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Do Narratives about Psychological Mechanisms Affect Public Support for Behavioral Policies?

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Abstract[1]

Behavioral policy, such as leveraging defaults, is increasingly employed by governments worldwide, but has sometimes faced public backlash, which limits political feasibility. We conducted a survey experiment with a large, representative sample to explore how the narrative describing the psychological mechanism by which a default rule impacts a socially significant outcome affects public approval. Respondents are presented with a vignette in which an unemployed person follows a default to participate in further training. We experimentally vary the narrative about his reasons for doing so. Compared to the baseline condition in which no information on the psychological mechanism is provided, voluntary ignorance, involuntary ignorance, perceived social expectations and perceived social pressure each reduce policy approval. These factors also lead to more negative perceptions of the default rule's impact on the decision maker's welfare and autonomy. The benign mechanism of deliberate endorsement, however, does not significantly raise approval or perceptions. We show that these findings hold irrespective of assumed preferences and discuss their practical implications.

Keywords: behavioral policy, public support, psychological mechanisms, default rule, opt-in versus opt-out, automatic enrolment, experiment

JEL classifications: D91; D83; I31; J68

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1 Introduction

In recent years, policy-makers have increasingly used interventions based on insights from behavioral economics and psychology to advance their policy goals. One important class of interventions involves the re-design of default settings - the automatic implementation of a specific option if no active choice is made. The strategic use of defaults seems to be the most effective among a large group of interventions commonly called "nudges" (Hummel & Maedche, 2019; Mertens et al., 2022), which is one of the most policy-relevant insights from behavioral economics (Madrian, 2014).[2] For example, switching from an opt-in to an opt-out default (i.e., implementing automatic enrolment), increases environmentally friendly consumer choices (Pichert and Katsikopoulos, 2008), charitable giving (Behavioural Insights Team 2013), organ donation (Johnson and Goldstein, 2003, Abadie and Gay 2004), and vaccine use (Chapman et al., 2010), health care coverage (Shepard and Wagner, 2023) and savings (Samuelson and Zeckhauser, 1988, Madrian and Shea, 2001, Choi et al., 2004, Thaler and Benartzi, 2004, Chetty et al., 2014, Michaelsen and Sunstein, 2023).

Even if opt-out defaults are highly effective and their introduction does not require changing any laws or burden the public budget, there has been vigorous public discussion about their acceptability in both the U.S. and the U.K (Tannenbaum et al., 2017). The political feasibility of such policies critically depends on their public support. For instance, the German government considered the introduction of an opt-out rule with respect to organ donation, but abandoned this initiative due to low public support.[3] On the other hand, an opt-out rule for digital patient files enjoyed broad public support, and was ultimately adopted.[4] It is therefore important to better understand the drivers of public support for opt-out defaults.

As the reasons why a person follows a default may influence its effects on her welfare and autonomy, assumptions about the structural model that generates behavior are necessary to resolve the "normative ambiguity" of default effects (Goldin and Reck, 2022). For example, it may matter for an agent's welfare and autonomy whether he sticks to a subscription-by-default because he is unaware of the possibility to opt out, because opt-out entails perceived social or effort costs, or because he deliberately endorses the default options.

Moreover, an understanding of the psychological mechanisms that drive behavior is relevant for predicting heterogeneous and distributional effects of defaults (Jachimowicz, 2019), as field experiments in the context of higher education and laboratory experiments have shown (Behlen et

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[2] A meta-analysis of 58 studies found that opt-out defaults on average increase subscriptions, contributions, and similar engagements by 0.63–0.68 standard deviations (or 27.3 percentage points) compared to opt-in defaults (Jachimowicz et al., 2019).

[3] In a representative survey from May 2022, only 28 percent are in favor of an opt-out rule with respect to organ donation, while 49 percent are in favor of an opt-in rule. https://de.statista.com/infografik/27554/anteil-der-befragten-die-folgende-organspendeloesung-befuerworten/ (01.03.2024)

[4] In a representative survey from August and September 2022, 65 percent are in favor of an opt-out rule with respect to digital patient files, while only 12 are against it. https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/ST-G_Factsheet_ePA_Opt-out.pdf (01.03.2024)

al., 2022, Altmann et al., 2022, Ortmann et al., 2023). Perceptions about why a default affects behavior may therefore affect its perceived ethicality and support for its use as a policy tool.

In this paper, we test whether public approval of a given default policy, and its perceived effects on welfare and autonomy, is influenced by different narratives about the underlying psychological mechanisms driving its effectiveness. We implement an online-survey experiment among a large representative sample of adults in Germany, in which each respondent is randomly assigned to one of six experimental groups, resulting in about 800-900 subjects per treatment. The experiment entails three stages. First, we elicit respondents' general support for the policy goal, participation of the unemployed in further training. Second, respondents are shown a vignette presenting them with an opt-out default policy, asking them to imagine an unemployed decision-maker who receives a letter informing him that he was signed up for a further training course and is obliged to participate unless he opts out. Finally, we elicit respondents' approval of the default policy and their perceptions of the decision-maker's autonomy and wellbeing, and the training's effectiveness.

