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Choice Protection for Feeling-Focused Decisions

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Whether guided by feelings or deliberation, most decisions entail selecting an option and then living with it. Beyond simply investigating which option people select and how they evaluate it right away, the present research examines the extended issue of how people think and act in the service of that choice as a function of how they decided in the first place. We propose that reliance on feelings over deliberation in making an initial decision will strengthen postchoice protection of chosen options against threats. Seven studies provide evidence that feeling-focused deciders prove more mentally, emotionally, and behaviorally staunch in their defense of chosen options in response to a range of different campaigns against them. Together, a focus on feelings emerges as a decision strategy with broad relevance for the extended issue of how decision makers navigate the postchoice course.

Keywords: feelings, affect, decision making, threat, choice protection

Who wins my vote? What car should I buy? Which exercise program is best for me? Every day, from the trivial to the vital, people face any number of decisions. Despite the prescription from conventional wisdom to reason deliberatively through the deluge of information defining every option in a choice set (Elster, 1999; Janis & Mann, 1977), mounting research has suggested that people may instead fare better by relying upon feelings in navigating certain decisions (Greifeneder, Bless, & Pham, 2011). While feelings can impact decision making in a variety of ways and may be crucial to choice itself (Damasio, 1994), we restrict our focus to asking how one feels about choice options as a guide in selecting one option from a choice set (termed the affect heuristic; Schwarz & Clore, 1988; Slovic, Finucane, Peters, & MacGregor, 2002, 2007). Investigations advocating for the use of this strategy have provided evidence that reliance on feelings can boost accuracy, confidence, and satisfaction (Mikels, Maglio, Reed, & Kaplowitz, 2011; Wilson et al., 1993). Most investigations, though, effectively conceptualizes a decision as an end point, documenting whether feeling-focused deciders pick the choice option designed to be objectively superior or whether they evaluate it more favorably immediately after deciding. Motivated by the way that making a decision triggers a period during which people live with their chosen options (ownership of cars, terms of elected officials, use or neglect of exercise equipment), the present investigation frames the scope of decision making as a beginning. We predict that the benefits of feeling-focused decision making might extend to shielding selected options through a process of choice protection.

Decisions require the decision maker to choose an option from a choice set. Nevertheless, the manner in which the decision maker approaches this task can vary substantially, and several dual-process theories articulate how decision makers can diverge in this approach. One set of perspectives contends that deciders can decide deliberatively or intuitively (Chaiken & Trope, 1999; Epstein, 1994; Kahneman, 2003; Sloman, 1996; Strack & Deutsch, 2004). In broad terms, the former entails more careful, controlled, rational analysis, while the latter acts quickly, automatically, and in accordance with one's "gut feelings." The present investigation takes this last piece of the dual-process puzzle—rationality versus gut feelings—as its primary concern, given the key role that affective or feeling-based processing has been theorized to play in intuitive decision making (Hsee & Rottenstreich, 2004; Loewenstein, Weber, Hsee, & Welch, 2001). We conceptualize a focus on feelings as moving the needle in the direction of intuitive reliance on affective reactions and along a continuum contrasted against deliberation on the facts in that most decisions incorporate at least some degree of both (Hammond, 1996). As a counterpoint to deliberatively analyzing each option, the affect heuristic proposes that decision makers summarize alternatives according to the extent to which they feel positive or negative affect toward each (Finucane, Alhakami, Slovic, & Johnson, 2000; Slovic et al., 2002). That is, choosing deliberatively asks, "What do I know about my options?" while the affect heuristic guides decisions through considering, "how do I feel about my options?" (Pham, 1998; Schwarz & Clore, 1988).

Earlier research adopting this approach has considered how reliance on feelings (vs. deliberation) changes *which* option people

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ultimately select (e.g., Shiv & Fedorikhin, 1999). For instance, undergraduates asked to focus on their feelings were more likely than their deliberating counterparts to select the objectively best car or the best vacation from a set of four options for complex decisions (Mikels et al., 2011). Similarly, encouraging older adults to focus on their feelings versus the details as they learned about four doctors helped them to select the objectively best doctor from the set (Mikels et al., 2010). Beyond hypothetical decisions, feeling-based choice can enhance accuracy in anticipating real-world outcomes, as people naturalistically or experimentally inclined to have a high degree of trust in their feelings proved more successful at anticipating the winner of *American Idol* and the Democratic nominee for the 2008 U.S. presidential race (Pham, Lee, & Stephen, 2012).

These and other examples highlight the benefit afforded to decision makers—under the right circumstances—by relying upon feelings, guiding them toward the best choice. They also share, however, a presumption that the decision process ends at the moment of choice. We contend that making choices kick starts any number of subsequent considerations that the decision maker must entertain with respect to chosen options. For example, consider a person resolved to lose weight. Upon choosing one health regimen from many available options, the pursuit of weight loss *begins* with this initial choice, requiring further thoughts and actions in the service of that choice (e.g., keeping vs. returning a less-than-perfect stationary bicycle; staying the course with an aerobic exercise plan vs. switching to the paleo diet in the wake of a particularly favorable news report). More broadly, while feeling-based choice can prove helpful in making good decisions, might it also more effectively steer the postchoice course?

