

When Do Individuals Give Up Agency? The Role of Decision Avoidance

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Abstract

A common policy problem is that individuals reject recommended options and insist on making their own choices. Via a large-scale experiment, we document and investigate what factors contribute to this preference for agency. Our main results show that individuals' willingness to give up their agency increases when they are less determined about what they would choose. Additional results suggest that this is due to the fact that forgoing agency allows them to avoid making decisions.

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1 Introduction

Individuals decide whether to adopt the recommendations of others in a myriad of situations: at home, deciding whether to have one’s spouse select a restaurant; at work, when a boss decides whether to implement an employee’s solution to a problem or to investigate the problem herself; or in policy, when nudge units try to change people’s behavior. While there has been some recent work on measuring preferences for agency, we study whether there are factors that increase the propensity to accept another’s choice. Understanding the role of choice architecture in the preference for agency not only helps understand the nature of this still quite recent concept, but also has important policy implications. If the goal is to encourage individuals to accept a paternalistic decision and give up agency, understanding these factors can directly inform policymakers on how to intervene, regardless of whether this paternalistic decision is made by family members, bosses, industries, or governments.

To illustrate our intuition, consider the case of a boss who is reviewing a problem for the first time. If she insists on agency, she needs to choose which option to implement. If she gives up agency, the choice will be made by her trusted employee instead. How easy is it to convince the boss to forgo agency? Consider, in contrast, a boss who has already made a decision in a problem; she already determined which option to implement. This *determined* boss is now revisiting the problem. How easy is it to convince this determined boss to forgo agency? In this paper we provide evidence, as well as possible reasons, as to why it is harder to convince this determined boss to accept her trusted employee’s choice compared to the previous boss.

Specifically, we propose the *Determined Choice* hypothesis: an individual’s willingness to give up agency increases in the extent to which her choice is less determined. Thus, an individual is more willing to give up agency when she encounters a problem for the first time, compared to when she has already had experience with the problem and is very determined about which option to implement. To document this *Determined Choice* hypothesis as well as its underlying drivers, we run several large online experiments.

In these experiments, participants face a series of investment problems. In each problem, participants choose which investment option—from a set of available options—to implement. Each investment problem appears once in each of the two blocks: the Baseline Block and the Agency Block. In the Baseline Block, participants decide which option to implement in an investment problem for a small fee. In the Agency Block, participants decide to either forgo agency in an investment problem (and accept the option chosen by the paternalist, Pat), or to insist on agency (and implement an option they choose for a small fee). The fee ensures that individuals who select agency have a strict preference for doing so. While participants have information about Pat, they do not know Pat’s exact choices. In the main series of experiments, Pat is an individual who made very common choices.

We design the *Determined* and *Inexperienced* treatment to assess individuals' willingness to give up agency depending on whether their choice is determined or not. In the *Determined* treatment, participants first face the Baseline Block and then the Agency Block. If participants insist on agency in an investment problem in the Agency Block, the option that will be implemented is already determined: it is the option they previously chose in the same investment problem in the Baseline Block. Participants in the *Determined* treatment forgo agency in a problem 31% of the time. In contrast, in the *Inexperienced* treatment, the Agency Block is the first block participants face. If participants insist on agency in an investment problem, they subsequently have to select which option to implement. In the *Inexperienced* treatment, participants forgo agency 55% of the time. Consistent with the *Determined Choice* hypothesis, participants are 24 percentage points (or 77%) more likely to forgo agency when their choice is less determined. We therefore find strong evidence for the *Determined Choice* hypothesis.

To understand the drivers of the *Determined Choice* hypothesis, note that there are two differences between the *Determined* and the *Inexperienced* treatment. The first difference relates to *experience*. While participants in the *Inexperienced* treatment decide on agency when they encounter a problem for the first time, participants in the *Determined* treatment have experience with the problem before deciding on agency. There are many reasons why experience may cause a difference in agency preferences. In addition to pure experience effects, a strong preference for consistency in choices or a eureka moment when selecting an option in a problem for the first time may imply that participants know—with certainty—which option they would implement in a problem when facing it for the second time. In this way, experience may make participants very determined about their choice. The second difference relates to *decision avoidance* (or commitment). In the *Inexperienced* treatment, insisting on agency requires participants to choose which option—out of all available options—to implement. By forgoing agency, they can avoid making this decision. In the *Determined* treatment, insisting on agency does not force, and indeed does not allow, participants to choose which option to implement. This is because participants are committed to their prior choice. Hence, they have no decision to make if they insist on agency; or, put differently, no decision to avoid by forgoing agency.

To examine the role of *experience* and *decision avoidance*, we design the *Experienced* treatment. As in the *Determined* treatment, participants first face the Baseline Block and then the Agency Block. However, as in the *Inexperienced* treatment, if participants insist on agency in an investment problem in the Agency Block, they subsequently have to select which option to implement. To avoid making that decision, participants in the *Experienced* treatment must forgo agency. While about one third of the *Determined Choice* effect is driven by experience (as seen by comparing the *Inexperienced* to the *Experienced* treatment), the vast majority, two-thirds, is driven by *decision avoidance* (as seen by comparing the *Experienced* to the *Determined* treatment).

In additional experiments, we present several robustness and extension results. First, we replicate our main *Determined Choice* effect in a new sample. Second, we show that the *Determined Choice* effect holds when participants are informed about Pat’s decision rule. Specifically, we use a Pat who makes random uniform choices. Third, we show that our results hold even when participants are informed of the exact choice Pat makes. Finally, we have two additional treatments to document the role of *decision avoidance* in driving participants’ willingness to give up agency in a slightly different environment.

