Do Our Choices Tell Us Who We Are? It Depends on How Easy or Difficult They Were to Make

Mary Steffel ⓘD
Northeastern University

Elanor F. Williams
Washington University in Saint Louis

The notion that people's choices reveal something about who they are is fundamental to theories of self-perception, self-signaling, and preference construction, and yet, much is still unknown about the impact of the metacognitive experiences that accompany those choices. The present research explores how the relative ease or difficulty of choosing influences the extent to which consumers infer that they will make similar choices in other situations. Two experiments show that people perceive themselves to be more likely to make similar choices in other situations when their choices feel relatively easy rather than difficult to make. This is because people perceive choices to be more diagnostic of who they are when they feel relatively easy. Moreover, people consider their choices to be especially self-diagnostic when their own choice ease or difficulty differs from the ease or difficulty they expected most other people to experience. Together, these findings suggest that consumers come to understand their preferences not just from what they choose, but also from how easy or difficult those choices were to make.

Keywords Choice difficulty; Fluency; Preference construction; Self-perception

It is not our abilities that show what we truly are. It is our choices.— Albus Dumbledore in "Harry Potter and the Chamber of Secrets," by J. K. Rowling

The idea that our choices reveal who we are is ingrained in our culture. It is reflected in theories of self-perception (Bem, 1972) and self-signaling (Bodner & Prelec, 2003), as well as in theories of preference construction, which posit that, rather than carry around stable preexisting preferences, we update our preferences in response to specific decisions (Bettman et al., 1998). Although it is well established that choices influence self-perception, less is known about the impact of the metacognitive experiences that accompany those choices.

This research explores how the metacognitive ease or difficulty of choosing influences people's inferences about how likely they are to make similar choices in other situations. Past research on metacognition has shown that memory-based cues like ease or difficulty of recall as well as context-based cues like perceptual fluency or disfluency influence a variety of judgments (for a review, see Alter & Oppenheimer, 2009). The present research contributes to a growing literature showing that decision-based cues like the ease or difficulty of choosing may similarly affect judgments. Perhaps the most relevant finding is that the relative ease or difficulty of choosing can influence what people think they will choose when presented with the same options again (Liberman & Förster, 2006). We extend this idea to examine the inferences people make about how likely they are to choose similarly in *other* situations, between *other* choice options. The difference is akin to Kelley's (1973) differentiation between consistency (covariation of behavior across time) and distinctiveness (covariation of behavior across situations, the focus here).

There is some research to suggest that consumers may generalize their preferences more when choices feel relatively difficult to make. Difficult choices produce greater postchoice dissonance, which can motivate people to bolster their valuation of the chosen option relative to the foregone options (Brehm, 1956; Festinger, 1964), potentially making them anticipate choosing options with similar attributes in other choice situations. However, if anything, consumers believe that they are *less* likely to choose the same options again when choices feel difficult (Liberman & Förster, 2006). The feeling of difficulty may also trigger deeper reflection and encoding (Alter et al., 2007; Diemand-Yauman et al., 2011; but see Kühl & Eitel, 2016), which may make people more likely to internalize their preferences and generalize them to other situations. However, these processes tend to have delayed rather than immediate effects on judgments (Oppenheimer & Alter, 2013).

A preponderance of research suggests that consumers may generalize their preferences more when choices feel relatively *easy* to make. People interpret decision ease as a sign they strongly prefer their chosen option (Liberman & Förster, 2006) and are more certain of their preferences (Dhar, 1996, 1997a, 1997b; Dhar & Nowlis, 1999; Dhar et al., 1999; Perfecto et al., 2017). People also think easy-to-recall (vs. difficult-to-recall) behaviors are more indicative of themselves (Schwarz et al., 1991) and easy-to-generate reasons for their decisions are more indicative of their preferences (Wänke et al., 1997). People believe that choosing based on their gut feelings (rather than deliberation) seems more revealing of their "true self" (Maglio & Reich, 2019). Indeed, spontaneous thoughts—those that pop to mind easily and unbidden—seem to provide self-insight (Morewedge et al., 2014). Altogether, this work suggests that people will perceive choices that feel easy rather than difficult to make to be more diagnostic of their preferences and consequently will be more likely to expect to make similar choices in other situations.

