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Groups Are More Libertarian than Individuals

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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 involving individual decision making (Internality) and one involving social decision making (Externality). Analyses of the group chat logs and two additional experiments show that participants tend to shy away from proposing interventions in social contexts, even when they intervene individually. We conclude that interventions differ systematically between individual and social contexts, and that transferring decision-making power to groups can lead to a "liberal shift".

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1. Introduction

The governance of societies and organizations regularly requires leaders to make decisions about the degree of individuals' choice autonomy. Such decisions are often made by groups, for example management boards or employee teams. In this paper, we study when, why, and how groups are willing to restrict the choice autonomy of others and examine how group interventions compare with 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, other individuals 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. 2023, Kölle et al. 2024). However, little is known about how *groups* resolve these conflicting views on decision autonomy and how collective decisions aggregate the individual intervention preferences.

To shed light on these questions, we conduct preregistered laboratory experiments (with mostly student subjects) in which participants act either as *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 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). To avoid that CAs simply intervene because they have no other way to give advice or communicate their opinion, they also have the opportunity to recommend against certain choices.

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. Neither individuals nor groups can rely on a default option for when groups cannot agree on a decision; they must make active choices. In both treatments, we have an initial decision (stage 1) where all participants make individual intervention choices to elicit their intervention preferences. Based on these individual decisions, we classify participants as either liberals or interventionists.[1]

We discuss predictions based on a rational choice benchmark as well as alternative considerations that we base on the previous literature on group decision making, autonomy and intervention behavior (e.g., Charness and Sutter 2012, Bartling et al. 2014, Ambuehl et al. 2021). While the rational choice benchmark suggests that groups and individuals display a similar willingness to intervene in both decision situations, alternative (nonrational choice) considerations suggest several reasons of why interventions may differ between groups and individuals (see Section 2.3).

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% versus 26%). The finding of fewer group interventions is prevalent and significant in both decision contexts, *Internality* and *Externality*. Because the actual fraction of group interventions is significantly lower than what would be expected based on the individual preferences of the group members, we conclude that individual preferences for interventions are not fully reflected in group decisions, which tend to settle on the libertarian view.

The experimental data show that the difference between groups and individuals cannot be explained by a mechanism in which groups seek to avoid coordination costs by agreeing on the seemingly easy option of not intervening at all. Indeed, groups do incur coordination costs by agreeing on recommendations against certain options. Moreover, the chat logs from the group discussions suggest 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 liberals are more persistent or persuasive in enforcing their preference. Instead, the chat logs show 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 tend to 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 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 only consists of one individual intervention stage in which we manipulate social image concerns, following the methodology of standard social image experiments such as Ewers and Zimmermann (2015). Specifically, 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 participants who prefer not to intervene. In the second experiment, we find that individuals intervene less often when they must publicly disclose their decisions. Overall, these results show that one channel through which (part of) the difference in intervention behavior between groups and individuals can be explained is the social context of the group decision, which discourages interventions. We discuss our findings and potential alternative explanations in Section 5.1.

Our finding that groups are more libertarian than individuals captures a general behavioral phenomenon with specific management implications. In recent years, organizations 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 toward greater decision-making autonomy for employees, particularly evident in agile organizations (Rajan and Wulf 2006, Bass 2009, Rigby et al. 2018, Doz and Guadalupe 2019). We identify a mechanism that relates these two major trends: more managerial team decision making may increase the level of autonomy granted to employees.[2] Our results indicate that allocating more decision-making power to groups may causally prompt a "liberal shift" in the governance of organizations, possibly leading to less hierarchical organizational structures and less interventionist leadership styles.[3] Generally, 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 suggest that managers contemplating an increase in group decision making within their organization should consider

possible, and perhaps unforeseen, impacts on employee autonomy when designing management practices, as these can play a significant role in business success (Bloom and van Reenen 2007). Section 5.2 further discusses the external validity of our findings with respect to business contexts.

Our paper further speaks to the behavioral economics literature that studies preferences for autonomy and paternalism (see, e.g., Ambuehl et al. 2021, Bartling et al. 2023 and references therein). We add to this literature by showing that in social contexts, that is, 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 organizations, suggesting, for example, that policy preferences for a strong state or leadership are less likely to be expressed in public than in private.

Finally, our findings highlight that the social context created by group decision making may per se explain differences between groups and individuals. A similar mechanism may be at work in other contexts where groups and individuals have been shown to behave differently (see Charness and Sutter 2012, Kugler et al. 2012, Kocher et al. 2020 for reviews), 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).

The paper proceeds as follows. In Section 2, we describe the design (2.1) and procedures (2.2) of our main experiment, and discuss theoretical considerations (2.3). Section 3 presents the results of our main experiment. In Section 4, we present empirical evidence (including two additional experiments) to shed light on potential mechanisms to explain the main experiment's findings. Section 5 concludes the paper with a discussion of the internal validity of our experiment (5.1), the external validity with respect to business contexts (5.2), and the implications of our findings for decision-makers and welfare (5.3).

2. The Experiment

2.1 Experimental Design

2.1.1. 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: "Decision Maker" (DM - *he*) and "Choice Architect" (CA – *she*). Our interest in this study is in the choices of the CAs who can decide whether to intervene in the DM's choices. In this study, similar to Ambuehl et al. (2021), an intervention is defined as a factual choice restriction in the sense that people have fewer choice options in case of an intervention.[4] The sole function of the DMs in our experiment is to render the CAs' decisions consequential.