In asking what happens *after* making choices, we share a perspective similar to research on choice commitment, which has elaborated on how factors inherent to the process of choosing can shape the manner in which people then think and act vis-à-vis their chosen options. For instance, when making a selection from a choice set, the options might be presented either in a one-at-a-time sequence or simultaneously. From chocolates to wines, people prove more committed to their choices if the set from which they choose appears simultaneously rather than sequentially (Mogilner, Shiv, & Iyengar, 2013). Additionally, Schrift and Parker (2014) have suggested that people pursue choices differently depending on whether the initial choice set includes the option of doing nothing (see also Jones, Frisch, Yurak, & Kim, 1998; Parker & Schrift, 2011). If it does, they reasoned, the decision maker sees him or herself as preferring not only the chosen course of action over others (e.g., on which of two topics to work), but also over the option of performing no task at all (relative to people choosing only between the different topics and not provided a no-choice option). This revealed preference, witnessed by decision makers, signals to themselves a commitment to the chosen option, enhancing the determination with which they execute the task. These and other studies (e.g., Cioffi & Garner, 1996; Keller, Harlam, Loewenstein, & Volpp, 2011) support the idea that the means by which people make choices can exert powerful effects on decisions seen as a beginning rather than an end.

While the affect heuristic—the focus of the present investigation—has not been brought to bear on postchoice effects, a broader conceptualization of feelings in choice points to a possible connection with how people appraise their choices after making them. Generally, focusing on feelings precludes the kind of extensive deliberation that fosters attachment to options before choosing them and transforms the moment of choosing any one option into an act of sacrifice, effectively surrendering each of the others (Carmon, Wertenbroch, & Zeelenberg, 2003). With a longer gap separating the choice from its evaluation, thorough introspection makes decision makers less satisfied with what they choose (Wilson et al., 1993), and incorporating affective cues into choice can predict stronger satisfaction weeks later (Darke, Chattopadhyay, & Ashworth, 2006). In attesting to the role of affect and the trouble with thinking too much (see also Wilson & Schooler, 1991), investigations of this sort often conflate how people decide (e.g., the degree of thought or reliance on incidental emotion) with what people choose (e.g., selecting one option vs. another).

Through the lens of the affect heuristic, more recent and targeted consideration of feelings in choice has decoupled the decision reached from the process behind it (Maglio & Reich, 2019). Though Mikels and colleagues (2011) assessed accuracy in some studies in documenting an edge for affect, other studies used a paradigm in which none of the available options dominated the others, rendering objective accuracy moot. Instead, the latter results revealed that people focusing on their feelings—in the absence of any standardized metric by which one option proved superior—felt more satisfied with their choice than those who adopted a deliberation-based approach. If feelings encountered during choice (in general, as above) can have longer-lasting effects, and if a reliance on feelings (in particular, as operationalized and evoked as specified by the affect heuristic) exerts reliable short-term effects on the mind of the decision maker, then might use of the affect heuristic predict its own set of longer-lasting effects? We offer two reasons predicting an answer in the affirmative.

First, the very type of immediate choice satisfaction documented by Mikels and colleagues (2011) can act, in part, as the springboard that connects decision-related variables to subsequent thoughts and behaviors surrounding chosen options. When Mogilner and colleagues (2013) asked their participants about the option they had chosen, those in the simultaneous information condition—the same people who proved more committed to their chosen options—also reported greater satisfaction. Motivational accounts (e.g., Kruglanski et al., 2002; Locke & Latham, 1990) argue for the importance of this same feeling of satisfaction with chosen options (e.g., the goal one selects) in translating intention ("I would like to accomplish this goal") into action (exerting effort in the service of that goal; Sheeran, 2002). That which boosts upstream satisfaction—whether regarding an exercise plan to follow, a wine to order, or a car to purchase—should provide a downstream boon for chosen options.

Second, Maglio and Reich (2019) established a connection between reliance on feelings and how decision makers evaluate their chosen options after making them. The first step in their process model found that decision makers who rely on feelings more clearly see their true selves reflected in the options that they choose. This occurs because affective reactions arise automatically and without conscious control, leading those reactions—more so than deliberations—to seem representative of what one truly prefers at a deep, fundamental level. In the second step, the result of seeing choices as more aligned with this true self, feeling-focused decision makers subsequently hold more certain attitudes regard-

ing their chosen options. Though how participants chose did not systematically alter what they chose, those led to decide on the basis of their feelings (vs. deliberation) reported greater attitude certainty on both a direct and an indirect measure. Their indirect measure of certainty found an impact on advocacy: Participants who chose a restaurant based on feelings were more likely to share their choice with friends and family than those who chose deliberatively. This request to share occurred immediately after the decision, leaving open the question of how feelings might operate on thoughts and behaviors as time unfolds.

The literature on attitude strength offers an insight into this unfolding process, as attitude certainty predicts not only the impact but also the durability of an attitude (Krosnick & Petty, 1995). To the latter, attitudes held with certainty tend to subsist over long periods of time: The more certainly an attitude is held today, the more certainly it can be expected to be held tomorrow (Bassili, 1996), even when confronted with counter-attitudinal information (Eagly & Chaiken, 1995; Tormala & Petty, 2002). Such resilience against persuasion results from the biased manner in which the holders of those attitudes interpret new information as it informs ongoing thought and action surrounding the objects of their attitudes (Fazio & Zanna, 1978; Rucker & Petty, 2004; Tormala & Petty, 2002). This dovetails with the broader framework of motivated reasoning (Kunda, 1990) and with people processing information in a manner that allows them to maintain desired points of view (Ditto & Lopez, 1992; Lord, Ross, & Lepper, 1979; Simpson, Ickes, & Blackstone, 1995; cf. arriving at certain points of view; Woolley & Risen, 2018).