Depending on the experimental group, respondents learn in the vignette that the decision maker followed the default for one of the following reasons: because he did not know that he could opt out as he either did not read the letter (*voluntary ignorance*), or did not receive the letter (*involuntary ignorance*); because he believes that society expects him to participate (*social expectation*), because he feels pressured by the employment agency to participate (*social pressure*), or because he interprets his default subscription as revealing information that his participation in the program is beneficial to him (*deliberate endorsement*). Respondents in the control group (*baseline*) were not given any narrative about psychological mechanisms.

We find that the policy goal that unemployed participate in further training is very popular, as it is supported by 86.5 percent of the general population. When no psychological mechanism is given (*baseline*), 62.1 percent of the public support the use of the opt-out default policy described in the vignette. The level of support is unaffected when the cognitive mechanism described is a conscious decision to stick with the default option (*deliberate endorsement*). However, when a narrative is used that describes the decision-maker's unawareness of the possibility to opt out or his perception of what others want him to do as his reason for complying with the default, public approval of the default policy is significantly reduced. If the decision-maker does not know about the possibility to opt out because he did not read the letter (*voluntary ignorance*), public approval of the default policy is reduced by 4.8 percentage points, if he is unaware because he did not receive the letter (*involuntary ignorance*) approval is reduced by 15.9 percentage points. If the decision-maker perceives that society expects him to participate (*social expectation*) public approval of the default policy is reduced by 5.1 percentage points, whereas public approval is reduced by 10.6 percentage points if the decision-maker participates because he feels pressured by the employment agency to participate (*social pressure*). Furthermore, we find that narratives about psychological mechanisms systematically influence the public's perceived effects of the default policy on the decision-maker's wellbeing and

autonomy and the training program's effectiveness (i.e., increased job chances for the unemployed) that are largely in line with the narratives' influence on approval ratings.

In extensions of our experimental design, we show that our results are not driven by changes in respondents' perceptions of the decision-maker's preferences for attending the training. Furthermore, the treatments do not affect respondents' views about the employment agency.

A growing literature examines the determinants of public support for the use of defaults as policy tools. Important determinants and correlates of support for setting an opt-out default are policy area (Jachimowicz et al., 2019, Yan and Yates, 2019), policy goal (Sunstein, 2019), alternative policies (Arad and Rubinstein, 2017, Katz and Zamir, 2021, Hagman et al., 2022)[5], perceived effectiveness (Sunstein, 2016, Katz and Zamir, 2021), and transparency (Felsen et al., 2013, Jung and Mellers, 2016, Michaelsen et al., 2020). Most closely related to our study, Tannenbaum et al. (2017) show that people's general attitudes towards default policies (i.e. not only for their specific applications) may be influenced by narrative illustrations of what policy goal a default could be used for. Identifying a "partisan nudge bias", the authors suggest that opposition to (or support for) defaults as policy tools should not always be taken at face value, as people appear to conflate their attitudes about general purpose policy tools with their attitudes about specific policy objectives or policy sponsors.

We relate to this literature by providing causal evidence for whether narratives about the psychological mechanism through which a default policy operates affect its perceptions and support in the general public. Our results show for the first time that the general public's policy approval is strongly influenced by narratives about why (i.e., through which psychological mechanism) a default policy affects targeted behavior. This finding likely extends to other behavioral and conventional policy tools and other policy areas.

From a policy-maker's point of view it is also important to note that we find that giving no narrative results in approval ratings, and perceptions of autonomy and welfare, that are about as high as with a narrative about the agent's deliberate endorsement, the most benign mechanism given in our study (and even induces more positive perceptions of a policy's effectiveness). It seems to be the case that, at least in the context of our study, communicating that the mechanism behind behavioral policies is autonomy- and welfare-preserving, does not increase support for a policy relative to a communication strategy in which no information on the mechanism is given. Furthermore, we find no evidence that respondents perceive a trade-off between autonomy and welfare as frequently conjectured. Instead, narratives that lead to lower perceived autonomy also lead to lower perceived welfare.

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[5] In their meta-study, Diepenveen et al. (2013) find that public acceptability for behavioral interventions is generally higher the less intrusive they are: Providing information was deemed more acceptable than guiding choice, which was in turn deemed more acceptable than eliminating choice.

The paper is structured as follows. Section 2 summarizes theoretical considerations and existing experimental results on psychological mechanisms of default effects. Section 3 describes the experiment, section 4 presents the results and section 5 concludes.

2   Psychological Mechanisms of Default Effects

In order to model the welfare effects and optimal design of defaults, theoretical studies make assumptions about the mechanisms through which default policies affect targeted behavior (Bernheim, Fradkin and Popov 2015, Bar-Gill and Ben-Shahar, 2021, Goldin and Reck, 2022). An understanding of the psychological mechanisms that drive behavior is not only important for understanding the working of such policies per se, but also for predicting heterogeneous and distributional effects of defaults (Jachimowicz, 2019, Borghans and Golsteyn, 2014, Behlen et al., 2022, Altmann et al., 2022, Ortmann et al., 2023).