We first present the details on the DMs choices. We then describe the context of the intervention decision and our treatment manipulation.

2.1.2. Decision Makers. Each DM faces two decisions, one where he chooses between different amounts of money now and later (*Internality*), and one where he chooses between different amounts of money for himself and a nonprofit organization (*Externality*). 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. The parameterization of the decision is inspired by Menu 1 of the main study in Ambuehl et al. (2021), adding an additional intermediate option to allow for more heterogeneous responses.

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 nonprofit 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. Specifically, we provide (i) an option in which the total distributed monetary amount is maximized and everything is allocated to *Atmosfair*, (ii) a "fair" option where both get the same monetary amount, (iii) a selfish option where the distributed monetary amount is lowest and everything goes to the DM, and (iv) a typical average distribution of payments in a dictator game (Engel 2011). This paradigm is known to trigger heterogeneous responses in individual decision-making contexts (e.g., Andre et al. 2024a, Kölle et al. 2024).

We chose these two experimental paradigms with the aim to (i) cover a wide range of decision contexts (that also offer implications for management decisions),

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	

(ii) learn about the robustness of interventions decisions of groups and individuals, (iii) provide different potential hypotheses about the underlying motives for interventions across treatments (as discussed below), (iv) generate sufficient heterogeneity in intervention behavior to leave room for finding differences between groups and individuals, and (v) capture contexts in which the role of interventions is subject to an ongoing debate among (behavioral) economists and in broader societal discourse.[5]

The order in which the two situations, *Internality* and *Externality*, are presented to CAs was randomized and we provided multiple options to avoid that CAs do not avoid intervention, because they do not want to determine the final decision. We do not provide the same values in the *Internality* and *Externality* situations as we do not aim to compare the two decision contexts directly. Instead, our focus is on the comparison of group and individual decisions within the respective decision context. The values are chosen to make the fourth option in *Internality* particularly inefficient and particularly selfish in *Externality*.

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 over the options that are made available to him by the CA (see below).

2.1.3. 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", that is, the DM will be able to choose that option, or "not available", that is, the DM will not be able to choose that option. The CA makes an active choice for each option in the two decisions, that is, 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.

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.

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 in the sense that they have no direct personal stakes in the decisions of the DM: they receive a fixed payment for their participation.

2.1.4. 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

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	○	○	□

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.

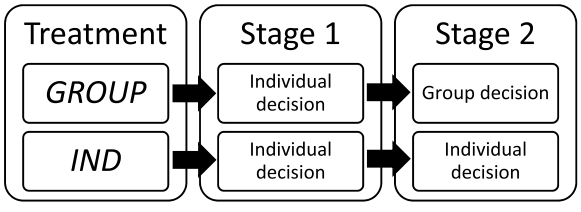
2.2. Procedures

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 preregistered 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. Online Appendix C.1 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.

Figure 1. The Flow of the Experiment



2.3. Theoretical Considerations

We select our decision situations, *Internality* and *Externality*, to represent potentially different motivations and decision-making processes underlying interventions. What behavior should one expect in the two situations and how may the intervention choice differ between individuals and groups? We discuss potential predictions based on a rational choice benchmark as well as alternative considerations based on the previous literature on group decision making (e.g., Charness and Sutter 2012), intervention behavior (e.g., Ambuehl et al.

2021) and (value of granting) autonomy (e.g., Bartling et al. 2014).

2.3.1. Rational Choice. In the case of the *Internality* decision, an intervention does not affect the CA's own outcome. Under rational choice assumptions, both CAs and DMs make rational decisions. This implies that DMs maximize their own utility, and thus, an intervention can only diminish DM's welfare. Since interventions do not affect the CA's own outcome and can only reduce the welfare of the DMs, CAs have no reason to intervene. Thus, from a rational choice perspective, we do not expect interventions in the *Internality* situation.

In the *Externality* decision, reducing CO_2 emissions is a contribution to a global public good—although we acknowledge that the global externality from individual CO_2 abatement in our experiment is extremely small. However, to the extent the DM's climate action is perceived to benefit the environment and thus the CAs, and since a rational and selfish DM will take all the money for himself, rational CAs want to restrict the choice set of the DM such that the DM is forced to invest in climate action (Kölle et al. 2024).

With standard rational choice reasoning, there is no reason to hypothesize that intervention behavior is different between groups and individuals, neither in the *Internality* nor the *Externality* situation (e.g., with all agents being rational, groups cannot have more cognitive capacities than individuals).[6]

2.3.2. Alternative Considerations. As shown in Ambuehl et al. (2021), CAs frequently intervene in situations similar to our *Internality* situation by removing impatient choice options, based on the belief that such altruistically motivated interventions benefit DMs. However, the literature on group decision making suggests that groups tend to act more selfishly than individuals (Charness and Sutter 2012), indicating that groups may be less inclined to intervene due to lower levels of concern for DMs.[7] Conversely, groups have also been found to be smarter than individuals,[8] potentially making them better able to recognize that DMs may suffer from present bias. This might suggest that groups intervene more frequently than individuals. Ambuehl et al. (2021) show that CAs, while attempting to be altruistic, behave as if they assume their own preferences are relevant for others (ideals-projective paternalism). Given that they are smarter, groups might be more adept at avoiding this projection bias, potentially leading to a more nuanced understanding of the detrimental impacts of interventions and resulting in less frequent interventions.