Viewing a chosen option as tied to an attitude susceptible to attack, we chart the boundaries of choice protection within the domain of persuasion. This conceptualization allows for choice protection to be included as a postchoice effect that necessitates the introduction of new postchoice information, as even the most certainly held attitudes can be subjected to scrutiny. Scrutiny poses a threat to the existing attitude—either in strength or in kind—that can originate from sources either outside (e.g., attempts from others to change one's mind) or within (e.g., the generation of counterfactuals that may beget regret) the individual who holds it. Even relatively benign new information, like passing a billboard for a competitor to a favorite brand or scrolling to a status update from an ex, might threaten an attitude should it be held weakly by its owner, ready to see any news as ominous news. Choice protection scaffolds up from attitudes to chosen options. In so doing, it reflects the degree to which decision makers mentally and behaviorally guard against threats capable of diminishing their opinions regarding chosen options. Choice protection necessarily tracks the time after a decision: For a choice to be protected, the decision maker must not only have made a selection but subsequently must also encounter new information (threatening to the choice) that provides the opportunity for protection to occur.

Taken together, insofar as feeling-focused decision making evokes immediate satisfaction with and characteristically longer-term attitude certainty toward (i.e., durability regarding) chosen options, the present investigation contends that people who rely on feelings (vs. deliberation) in making decisions will more resolutely protect their choices. We test this prediction in seven studies. Across all of the studies, we use a variety of choice domains, operationalizations of our key independent variables, assessments of choice protection as our key dependent variable, and seek to preclude alternative accounts. We sought to maximize power by recruiting as many participants as possible but as limited by the data collection method. For the majority of the studies, this produced samples of at least 30 participants per condition (Studies 2, 3A, and 4) if not nearly 100 or more per condition (Studies 1, 3B, and 6). Study 5 recruited participants from a restricted university participant pool; because its results complement those of the other studies while having over 20 participants per condition, we have included it in the interest of completeness. We report all manipulations and all measures for each study. All of the studies received approval from the research ethics committees at the universities at which they were conducted.

Study 1: Denigrating Direct Experience

As a first consideration of choice protection, Study 1 does not examine whether people don rose-colored glasses when they look upon items that they chose through reliance on feelings; instead, it examines whether they put on darker lenses to evaluate items that may threaten their choice. Might feeling-focused choosers differ in their interpretation of direct experience with postchoice alternatives when they come along? If feelings do, in fact, foster protection of decisions, then choosers should more readily find fault with competitors threatening their decision relative to those deciding deliberatively. To consider this possibility, Study 1 has participants first make a choice from a set of three different squeeze balls, either on the basis of feelings or deliberation, and then surprises them with a request to engage in direct experience with a fourth squeeze ball. We predict that, when asked to evaluate this new offering in a context in which they are forced to reckon with a potential threat to their choice, participants will protect feeling-derived choices (more than deliberation-derived choices) in the form of rating direct experience with this potential threat as objectively worse.

Method

There were 255 participants (59% female) who were recruited throughout the campus of an American university and asked to complete a research study related to decision making. They were tested using a lab computerized format and received $5 for their participation. They were told that they would be shown descriptions of three different squeeze balls and that their task was to choose the one that they preferred.

Participants were randomly assigned to a condition designed to manipulate decision strategy. Specifically, participants were instructed either to "use [their] intuitive, gut feeling," or to "use [their] deliberate, rational analysis" to make their choice (adapted from Maglio & Reich, 2019; Mikels et al., 2010) from a set of squeeze balls. They were then presented with information about the three squeeze balls, named Ball A, Ball B, and Ball C. Each squeeze ball was defined by four attributes, two of which were identical (having a 2.25-in. diameter and a rating of medium-plus for comfort). The other attributes included price (Ball A: $8; Ball B: $12; Ball C: $10) and a final attribute that was nonalignable across the balls (Ball A: engineered to relieve physical tension; Ball B: engineered to strengthen hands; Ball C: engineered to improve mental focus).

After learning about the balls, participants chose the one that they preferred. Next, they were told that a new squeeze ball

(named Ball D) had just become available and was located behind the monitor of the computer used to present the experimental materials. We had placed a squeeze ball in this location before the beginning of the experimental session. Participants were asked to reach behind the monitor, to take Ball D, and to spend as much time as they needed to try it. They were asked to indicate how comfortable they found Ball D to be on a scale ranging from 1 (*not at all comfortable*) to 7 (*very comfortable*). We targeted comfort because it was an attribute that required direct experience to evaluate and also had been held constant in the description of the initial set of three balls from which the participants chose. Finally, they were asked to return Ball D behind the monitor, provided basic demographic information, and were debriefed and dismissed.

Results and Discussion

Preliminary analysis. The specific ball chosen did not vary as a function of decision strategy, χ^2 (2, N = 255) = 2.05, p = .36, suggesting that any differences observed between the decision strategy conditions cannot be attributed to item-specific features of chosen options.

Primary analysis. The experienced comfort of Ball D varied as a function of decision strategy, $F(1, 253) = 6.16$, $p = .014$, $\eta_p^2 = .02$. Specifically, participants who chose based on feelings found it less comfortable ($M = 4.56$, $SD = 1.48$) than their deliberating counterparts ($M = 5.05$, $SD = 1.62$). Feelings seem to inoculate against threats to choices, as participants who followed their feelings more readily found fault with a newcomer in response to direct experience with (and an opportunity to psychologically disparage) it.