This paper is related to several literatures and also has important policy applications. First, we add to a small but growing literature on agency preferences (Fehr, Herz and Wilkening, 2013; Bartling, Fehr and Herz, 2014; Owens, Grossman and Fackler, 2014; Pikulina and Tergiman, 2020; Afzal et al., 2022). We highlight that the strength of agency preferences does not only vary across individuals or problems, but crucially also depends on *when* in the decision process individuals are asked whether they prefer to exercise agency. When individuals are asked early (i.e., when they encounter a problem for the first time), their preference for agency is very different than when they are asked late, (i.e., when they have experience with a problem and, more importantly, are committed to a prior choice).

Second, our work speaks to an individual’s willingness to be paternalized. This nicely complements recent work on individuals’ willingness to paternalize others (Jacobsson, Johannesson and Borgquist, 2007; Lusk, Marette and Norwood, 2014; Gangadharan et al., 2018; Ambuehl, Bernheim and Ockenfels, 2021; Bartling et al., 2022).¹

Third, ample and important work in behavioral economics suggests that it is often quite difficult to affect individuals’ choices. There is important work on choice architecture and nudges discussing how to encourage individuals to adopt a specific recommended or default option or change their behavior (for a review of this literature, see Jachimowicz et al., 2019 or DellaVigna and Linos, 2022). Our results suggest a potentially powerful lever for this work: intervene earlier in the decision-making process. Interestingly, our results also make clear that this does not necessitate reaching individuals before they gain experience with a decision environment. Even experienced agents prove more willing to forgo agency if insisting on agency requires them to remake decisions.

Fourth, there is a different strand of the behavioral economics literature, such as work on framing effects or anchoring, suggesting that individuals are very easily swayed in what option they select. This contrasts with the aforementioned strand of work suggesting it is hard to influence individuals’ choices. We provide a potential way to unify this dichotomy. When individuals are early in the decision process, they are more easily, and perhaps even quite easily, swayed and influenced. In contrast, individuals with experience and, even more so, individuals who are very

¹An important decision domain for understanding how individuals paternalize others relates to parental decisions about their children. For excellent recent work, see Berry, Dizon-Ross and Jagnani (2020).

determined in their choice are much harder to move; that is, they are harder to be persuaded to give up agency and adopt different options.

2 Design

In this section we describe our main experiment. For complete instructions, see Section 2 of the Online Appendix.

2.1 Decision Environment

Our study involves 18 investment problems. In each one, participants receive an endowment of \$2.25 and decide how to invest \$2 of that endowment by selecting which investment option to implement.

The 18 investment problems are described in Table 1. There are twelve Eckel-Grossman (EG) problems—inspired by [Eckel and Grossman \(2002\)](#)—with five investment options each: one guarantees a fixed return, and four have returns that depend on a 50-50 lottery. There are also four High-Risk problems with three investment options: one guarantees a fixed return, and two involve small chances of high returns. Finally, there are two Attention Check problems with five investment options each, all with fixed returns, one of which strictly dominates the others. Participants do not receive any information about their investment decisions until the end of the experiment.

Participants face each investment problem twice: once in the Baseline Block and once in the Agency Block. The order of the 18 problems in each block is random. In the Baseline Block, participants choose an investment option and incur a \$0.25 implementation fee. In contrast, in the Agency Block, participants can either implement the option chosen by themselves (“insist on agency”) or instead implement the option chosen by someone else (“forgo agency”). If they insist on agency, they incur a \$0.25 implementation fee, just as in the Baseline Block. If they forgo agency and opt for the investment option chosen by someone else, whom we call “Pat,” they do not have to pay any implementation fee. Therefore, participants who insist on agency have a strict preference for doing so.

To prevent individuals from being influenced by Pat’s choice, they do not learn it. That is, we do not have to worry that individuals who make an investment decision in the Baseline Block after the Agency Block are influenced by Pat’s choices. Participants are, however, informed that Pat’s choices are determined by another MTurk worker, whom we describe as follows:

Because of anonymity, we cannot give you the true name of this MTurk worker. Therefore, for simplicity, let’s refer to this MTurk worker as “Pat.” Pat will be chosen such that for as many decisions [investment options] as possible out of the 18 decisions you are about to make, the following is the case: Pat made the choice that is the

most common choice among all other MTurk workers in a prior version of this study. In this sense, Pat is usual for MTurk workers.

We chose the name Pat both because of its gender neutrality and as a nod to Pat’s paternalistic nature in our study. We select Pat to be someone who made “common” choices and is thus “usual” in order to capture individuals’ willingness to give up agency when doing so is “reasonable.” We examine the robustness of our results to other “Pats”—e.g., when Pat is instead known to be equally likely to select any of the available investment options—in the Section 4.

Table 1 details the 18 investment problems, where Pat’s choice is in italics and bold. Pat’s choice was determined by a previous treatment in which participants only had to make decisions in the Baseline Block.²