In the *Externality* situation, if donations to the charity are perceived as benefiting society and CAs, CAs have a selfish incentive to intervene. Having shown to be smarter and more selfish than individuals (see above), groups are expected to be better in recognizing the public good nature and have less concern for the DM. As a result, they might intervene more frequently than individuals. Conversely, as noted before, group interactions may diminish the projection bias, which could mitigate the tendency to intervene.

In summary, both the degree of altruism and cognitive sophistication differ between groups and individuals, suggesting that groups may respond differently than individuals in both *Internality* and *Externality*; however, the direction of this difference—if any—is ambiguous.[9]

3. Results

3.1. 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. 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 perceive to have a self-interested reason to enforce climate action by the DMs. Here, more than half of all CAs intervene (53%). 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. As shown by Table 3, intervention decisions by CAs are primarily directed toward impatient (*Internality*) and selfish (*Externality*) choice options. 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 (Andre et al. 2024b, Kölle et al. 2024). In both decision situations, we find that the modal CA among CAs who intervene removes one choice option (see Figure A.1 in Online Appendix A for the full distribution).[10]

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.[11] We provide a discussion of this classification in Section 4.4.

3.2. 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

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)

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 economically large and statistically significant (χ^2 test, $p < 0.001$).

The pattern of fewer interventions in groups is robust and large in magnitude in both the *Internality* and *Externality* situation. 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 with 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 with 62% of the individuals (χ^2 test, $p = 0.002$).

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. Model (1) shows that pooling over *Internality* and *Externality*, in our *IND* treatment an option is removed in 15.9% of the cases. In the *GROUP* treatment, this number is significantly reduced by 8.2%–7.7%. As indicated by the negative and significant group dummy in Models (2) and (3), this result holds when we consider the *Internality* and *Externality* decisions separately. 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 differences in interventions across treatment is mainly due to differences at the extensive rather than the intensive margin.[12]

We summarize our results so far as follows:

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

To put the low frequency of group interventions into perspective, we can 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.

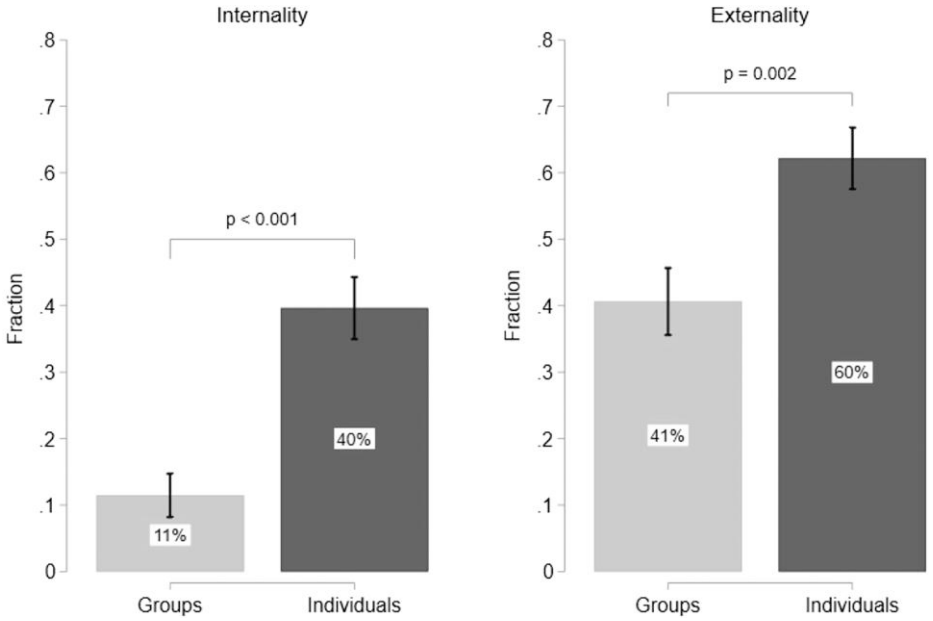
Table 4. Differences in Interventions Across Treatments

				If intervention >0	
	Pooled (1)	Internality (2)	Externality (3)	Internality (4)	Externality (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	1,656	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. To control for the dependency of observations, we cluster standard errors (reported in parentheses) at the group level. We have a total of 207 clusters (111 individuals + 96 groups).

***$p < 0.01$.

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.

Specifically, assuming that groups consisting of two liberals 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 (marginally) significantly lower than this benchmark (Binomial tests, $p < 0.001$ and $p = 0.066$, respectively).