Study 2: Regret

Study 2 attests to the fact that making a decision does not free deciders from the possibility of later learning new information against which they might be forced to weigh their original choice. Importantly, the valence of feedback (i.e., positive or negative) predicts how people behave in response to it: While positive feedback generally validates the choice and negative feedback calls it into question, the manner in which the individual interprets this feedback carries substantial, separable heft in motivating subsequent action (e.g., Fishbach, Eyal, & Finkelstein, 2010). We hypothesize that choices made on the basis of feelings (vs. deliberation) should more durably withstand negative feedback. As an initial treatment of this question, and given the significant role of counterfactual considerations in predicting future-oriented behavior (e.g., Ersner-Hershfield, Galinsky, Kray, & King, 2010; Roese, 1997), Study 2 assesses the role of regret as arising in response to positive and negative feedback after deliberative or feeling-focused choice.

Method

There were 128 participants (52% female) who were recruited throughout the campus of a Canadian university and asked to complete a brief research study related to decision making. They were told that they would be shown descriptions of three different digital cameras and that their task was to choose the one that they preferred.

As in Study 1, participants were randomly assigned to a condition in which they made their decision based upon feelings or deliberation. Participants were then presented with information about three cameras, named Camera A, Camera B, and Camera C. Each camera was defined by four attributes, two of which were identical (having 14 Megapixels and a 3-in. LCD display). The other attributes included price (Camera A: $430; Camera B: $455; Camera C: $415) and a final attribute that was nonalignable across the cameras (Camera A: ISO 100–6400 for shooting from bright to dim light; Camera B: EXPEED III for rapid image processing; Camera C: SuperSteadyShot for image stabilization).

After learning about the cameras, participants were asked to select the one that they preferred and to imagine that they had gone to a store and purchased that camera. Next, participants were randomly assigned to a condition in which they received either positive or negative feedback regarding their choice. In the positive feedback condition, participants were asked to imagine that, the day after making their purchase, they saw a consumer report claiming that their chosen camera was a very good purchase. In the negative feedback condition, a similar scenario asked them to imagine a consumer report claiming that their chosen camera was a very bad purchase. Participants then indicated how much regret they felt on a scale ranging from 0 (*no regret*) to 5 (*maximum regret*). Finally, they provided basic demographic information and were debriefed and dismissed.

Results and Discussion

Preliminary analysis. The specific camera chosen did not vary as a function of decision strategy, $\chi^2(2, N = 128) = 2.167$, $p = .34$, suggesting that any differences observed between the decision strategy conditions cannot be attributed to item-specific features of chosen options.

Primary analyses. We subjected reported regret to a 2 (strategy: deliberation vs. feelings) × 2 (feedback: positive vs. negative) analysis of variance (ANOVA). We observed both a main effect of strategy, $F(1, 124) = 8.41$, $p = .004$, $\eta_p^2 = .06$, and a main effect of feedback, $F(1, 124) = 140.89$, $p < .001$, $\eta_p^2 = .53$, which were qualified by an interaction between the two, $F(1, 124) = 5.67$, $p = .019$, $\eta_p^2 = .04$. As illustrated in Figure 1, after receiving positive feedback, regret was equally low among participants who had chosen based on feelings ($M = 0.36$, $SD = 0.78$) and deliberation ($M = 0.47$, $SD = 0.91$), $F(1, 124) = 0.14$, $p > .7$. However, after receiving negative feedback, participants who had chosen based on feelings experienced less regret ($M = 2.46$, $SD = 1.73$) than participants who had chosen based on deliberation ($M = 3.63$, $SD = 1.21$), $F(1, 124) = 13.89$, $p < .001$, $\eta_p^2 = .10$. This suggests that, whereas positive feedback lends a favorable boost across different decision strategies, choosing on the basis of feelings (vs. deliberation) insulates the decision maker from experiencing substantial regret in the face of negative feedback.

Study 3: Reviewer Competence

Though it was designed to provide evidence for choice protection in the form of a particular emotion (i.e., regret), Study 2 also calls attention to the fact that reviewers themselves act as bearers of positive or negative feedback, the competence of which might be open to doubt. Study 3 capitalizes upon this phenomenon,

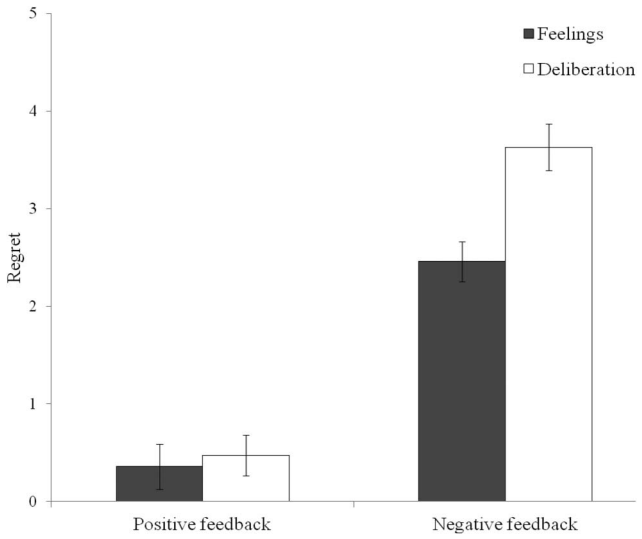

Figure 1. Regret as a function of feedback valence and decision strategy, Study 2. Bars indicate standard error.

asking participants first to make a choice and then to evaluate the competence of the reviewer in an opportunity for choice protection. Study 3A draws a direct line from Studies 1 and 2 to offer a conceptual replication thereof, and Study 3B retains the measure of reviewer competence with a different operationalization of choice strategy to lend greater nuance to the overall pattern of results for choice protection in the form of lampooning or heralding a reviewer.