Table 1: Investment Problems

	Option 1	Option 2	Option 3	Option 4	Option 5
EG 1	<i>2</i>	$\mathcal{L}(3, 1.50)$	$\mathcal{L}(4, 1)$	$\mathcal{L}(5, 0.50)$	$\mathcal{L}(6, 0)$
EG 2	<i>2</i>	$\mathcal{L}(3.50, 1.50)$	$\mathcal{L}(5, 1)$	$\mathcal{L}(6.50, 0.50)$	$\mathcal{L}(8, 0)$
EG 3	<i>2</i>	$\mathcal{L}(2.75, 1.50)$	$\mathcal{L}(3.50, 1)$	$\mathcal{L}(4.25, 0.50)$	$\mathcal{L}(5, 0)$
EG 4	<i>2</i>	$\mathcal{L}(2.50, 1.50)$	$\mathcal{L}(3, 1)$	$\mathcal{L}(3.50, 0.50)$	$\mathcal{L}(4, 0)$
EG 5	<i>2</i>	$\mathcal{L}(3.25, 1.50)$	$\mathcal{L}(4.50, 1)$	$\mathcal{L}(5.75, 0.50)$	$\mathcal{L}(7, 0)$
EG 6	<i>2</i>	$\mathcal{L}(3.75, 1.50)$	$\mathcal{L}(5.50, 1)$	$\mathcal{L}(7.25, 0.50)$	$\mathcal{L}(9, 0)$
EG 7	<i>3</i>	$\mathcal{L}(4, 2.50)$	$\mathcal{L}(5, 2)$	$\mathcal{L}(6, 1.50)$	$\mathcal{L}(7, 1)$
EG 8	<i>3</i>	$\mathcal{L}(4.50, 2.50)$	$\mathcal{L}(6, 2)$	$\mathcal{L}(7.50, 1.50)$	$\mathcal{L}(9, 1)$
EG 9	<i>3</i>	$\mathcal{L}(3.75, 2.50)$	$\mathcal{L}(4.50, 2)$	$\mathcal{L}(5.25, 1.50)$	$\mathcal{L}(6, 1)$
EG 10	<i>3</i>	$\mathcal{L}(3.50, 2.50)$	$\mathcal{L}(4, 2)$	$\mathcal{L}(4.50, 1.50)$	$\mathcal{L}(5, 1)$
EG 11	<i>3</i>	$\mathcal{L}(4.25, 2.50)$	$\mathcal{L}(5.50, 2)$	$\mathcal{L}(6.75, 1.50)$	$\mathcal{L}(8, 1)$
EG 12	<i>3</i>	$\mathcal{L}(4.75, 2.50)$	$\mathcal{L}(6.50, 2)$	$\mathcal{L}(8.25, 1.50)$	$\mathcal{L}(10, 1)$
High-Risk 1	<i>(1, 100%)</i>	(10, 2.50%)	(100, 0.25%)		
High-Risk 2	<i>(1, 100%)</i>	(5, 10%)	(50, 1%)		
High-Risk 3	<i>(2, 100%)</i>	(10, 5%)	(100, 0.50%)		
High-Risk 4	<i>(2, 100%)</i>	(5, 20%)	(50, 2%)		
Attention 1	<i>3</i>	1	1	1	1
Attention 2	<i>3</i>	1	1	1	1

Each EG problem involves a choice between one of five options: the first, X ($= \{2, 3\}$), indicates a 100% chance of receiving $\$X$; and each of the remaining options $\mathcal{L}(X, Y)$ indicates a 50% chance of receiving $\$X$ and a 50% chance of receiving $\$Y$. Each High-Risk problem involves a choice between one of three options: each option is described as (X, P) , which denotes a $P\%$ chance of receiving $\$X$. Each Attention Check problem involves a choice between one of five options: each option, described above as X ($= \{1, 3\}$), denotes a 100% chance of receiving $\$X$. Pat’s choices are in italics and bold.

²We have 398 Amazon MTurk workers from August 2, 2018 in this *Reference Group* treatment, which was only used to determine Pat’s choices.

2.2 Treatment Groups

Testing our main *Determined Choice* hypothesis guides the design of our main treatments, the *Inexperienced* and the *Determined* treatment. We then aim to decompose our main effect, which guides the design of the *Experienced* treatments.

Our four main treatments—the *Inexperienced*, *Experienced–NR (No Reminder)*, *Experienced–R (Reminder)*, and *Determined* treatment—differ in three main ways, which we describe below. See Table 2 for an overview.

1. Commitment or restricted opportunity set: The first difference concerns the opportunity set of options that are available to a participant who exercises agency in the Agency Block. In all treatments, apart from the *Determined* treatment, a participant who insists on agency can choose to implement any of the investment options available in that problem. In contrast, in the *Determined* treatment, a participant who insists on agency is restricted and committed to implementing the option she previously selected in the Baseline Block.

2. Experience: This difference concerns the block in which participants decide upon agency. In the *Inexperienced* treatment, participants first complete the Agency Block and then the Baseline Block, which is the opposite from all other treatments. Hence, only in the *Inexperienced* treatment do agents have no experience when deciding upon agency.

3. Information on previous choice: We vary the information participants in the Agency Block have about their previous choice. In the *Experienced–R (Reminder)* treatment as well as the *Determined* treatment, participants who face an investment problem in the Agency Block are reminded of the choice they previously made in the Baseline Block. This is not the case in the *Experienced–NR (No Reminder)* treatment, and does not apply to the *Inexperienced* treatment.

Table 2: Treatment Groups

	<i>Experienced</i>			
	<i>Inexperienced</i>	<i>–NR</i>	<i>–R</i>	<i>Determined</i>
Previously made a choice		X	X	X
Reminded of previous choice			X	X
Committed to previous choice				X

We describe the conditions in which participants decide on agency in the Agency Block. In all but the *Inexperienced* treatment, the Baseline Block precedes the Agency block—and therefore, participants have previously made a choice. In the *Experienced–R* and *Determined* treatments, participants are reminded of that previous choice when deciding whether to forgo agency. Only in the *Determined* treatment are participants, if they insist on agency, committed to implementing that previous choice.

2.3 Main hypothesis: *Determined Choice*

Our main *Determined Choice* hypothesis is that the extent to which individuals insist on agency increases when they are more determined about their choice. Since the option that is

implemented is already determined if participants insist on agency in the *Determined* treatment, this hypothesis implies that, compared to the *Determined* treatment, participants are more willing to forgo agency in the *Inexperienced* treatment.

Our main hypothesis points to important variations in agency preferences across environments. It also has direct policy implications. If the goal is to have individuals give up agency and accept a recommended or default option, it is best to provide this option early in the decision process.

2.4 Drivers of *Determined Choice*

Since we test the *Determined Choice* hypothesis by comparing agency preferences between the *Inexperienced* and the *Determined* treatment, we note that these two treatments differ in two ways which could drive *Determined Choice*. One difference is whether participants have experience with the problem at hand when deciding whether to forgo agency. The other concerns whether forgoing agency allows individuals to avoid making a decision, i.e., to avoid selecting an option out of all of the available options. Below, we discuss both of these two channels, *experience* and *decision avoidance*. We describe how we test for their role in accounting for our *Determined Choice* hypothesis. Finally, we discuss the policy implication of each channel.