A number of different psychological mechanisms have been suggested as explanations for why opt-out and opt-in rules result in stark differences in participation rates (see, e.g., Johnson & Goldstein, 2003, Brown and Krishna, 2004, McKenzie et al., 2006, Dinner et al, 2011, Everett et al., 2015, Grüne-Yanoff, 2016, Jachimowicz, 2019, Altmann et al., 2022, Ortmann et al., 2023). First, people may follow the default because they view it as a recommended choice. If they think of the choice architect as being both well-intended and well-informed, this recommendation may communicate important *information* about what is best for the decision maker. Second, they may shy away from the (cognitive) effort it takes to consider and implement alternative options. Third, the default may be perceived as signal of what behavior is socially expected and people may fear social punishment if they deviate from it. Both the second and the third explanation point at perceived non-monetary *costs* as being an important mechanism of default compliance. Fourth, visceral factors—such as emotions, stress, pain, and physical urges, which Grüne-Yanoff (2016, p. 469) defines as "influences on behavior that are typically distinguished from motivations based on perceived self-interest"—may result in an unconscious or only partially conscious, "automatic" following of defaults. Fifth, people may stick to a default due to being *ignorant* about the possibility to opt out. Our treatment variation thus allows us to investigate the role of narratives about psychological mechanisms often suggested to explain default effects in the literature.[6]

Some experimental studies have shed light on psychological mechanisms underlying behavioral default effects. Altmann et al. (2022) show that default effects are more pronounced if the interests of the default setter and decision maker are more closely aligned.[7] Providing further evidence of the relevance of interest alignment for "downstream" default effects (i.e., knock-on effects that require extra effort), Behlen et al. (2022) found that university students who respond to unrelated university

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[6] Further mechanisms discussed in specific financial settings are biases such as a loss aversion or endowment effects (Dinner et al, 2011). Moreover, other mechanisms have been suggested for knock-on effects of a change in defaults. For example, a default, by changing the social environment, over time may enable learning (e.g. due to more social interactions or feedback) and thus change behaviour long term due to changes in beliefs (e.g. about the trustworthiness of bank clerks, Somville and Vandewalle, 2018).

[7] If decision-makers are aware that their interests are not aligned with those of the default-setter, such as in many marketplace interactions, default-setting may trigger "metacognition-driven skepticism" that may result in defaults being ineffective or backfiring, as investigated by Brown and Krishna (2004).

requests are more likely to convert increased sign-ups from an opt-out default into more passed exams. For non-responsive students, increased sign-ups result in more failed exams due to no-shows. Similarly, Borghans and Golsteyn (2014) show that decision makers are also more likely to follow default options the less they are privately informed about the relevant decision environment, suggesting that people interpret the default as a recommendation. The authors investigate a hypothetical choice experiment on default options and training participation and find that people are more likely to follow the default if it provides skills they think they lack. Providing evidence for a cognitive-effort mechanism, Ortmann et al. (2023) find that defaults influence purchasing behavior when participants can decide at their own pace. However, this effect disappears in a treatment where decision time is fixed at 45 seconds per screen, preventing faster decisions. This setup lowers the opportunity cost of decision time, making active deliberation less costly.

Using evidence from self-reports, McKenzie et al. (2006) found that subjects presented with opt-out defaults (versus opt-in) in organ donation and retirement savings were more likely to believe that the default-setter is willing to be an organ donor or is enrolled in retirement savings, thinks people should be donors or enrolled, and believes that people want to be enrolled. Similarly, Everett et al. (2015) found that participants were more likely to donate money to charity when this was the default option in an altruistic choice context. In their setting, participants reported to perceive the default option to be the socially normative option and perceptions of social norms mediated the relationship between default status and charitable donations.

3   Background and Research Design

This section introduces our research design. Our vignette scenario refers to a hypothetical policy where unemployed individuals are enrolled in further training courses unless they opt-out. In a first step, we provide some institutional context about the training of unemployed in Germany. Then we discuss our data, experimental design, and empirical strategy.

3.1 Institutional Context

To receive unemployment benefits, unemployed workers in Germany have to register with the Federal Employment Agency (FEA). In their first year after losing their job, an unemployed person without children receives 60 percent of their previous net wage as monthly unemployment benefit. Payments can be extended for up to two years for those who are 50 or older.[8] As part of their interaction with the FEA, unemployed workers have individual meetings with career advisers who can offer participation in publicly financed retraining or professional development courses. Offered courses are selected on an individual basis to allow the unemployed worker to strengthen their basic competencies, i.e. skills in reading, writing, mathematics or ICT, to increase their chances of reentering employment. Such courses can be made mandatory, without any easy way to opt out of

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[8] In 2020 the average monthly gross wage in Germany was around 4,000 euros. After taxes and social security contributions the net monthly wage was about 2,460 euros (about 62 percent of the gross wage). For the average previously employed person this means they receive 1,475 euros per month unemployment benefits. If workers remain unemployed for longer periods of time and no longer receive unemployment benefits, they can apply for other, generally less generous assistance through the social security system which is independent of previous wages.