Additionally, people tend to perceive their metacognitive experiences as especially informative when those experiences are unexpected. People are more likely to draw inferences from the ease or difficulty of recall (Menon & Raghubir, 2003, 2005; Winkielman & Schwarz, 2001), perceptual fluency or disfluency (Wänke & Hansen, 2015; Whittlesea & Williams, 1998, 2000), or decision ease or difficulty (e.g., Schrift et al., 2011; Sela & Berger, 2012) when those experiences are unexpected. Thus, we hypothesize that people will perceive decision ease or difficulty to be especially diagnostic when those feelings differ from what they expect.

Two experiments test whether people believe their choices are more diagnostic of their preferences and more predictive of their choices in other situations when choosing feels easy versus difficult. Experiment 1 examines people's intuitions about what easy and difficult choices say about who they are and how likely they are to make similar choices in other situations. It also explores whether people's expectations moderate whether decision ease or difficulty seems diagnostic of their preferences. Experiment 2 examines how people's experiences of ease or difficulty when choosing affect preference generalization across domains. We hypothesize that people use how relatively easy or difficult a choice feels as an indicator of the extent to which a choice reflects what kind of person they are, and expect their preferences to generalize more when choices feel easy than difficult, especially when those feelings are unexpected.

Experiment 1: Intuitions About Preference Generalizability

Our first experiment explored people's intuitions about what easy and difficult choices say about who they are. Participants imagined they had chosen to share information on a music streaming app, and were told the choice felt easy, were told it felt difficult, or were told nothing about its ease or difficulty. Participants next imagined they were joining a social network and indicated, given their experience with the previous choice, how much information they would share. Participants then rated the extent to which they thought their initial choice suggested that they were the kind of person who was willing to share information. We predicted that participants would expect to share more information when their initial choice was said to feel easy versus difficult and that the relationship between choice difficulty and their expected willingness to share information would be mediated by perceived self-diagnosticity.

Additionally, we assessed participants' expectations of what most people would choose and whether the choice would be easy or difficult for most people (Menon & Raghubir, 2003). We predicted that participants would perceive their own ease or difficulty to be especially diagnostic when they expected most people to feel differently, and this would amplify the relationship between choice

difficulty and preference generalization through self-diagnosticity.

Method

Participants

Participants ($N = 617$, 305 men, 301 women, 11 unreported, $M_{age} = 37.71$, age range = 19–74) were recruited via MTurk and paid $0.40. The sample size was set a priori to 200 participants per cell.

Procedure

Participants read a vignette in which they chose to share information on a new music streaming app (see Appendix S2 for full materials). Participants were told that this decision felt easy (*easy condition*), were told that it felt hard (*hard condition*), or were told nothing about its ease or difficulty (*control condition*). Participants completed two comprehension checks before advancing to the outcome measures (participants who responded incorrectly were instructed to reread the scenario and try again).

Participants then imagined that they were joining a social network. They considered, given their experience with the initial choice, what information they would share on the social network and with whom, a measure of their perceived likelihood of making similar choices (cf. Steffel et al., 2016). Participants then rated, regarding the ease or difficulty of the initial choice, whether "It suggests that I am the kind of person who is generally willing to share information on social media," on a scale from *1 = strongly disagree* to *7 = strongly agree*.

Finally, participants indicated their expectations about what most people would choose and how easy or difficult the choice would be: "What do you think most people would do?" where *1 = Most people would agree to the privacy agreement and join the app* or *2 = Most people would NOT agree to the privacy agreement and would NOT join the app*, and "Do you think this choice would be easy or difficult for most people?" where *1 = This choice would be EASY for most people* or *2 = This choice would be HARD for most people*. Additionally, control participants were asked: "Do you think this choice would be easy or difficult for you to make?" where *1 = This choice would be EASY for me to make* or *2 = This choice would be HARD for me to make*, to assess their expectations of how easy or difficult the choice would be for *themselves*, since they were not told how easy or difficult this choice was for them personally.