Experience

When deciding whether to give up agency, participants have *experience* with the problem at hand in the *Determined* treatment but not in the *Inexperienced* treatment. There are several reasons why *experience* may increase the preference for agency. There could be a direct effect of experience that may increase the demand for agency in general. In addition, experience could increase the extent to which participants' choices are determined and hence contribute to a demand for agency. For instance, if a participant has a eureka moment when selecting an option in a problem for the first time, she may then know—with certainty—that she should implement the same option again when facing a problem for the second time. Similarly, if a participant has a strong preference for consistency, she may desire to implement the same option again when facing a problem for the second time. For the importance of experience or consistency see, e.g., [Yariv, 2005](#); [Agarwal et al., 2008](#); [DellaVigna, 2009](#); [Falk and Zimmermann, 2013, 2018](#).

To assess the role of *experience*—including the role of consistency that is only made relevant once participants have experience—we use the *Experienced* treatments. The extent to which the preference for agency increases from the *Inexperienced* treatment to the *Experienced* treatments provides a measure of the role of *experience* in accounting for our *Determined Choice* hypothesis.³

³Differences between the *Experienced-NR* and the *Experienced-R* treatments capture effects of pure experience versus the additional benefit of being reminded of one's previous choice. It turns out that being reminded of one's choice has no impact in this environment. This is in contrast to work in guessing games; see [Fragiadakis, Knoepfle and Niederle \(2020\)](#).

The policy implication of a significant *experience* effect is that the ideal time for an intervention to induce an individual to give up agency is before the individual ever makes the decision of interest.

Decision Avoidance

Decision avoidance may drive a greater demand to forgo making decisions in the *Inexperienced* compared to the *Determined* treatment. In the *Inexperienced* treatment, as well as in the *Experienced* treatments, insisting on agency requires participants to choose which option—out of all available options—to implement. A participant who wants to avoid making a decision may therefore forgo agency in those treatments. In contrast, in the *Determined* treatment, insisting on agency does not require participants to choose which option to implement out of available options. This is because the option that is implemented is already determined (i.e., it is the option they chose when they faced that problem the first time) if they insist on agency. Hence, participants who insist on agency have no decision to make; or, put differently, no decision to avoid by forgoing agency.

To assess the role of *decision avoidance*, we again use the *Experienced* treatments. But this time, we compare the *Experienced* treatments to the *Determined* treatment since all that varies across these treatments is whether participants forgo agency in order to avoid choosing which option—out of all available options—to implement. The extent to which the preference for agency increases from the *Experienced* treatments to the *Determined* treatment provides a measure of the role of *decision avoidance* in accounting for our *Determined Choice* hypothesis.

Similar to the policy implication of a significant *experience* effect, a policy implication of a significant *decision avoidance* effect suggests that a good time for an intervention to induce an individual to give up agency is before the individual ever makes the decision of interest—and thus, when that individual may avoid making that decision by forgoing agency. However, a significant *decision avoidance* effect also suggests a policy implication to affect the agency preferences of an experienced individual. To tempt an experienced individual to give up agency, the *decision avoidance* effect suggests that the individual should only be able to avoid remaking their decision by forgoing agency. That is, if the individual does not forgo agency, the individual should be required remake their decision by selecting which option they prefer from all available options.

2.5 Alternative Predictions

The *Determined Choice* hypothesis predicts that individuals are more willing to give up agency when in the *Inexperienced* than in *Determined* treatment. In this section, we discuss two alternative predictions, and which models would make those predictions.

Since our investment problems are basically choices over lotteries, one alternative hypothesis with the *opposite prediction*, namely that participants are *less* likely to forgo agency in the *Determined* than in the *Inexperienced* treatment, comes from a model where participants

have a strong preference for diversification (Agranov and Ortoleva, 2017; Dwenger, Kübler and Weizsäcker, 2018). This is because a preference for diversity or randomization predicts a preference to forgo implementing one’s previous choice again and hence to forgo agency in the *Determined* treatment. Only by accepting Pat’s choice is there a chance for randomization. This additional motive to give up agency does not apply in the *Inexperienced* treatment, since in the first block, which is the Agency Block in the *Inexperienced* treatment, participants do not know the nature of the second block of problems. If the change in agency preferences is driven by a strong preference for diversification, the prediction is that an individual is *more* willing to forgo agency after she makes a choice in the environment herself.

Another alternative hypothesis also predicts no difference in agency preferences between the *Determined* and the *Inexperienced* treatments. Specifically, *homo economicus* predicts that individuals have instant and free access to their complete preferences, so their agency preferences should not depend on whether they are considering those preferences for the first or second time.

Finally, there are two literatures that are related to our environment but make no predictions as to how the strength of agency preferences may differ between the *Inexperienced* and the *Determined* treatments. First, a growing literature documents the existence and importance of agency preferences, but does not model how those would change between these two treatments—see, for example, excellent work in Fehr, Herz and Wilkening (2013), Bartling, Fehr and Herz (2014), Owens, Grossman and Fackler (2014), Pikulina and Tergiman (2020), and Afzal et al. (2022).⁴ Second, there is an important literature that shows that the influence of information on subsequent choices depends on the timing of that information, see Babcock et al. (1995), Gneezy et al. (2020), and Saccardo and Serra-Garcia (2022). This literature does not apply to our environment because, by design, we eliminated effects related to the timing of information.⁵ As explained in Section 2.1, participants are never informed of what choices Pat made. We made this design choice precisely in order to eliminate the possibility that learning about Pat’s choices could influence our results.

2.6 Implementation Details

For our main study, we recruited Amazon Mechanical Turk participants who had a U.S. IP address and completed at least 100 HITs with an approval rating of 95%. We randomly assigned them to one of our four main treatments. Participants receive a \$2 completion fee, plus additional payments from one randomly selected decision. This could result in additional payments from \$0 to \$100 (given the High-Risk problems). The average additional payment was \$3.

