Am Ende des Experiments erhält der zukünftige Experimentsteilnehmer dann jene Option, die er/sie am höchsten eingestuft hat, innerhalb jener Optionen, die verfügbar sind. Bei seiner/ihrer Entscheidung über die Rangfolge der Optionen wird der zukünftige Teilnehmer noch nicht wissen, welche der Optionen verfügbar sind und welche nicht.

Rang	Option
☐	Option A
☐	Option B
☐	Option C
☐	Option D

Beispiel:

Nehmen Sie an, der zukünftige Experimentsteilnehmer weist Option A den Rang 1, Option B den Rang 3, Option C den Rang 4 und Option D den Rang 2 zu. Nehmen Sie weiterhin an, dass Sie Option A für den zukünftigen Experimentsteilnehmer nicht verfügbar machen. In diesem Fall wird der zukünftige Experimentsteilnehmer Option D erhalten. Der Grund ist, dass A nicht verfügbar ist und dass der Teilnehmer D höher einstuft als B und C.

SCREEN 9

Verständnisfragen

Bevor Sie Ihre Entscheidung treffen, bitten wir Sie noch, einige Verständnisfragen zu den Instruktionen und dem Experiment zu beantworten. Dies soll sicherstellen, dass alle Teilnehmer verstehen, wie sich ihre Entscheidungen auf den anderen Experimentteilnehmer auswirken. Bitte beachten Sie, dass Ihnen zur Beantwortung der Fragen maximal 5 Minuten zur Verfügung stehen.

Nehmen Sie an, dass der zukünftige Experimentsteilnehmer Option B zuoberst einstuft, gefolgt von C und D, und dass er Option A am niedrigsten einstuft.

Frage 1: Wenn alle Optionen verfügbar sind, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 2: Wenn Option A nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 3: Wenn Option B nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 4: Wenn Option C nicht verfügbar ist, welche wird der zukünftige Experimentsteilnehmer erhalten?

Frage 5: Wenn Optionen B, C und D nicht verfügbar sind, welche wird der zukünftige Experimentsteilnehmer erhalten?

SCREEN 10

Verständnisfragen - Teil 2

Bitte wählen Sie alle wahren Aussagen aus (und nur diese).

Aussage 1: Ich kann einige Optionen zur Verfügung stellen und andere nicht, wenn ich das für richtig halte.

Aussage 2: Ich kann alle Optionen zur Verfügung stellen, wenn ich das für richtig halte.

Aussage 3: Ich kann alle bis auf eine Option nicht verfügbar machen, wenn ich das für richtig halte.

Aussage 4: Es gibt keine richtigen oder falschen Entscheidungen, ich kann Optionen verfügbar oder unverfügbar machen und ich kann von Optionen abraten oder nicht, je nachdem was ich für richtig halte (solange mindestens eine Option für den zukünftigen Experimentsteilnehmer verfügbar bleibt).

Aussage 5: Es gibt richtige oder falsche Entscheidungen, ich kann nicht einfach verfügbar oder unverfügbar machen, was ich für richtig halte.

Aussage 6: Der zukünftige Experimentsteilnehmer wird nur jene Optionen sehen, die ich zur Verfügung stelle, und wird die Optionen, die ich nicht zur Verfügung stelle, nicht einmal sehen.

Aussage 7: Der zukünftige Experimentsteilnehmer wird alle Optionen einstufen. Er wird nicht wissen, welche verfügbar oder nicht verfügbar sind. Seine Auszahlung richtet sich nach der am höchsten eingestuften Option unter den verfügbaren Optionen.

Aussage 8: Der Computer wird alle Entscheidungen, die ich in diesem Experiment treffe, ausführen.

Aussage 9: Der Computer wählt zufällig einen der beiden Teile (Teil A oder B) aus. Die in diesem Teil getroffen Entscheidung wird dann umgesetzt. Jeder Teil ist dabei gleich wahrscheinlich.