Looking at the decisions at the group level helps explain this finding. Consistent with their Stage 1 decisions, 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.[13] The difference in the alignment of the individual preferences and the eventual group decision between liberal and interventionist groups is highly significant ($p < 0.001$).[14] This asymmetry between libertarian and interventionist types in the implementation of their individual preferences when interacting in groups is further demonstrated when looking 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 ($p < 0.001$).[15] As can be seen in Figure 3, these results are present in both decision situations, but are particularly pronounced for the *Internality* decision, possibly because the presence of the externality in the *Externality* situation provides a better argument for interventionist types to intervene (recall in this context that we generally see higher intervention rates in *Externality* than *Internality*).[16]

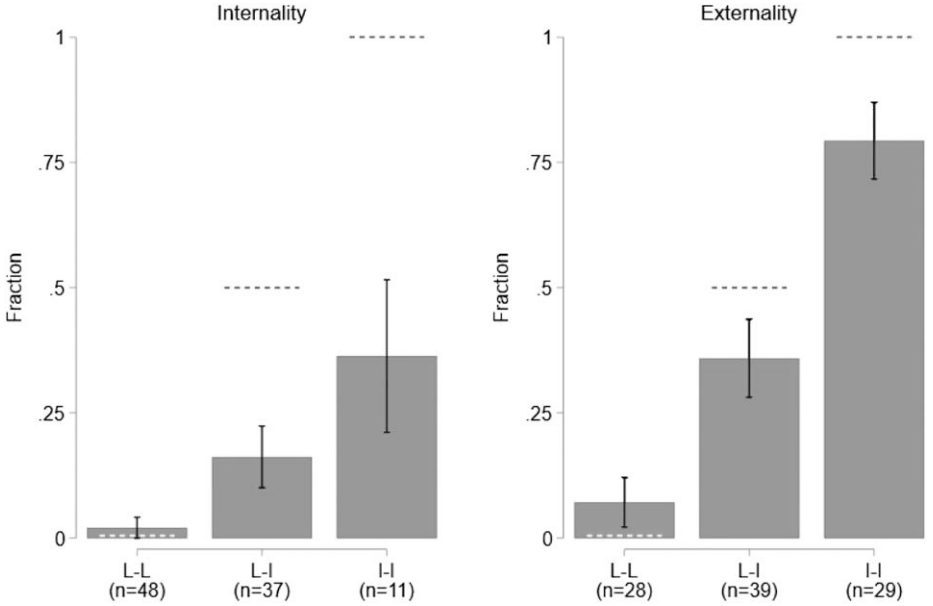
4. Why Are Groups More Libertarian?

Our results so far reveal that groups are more libertarian than individuals. In this section, we conduct additional analyses based on our choice data (4.1) as well as the data from our chat logs (4.2), and provide evidence from two additional experiments to further explore this core finding and to shed light on possible explanations (4.3).

4.1. Choice Data from Main Experiment

4.1.1. Complexity of Decision Situation. One possible explanation for our findings above is that libertarian decisions are simply "less complex" and therefore more stable over time. To test for this, we check the rate at which participants in our *IND* treatment make consistent decisions between Stage 1 and Stage 2. If the libertarian view was indeed more stable over time, we should expect participants who did not intervene in Stage 1 to be more likely to make consistent choices in Stage 2 than individuals who revealed to be an interventionist. However, this is not what we find. Aggregated over both decision situations, we find that in 79% of the cases in which a participant decided to intervene in Stage 1 they also chose to intervene in Stage 2,

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 interventionist types. 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.

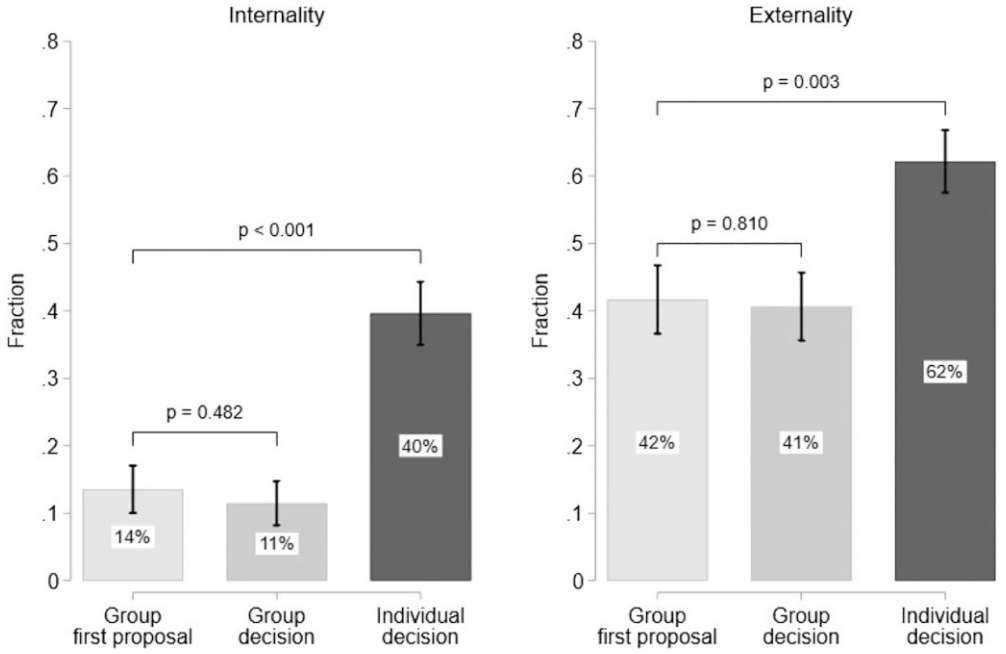
compared with a consistency rate of 73% for liberals. So, if anything, the libertarian view is even less stable over time, although the difference is small and not statistically significant ($p = 0.324$).[17]