⁴A reluctance to accept responsibility is often considered in the literature on motivated reasoning, see, e.g., Bartling and Fischbacher (2012) and Falk, Neuber and Szech (2020). This literature also does not predict a difference across our treatments.

⁵In addition, this literature focuses on environments where individuals have a specific motive to justify their choice, e.g., they need to negotiate on one side of an issue or are incentivized to make a potentially unethical choice. We do not expect motivated reasoning to be relevant in our environment.

3 Results

We focus on the 674 participants who correctly answer both attention checks in the Baseline Block. However, our results are robust to including those who answer either one incorrectly (see Online Appendix Figure 1 and Table 1).

3.1 Main Hypothesis: Determined Choice

As seen in Figure 1 Panel A, participants forgo agency and accept Pat’s choice in the *Determined* treatment in 5 of 16 problems, on average. By contrast, as seen in Figure 1 Panel B, participants forgo agency and accept Pat’s choice in the *Inexperienced* treatment in 8.9 of 16 problems, on average. This difference is statistically significant ($p < 0.01$) and implies that participants are almost twice as likely to forgo agency when their own choice is less determined because they are facing the problem for the first time.⁶ The results of a linear probability model in Column 1 of Table 3 confirm that when moving from the *Determined* to the *Inexperienced* treatment, the chance that a participant forgoes agency and accepts Pat’s choice increases from 31% to 55%, an increase of 24 percentage points or 77%.

To summarize, we find strong support for a *Determined Choice* effect: participants are more willing to forgo agency when their choice is less determined, as measured by the difference between the *Determined* and *Inexperienced* treatments.

3.2 The Role of *Experience* and *Decision Avoidance*

The two *Experienced* treatments, with and without reminder, are very similar and do not significantly differ in how often participants insist on agency.⁷ For simplicity, we therefore combine the results into a single *Experienced* treatment. To investigate the drivers of our *Determined Choice* effect, we decompose it into an *experience* effect and a *decision avoidance* effect.

The *experience* effect proves significant. Out of the 16 problems, the average number of times participants forgo agency significantly falls from 8.9 problems in the *Inexperienced* treatment to 7.5 problems in the *Experienced* treatment ($p < 0.01$, two-sided t-test). Related, as evident via a test of the coefficient estimates in Table 3, the percent of times participants forgo agency significantly falls from 55% of the time in the *Inexperienced* treatment to 46% of the time in the *Experienced* treatment ($p < 0.01$).

The *decision avoidance* effect is not only significant, but also larger than the experience effect. Out of the 16 problems, the average number of times participants forgo agency significantly falls from 7.5 problems in the *Experienced* treatment to 5 problems in the *Determined* treatments

⁶All statistical tests about differences in the average number of times that participants forgo agency are from t -tests. All statistical tests about the chance that a participant forgoes agency are from linear probability models of the likelihood to forgo agency in a problem, with standard errors clustered at the participant level.

⁷The average number of times that participants forgo agency is 7.8 versus 7.2 with and without reminder (two-sided t-test, $p = 0.29$).

($p < 0.01$, two-sided t-test). Related, as evident via a test of the coefficient estimates in Table 3, the percent of times participants forgo agency significantly falls from 46% of the time in the *Experienced* treatment to 31% of the time in the *Determined* treatment ($p < 0.01$).

Thus, while we find evidence for both effects—*experience* and *decision avoidance*—in accounting for our main *Determined Choice* effect, *decision avoidance* accounts for almost two-thirds of the total effect. This suggests that the ability to avoid making a decision proves key to participants’ willingness to forgo agency. When insisting on agency requires participants to choose an investment option—as in the *Inexperienced* or the *Experienced* treatment—participants are relatively willing to forgo agency to avoid making this decision.

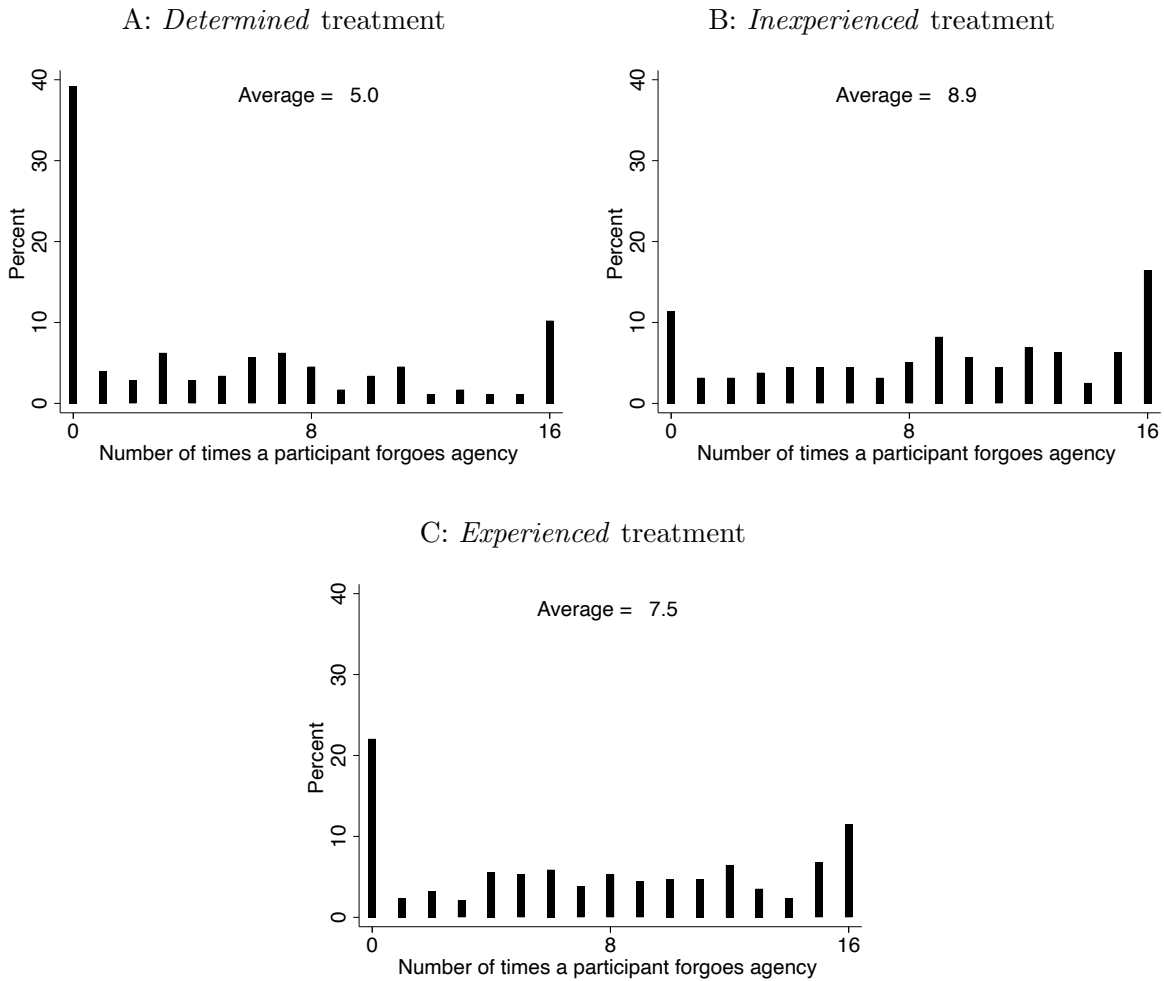
These results have implications on how we think about the choice participants made in the Baseline Block. Specifically, when participants face an investment problem for the first time, they do not have a eureka moment in which they determine their optimal investment option with certainty. Rather, since even experienced participants are keen to forgo agency when it allows them to avoid making a decision for a second time—even when, as in the *Experienced-R* treatment, they are reminded of how they previously made that decision—our results are more consistent with participants *not* viewing the choices they made when they faced an investment problem for the first time as fully informative for what they should choose when facing the same investment problem again. This could, for example, be because of the cognitive uncertainty surrounding their initial choice (Enke and Graeber, 2021).