them and with sanctions for non-compliance. The existence of a sanction mechanism may be perceived as humiliating and potentially causing grudges and resistance among the unemployed, although in practice sanctions are rarely applied.[9]

The introduction of simple opt-out defaults may both better preserve the autonomy of and at the same time increase the acceptance - and therefore the participation - of the unemployed in training programs. Given the large cost of unemployment to the public budget, increasing the share of people who are participating in training programs that might increase their probability of finding a new job is an important policy aim.[10] Second, unemployment is a common occurrence, meaning that most respondents will have encountered either the FEA themselves, or someone who has experienced unemployment spells over their working life. A broad understanding of the context of the vignette increases the informative value of respondents' stated policy preferences. Third, the policy goal of having the unemployed participate in further training courses enjoys strong public support. We also chose a policy goal that is unidimensional, and for which, to our knowledge, the use of simple opt-out defaults is not common practice.

3.2 Data

To investigate the effects of narratives about psychological mechanisms on the public approval of defaults, we implemented a survey experiment in two waves of the ifo Education Survey, a representative online survey of the adult population in Germany (Freundl et al., 2023). We mainly report results from the 2020 wave, which was in the field in June 2020 and covers a sample of 10,338 respondents. Sampling and polling were carried out via online access panels by the polling firm Respondi. The survey also includes a rich set of sociodemographic characteristics. Median completion time was 24 minutes. For some of the analyses, we additionally use data from the 2019 wave of the ifo Education Survey. This wave was in the field in May 2019 and covered 4,009 respondents, polled by the polling firm Kantar. All respondents answered the survey autonomously on their own digital device.

Appendix Table A1 presents an overview of sociodemographic characteristics of our analysis sample. For example, the average age of respondents in the baseline experimental group is 45.1 years, and 73.1 percent report they are currently working (Table A1, column (1)). Columns (2) – (6) report average characteristics by experimental group. The small number of three significant coefficient differences across sixty independent comparisons show that randomization worked as intended.

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[9] In 2023, about 0.4 percent of long-term unemployed workers were sanctioned for refusing to accept a job offer or to participate in a measure aimed at integrating them into the labor market, such as further training. (https://www.zdf.de/nachrichten/politik/deutschland/buergergeld-sanktionen-kuerzungen-100.html)

[10] As of 2023, according to the definition of the FEA there are 2.7 million regististed unemployed in Germany, amounting to an unemployment rate of 5.7 percent, who are not currently participating in measures to promote their re-integration into the labor market but who would be able to do so (because they are below 58 years of age, not registered sick, and do not have to care for dependents).

3.3 The Experiment

The online-survey experiment consists of three consecutive stages. First, we elicit respondents' general support for the policy goal of participation of unemployed workers in further training. The question is worded as follows:

"Are you in favor of or against the unemployed taking part in further training?"

Respondents record their answer on a five-point Likert scale ("I am very much in favor", "I am rather in favor", "I am rather against it", "I am very much against it", "I am neither in favor nor against").

Second, on the next screen, respondents are shown a vignette presenting them with an opt-out default policy:

"Please imagine the following situation: Mr. Schmidt is 51 years old, a trained retail salesman and has been unemployed for 9 months. He worked as a salesman in a car dealership for the last 20 years until it had to close. Mr. Schmidt is undecided as to whether he would like to do further training or not. The Federal Employment Agency sends him a letter informing him that it has registered him for a 4-week further training in computer applications. If he does not opt out from it within two weeks, participation is mandatory for Mr. Schmidt.

Mr. Schmidt takes part in the training.

Are you in favor of or against the Federal Employment Agency's described procedure to mandatorily register unemployed persons for further training courses if they do not opt out of the registration?"

Respondents state their approval of the default policy on a five-point Likert scale ("I am very much in favor", "I am rather in favor", "I am rather against it", "I am very much against it", "I am neither in favor nor against"). We chose the hypothetical unemployed person in our vignette to be very typical for an unemployed person in Germany at the time of our study: Unemployment rates are highest among people with a low level of education, among people over the age of 50 and among men. "Schmidt" is one of the most common names in Germany and the average unemployed person has been unemployed for about 9 months.

In the baseline condition no information on the psychological mechanism is provided. In the other experimental groups, the second paragraph of the vignette is extended in one of the following ways and respondents additionally learn about the psychological mechanism that leads to Mr. Schmidt's participation:

1. *"Mr. Schmidt does not read the letter and therefore does not know that he can opt out of the registration for two weeks. After the deadline has expired, the employment agency informs him that he is now mandatorily registered. Mr. Schmidt therefore takes part in the training." (voluntary ignorance)*

2. *"Mr. Schmidt does not read the letter because the mail service delivered it incorrectly and therefore does not know that he can opt out of the registration for two weeks. After the deadline has expired, the employment*

agency informs him that he is now mandatorily registered. Mr. Schmidt therefore takes part in the training." (involuntary ignorance)

3. *"Because the employment agency has registered him for the training, he believes that society expects him to take part in the training. Mr. Schmidt therefore takes part in the training." (social expectation)*