Results and Discussion

Preference generalization

Participants expected their preferences to generalize more from the initial choice to another, similar choice when their initial choice was said to feel easy versus hard. An ANOVA revealed an effect of condition (easy, hard, or control) on sharing, $F(1, 606) = 6.67$, $p < .001$, $\eta_p^2 = 0.02$. Participants expected to share the most information on the social network when their initial choice to share information on the music streaming app was easy ($M = 5.36$, $SD = 3.83$), followed by when choice difficulty was unspecified ($M = 4.82$, $SD = 3.40$), and least when it was hard ($M = 4.16$, $SD = 2.55$). A series of Bonferroni-corrected pairwise comparisons revealed that participants expected to share more information in the easy condition than in the hard condition, $p = .001$, and that expected sharing did not differ between the control condition and the easy condition, $p = .30$, or the hard condition, $p = .14$.

Perceived diagnosticity

Participants thought their initial choice was more diagnostic of who they were when the choice was said to feel easy versus hard. An ANOVA revealed an effect of condition on rated diagnosticity, $F(1, 604) = 107.24$, $p < .001$, $\eta_p^2 = .26$. Participants were more likely to agree that their choice to share information on the music streaming app suggested that they were the kind of person who would be willing to share information on social media when their initial choice was easy ($M = 5.37$, $SD = 1.45$), followed by when choice difficulty was unspecified ($M = 4.80$, $SD = 1.65$), and least when it was hard ($M = 3.10$, $SD = 1.75$). A series of Bonferroni-corrected pairwise comparisons revealed that diagnosticity was greater in the easy condition than in the hard condition, $p < .001$, and the control condition, $p = .001$, and that diagnosticity was greater in the control condition than in the hard condition, $p < .001$.

A mediation model (PROCESS model 4; Hayes, 2017) with our choice difficulty manipulation as the independent variable (coded as $1 = $ easy, $0 = $ control, $-1 = $ hard), rated diagnosticity as the mediator, and sharing (i.e., preference generalization) as the dependent variable yielded significant mediation via rated diagnosticity (95% C = .36, .75). Our difficulty manipulation increased rated diagnosticity, $\beta = 1.14$, $SE = .08$, $t = 13.89$, $p < .001$, which

increased sharing, $\beta = .48$, $SE = .08$, $t = 5.98$, $p < .001$. The direct effect of difficulty on sharing was reduced to nonsignificance, $\beta = .05$, $SE = .18$, $t = .27$, $p = .79$.

Expectations

We next examined whether these inferences were moderated by participants' expectations. Regardless of condition, $\chi^2(2, 606) = 4.23$, $p = .12$, $\phi = .08$, most participants (81%) expected most people to share information on the music streaming app. Participants' expectations of how easy or hard the choice would be for most people was influenced by condition, $\chi^2(2, 606) = 12.87$, $p = .002$, $\phi = .15$. Participants were more likely to expect the choice to be easy for most people when they were told that the choice was easy for themselves (79.90%) and when their own choice difficulty was unspecified (83.74%) than when they were told that the choice was hard for themselves (69.35%). A series of Bonferroni-corrected pairwise comparisons revealed that participants were more likely to expect the choice to be easy for most people in the easy than hard condition, $p = .045$, and in the control than hard condition, $p = .003$, and that expectations did not differ between the easy and control conditions, $p = .95$. Additionally, most participants in the control condition (71.43%) expected the choice to be easy rather than hard for themselves to make.