4.1.2. Effort Costs. Another possible explanation for the observed treatment differences is that groups are simply reluctant to make the effort to reach a consensus. Two facts speak against this hypothesis. First, group members were required by design to actively agree on a decision, even if they do not intervene at all; there is no default for groups that fail to reach an agreement. Second, and more importantly, if groups were simply aiming to minimize effort, the arguably simplest decision would be to leave all options available and to not recommend against any option. This is not what we find. Instead, we find that groups *do* make an effort to coordinate, but that they agree on recommending against choosing certain options rather than making them unavailable. Specifically, we find that 62.5% of the groups in *Internality* and 39.6% of the groups in *Externality* use the recommendation but not the intervention option. These numbers are significantly higher than the respective ones in the IND treatment (*Internality:* 39.6%, χ^2 test, $p = 0.001$; *Externality:* 24.3%, χ^2 test, $p = 0.018$). As a result, when only comparing the instances in which CAs neither used the advice nor the removal option, we find no differences across treatments, neither for *Internality* (IND: 20.7%, GROUP: 26.0%, χ^2 test, $p = 0.336$) nor for *Externality* (IND: 13.5%, GROUP: 9.8%, χ^2 test, $p = 0.224$). Overall, these results indicate that the lower frequency of interventions in our *GROUP* treatment compared with our *IND* treatment is not due to groups simply wanting to avoid the effort of coordinating on a decision. Instead, they show that groups coordinate on the alternative and softer approach of influencing the *DM*s' decisions via recommendations (see Online Appendix B and Figure B.1 therein for an empirical overview of the recommendations given).

4.2. Chat Log Analyses

4.2.1. Role of First Proposal. The group outcome is strongly predicted by the initial proposals made in the group chat.[18] 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.[19] 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 ($p = 0.482$).[20] Similarly, the share of initial proposals for the *Externality* decision that involve the removal of at least one option is 42%, which is very

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.

close to the 41% of final group interventions ($p = 0.810$). These results indicate that the observed differences in 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 4.3 will provide further evidence).

4.2.2. 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 less 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 their type (interventionist versus libertarian, as defined based on their Stage 1 decisions—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 interventionist dummy, 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.

4.2.3. Congruency of First Proposals and Individual Preferences. Taking together, the evidence so far could suggest that interventionists shy away from expressing

Table 5. Relationship Between an Individual's Type and the Likelihood of Making the First Proposal in Groups

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

***$p < 0.01$.

their individual preferences when they are part of a group. To shed light in this potential explanation, we test in a next step whether, conditional on making the first proposal, CAs make proposals that are congruent with their own type. We find that liberals are much more likely to make congruent proposals than interventionists. Specifically, aggregating across both decision situations, we find that 94.8% of first proposals made by liberals contain no intervention. In stark contrast to that, only 61.0% of interventionists propose to intervene when making the first proposal. This suggests that interventionists are more likely to shy away from revealing their own type in the context of a group discussion than liberals.

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.

4.3. 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 express their preferences than liberals. Building on these observations, we expect that, 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.

4.3.1. Experiment 1: Selection into Intervention Decisions. In our first additional experiment, we test whether liberals 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, but with one important difference. 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.[21] CAs know the decision situation in Stage 2 (i.e., group or individual decision) when they decide whether they want to move on to Stage 2.

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* treatment.[22] As before, the decisions of the DMs were elicited as part of an upcoming experiment.

We find a strong interaction effect between an individual's intervention type (based on their Stage 1 decision) and their willingness to select into the role of a CA across the two contexts. Specifically, at the aggregate level, we find that liberals 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%). In contrast, interventionists are significantly less likely to serve as an CA when decisions have to be made in the social context of a group: the proportion of interventionists who select into the role drops from 80.8% in the *IND* treatment to 60.3% in the *GROUP* treatment.

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

Table 6. Relationship Between an Individual's Type and the First Proposal

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

Notes. OLS regressions. The dependent variable takes the value 1 if the first proposal made within a group 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.

***$p < 0.01$.

Table 7. OLS Regressions of the Choice to Make a Decision as a CA

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

*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

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 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 select out of 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 opt into situations in which they need to discuss potential intervention decisions with others.

4.3.2. 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 investigating 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).[23] 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 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.[24]

Result 2 summarizes our findings and confirms our hypothesis:

Result 2. *In social contexts, participants shy away from interventions.*

5. 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 a substantial disparity in the intervention tendencies of groups and individuals, with groups being significantly more liberal than individuals. In the following, we discuss the internal (5.1) and external (5.2) validity of our empirical approach and findings, and consider the implications for decision-makers and welfare (5.3).

Table 8. Relationship Between the Likelihood of Intervening and the Anonymity of the Decision

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

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.
**$p < 0.05$; ***$p < 0.01$.

5.1. Internal Validity: Discussion of Mechanisms

In Section 3, we established that groups are less likely to intervene than individuals. Section 4 empirically explores various mechanisms to explain this difference. Our empirical analyses of chat logs (Section 4.2) and two additional experiments (Section 4.3) are consistent with the notion that the social context of the group discourages interventionist individuals from expressing their preferred choices. To assess the relative importance of the social context mechanism in explaining the overall difference observed in the main experiment, we can compare the results of the main experiment with those of the second additional experiment, where participants' choices are either disclosed or kept private.