4. *"He feels under pressure from the employment agency to take part in the training and therefore does not dare to cancel his registration. Mr. Schmidt therefore takes part in the training." (social pressure)*

5. *"Because the employment agency has registered him for further training, he believes that taking part will help him to find a job again more quickly. Mr. Schmidt therefore takes part in the training." (deliberate endorsement)*

Due to sample size constraints, the 2019 wave of the survey only included experimental groups voluntary ignorance, social pressure and deliberate endorsement. Vignettes in the 2019 wave also did not include the sentence: "Mr. Schmidt is undecided as to whether he would like to do further training or not.". In the 2020 survey, we replicate those vignettes in addition to those listed above. When we compare across waves, we compare results from the 2019 survey to those respondents in the 2020 survey that received the comparable treatment.

Third, on the following screen, we elicit respondents' perceptions of how the default policy affects unemployed persons' autonomy and wellbeing, as well as their ex-post beliefs about the effectiveness of further training courses. In particular, respondents state whether they agree with the following statements:

"The procedure restricts the freedom of choice of the unemployed."

"The procedure is overall good for the unemployed."

"Participation in further training improves the labor market opportunities of the unemployed."

Answers are given on a 5-point Likert scale ("I very much agree", "I rather agree", "I rather disagree", "I very much disagree", "I neither agree nor disagree").

3.4 Empirical strategy

We estimate the effects of the treatment using the following regression model:

$$y_i = \alpha_0 + \sum_j \alpha_{1j} \, T_i^j + \delta' X_i + \varepsilon_i \tag{1}$$

where y_i is the outcome variable of interest, e.g., support for the default policy, and T_i^j are treatment indicators equal to 1 for each respondent i assigned to experimental group j, and 0 otherwise. The vector X_i is a vector of control variables. Due to random assignment of respondents to treatment, the inclusion of controls is not necessary for identification of α_1, but might increase the precision of estimates. We present results without covariates throughout the analysis. Our results remain unchanged if we include the set of control variables listed in Table 1. ε_i is the error term.

To analyze whether results replicate in two different waves of cross-sectional data, we also estimate the following specification:

$$y_i = \alpha_0 + \sum_j \alpha_{1j} T_i^j + \alpha_2 W_i + \sum_k \alpha_{3k} T_i^k W_i + \delta' X_i + \varepsilon_i \tag{2}$$

where W_i is an indicator of whether respondent i was surveyed in the 2019 or 2020 survey wave.

4 Results

We start by presenting the effects of narratives about the underlying psychological mechanisms on approval of the default policy, perceived autonomy, effectiveness and wellbeing. Next, we discuss whether effects are driven by changes in perceptions about the unemployed person in the vignette or the FEA. Finally, we present results on robustness of the main findings.

4.1 Experimental Effects of Narratives on Approval

Our results show that if the vignette asks participants to imagine a decision maker who complies with the default due to perceived social cost or ignorance, approval for the default policy is significantly reduced. Table 1 reports treatment effects on support for the policy based on equation (1). In the baseline condition, 62.1 percent of respondents fully or somewhat support the default policy. This share significantly decreases by 4.8 percentage points for respondents who were provided the narrative that the unemployed had not been aware of the option to opt-out due to a failure to read the information *(voluntary ignorance)*, and by 15.9 percentage points in the experimental group who received the vignette suggesting that he was unable to read the information because he did not receive the letter *(involuntary ignorance)*. This shows that respondents on average are less supportive of the default policy if the vignette asks respondents to imagine that the unemployed person complies with the policy aim through ignorance.

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Table 1: Treatment effects on approval for default policy

| | Approval for default policy |
	(1)
Voluntary ignorance	-0.048**
	(0.022)
Involuntary ignorance	-0.159***
	(0.022)
Deliberate endorsement	0.031
	(0.021)
Social pressure	-0.106***
	(0.022)
Social expectation	-0.051**
	(0.022)
Control group mean	0.621
Covariates	NO
Observations	6186
R^2	0.0162

Notes: OLS regressions. Sample: respondents who participated in 2019 wave of the experiment. Dependent variable: Dummy=1 if "strongly" or "rather agree" with the policy, 0 otherwise. Wald-test for voluntary ignorance and involuntary ignorance is 0.111***, for voluntary ignorance and deliberate endorsement -0.079***, for voluntary ignorance and social pressure 0.059***, for voluntary ignorance and social expectation 0.003, for involuntary ignorance and deliberate endorsement -0.190***, for involuntary ignorance and social pressure -0.052**, for involuntary ignorance and social expectation -0.108***, for deliberate endorsement and social pressure 0.137*** and for deliberate endorsement and social expectation 0.082***. Robust standard errors in parentheses. ***/**/* indicate significance at the 1%/5%/10% level.