Table 3: Linear probability model of likelihood to forgo agency

	All Problems		EG Problems		High-Risk Problems	
	(1)	(2)	(3)	(4)	(5)	(6)
Inexperienced	0.24*** (0.04)	0.25*** (0.04)	0.23*** (0.04)	0.23*** (0.04)	0.29*** (0.04)	0.30*** (0.04)
Experienced	0.15*** (0.03)	0.16*** (0.03)	0.14*** (0.03)	0.15*** (0.03)	0.18*** (0.04)	0.18*** (0.04)
Constant	0.31*** (0.03)	0.42*** (0.06)	0.31*** (0.03)	0.39*** (0.07)	0.34*** (0.03)	0.49*** (0.07)
N	10784	10784	8088	8088	2696	2696
Controls	no	yes	no	yes	no	yes

Results from a linear probability model of the likelihood to forgo agency. Inexperienced and Experienced are indicators for a participant being in the *Inexperienced* and *Experienced* treatments, respectively. Columns 1 and 2 use data on all 16 problems, while columns 3 and 4 restrict attention to the 12 EG problems, and columns 5 and 6 to the 4 High-Risk problems. Controls include a participant’s age, a measure of risk aversion equal to the number of times (out of 12) the participant chose the safe option in EG problems in the Baseline Block, and indicators for whether the participant is male, has completed at least 4 years of college, and identifies as white. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant level and shown in parentheses.

Figure 1: Distribution of how often participants forgo agency



There are 158 participants in the *Inexperienced* treatment, 176 in the *Determined* treatment, and 340 in the *Experienced* treatment (165 with and 175 without reminders).

4 Robustness and Discussion

To demonstrate the robustness of our main *Determined Choice* effect and to further validate our *decision avoidance* effect, we ran additional Experiments A1, A2, A3, and A4. For full design details, see Section 3 of the Online Appendix. In this section, we focus on the main findings and report the statistical significance of results according to regression specifications that follow those shown in Table 3. In addition, to facilitate comparison to our main results, we once more restrict attention to participants who correctly answered both attention checks in the Baseline Block, which leaves us with 2,027 additional participants.

In Section 4.1, we show that we replicate our main *Determined Choice* effect. In Section 4.2, we show that we replicate our main *Determined Choice* effect when expectations over Pat’s choices are fixed because Pat—rather than reflecting the choices of the typical participant—is a

computer that is equally likely to select any of the available investment options. In Section 4.3, we discuss the robustness to the case where Pat’s choice is known; that is, when an individual is informed what choice is implemented in case she gives up agency. In Section 4.4, we confirm that participants react to the identity of Pat. In Section 4.5, we provide additional evidence on the role of *decision avoidance* in driving participants’ willingness to forgo agency in a slightly different environment. Finally, in Section 4.6, we discuss the role of time costs in the *decision avoidance* effect.

In each of the next subsections, we only compare individuals across treatments within the same experiment, since in each experiment participants are randomized across treatments.

4.1 Replication of the *Determined Choice* Effect

Our main study documents a strong and significant *Determined Choice* effect. We find a 31% chance to forgo agency in the *Determined* treatment, which increases by 24 percentage points in the *Inexperienced* treatment ($p < 0.01$).