Study 3A

Study 3A largely mirrors the design of Study 2, first asking participants to make a choice on the basis of feelings or deliberation and then manipulating feedback (positive or negative) regarding their chosen option before asking them to evaluate the competence of the reviewer bearing the good or bad news. On this new outcome measure, we predict a pattern of results similar to Study 2, with equal positivity (across the two decision strategies) toward the reviewer providing positive feedback but a higher degree of choice protection (here, reviewer derogation) among feeling-focused (vs. deliberative) choosers after negative feedback.

Method

There were 156 participants (44% female) who were recruited throughout the campus of a Canadian university and asked to complete a brief research study related to decision making. They were told that they would be shown descriptions of three different digital cameras and that their task was to choose the one that they preferred.

As in the earlier studies, participants were randomly assigned to a condition in which they made their decision based upon feelings or deliberation. Participants were then presented with information about three cameras, which were identical to those used in Study 2.

After learning about the cameras, participants were asked to select the one that they preferred and to imagine that they had gone to a store and purchased that camera. Next, participants were randomly assigned to a condition in which they received either positive or negative feedback regarding their choice in a manner identical to Study 2. Participants then indicated how competent they thought the reviewer was on a scale ranging from 1 (*not at all competent*) to 7 (*extremely competent*). Finally, they provided basic demographic information and were debriefed and dismissed.

Results and Discussion

Preliminary analysis. The specific camera chosen did not vary as a function of decision strategy, $\chi^2(2, N = 156) = 1.18$, $p = .55$, suggesting that any differences observed between the decision strategy conditions cannot be attributed to item-specific features of chosen options.

Primary analyses. We subjected evaluations of the reviewer to a 2 (strategy: deliberation vs. feelings) × 2 (feedback: positive vs. negative) analysis of variance (ANOVA). We observed both a main effect of strategy, $F(1, 152) = 4.34$, $p = .039$, $\eta_p^2 = .03$, and a main effect of feedback, $F(1, 152) = 84.81$, $p < .001$, $\eta_p^2 = .36$, which were qualified by an interaction between the two, $F(1, 152) = 5.78$, $p = .017$, $\eta_p^2 = .04$. As illustrated in Figure 2, after receiving positive feedback, the reviewer was judged as being highly competent both among participants who had chosen based on feelings ($M = 5.33$, $SD = 1.34$) and deliberation ($M = 5.25$, $SD = 1.36$), $F(1, 152) = 0.05$, $p > .8$. However, after receiving negative feedback, participants who had chosen based on feelings more readily dismissed the reviewer as incompetent ($M = 2.59$, $SD = 1.57$) than participants who had chosen based on deliberation ($M = 3.65$, $SD = 1.58$), $F(1, 152) = 9.98$, $p = .002$, $\eta_p^2 = .06$. This lent support to our prediction for choice protection, as people making feeling-based (vs. deliberative) choices protected their choices by discrediting the negative reviewer while proving

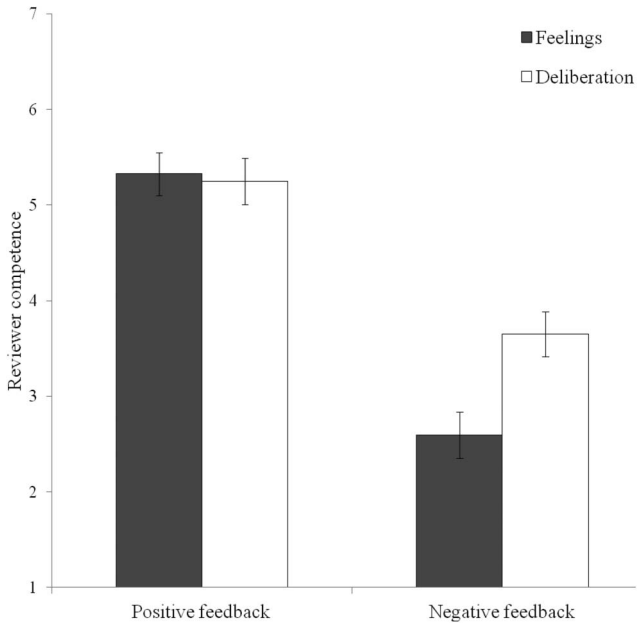

Figure 2. Reviewer competence as a function of feedback valence and decision strategy, Study 3A. Bars indicate standard error.

equally ready to embrace a positive reviewer as their deliberating counterparts.

Study 3B

The first three studies kept with an established methodological tradition that explicitly instructs participants on how to make choices (Mikels et al., 2010, 2011). More recent advances have found that more subtle manipulations yield results conceptually similar to those resulting from explicit instruction (Maglio & Reich, 2019). Rather than pressing yet subtler, Study 3B moves in the opposite direction, seeking greater precision in the means by which to evoke different decision strategies. Asking participants only to use either their "deliberate, rational analysis" or their "intuitive gut feeling" obfuscates whether any differences between condition result from differences in the content of their consideration (feelings vs. facts), the process of their consideration (intuition vs. deliberation), or some interaction between content and process. After all, people might reasonably make an intuitive, heuristic decision on the basis of facts (e.g., the "Take The Best" heuristic; Gigerenzer & Goldstein, 1996) or pore over their feelings deliberately (Rachman, 1980).