Similarly, we find that approval of the default policy falls by 5.1 percentage points in the experimental group that was asked to imagine that the unemployed person complied with the default because he is under the impression that opting out would be against societal expectations of him (*social expectation*) and by 10.6 percentage points if the vignette states that he complied with the default because he felt pressured to not opt-out of participation *(social pressure)*. In contrast, we find that the experimental group that was given the narrative that the unemployed person did not opt out because he believed that the professional course would be beneficial for finding new employment had similar approval levels as the baseline group. This seems to suggest that respondents in the baseline group infer rather positive narratives for the decision by the unemployed worker in the vignette to participate in the training.

Next, we test whether the narrative about the underlying psychological mechanism leading to the hypothetical decision maker's default compliance affects respondents' perceptions of the default policy's effects on the autonomy and wellbeing of the unemployed, as well as the effectiveness of

the policy. Table 2 shows that in the baseline group, 51.9 percent of respondents agree with the statement that the default policy restricts autonomy of the unemployed. Looking at the experimental results, we find that narratives of *involuntary ignorance* and *social pressure* significantly increase the share of respondents who agree that the default policy restricts unemployed people's autonomy by 6.3 percentage points and 8.4 percentage points, respectively. Respondents in other experimental groups are not statistically significantly more or less likely to agree to this statement than the baseline group.

Table 2: Treatment effects on perceptions of autonomy, wellbeing, and training effectiveness

	Restricts Autonomy	Wellbeing	Training Effectiveness
	(1)	(2)	(3)
Voluntary ignorance	-0.035	-0.019	-0.014
	(0.022)	(0.021)	(0.020)
Involuntary ignorance	0.063***	-0.040*	-0.026
	(0.022)	(0.021)	(0.020)
Deliberate endorsement	-0.023	-0.006	-0.018
	(0.022)	(0.021)	(0.020)
Social pressure	0.084***	-0.081***	-0.066***
	(0.022)	(0.022)	(0.021)
Social expectation	0.024	-0.042**	-0.044**
	(0.022)	(0.021)	(0.020)
Baseline mean	0.519	0.638	0.703
Covariates	NO	NO	NO
Observations	6190	6189	6191
R^2	0.0076	0.0031	0.0021

Notes: OLS regressions. Sample: respondents who participated in 2020 wave of the experiment. Dependent variable: Dummy=1 if "strongly" or "rather agree" with the statement, 0 otherwise. Wald-test for column (1): for voluntary ignorance and involuntary ignorance -0.099***, for voluntary ignorance and deliberate endorsement -0.013, for voluntary ignorance and social pressure -0.119***, for voluntary ignorance and social expectation -0.060***, for involuntary ignorance and deliberate endorsement 0.086***, for involuntary ignorance and social pressure -0.020, for involuntary ignorance and social expectation 0.039*, for deliberate endorsement and social pressure -0.107***, and for deliberate endorsement and social expectation -0.047**. Wald-test for column (2): for voluntary ignorance and involuntary ignorance 0.012, for voluntary ignorance and deliberate endorsement 0.004, for voluntary ignorance and social pressure 0.052**, for voluntary ignorance and social expectation 0.030, for involuntary ignorance and deliberate endorsement -0.008, for involuntary ignorance and social pressure 0.040*, for involuntary ignorance and social expectation 0.018, for deliberate endorsement and social pressure 0.048**, and for deliberate endorsement and social expectation 0.026. Wald-test for column (3): for voluntary ignorance and involuntary ignorance 0.021, for voluntary ignorance and deliberate endorsement -0.013, for voluntary ignorance and social pressure 0.062***, for voluntary ignorance and social expectation 0.023, for involuntary ignorance and deliberate endorsement -0.034, for involuntary ignorance and social pressure 0.041*, for involuntary ignorance and social expectation 0.002, for deliberate endorsement and social pressure 0.075***, and for deliberate endorsement and social expectation 0.036*. If controls are included, the coefficient of "social expectation" in column 2 is no longer significant at the 5% or 10% level while the magnitude remains very similar at -3.6. Robust standard errors in parentheses. ***/**/* indicate significance at the 1%/5%/10% level.

63.8 percent of respondents agree that the default policy is overall good for the wellbeing of the unemployed. Again, respondents that were asked to imagine that the unemployed decision maker followed the default due to perceived *social expectations* and *social pressure* are 4.2 percentage points and 8.1 percentage points less likely to agree with this statement. Respondents in experimental group *involuntary ignorance* are 4.0 percentage points less likely to agree, however the effect is only marginally significant.

When no psychological narrative is provided, 70.3 percent of respondents agree that participation in further training is effective at improving the employment prospect of the unemployed (i.e. achieving the overall goal of the default policy). When narratives on *social expectations* or *social pressure* are provided, respondents are 6.6 percentage points and 4.4 percentage points less likely to agree that participation in further training is effective. The other experimental groups do not differ significantly from the baseline group.

Overall, these results suggest that the effects of narratives about psychological mechanisms driving default compliance on respondents' perceptions for autonomy and wellbeing of the unemployed and achieving the policy goal of their labor market participation are largely in line with the narratives' effects on the approval of the policy overall.