We created a variable representing participants' own ease or difficulty (as described in the scenario in the easy and difficult conditions and as reported by participants in the control condition) and a variable representing whether those feelings matched expectations of the ease or difficulty most people would experience. Among the 492 participants who expected most people to share information on the music streaming app, a 2 (choice difficulty: easy or hard) x 2 (expectations: expected or unexpected) ANOVA on sharing again yielded an effect of choice difficulty, $F(1, 488) = 4.19$, $p = .04$, $\eta_p^2 = .009$, but did not yield significant effects of either expectations, $F(1, 488) = .37$, $p = .55$, $\eta_p^2 < .001$, or their interaction, $F(1, 488) = .03$, $p = .86$, $\eta_p^2 < .001$.

An ANOVA on rated diagnosticity among those who expected most people to share information revealed an effect of participants' own choice difficulty, $F(1, 486) = 66.58$, $p < .001$, $\eta_p^2 = .12$, no main effect of expectations, $F(1, 486) = .34$, $p = .56$, $\eta_p^2 < .001$, and an interaction, $F(1, 486) = 6.90$, $p = .009$, $\eta_p^2 = .01$. The effect of choice difficulty on diagnosticity was more pronounced when those feelings were unexpected ($M = 5.85$, $SD = .88$ vs.

$M = 3.34$, $SD = 1.90$), $t(44.91) = 10.26$, $p < .001$, $d = 1.81$, but still significant when they were expected ($M = 5.10$, $SD = 1.48$ vs. $M = 3.81$, $SD = 1.73$), $t(60.48) = 4.83$, $p < .001$, $d = .80$.

A moderated mediation model (PROCESS model 7) with participants' own choice difficulty as the independent variable, rated diagnosticity as the mediator, expectations as the moderator, and sharing (i.e., preference generalization) as the dependent variable yielded significant moderated mediation (95% CI = −.94, −.20). The indirect effect of participants' own choice difficulty on sharing through diagnosticity was stronger when it was unexpected (95% CI = .69, 1.63) but was still significant when it was expected (95% CI = .28, .98). Participants' own choice difficulty increased diagnosticity both when it was unexpected, $\beta = 2.44$, $SE = .16$, $t = 15.10$, $p < .001$, and when it was expected, $\beta = 1.70$, $SE = .16$, $t = 10.59$ $p < .001$. Diagnosticity increased sharing, $\beta = .45$, $SE = .09$, $t = 5.17$, $p < .001$, and the direct effect of choice difficulty on sharing was reduced to nonsignificance, $\beta = −.05$, $SE = .09$, $t = −.15$, $p = .88$ (see Figure 1).

In summary, participants believed that choices were more diagnostic of who they were and that their preferences were more likely to generalize to other similar decisions, when those choices were said to feel easy (vs. difficult). There was a relationship between participants' own ease or difficulty and preference generalization regardless of whether participants' experiences were expected, but these effects were stronger when their experiences were unexpected. These results replicated in a 2 (choice difficulty: easy or hard) × 2 (expectations: expected or unexpected) experiment in which we manipulated whether the choice was said to be easy or hard for the participant *and* for most people to make (see Appendix S1).