Study 3B unpacks these possibilities in a full factorial design before presenting participants with a purchase scenario similar to that in Study 3A but followed only by negative feedback, as the conditions did not differ in their response to positive feedback in Study 3A. Though the established explicit manipulation of decision strategy does not produce differences in decision speed (Maglio & Reich, 2019), Study 3B includes a measure of decision speed to consider whether speed might play a role in this updated explicit manipulation. In the interest of robustness testing, Study 3B has participants make a decision in a different domain (restaurants) after reviewing information presented in a different format (a grid) and then using a different reviewer evaluation item (accuracy).

Method

There were 400 participants (47% female) who were recruited from the Mechanical Turk platform hosted by Amazon to participate in a study related to decision making and for which they were paid $0.50. They were told that they would be shown descriptions of three different restaurants and that their task was to choose the one that they preferred.

In a departure from the earlier studies, participants were randomly assigned to a condition in a 2 (content: feelings vs. facts) × 2 (process: intuition vs. deliberation) between-subjects design. In the intuition conditions, participants were asked to "make a snap decision based on your feelings [the facts]." In the deliberation conditions, participants were asked to "make a decision after carefully deliberating your feelings [the facts]."

Participants were then presented with information about three restaurants using a decision grid (see Figure 3). After learning about the restaurants, participants were asked to select the one at which they preferred to make a reservation. The decision grid describing the restaurants and the choice itself were presented on one page, and the electronic software used to present the experimental materials surreptitiously recorded how much time participants spent on this page.

	Restaurant		
	A	B	C
Takes reservations	Yes	Yes	Yes
Attire	Casual	Casual	Casual
Outdoor seating	Yes	Yes	No
Parking	Street	Back of restaurant	Front of restaurant
Good for kids	Yes	No	Yes
Good for groups	Yes	Yes	Yes

Figure 3. Decision grid used in Study 3B.

Next, all participants received negative feedback. They were asked to imagine that a week after making their reservation, they saw an extremely negative review of their chosen restaurant. Participants then indicated how accurate they thought the reviewer was on a scale ranging from 1 (*not at all*) to 7 (*extremely*). Finally, they provided basic demographic information and were debriefed and dismissed.

Results and Discussion

Preliminary analyses. The specific restaurant chosen did not vary as a function of decision content, χ^2 (2, N = 400) = 1.23, p = .54, or decision process, χ^2 (2, N = 400) = 1.81, p = .40, suggesting that any differences observed between conditions cannot be attributed to item-specific features of chosen options. Further, we observed no main or interaction effects by which the conditions differed in how long participants took to make their choices, Fs < 1, ps > .3, suggesting that any differences observed between conditions cannot be attributed to decision speed.

Primary analyses. We subjected evaluations of the reviewer to a 2 (content: feelings vs. facts) × 2 (process: intuition vs. deliberation) analysis of variance (ANOVA). Neither of the main effects were significant, Fs < 2, ps > .16, while the interaction between decision content and decision process was significant, $F(1, 396) = 4.44$, $p = .036$, $\eta_p^2 = .01$. As illustrated in Figure 4, for participants who had chosen based on facts, the reviewer was judged as being reasonably accurate both among participants who had chosen intuitively ($M = 4.09$, $SD = 1.20$) and deliberately ($M = 3.96$, $SD = 1.12$), $F(1, 396) = .65$, $p > .4$. However, among participants who had chosen based on feelings, those who had chosen intuitively more readily dismissed the reviewer as inaccurate ($M = 3.69$, $SD = 1.17$) than participants who had chosen deliberatively ($M = 4.04$, $SD = 1.13$), $F(1, 396) = 4.76$, $p = .030$, $\eta_p^2 = .01$.

These results confirm that the "affect heuristic" is aptly named, attesting to the vitality of both elements in the phrase. For choosers to deploy this decision strategy successfully, they not only must consult how they feel about the available options but also must process this information in accordance with an overall, intuitive impression. Regardless of how they processed the information, participants who considered the facts defining their options engaged in minimal choice protection (i.e., questioning the accuracy of a negative reviewer), consistent with our earlier studies and the role of affect. Still, deliberating over feelings appears to diminish choice protection as well, consistent with other findings in which

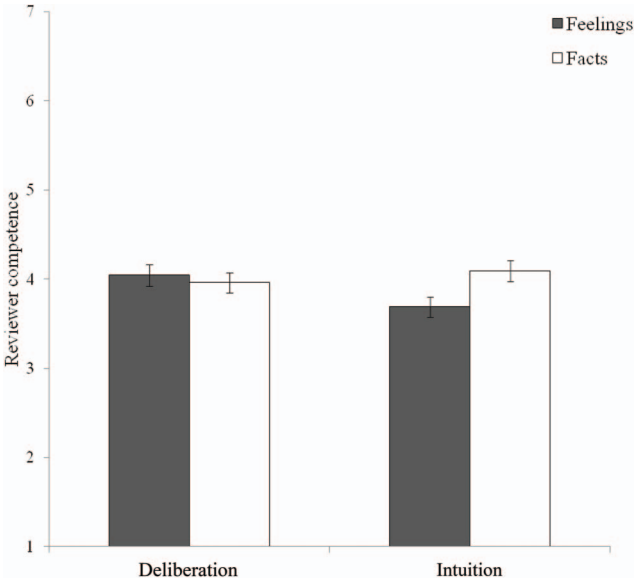

Figure 4. Reviewer competence as a function of feedback valence and decision strategy, Study 3B. Bars indicate standard error.

deliberation compromises beneficial effects of feeling-focused decisions (Mikels et al., 2011, Study 3) and perhaps underpinned by deliberative thoughts espousing a lay belief in fact-based rationality (Hsee, Yang, Zheng, & Wang, 2015; Hsee, Zhang, Yu, & Xi, 2003).