4.2 Robustness

In the previous section, we interpret differences between experimental groups as results of changes in the narrative that respondents are told to imagine is driving the decision-maker's compliance with the default policy. A competing explanation could be that respondents update their view of the FEA or the perceived characteristics of the unemployed person due to the narrative provided. For example, respondents might believe that only a very apathetic person would not read the letter (*voluntary ignorance*), and that this person would not be able to benefit from a further education course, unlike someone who actively decides to follow the default (*deliberate endorsement*).

We find no evidence that changes in answer behavior between experimental groups are due to changes in the perceived characteristics of the unemployed person described in the vignette or the FEA. First, while in the vignette used for our main analyses we explicitly state that the decision maker does not have a (strict or weak) preference in favor of or against participating in further training ("*Mr. Schmidt is undecided as to whether he would like to participate in further training or not.*"), we run additional experimental groups in the 2020 wave that do not mention the unemployed person's own preference for professional training, leaving it ambiguous. A comparison of these slightly more ambiguous vignettes with our main results allows us to estimate whether explicitly stating the unemployed person's preference (and therby holding it constant) affects our results. Arguably the ambiguity of the vignettes is likely to increase respondents' scope to ascribe personal characteristics to the unemployed person depending on the narrative they receive. Differences in treatment effects between the explicit and ambigous vignettes are summarized in Appendix Table A2. As it turns out,

this ambiguity does not change the estimated effects of different narratives on approval of the default policy, suggesting that respondents' view of the unemployed person is not systematically influenced by the different narratives in ways that affect approval. Additionally, these findings reassure us that our results are not sensitive to minor changes in question wording, which is a common concern of research designs utilizing vignettes.

Secondly, we conduct a follow-up survey two weeks after the main survey where we show all respondents the *baseline* vignette and re-elicit their approval of the default policy. Appendix Table A3 shows the results. Reassuringly, we find that there are no differences between the previous experimental groups' approval of the policy in the follow-up survey, which suggests that respondents do not update their perception of unemployed persons or the FEA more generally.

Another common concern of experimental research is that findings might not replicate (Maniadis et al. 2014). It is therefore reassuring that the subset of results for which we also collected data in the 2019 wave are consistent with the findings from the main 2020 wave. As reported in Appendix Table A4, coefficient estimates do not differ significantly between waves.

4.3 Heterogeneity of effects

Results presented so far show that approval of the default policy varies substantially with the psychological narrative stated in the vignette. We next test whether the average effect hides important heterogeneity. In particular, we are interested in whether effects differ for respondents who do or do not support the policy goal of participation of the unemployed in further training. Appendix Table A5 shows that the narrative about the psychological mechanism explaining default compliance affects approval of people who generally support the policy goal but does not significantly do so for people who do not support the policy goal. Among the latter, baseline support for the default policy is already low at 22.3 percent, compared to 68.3 percent for people who support the policy goal.

5   Conclusion

In this paper, we conducted a survey experiment with a large sample representative of the German population to explore how various narratives explaining the effectiveness of a default rule that automatically enrolls an unemployed person in a further training course influence public approval for the general use of defaults toward this goal. Holding both the effectiveness of the policy and the preferences of the decision-maker constant, we experimentally vary the narrative about why he follows the default. We find that, compared to the baseline condition in which no information on the psychological mechanism is provided, voluntary ignorance, involuntary ignorance, perceived social expectations and perceived social pressure each reduce policy approval and lead to more negative perceptions of the default rule on the decision maker's welfare and autonomy. The most welfare preserving mechanism of deliberate endorsement, however, does not significantly raise approval or perceptions.

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Our results show that the public's general policy approval is, indeed, influenced by narratives about why (i.e., through which psychological mechanism) a policy is effective in a specific setting. It suggests that the public has preferences not only over policy goals and policy tools but also over policies' actual psychological mechanisms of action. As there is currently very limited evidence on (heterogeneous) mechanisms of action of different (behavioral) policy interventions in different populations, policy makers may fill this gap with their own narratives to manipulate public support. To choose not only effective but also welfare and autonomy maximizing policies, and constrain the possibility to influence the public by suggestive storytelling, more research on psychological mechanisms of behavioral public policies is needed.

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Appendix

Table A1: Sample descriptives and balance across treatments

	Mean Baseline	Mean Voluntary Ignorance	Mean Involuntary Ignorance	Mean Deliberate Endorsement	Mean Social Expectation	Mean Social Pressure
	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.503	0.484	0.518	0.514	0.484	0.526
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Age	45.078	45.703	45.036	44.666	44.992	44.974
	(0.468)	(0.485)	(0.481)	(0.460)	(0.467)	(0.471)
School Degree						
No degree / lower-track secondary school	0.260	0.281	0.271	0.265	0.269	0.237
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.014)
Intermediate-track secondary school	0.284	0.291	0.286	0.278	0.268	0.301
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
University entrance qualification	0.456	0.428	0.443	0.457	0.463	0.462
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Professional Education						
Lower education	0.149	0.146	0.148	0.149	0.136	0.152
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Intermediate education	0.452	0.488	0.499	0.473	0.474	0.473
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Higher education	0.398	0.366	0.353	0.378	0.391	0.376
	(0.016)	(0.016)	(0.016)	(0.016)	(0.017)	(0.016)