In Experiment A1, we have 386 participants in the *Determined* and *Inexperienced* treatment. We find a 37% chance to forgo agency in the *Determined* treatment, which increases by 19 percentage points in the *Inexperienced* treatment ($p < 0.01$). We therefore replicate our *Determined Choice* effect.⁸

4.2 Delegating to Random Choice

In all results discussed so far, participants are not informed of Pat’s choice, which is the option that is implemented if participants forgo agency. This ensures that there are no differential information effects across treatments. To fix participants’ beliefs about Pat’s choice—without informing them of Pat’s actual choice—we run *Random Choice* variations of our treatments. In Experiment A2, we have 531 participants in the *Random Choice* variations of the *Determined* treatment, the two *Experienced* treatments, $-NR$ and $-R$, and the *Inexperienced* treatment.⁹

The preference for agency in the *Random Choice* variation of all treatments is in general lower than in the original version with a common choice Pat. For instance, while participants forgo agency in the original *Determined* treatment 31% of the time, they forgo agency 21% of the time in the *Determined–Random Choice* treatment. This is consistent with participants having a preference over Pat’s choice—i.e., preferring a choice that is common rather than purely random—when they decide whether to forgo agency.

While there are level effects in the *Random Choice* variations, we nonetheless replicate a strong *Determined Choice* effect. The percent of times participants forgo agency increases from

⁸Experiment A1 was run before our main experiment—but without the additional *Experienced* treatments. In this way, one could instead consider our main experiment a replication of the main results in Experiment A1.

⁹As in our main experiments, the two percentage point difference between the *Experienced–NR* and $-R$ treatments is not significant, and we therefore combine the data into a single *Experienced* treatment.

21% in the *Determined–Random Choice* treatment to 36% in the *Inexperienced–Random Choice* treatment ($p < 0.01$).

In the *Random Choice* variations, the *Determined Choice* effect is entirely driven by decision avoidance. That is, there is no evidence for an *experience* effect: participants forgo agency 36% of the time in both the *Inexperienced* and *Experienced* treatments.¹⁰ This implies that the 15 percentage points *Determined Choice* effect is driven entirely by the difference between the *Experienced* and the *Determined* treatments ($p < 0.01$), and hence by *decision avoidance*. The even more limited role of *experience* could be due to the generally lower level of insisting on agency in these variations.

4.3 The Role of Information on Pat’s Choice

In some environments, individuals may be informed of exactly what choice would be implemented if they forgo agency. We therefore test whether the *Determined Choice* hypothesis holds in such an environment.

In Experiment A3, we have 365 participants in *Pat Known* variations of the *Determined* and *Inexperienced* treatment, where agents are informed of Pat’s choice; that is, which option is implemented if they decide to forego agency. As in our main experiment, we use the common Pat. We find a 60% chance of forgoing agency in the *Determined–Pat Known* treatment, which increases by a significant 8 percentage points in the *Inexperienced–Pat Known* treatment ($p < 0.01$). Hence, our *Determined Choice* effect persists in an environment in which individuals are informed of the option that is implemented when they forgo agency.

While the difference between treatments is smaller, it is worth noting that many participants in the *Determined* treatment decide between implementing their previous choice and that same choice made by Pat. Indeed, 49% of the time, a participant’s previous choice was the same as Pat’s choice, which is not surprising since Pat made common choices. Hence, it naturally follows that participants in the *Determined–Pat Known* treatment are more likely to implement that choice by forgoing agency and accepting Pat’s choice (rather than insisting on agency and hence paying a fee to implement that same choice).

4.4 The Role of Pat’s Choice Being Reasonable

As detailed in Section 2.1, we purposefully select Pat in a way to ensure that participants know Pat’s choices are “reasonable.” Pat is chosen to be the participant who made the most common choices in a prior study. To verify that participants pay attention to the description of Pat, even when they are not directly informed of the exact choice Pat made, Experiment A1 (previously detailed in Section 4.1) has an additional 190 participants in an *Inexperienced–Unusual Pat* treatment. Participants in this treatment are informed that Pat is the participant

¹⁰In the *Experienced–R* treatment, participants forgo agency 37% of the time, and they forgo agency 35% of the time in the *Experienced–NR* treatment.

who made the least common choices in a prior study.

Compared to the 56% chance to forgo agency in the *Inexperienced* treatment, participants in the *Inexperienced–Unusual Pat* treatment are 17 percentage points less likely to forgo agency ($p < 0.01$). Therefore, participants pay attention to the description of Pat’s choices and are not just thoughtlessly giving up agency.

4.5 Additional Evidence on *Decision Avoidance*

As explained in Section 3.2, we found substantial and significant evidence of decision avoidance by comparing participants’ willingness to forgo agency in the *Experienced* to the *Determined* treatment. We found that, among experienced participants, there was a strong desire for decision avoidance. Furthermore, *decision avoidance* was the main driver of the *Determined Choice* effect, with *experience* playing a smaller role in all our experiments.

To further show the importance of *decision avoidance*, we design two new treatments, the *Avoidable Decision* and *Unavoidable Decision* treatment, in Experiment A4. As in our main treatments, the Pat we use is the common Pat. In both treatments, participants first face a modified Agency Block and then the Baseline Block. In both Agency Blocks, participants know that—after they make all of their agency decisions—two problems will be randomly chosen to be “required-own-choice” problems. In the required-own-choice problems, a participant is required to choose an investment option which will then be implemented, even if the participant initially opted to forgo agency. Our two treatments vary in how we elicit participants’ choices in these two required-own-choice problems. This variation will affect the participants’ ability to practice *decision avoidance* between the two treatments.

In the *Avoidable Decision* treatment, a participant who forgoes agency in an investment problem only has to indicate which option she would choose if the investment problem turns out to be a required-own-choice problem. If a participant insists on agency in an investment problem, she is then immediately asked which option she would choose in that problem and the option she chose is implemented. If the participant forgoes agency in an investment problem that is not one of the required-own-choice problems, she is never asked which option she would choose in that problem and the option Pat chose is implemented. Only if the participant forgoes agency in an investment problem that is one of the two required-own-choice problems is her experience more nuanced. Specifically, if the participant forgoes agency in an investment problem that is one of the two required-own-choice problems, she proceeds to the next investment problem without having to make a choice in that required-own-choice investment problem—but, she will be asked to make a choice in that required-own-choice investment problem at the very end of the experiment and that choice will be then implemented in that problem. Put differently, this design ensures that—in all but two problems (i.e., in all but the two problems that are revealed to be the required-own-choice investment problems at the end of the experiment)—the participant

in the *Avoidable Decision* treatment can practice decision avoidance. A participant who forgoes agency is therefore very likely, though not definitely, able to avoid choosing an option herself.