In the main experiment, 72% of participants in the IND treatment removed at least one option in at least one decision situation, compared with 47% in the GROUP treatment, yielding a difference of 35% between the treatments. In the second additional experiment, 69% of participants in the PRIVATE treatment removed at least one option, compared with 56% in the PUBLIC treatment, resulting in a relative difference of 19%. Although these two experiments differ in their design and are not directly comparable, the relative differences in the two experiments might suggest that the social context mechanism can accounts for more than half of the total treatment effect observed in the main experiment.

The observation that the social context mechanism alone is unlikely to fully explain the differences in intervention rates between groups and individuals prompts further investigation into additional mechanisms. Our data analysis sheds light on several of such potential explanations. We find no evidence to support the idea that group discussions, by fostering an exchange of arguments, lead to "smarter" decisions, nor that liberals are more likely to take the initiative in group discussions (as discussed in Section 4.2). We also examined whether differences in effort costs or complexity levels across treatments could explain the observed effects, but found no support for these explanations (Section 4.2). Notably, our data show that groups do not merely avoid coordination costs. Instead, they tend to coordinate on recommending against certain choice options, rather than possibly minimizing coordination costs by selecting the option that avoids making options unavailable or recommending against them. In addition, Figure A.3 shows that the differences in intervention behavior between groups and individuals are not driven by differences in their beliefs about the decision makers' (DM) preferred choice options.

Further potential explanations for our main finding include the idea that persuading someone to intervene is perceived to require more effort than proposing (and agreeing) not to intervene or recommending against an option. Additionally, it is possible that liberals generally hold stronger convictions, leading to group disagreements being resolved in favor of the more libertarian member, with recommending against an option serving as a compromise. Such mechanisms would not undermine the relevance of the social context explanation, though. First, in our second additional experiment, where participants did not need to persuade anyone to agree with their choice, we still observe fewer interventions when decisions were made in a social context. This suggests that the social context itself discourages interventions, regardless of the effort required to persuade others. Second, as shown in Section 3, even when groups consist entirely of interventionists, they agree to intervene in only 68% of cases, despite the absence of strongly convicted liberals who might need to be persuaded.

One might also think that people generally accept the attitudes they have toward others also from others toward themselves. As a result, it would perhaps not be surprising that liberals do not want others to intervene in their decisions, while this is more acceptable for interventionists in the group decisions. However, our findings indicate that the initial proposal made during group discussions tends to be more liberal and is typically the one the group ultimately agrees upon (see Section 4.2), and that even groups composed of two interventionists often reach a liberal decision (see the end of Section 3).

Overall, our data support the idea that the social context of group decision making explains a significant

portion of the differences observed between groups and individuals in the main experiment, though not the entire difference. This raises the question of *why* the social context discourages individuals from proposing interventions. One potential mechanism that may contribute to the social context effect is that decisions made in groups (as in Stage 2 of the GROUP treatment) or under public disclosure (as in the PUBLIC treatment of the second additional experiment) are made more carefully and reasonably than decisions made individually (as in Stage 1 of both treatments, Stage 2 of IND, and PRIVATE in the second additional experiment). This could be because the stakes are perceived as low in individual decisions, while in group or public settings, participants may be more concerned about their reputation and thus think through their choices more thoroughly. If this is the case, classifying individuals as interventionist or libertarian based on their Stage 1 behavior could be misleading, as those decisions might reflect a lack of careful consideration rather than true preferences. Consequently, the observed differences between group and individual decisions could be driven by the more deliberate decision-making *process* in group contexts, possibly due to reputational or social image concerns, rather than inherent differences between individual and group *preferences*, although we emphasize that this appears unlikely the full driver of the social context effect.[25]

Another, potentially complementary explanation is that interventionists may perceive that granting autonomy is generally viewed as more desirable by others. Philosophical debates have long attributed both instrumental and intrinsic value to autonomous decision making (Rawls 1971, 1980; Feinberg 1978; Young 1982), and recent empirical evidence shows that people value autonomy for its own sake (Benz and Frey 2008, Bartling et al. 2014).[26] This perception may lead group members to shy away from proposing interventions into others' freedom of choice, fearing that such proposals might be viewed unfavorably by their peers. Consequently, even when a majority supports intervention (as in our externality decision), group dynamics may lead to outcomes that favor libertarianism.[27]

5.2. External Validity: Relevance of Our Findings for Business Contexts

We designed our experiments to isolate individuals' and groups' fundamental willingness to intervene in others' autonomy within a simple and "minimal" environment—one that is just complex enough to allow for clear tests of intervention preferences in both individuals and groups. To achieve this, we employed a spectator design that minimizes potential confounding effects, such as financial incentives or other external motivations. This approach, which follows the emerging literature on paternalism that started with Ambuehl et al. (2021), enables us to show that groups are generally less inclined to intervene in others' decision making when other (potentially competing) considerations are absent. Employing a stylized social context comes at the cost of abstracting away from real-world complexities, potentially limiting the generalizability of our findings to real-world settings. Generally, questions surrounding autonomy and group decision making are relevant for management contexts and the organization of firms (Spector 1986, Seibert et al. 2011). An important question, therefore, is what insights our results can offer regarding the behavior of actual professionals in real-world management contexts.