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West-Germany	0.807	0.829	0.845**	0.822	0.828	0.784
	(0.013)	(0.013)	(0.012)	(0.013)	(0.013)	(0.014)
High Income	0.514	0.494	0.483	0.479	0.489	0.503
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
German-born	0.956	0.944	0.942	0.935*	0.943	0.948
	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)
Parental Education						
No higher degree	0.622	0.642	0.675**	0.641	0.639	0.658*
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Higher degree	0.378	0.358	0.325**	0.359	0.361	0.342*
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Parent	0.562	0.558	0.510**	0.535	0.561	0.551
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Employment						
Students / in training	0.050	0.039	0.056	0.054	0.048	0.057
	(0.007)	(0.007)	(0.008)	(0.007)	(0.007)	(0.008)
Active / Employed	0.731	0.732	0.720	0.724	0.737	0.716
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Not active / Unemployed	0.219	0.229	0.224	0.222	0.215	0.227
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Observations	884	869	892	909	870	897

Notes: Sample: respondents who participated in 2020 wave of the experiment.***/**/* indicate significance of difference between mean of experimental group to baseline group at the 1%/5%/10% level.

Table A2: Differences in default approval due to absence explicit indecision

	Difference in approval of default enrollment policy
	(1)
Baseline – Baseline (ambiguous preference)	-0.027
	(0.018)
Voluntary ignorance - Voluntary ignorance (ambiguous preference)	-0.015
	(0.019)
Deliberate endorsement - Deliberate endorsement (ambiguous preference)	0.019
	(0.018)
Social pressure - Social pressure (ambiguous preference)	-0.004
	(0.019)

Notes: OLS regressions. Sample: respondents who participated in 2020 wave of the experiment. Ambiguous preference: Wording of treatments without mention of unemployed person's indecision w.r.t. further training. Column 1: Wald-test of differences between treatment groups. Robust standard errors in parentheses. ***/**/* indicate significance at the 1%/5%/10% level.

Table A3: Changes in attitudes towards Federal Employment Agency

	Approval for default enrollment policy	
	Main survey	Follow-up (two weeks later; baseline condition only)
	(1)	(2)
Voluntary ignorance	-0.053**	0.004
	(0.021)	(0.023)
Deliberate endorsement	0.009	-0.001
	(0.022)	(0.024)
Social pressure	-0.125***	-0.029
	(0.022)	(0.024)
Baseline mean	0.640	0.651
Covariates	NO	NO
Observations	4009	3164
R^2	0.0118	0.0008

Notes: OLS regressions. Sample: respondents who participated in 2019 wave of the experiment. In the follow-up survey, all respondents received the vignette wording of the baseline group, i.e., the psychological narratives respondents saw in the main survey were not repeated. Dependent variable: Dummy=1 if "strongly" or "rather agree" with the policy, 0 otherwise. Robust standard errors in parentheses. ***/**/* indicate significance at the 1%/5%/10% level.

Table A4: Replication in cross-sectional samples

	Approval for default enrollment policy
	(1)
Voluntary ignorance (ambiguous preference)	-0.053**
	(0.021)
Deliberate endorsement (ambiguous preference)	0.009
	(0.022)
Social pressure (ambiguous preference)	-0.125***
	(0.022)
2020	0.015
	(0.021)
Voluntary ignorance (ambiguous preference) x 2020	-0.013
	(0.030)
Deliberate endorsement (ambiguous preference) x 2020	-0.046
	(0.030)
Social pressure (ambiguous preference) x 2020	-0.008
	(0.030)
Baseline mean	0.640
Covariates	NO
Observations	8146
R^2	0.0109

Notes: OLS regressions. Treatments: Wording of treatments without mention of unemployed person's preferences toward further training for comparison across years. Dependent variable: Dummy=1 if "strongly" or "rather agree" with the policy, 0 otherwise. Robust standard errors in parentheses. ***/**/* indicate significance at the 1%/5%/10% level.

Table A5: Heterogeneous effects on default policy approval by support for policy goal

	I(does not support policy goal)	I(supports policy goal)
	(1)	(2)
Voluntary ignorance	-0.052	-0.047**
	(0.048)	(0.022)
Involuntary ignorance	-0.022	-0.177***
	(0.048)	(0.023)
Deliberate endorsement	0.037	0.026
	(0.052)	(0.022)
Social pressure	0.015	-0.124***
	(0.050)	(0.023)
Social expectation	-0.016	-0.051**
	(0.049)	(0.023)
Baseline mean	0.223	0.683
Covariates	NO	NO
Observations	852	5334
R^2	0.0045	0.0206

Notes: OLS regressions. Sample: respondents who participated in 2020 wave of the experiment. Dependent variable: column (1) Dummy=1 if "strongly" or "rather oppose" participation of the unemployed in further training, 0 otherwise; column (2) Dummy=1 if "strongly" or "rather support" further training for unemployed workers, 0 otherwise. Robust standard errors in parentheses. ***/**/* indicate significance at the 1%/5%/10% level.