Experiment 2: Generalization of Preferences Across Domains

We examined whether these intuitions match the inferences people make when actually facing decisions designed to feel easy or difficult, and whether people generalize more to similar versus dissimilar domains. Participants made lottery choices presented in a superficially easy-to-process or difficult-to-process format. People tend to (mis)attribute superficial ease or difficulty to how easy or difficult a choice is to make (Alter & Oppenheimer, 2009). Participants next rated their likelihood of engaging in risky behaviors in domains that varied in
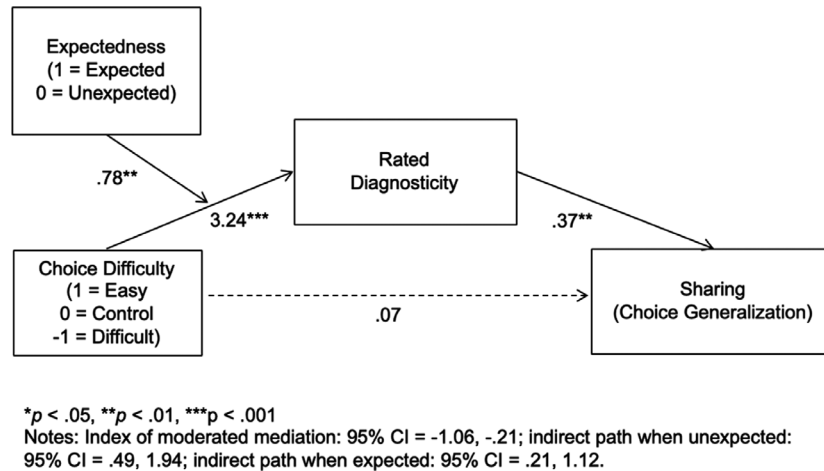
*p < .05, **p < .01, ***p < .001
Notes: Index of moderated mediation: 95% CI = -1.06, -.21; indirect path when unexpected:
95% CI = .49, 1.94; indirect path when expected: 95% CI = .21, 1.12.

Figure 1. Moderated mediation model (Experiment 1).

similarity to the lottery choices: finances and health/safety. We predicted that participants would rate themselves more likely to avoid risky behaviors, especially similar financial behaviors, after choosing the less risky lotteries when the choices felt easy versus difficult.

Method

Participants

Participants ($N = 102$, 33 men, 69 women, $M_{age} = 38.48$, age range = 20–78) were recruited via MTurk and paid $.15. Of an original 103 participants, one participant was excluded because they failed the attention check, "Select 'Moderately Likely' for this item if you are reading the instructions." The results are the same including this participant. The sample size was set a priori to 50 participants per cell.

Procedure

Participants made three choices between pairs of lotteries in which all participants would prefer the less risky lottery, because the higher probability/lower payoff lottery had a higher expected value: an 80% chance to win $50 or a 25% chance to win $65; a 90% chance to win $25 or a 10% chance to win $30; and a 75% chance to win $60 or a 20% chance to win $70 (see Appendix S2 for full materials). As intended, all participants chose the less risky lottery in each of these choices.

The ease or difficulty of these choices was manipulated by presenting the choice options in a fluent format (Verdana 14-point font, with black lettering on a white background, and with numbers written as numerals) or a disfluent format (Garamond Italic 11-point font, with black lettering on a gray background, and with numbers written as words). To ensure that the choices were perceived to be differentially easy/difficult, 51 MTurk participants rated how difficult it would be and how much effort, time, and thought it would take to choose between the options in each of these formats in a counterbalanced order using four scales anchored at not at all/very difficult, no/a lot of effort, no/a lot of time, and no/a lot of thought (cf. Menon et al., 1995). These measures were combined to form difficulty indexes ($\alpha_{fluent} = 0.94$ and $\alpha_{disfluent} = 0.92$). Participants perceived the choices to be more difficult when presented in a disfluent format ($M = 3.40$, $SD = 1.23$) than in a fluent format ($M = 2.68$, $SD = 1.47$), $t(50) = 9.26$, $p < .001$, $d = 1.43$.

Finally, to assess preference generalization, participants indicated the likelihood they would engage in risky financial behaviors ($\alpha = 0.81$; e.g., "gambling $100 at a casino," "investing 5% of your annual income in a very speculative stock") and health/safety behaviors ($\alpha = 0.73$; e.g., "drinking heavily at a social function," "driving a car without wearing a seat belt") on a scale ranging from $1 = extremely\ unlikely$ to $7 = extremely\ likely$ (Blais & Weber, 2006). These domains were chosen to vary in similarity to the lottery choices. A posttest with 50 MTurk participants confirmed that the financial behaviors were perceived to be more similar to the lottery choices ($M = 3.56$, $SD = 1.32$) than the health/safety behaviors ($M = 2.28$, $SD = 1.69$), $t(49) = 6.54$, $p < .001$, $d = .95$, on a scale from $1 = not\ at\ all\ similar$ to $7 = extremely\ similar$.