First, we note that existing research suggests that findings from student samples often align with findings from samples of professionals (see, e.g., Bolton et al. 2012, Fréchette 2016). Thus, it seems likely that the tendency for fewer group interventions observed in our study is observed similarly when professionals make decisions in a laboratory setting. Second, while managerial team decision making involves factors that we do not account for in our experiment—such as direct personal financial stakes, organizational hierarchies, and more indirect factors such as reputational concerns—, these factors can vary widely across different contexts. This variability makes it difficult to design a laboratory experiment that accurately replicates all relevant aspects of managerial decision making. As a result, we opted for an abstract design to study general behavioral propensities, which are likely present in managerial contexts—even when often balanced against competing motivations outside the laboratory. Moreover, even in many real-world managerial group decisions, direct personal stakes may be low, such as in advisory board decisions, public sector contracting, or CSR and regulatory compliance teams.

Our finding suggests 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.

In summary, while we believe our minimalistic approach is well-suited to studying the differences in intervention behavior between groups and individuals and that the resulting fundamental results carry implications for business contexts, we also recognize the value of increasing the complexity of experimental scenarios incrementally. We view our study as providing a

framework which allows to subsequently add potentially relevant and complicating economic and social real-effects such as financial incentives, external motivations or repeated interactions. Doing so would further enhance our empirical understanding of intervention behavior in managerial settings. In particular, future research could investigate how professionals approach abstract intervention decisions in groups and how their behavior shifts when competing motivations are introduced.

5.3. Implications for Decision Makers and Welfare

A natural follow-up question arising from our empirical findings is how the documented differences in intervention behavior between groups and individuals impact DMs (i.e., those whose choice set is decided upon) and overall welfare. The welfare criteria for such an investigation are inherently hard to measure (Ambuehl et al. 2021) and we can only speculate about an answer to this question. In the case of our *Internality* situation, a first attempt could focus on the size of the pie (abstracting from time discounting) and the frequency with which CAs remove options that are preferred by DMs. Looking at our data in Online Appendix Figure A.2, we see that individuals remove the pie-maximizing option in 10% of the cases, whereas groups never remove this option. At the same time, we elicit that 70% of participants rank the pie-maximizing option (which is also the most patient option) the highest (see also Table A.1 in Online Appendix A). That is, we see that individuals remove the option that is both pie-maximizing and most preferred by DMs more frequently than groups. Regarding the Externality situation, we find that individuals remove the most cooperative option more often than groups (see Figure A.2). We also see that individuals have a slightly higher inclination than groups to remove the selfish option (which is not the pie-maximizing one), even though, as we elicit, this is the option that is ranked highest by 51% of the participants. These observations seem to suggest that DMs' utility is higher in the presence of group decisions. We leave an in-depth analysis of this question to future research.

Acknowledgments

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Endnotes

[1] 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). 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).

[2] Of course, in managerial contexts other motivations may also be relevant for people's motivation to intervene in others' choices. We discuss this point in Section 5.2.

[3] To this end, we contribute to a literature studying the implications of group decision making in business contexts (e.g., Kerr and Tindale 2004, Mathieu et al. 2008, Salas et al. 2008, Chen and Lim 2013, Maciejovsky et al. 2013).

[4] Bartling et al. (2023) study paternalism and in particular focus on soft (a recommendation) versus hard interventions (a choice restriction) and find that people are far more reluctant to implement a hard than a soft restriction. In this study, we provide participants with the opportunity to provide a recommendation to avoid that CAs do only intervene to provide some information to DMs (see below).

[5] For example, if we had chosen an abstract Prisoner's Dilemma paradigm for our *Externality* treatment, it would have been fairly uncontroversial not to allow defection to improve all participants' payoffs without sacrificing fairness, and this would have left little room for studying differences between groups and individuals.

[6] Although all participants are drawn from the same population, one might also consider a situation where CAs are more rational than DMs. Predictions about the intervention decisions in *Externality* and *Internality* are less straightforward in this case, because interventions depend on the type of biases that DMs exhibit. Importantly, however, even in such asymmetric rationality cases, there is no reason to predict that group CAs and individual CAs will behave differently.

[7] The literature demonstrating that groups are less altruistic than individuals typically examines scenarios where agents divide money between themselves and others, which is different than in our Internality decision. Nevertheless, given the robust finding in this literature that groups display lower levels of altruism in certain decision situations, and considering that interventions are often motivated by altruistic motives, it seems justified to consider how varying levels of altruism may theoretically influence intervention patterns in our new decision context.

[8] Groups may be smarter, 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).

[9] Another potentially relevant non-rational choice motive in the literature concerns the value of granting autonomy to others (Bartling et al. 2014, Ackfeld and Ockenfels 2021, Bartling et al. 2023). This motive implies that CAs are less willing to intervene, both in *Internality* and *Externality*. However, the literature does not provide any reasons to believe that the value of granting autonomy is differently strong across groups and individuals (Buffat et al. 2023).