While we hesitate to speculate further on the cognitive dynamics that might differ between our experimental conditions in relating to choice protection, the reaction time (RT) data preclude one such possibility: decision speed. At first pass, this lack of a difference might seem at odds with an expectation that participants in the intuition conditions should have responded more quickly than participants in the deliberation conditions. However, our intent was that all participants, whether assigned to process the information intuitively or deliberatively, would review all the information defining the attributes of the restaurants (to consider how they felt or what they knew regarding that information in a heuristic or systematic way). The similar amount of time taken across our four experimental conditions (overall $M = 25.47$ s, $SD = 32.65$ s) suggests that all participants took sufficient time to encode all of the information about the restaurants (e.g., did not differentially choose based on a single attribute), leading to differences not in which option they chose but in how they used that information and protected their choices to different degrees. Indeed, when given no time constraint for making their choice, we expect that all participants—including those in the intuitive conditions—took as much time as they felt they needed to arrive at a sound decision. If they had chosen more quickly than their deliberating counterparts, then the instruction to make an intuitive decision might have forced them to choose before they felt prepared, which should have undermined how they felt about their chosen restaurant (Inbar, Botti, & Hanko, 2011). Instead, the absence of a difference in RT may have been crucial in allowing intuitive, feeling-based participants to protect their restaurant the most.

The results also warrant consideration through the lens of attitudes and persuasion, which has underscored the importance of decoupling content and process (Petty & Briñol, 2008) in much the same way as Study 3B. To the content, people can hold attitudes based on either affect or cognition (Breckler, 1984; Crites Jr., Fabrigar, & Petty, 1994; Eagly, Mladinic, & Otto, 1994; Millar & Tesser, 1986); to the process, attitudes can result from either extensive or minimal thought (Chaiken, 1980; Petty, Cacioppo, & Heesacker, 1981). Both have been brought to bear on attitude strength. Generally (but with important qualifications), attitudes deriving from affect prove stronger than those deriving from cognition (e.g., Lavine, Thomsen, Zanna, & Borgida, 1998; Rocklage & Fazio, 2018), consistent with the theorizing of the present investigation. However, it is deliberation, and not quick consideration, that usually begets stronger attitudes (Barden & Petty, 2008; Haugtvedt & Petty, 1992; Wegener, Downing, Krosnick, & Petty, 1995). Taken together, this literature might have predicted two main effects in Study 3B—with more choice protection among participants focusing on their feelings and engaging in thorough deliberation—with the latter underpinned by a significant difference in RT.

Instead, Study 3B observed a unique benefit for choice protection in focusing on feelings and in processing information heuristically, with no difference in RT. As a speculative explanation, we offer the possibility that attitudes and the strength with which people hold them might operate differently in contexts involving choice rather than persuasion. A prototypical investigation into persuasion only involves a single attitude object (e.g., an opinion, position, or policy). Conversely, when people make decisions, they are open to selecting any of the options comprising their choice set, inherently involving multiple objects in need of an attitude toward each. Thus, attitudes in choice might stem from a different set of factors or processes (e.g., how choosers make trade-offs between different options) than those involved in persuasion (e.g., whether—and how strongly—to espouse a particular position). To illustrate, making a decision entails generating attitudes toward the options and acting on the collective attitudes by selecting one option (presumably, the one engendering the most favorable attitude). This decision process effectively collapses the formation stage and the subsequent expression stage that are often separated and characterized by unique properties in the literature on attitudes and persuasion (Tormala, Clarkson, & Henderson, 2011). Despite the absence of a difference in the overall measure of RT in Study 3B, might participants in the different conditions have allocated that essentially equivalent amount of time differently—on attitude formation versus expression—in a way that predicts choice protection? Though outside the scope of this initial treatment of choice protection, the present investigation raises the broader possibility of noteworthy contrasts between attitudes formed and evaluated in isolation and those that emerge from the process of choice.

Study 4: Mood as an Alternative Explanation

Our first three experiments provided evidence consistent with feelings fostering choice protection, including the important boundary condition from Study 3B by which consultation of feelings must be coupled with an intuitive mode of processing to facilitate choice protection (for this reason, our remaining experiments will use the original, explicit manipulation of decision strategy). However, none have yet precluded alternative accounts,

and Study 4 seeks to resolve an interpretation based upon mood. Despite the semantic overlap between our focal construct and this alternative, we believe it important to differentiate the former (a focus upon feelings in making decisions) from the latter (the valenced experience of a positive or negative affective state). After all, people vary in their enjoyment of making different types of choices (e.g., choosing for the self vs. others; Polman & Vohs, 2016), the positivity of which may configure how they respond to negative feedback (Raghunathan & Trope, 2002), and all of which operates independently of the established inverse relationship whereby experiencing positive affect increases reliance upon intuitive feelings (King, Burton, Hicks, & Drigotas, 2007; King & Hicks, 2009). Should the use of feelings in choice similarly bolster mood, then perhaps these positive feelings would explain the seeming resilience of feeling-based choice against negative feedback. Study 4 entertains this possibility, probing participants' mood both immediately after making a choice (based upon deliberation or feelings, as in the earlier studies) as well as in response to either positive or negative feedback regarding that choice. We predict that no difference will emerge in mood immediately after choice but that, in response to negative feedback, participants focusing on deliberation versus feelings will diverge in a manner consistent with our earlier studies.