Results and Discussion

Participants generalized their preferences more when their choices felt easy rather than difficult. A repeated-measures ANOVA on rated likelihood of engaging in risky behaviors with fluency as a between-subjects variable and domain as a within-subjects variable revealed that, across both domains, participants rated themselves to be more likely to avoid risky behaviors when the initial lottery choices were fluent ($M = 2.94$, $SD = .96$) versus disfluent ($M = 3.40$, $SD = 1.00$), $F(1, 100) = 4.82$, $p = .03$, $\eta_p^2 = .05$. Participants also rated themselves to be more likely to avoid risky health/safety behaviors ($M = 2.74$, $SD = .94$) than financial behaviors ($M = 3.40$, $SD = 1.27$), $F(1, 100) = 27.76$, $p < .001$, $\eta_p^2 = .22$.

Although the effect of fluency on preference generalization did not differ reliably across domains, $F(1, 100) = 2.37$, $p = .13$, $\eta_p^2 = .02$, we examined it separately within each domain because we expected people to be more likely to generalize their preferences to more similar domains. Indeed, as predicted, fluency significantly predicted preference generalization for similar, financial behaviors ($M_{\text{fluent}} = 3.10$, $SD = 1.23$ vs. $M_{\text{disfluent}} = 3.69$, $SD = 1.26$), $t(100) = 2.38$, $p = .02$, $d = .47$, but not for relatively less similar, health/safety behaviors ($M_{\text{fluent}} = 2.63$, $SD = .91$ vs.
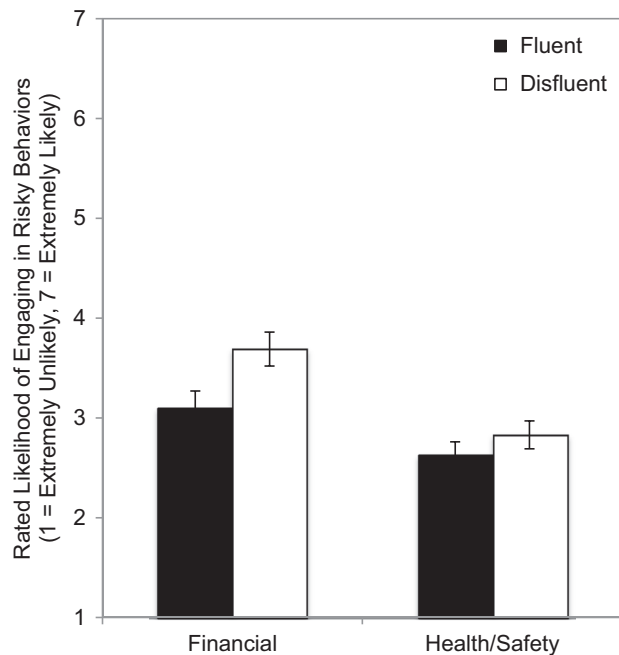
$M_{\text{disfluent}} = 2.83$, $SD = .97$), $t(100) = 1.08$, $p = .28$, $d = .21$ (see Figure 2).

General Discussion

Consumers come to understand their preferences not just from what they choose, but from how relatively easy or difficult those choices were to make. People infer that they are more likely to make similar choices in other situations when choices feel easy versus difficult. This is because people perceive their choices to be more diagnostic of who they are when those choices feel easy to make. Moreover, people consider their choices to be especially self-diagnostic when their own choice ease or difficulty is unexpected.