In the *Unavoidable Decision* treatment, participants have to indicate which option they would choose in all investment problems regardless as to whether they insist on agency. If a participant insists on agency in an investment problem, she is then immediately asked which option she would choose in that problem and the option she chose is implemented. If the participant forgoes agency in an investment problem, she is then immediately asked which option she would choose in that problem but the option she chose is only implemented if that problem turns out to be a required-own-choice problem (and otherwise, the option Pat chose is implemented).¹¹ Thus, choosing to forgo agency does not allow a participant to avoid making a decision.

We have data from 365 participants in Experiment A4. We find a 43% chance to forgo agency in the *Unavoidable Decision* treatment. This increases by 9 percentage points in the *Avoidable Decision* treatment ($p < 0.05$). We therefore find a significant *decision avoidance* effect in this new environment among inexperienced participants.

Furthermore, the 52% chance to forgo agency in the *Avoidable Decision* treatment is very similar to the 55-56% chance that we found in the *Inexperienced* treatments when considering both our main study and Experiment A1. This is reassuring, since the *Avoidable Decision* and the *Inexperienced* treatment differ in only two of the 18 investment problems.¹² This small change does not significantly affect agency preferences. This is quite in contrast to the large change made in the *Unavoidable Decision* treatment.

4.6 The Role of Time in *Decision Avoidance*

As noted, our results support individuals forgoing agency to avoid decision costs. An important component of decision costs could be the time associated with having to make a decision. Thus, our design does not seek to rule out the possibility that a desire to avoid time costs contributes to our *decision avoidance* results.

That said, additional results from our experiment suggest a limited role for time costs in driving our *decision avoidance* results. First, the average amount of time participants spend in the *Experienced* and *Determined* treatments is very similar (17.0 min vs. 17.5 min, $p = 0.57$). Second, excluding the 10% of participants who complete our study the fastest (and hence who may be most motivated to avoid time costs) does not change the *decision avoidance* effect: participants are still 15 percentage points more likely to forgo agency in the *Experienced*

¹¹Note that, immediately after forgoing agency for the first time in the Agency block, participants, by design, are reminded that they have to select an option even if they opted to forgo agency.

¹²Specifically, compared to the *Inexperienced* treatment, in the *Avoidable Decision* treatment, two randomly selected investment problems turn into required-own-choice problems. However, while participants decide on agency in the 18 investment problems, they go through all of the the same other procedures. It's only at the very end, after making 18 decisions, that participants in the *Avoidable Decision* treatment may have to decide which option to implement for at most two problems.

treatment as compared to the *Determined* treatment. Future work may further investigate the role of time costs by exogenously varying how long someone has to spend on a decision if they do not forgo agency.

5 Conclusion

Consistent with our motivating example in which a boss is more likely to have her trusted employee implement a solution when she encounters a problem for the first time, our *Determined Choice* hypothesis states that individuals insist less on agency the less they are determined in their choice. We provide strong evidence for our hypothesis by comparing agency preferences between the *Determined* and *Inexperienced* treatment.

In the *Determined* treatment, an individual decides whether to forgo agency in the second block of problems, where the alternative is to re-implement the choice she made the first time she encountered the problem in the first block of problems. In contrast, in the *Inexperienced* treatment, an individual decides whether to forgo agency in the first block of problems, where the alternative is to select an option among all available options herself. While, on average, individuals forgo agency only 31% of the time in the *Determined* treatment, this increases by 24 percentage points (or 77%) in the *Inexperienced* treatment.

Approximately one-third of the total effect can be attributed to *experience*, the fact that individuals encounter the problem for a second time. The remaining two-thirds of the effect can be attributed to *decision avoidance*. Specifically, experienced participants, even if they are reminded of their previous choice, are much more likely to forgo agency if it allows them to avoid choosing which option to implement. That is, they are much more likely to forgo agency when they have the opportunity to implement any possible option compared to when they are committed to implementing their previous choice.

Our findings speak to policy implications. Specifically, if the goal is to have individuals forgo agency—by accepting a recommendation made by others—then our results indicate that it is useful to catch them early in the decision process. To capture the benefits of both the *experience* effect and the *decision avoidance* effect, it would be particularly useful to ask individuals to forgo agency when they encounter a problem for the first time and are not yet determined about which option to implement. But, even when an individual is not facing the problem for the first time, the *decision avoidance* effect further shows that it can be useful to require individuals who insist on agency to remake their decisions, i.e., to select among all possible options.

Our findings also suggest two avenues of future research. The first avenue concerns when individuals' decisions should be expected to be more or less malleable. Our results strongly suggest that individuals' decisions appear more malleable when they are earlier in the decision-making process. While we show this in the context of agency decisions, future work may investigate whether individuals—when they are less determined about what to choose in a problem because

they are earlier in the decision-making process—are also more easily influenced by information, defaults, framing effects, etc. This could serve as an explanation for a dichotomy in the behavioral literature: while some papers show that individuals are very malleable in their decisions (e.g., framing effect), other papers show that it is really difficult to change an individual’s decision (e.g., habit formation).

The second avenue concerns implications of *decision avoidance*. We provide evidence that individuals select to avoid costs associated with decision-making. While this is consistent with some work on costly thinking (see, e.g., [Gabaix, 2019](#) or [Mackowiak, Matejka and Wiederholt, Forthcoming](#)), future work could study the full ramifications of the fact that decisions are costly, and investigate whether this could generate new biases or perhaps explain existing ones. Indeed, our results—specifically those from the *Random Choice* treatments—suggest that a desire to avoid decision costs may make risk preferences very malleable and sensitive to the elicitation procedure (for an important and related review of estimating risk preferences, see [Barseghyan et al. \(2018\)](#)).

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