[10] The results presented in Table 3 suggest heterogeneity in how CAs intervene in others' choices, perhaps indicating different underlying reasons for interventions. For example, in *Internality*, making one of the last three options not available may show that CAs want to generate the highest overall payment, whereas making the first option unavailable, although it generates the highest payoff, may show that they want the DMs to be able to consume some of the money today, for example, because they attribute their own preference onto the DM (called projective paternalism in Ambuehl et al. 2021; indeed, the percentage of paternalists who restricted the most patient option in our study—6.6%—is comparable to that in

Menu 1 of Ambuehl et al.'s main study—6.0%—which we used to parameterize our options). Another reason may be that CAs perceive the payments in 6 months as more uncertain. Similarly, in *Externality*, we see several potential reasons that CAs make the first option unavailable, although it is both the most prosocial option and the one that maximizes the distributed monetary amount. For example, individuals who are overly altruistic can sometimes be perceived negatively by their peers, potentially due to not adhering to social norms (see Raihani and Power 2021, Khalmetski and Ockenfels 2024), and the CA might aim to prevent DMs from being perceived negatively. It may also be that CAs have a motivation to help the DM retain more money for themselves, or that CAs either view the charity unfavorably and/or do not believe in the charity's objectives or effectiveness. In the following, we are mainly concerned with whether CAs intervene at all, rather than focusing on the (un)availability of specific options.

[11] Based on rational choice theory, we should not expect a relation between interventions across contexts. It is therefore an interesting empirical question of whether at the individual-level interventions are correlated across decision contexts. We do not find evidence for such a correlation. Specifically, we find that in Stage 1, 17% of CAs intervene in both decision situations, 36% intervene only in the *Externality* decision, 15% intervene only in the *Internality* decision, and 32% do not intervene at all. The correlation between being a libertarian or interventionist type across *Internality* and *Externality* is close to zero and not significant (Spearman rank correlation: rho = 0.010, $p = 0.869$). This suggests that there is not general "intervention type", but that intervention decisions are rather context-dependent.

[12] As we show in Figure A.2 in Online 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.

[13] 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.

[14] 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 liberals 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 liberals 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).

[15] 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 interventionist 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).

[16] 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 preferences and group decisions is highly significant (χ^2 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 preference (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% versus 79%, χ^2 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 weakly significantly lower than the 50% that would be expected if the liberal and interventionist views had equal weight (t test, $p = 0.080$).

[17] The p-value comes from a linear probability model in which we regress a dummy indicating whether an individual made a Stage 2 decision consistent with their individual preferences as revealed in Stage 1 on a dummy indicating whether they are classified as libertarian or interventionist. We account for the dependency of decisions that are made by the same participant by clustering standard errors at the individual level ($n = 222$ observations, 111 clusters).

[18] 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 initially thought (Fudenberg et al. 2012, Maniadis et al. 2014).

[19] The chat logs were transcribed by a research assistant. A proposal is defined as bringing up and mentioning a specific option for action in the group discussion.

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

[21] 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.

[22] The original German instructions as well as an English translation can be found in Online Appendix C.2. The experiment was preregistered along with the main experiment. Ethical approval was also granted along with the main experiment.

[23] See Online Appendix C.3 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).

[24] Overall, we see the following rates of no recommendation, any recommendation and intervention in the four conditions: (i) Internality/private: 19% no recommendation, 47% recommendation, 35% intervention; (ii) Internality/public: 21% no recommendation, 49% recommendation, 30% intervention; (iii) Externality/private: 21% no recommendation, 23% recommendation, 56% intervention; (iv) Externality/public: 27% no recommendation, 31% recommendation, 41% intervention.

[25] Our analysis provides some indications that Stage 1 behavior is informative about individual preferences. First, we observe a high degree of consistency between Stage 1 and Stage 2 behavior in the IND treatment, where decisions are made individually in both stages. Consistency rates are 79% for interventionists and 73% for liberals (see Section 4.1). Second, in the GROUP treatment, we find that groups composed of Stage 1 liberals almost invariably choose not to intervene (Section 3). Third, Stage 1 behavior is reasonable in that the most frequently removed options are those associated with selfishness (in the *Externality* decision) and impatience (in the *Internality* decision) (see Table 3). Fourth, we analyze decision times in Stage 1 and find that participants take an average of 52 seconds to decide in the *Internality* situation and 55 seconds in the *Externality*

situation. While we lack a direct benchmark to assess these times, random or careless clicking would likely take less time. Even those who choose not to intervene take 50 seconds on average, compared to 58 seconds for interventionists. Taken together, these observations indicate that individual choices are informative about individual preferences. We also note that it is indeed common in the paternalism literature to use individual behavior of choice architects without incentivizing intervention decisions to infer paternalistic preferences (e.g., Ambuehl et al. 2021, Bartling et al. 2023). However, it remains possible that group decisions are made with even greater care than individual decisions, for example, due to reputational or social image concerns. Because the presence of others is a fundamental characteristic of group decisions and a key difference from individual decisions, this would be consistent with the social context interpretation of our results.

[26] 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; for example, sugar taxes, smoking bans, savings for the future, or gun control (e.g., Chetty et al. 2014, Allcott et al. 2019, DeCicca et al. 2022). Also see 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 (http://marketdesigner.blogspot.com/).

[27] 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.

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