Future research should explore the boundaries of these findings. One boundary may be factors that make people more prone to make situational versus dispositional attributions for their choice ease or difficulty—such as incentives (Lepper & Greene, 1975), social norms (Prentice & Miller, 1996), or the obviousness of situational factors affecting choice ease or difficulty (Wänke & Hansen, 2015). People may be less likely to draw inferences when they attribute their metacognitive experiences to situational (vs. dispositional) factors. Another boundary may be factors that influence whether people believe that they *ought* to make a choice easily or with difficulty and thoughtful deliberation—such as decision importance (Schrift et al., 2011), decision domain (Pachur & Spaar, 2015), or need-for-cognition (Barden & Petty, 2008). When people believe that choices should be difficult, they may perceive their choices to be *less* self-diagnostic or predictive of other choices if they believe they chose without putting enough thought into their choices. A third boundary may be whether people make inferences immediately after choosing or in retrospect. Choices that feel difficult may be encoded more deeply in memory (Diemand-Yauman et al., 2011). Memory-based cues may be more important than decision-based or context-based cues over time, such that the relationship between choice difficulty and preference generalization may attenuate or even reverse as time passes.

This research suggests that marketers should make choices feel easy if they wish to encourage choosers to infer that they will prefer similar options in other situations. Marketers who wish to encourage consumers to generalize their preferences from a single product decision (e.g., an Oster or a KitchenAid blender) to a broader class of

Figure 2. Rated likelihood of engaging in risky financial behaviors (similar domain) and health/safety behaviors (less similar domain) based on choosing less risky lotteries in a fluent format (easy choice) or disfluent format (difficult choice; Experiment 2).

preferences (e.g., Oster vs. KitchenAid appliances) should make consumers' choices as easy as possible, say, by comparing their product to a dud alternative rather than a close competitor. Moreover, this research contributes to an understanding of metacognition by showing that the inferences people make depend not just on memory-based and context-based cues but also decision-based cues and baseline expectations. It also contributes to research on self-perception, self-signaling, and preference construction by showing that it is not just our choices that tell us who we are, but the ease or difficulty with which we make them.

References

Alter, A. L., & Oppenheimer, D. M. (2009). Uniting the tribes of fluency to form a metacognitive nation. *Personality and Social Psychology Bulletin*, 13, 219–235.

Alter, A. L., Oppenheimer, D. M., Epley, N., & Eyre, R. N. (2007). Overcoming intuition: Metacognitive difficulty activates analytic reasoning. *Journal of Experimental Psychology: General*, 136, 569–576.

Barden, J., & Petty, R. E. (2008). The mere perception of elaboration creates attitude certainty: Exploring the thoughtfulness heuristic. *Journal of Personality and Social Psychology*, 95, 489.

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). Academic Press.

Bettman, J. R., Luce, M. F., & Payne, J. W. (1998). Constructive consumer choice processes. *Journal of Consumer Research*, 25, 187–217.

Blais, A., & Weber, E. U. (2006). A domain-specific risk-taking (DOSPERT) scale for adult populations. *Judgment and Decision Making*, 1, 33–47.

Bodner, R., & Prelec, D. (2003). Self-signaling and diagnostic utility in everyday decision making. In I. Brocas, & J. D. Carillo (Eds.), *The psychology of economic decisions*. Oxford University Press.

Brehm, J. W. (1956). Post-decision changes in the desirability of choice alternatives. *Journal of Abnormal and Social Psychology*, 52, 384–389.

Dhar, R. (1996). The effect of decision strategy on deciding to defer choice. *Journal of Behavioral Decision Making*, 9, 265–281.

Dhar, R. (1997a). Consumer preference for a no-choice option. *Journal of Consumer Research*, 24, 215–231.

Dhar, R. (1997b). Context and task effects on choice deferral. *Marketing Letters*, 8, 119–130.

Dhar, R., & Nowlis, S. M. (1999). The effect of time pressure on consumer choice deferral. *Journal of Consumer Research*, 25, 369–384.

Dhar, R., Nowlis, S. M., & Sherman, S. J. (1999). Comparison effects on preference construction. *Journal of Consumer Research*, 26, 293–306.

Diemand-Yauman, C., Oppenheimer, D. M., & Vaughan, E. B. (2011). Fortune favors the bold (and the italicized): Effects of disfluency on educational outcomes. *Cognition*, 118, 111–115.

Festinger, L. (1964). *Conflict, decision, and dissonance*. Stanford University Press.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* 2nd ed. Guilford publications.

Kelley, H. H. (1973). The processes of causal attribution. *American Psychologist*, 28, 107–128.

Kühl, T., & Eitel, A. (2016). Effects of disfluency on cognitive and metacognitive processes and outcomes. *Metacognition Learning*, 11, 1–13.

Lepper, M. R., & Greene, D. (1975). Turning play into work: Effects of adult supervision and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology*, 31, 479–486.

Liberman, N., & Förster, J. (2006). Inferences from decision difficulty. *Journal of Experimental Social Psychology*, 42, 290–301.

Maglio, S. J., & Reich, T. (2019). Feeling certain: Gut choice, the true self, and attitude certainty. *Emotion*, 19, 876–888.

Menon, G., & Raghubir, P. (2003). Ease-of-retrieval as an automatic input in judgments: A mere-accessibility framework? *Journal of Consumer Research*, 30, 230–243.

Menon, G., & Raghubir, P. (2005). When and why is ease of retrieval informative? *Memory & Cognition*, 33, 821–832.

Menon, G., Raghubir, P., & Schwarz, N. (1995). Behavioral frequency judgments: An accessibility-diagnosticity framework. *Journal of Consumer Research*, 22, 212–228.

Morewedge, C. K., Giblin, C., & Norton, M. I. (2014). The (perceived) meaning of spontaneous thoughts. *Journal of Experimental Psychology: General*, 143, 1742–1754.

Oppenheimer, D., & Alter, A. (2013). The disfluency sleeper effect: Disfluency today promotes fluency tomorrow. In C. Unkelbach, & R. Greifeneder (Eds.), *The experience of thinking: How the fluency of mental processes influences cognition and behavior*. Psychology Press.

Pachur, T., & Spaar, M. (2015). Domain-specific preferences for intuition and deliberation in decision making. *Journal of Applied Research in Memory and Cognition*, 4, 303–311.

Perfecto, H., Galak, J., Simmons, J. P., & Nelson, L. D. (2017). Rejecting a bad option feels like choosing a good one. *Journal of Personality and Social Psychology*, 113, 659–670.

Prentice, D. A., & Miller, D. T. (1996). Pluralistic ignorance and the perpetuation of social norms by unwitting actors. *Advances in Experimental Social Psychology*, 28, 161–209.

Schrift, R.Y., Netzer, O., & Kivetz, R. (2011). Complicating choice. *Journal of Marketing Research*, 48, 308–326.

Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as

information: Another look at the availability heuristic. *Journal of Personality and Social Psychology*, *61*, 195–202.

Sela, A., & Berger, J. (2012). Decision quicksand: How trivial choices suck us in. *Journal of Consumer Research*, *39*, 360–370.

Steffel, M., Williams, E. F., & Pogacar, R. (2016). Ethically deployed defaults: Transparency and consumer protection through disclosure and preference articulation. *Journal of Marketing Research*, *53*, 865–880.

Wänke, M., Bohner, G., & Jurkowitsch, A. (1997). There are many reasons to drive a BMW: Does imagined ease of argument generation influence attitudes? *Journal of Consumer Research*, *24*, 170–177.

Wänke, M., & Hansen, J. (2015). Relative processing fluency. *Current Directions in Psychological Science*, *24*, 195–199.

Whittlesea, B. W., & Williams, L. D. (1998). Why do strangers feel familiar, but friends don't? A discrepancy-attribution account of feelings of familiarity. *Acta Psychologica*, *98*, 141–165.

Whittlesea, B. W., & Williams, L. D. (2000). The source of feelings of familiarity: the discrepancy-attribution hypothesis. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *26*, 547.

Winkielman, P., & Schwarz, N. (2001). How pleasant was your childhood? Beliefs about memory shape inferences from experienced difficulty of recall. *Psychological Science*, *12*, 176–179.

Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Appendix S1. Manipulating Expected Ease/Difficulty.

Appendix S2. Methodological detail.