Method

There were 122 participants (56% female) who were recruited throughout the campus of a Canadian university and asked to complete a brief research study related to decision making. They were told that they would be shown descriptions of three different smartphones and that their task was to choose the one that they preferred.

As in Studies 1–3A, participants were randomly assigned to a condition in which they made their decision based upon feelings or deliberation. Participants were then presented with information about three smartphones, named Phone A, Phone B, and Phone C. Each smartphone was defined by four attributes, two of which were identical (having a 16 megapixel camera and a 5-in. touchscreen display). The other attributes included price (Phone A: $715; Phone B: $725; Phone C: $720) and a final attribute that was nonalignable across the phones (Phone A: XP7 enhanced reception; Phone B: 32 GB expandable internal memory; Phone C: 2.5 GHz quad-core processor).

After learning about the phones, participants chose the one that they preferred. To assess their mood immediately after the making of their choice, participants then indicated how they felt at that moment on a scale ranging from −5 (*very bad*) to 0 (*neutral*) to 5 (*very good*). Next, participants were randomly assigned to a condition in which they received either positive or negative feedback regarding their choice in a manner identical to Studies 2 and 3A. In response to this information, participants again rated their feelings on a scale identical to that used in the initial assessment. Finally, they provided basic demographic information and were debriefed and dismissed.

Results and Discussion

Preliminary analysis. The specific phone chosen did not vary as a function of decision strategy, $\chi^2(2, N = 122) = 3.60$, $p = .55$, suggesting that any differences observed between the decision strategy conditions cannot be attributed to item-specific features of chosen options.

Primary analyses. We subjected mood reports to a 2 (strategy: deliberation vs. feelings) × 2 (feedback: positive vs. negative) × 2 (report timing: before and after feedback) ANOVA, with the first two factors manipulated between subjects and the third factor assessed as a repeated measure. Of the three main effects, only the feedback factor proved statistically reliable ($p < .001$). Of the three possible two-way interactions, two proved statistically reliable: rating timing by feedback ($p < .001$) and rating timing by decision strategy ($p = .012$). Crucially, these effects were qualified by an interaction between all three factors, $F(1, 118) = 11.85$, $p = .001$, $\eta_p^2 = .09$.

Accordingly, we decomposed this interaction to a series of pairwise comparisons between participants in the feelings and deliberation conditions. Examining the first rating (made before the feedback) among participants in the positive and negative feedback conditions, no difference emerged between participants in the two conditions (positive feedback: $M_{\text{feelings}} = 2.00$, $SD = 2.47$; $M_{\text{deliberation}} = 1.42$, $SD = 2.51$, $p = .38$; negative feedback: $M_{\text{feelings}} = 1.17$, $SD = 2.49$; $M_{\text{deliberation}} = 2.13$, $SD = 2.77$, $p = .16$). This suggests that reliance on feelings in decision making does not enable choice protection by way of providing an initial boost to mood upon which decision makers lean for support in processing negative feedback.

Examining the second rating (made after the feedback), participants who received positive feedback felt equally positive, $M_{\text{feelings}} = 3.81$, $SD = 1.52$; $M_{\text{deliberation}} = 3.56$, $SD = 1.50$, $p = .65$. Conversely, when the second rating was made in response to negative feedback, participants in the feelings condition felt better ($M = 0.00$, $SD = 2.52$) than those in the deliberation condition ($M = -1.29$, $SD = 2.76$), $F(1, 118) = 5.31$, $p = .023$, $\eta_p^2 = .04$. Thus, the lack of a difference in mood immediately after deliberative versus feeling-focused choice suggests that a focus on feelings in decision making does not foster choice protection as a function of proving to be a more enjoyable or positive experience. Rather, that it safeguards mood in response to negative feedback (relative to a deliberative approach) suggests a unique role for feeling-based choice. Echoing the results of the earlier studies, reliance on feelings in choice appears to provide a buffer against subsequent attacks on the choice, documented here not vis-à-vis a specific emotion (e.g., regret in Study 2) but rather mood writ large. Having addressed this alternative explanation, our next study turns to consideration of behavioral intentions regarding chosen options.

Study 5: Perseverance

As choice protection broadly guards against threats to chosen options, it can be made manifest not only in the form of present evaluations (dampened evaluations of competitors and naysayers; dampened negative emotion in response to negative feedback) but also in forward-looking contexts. Decision makers protecting their choices might selectively recruit optimistic expectations, believing that the good things about their choices will remain positive and that anything negative about their choices will trend upward. For this reason, Study 5 examines the effect of feeling-focused decision making with implications for the future. Here, participants choose between two types of tasks on which to work and then

receive ostensible feedback on their performance. The choice of task is a decision in name only; all participants proceed to the same task regardless of their choice. Furthermore, this study examines choice protection in a context where participants receive no information about the specific choice options to provide evidence for a robust effect. We chose one particular design (the Raven's Progressive Matrices; Raven, 2000) that would allow us to manipulate success or failure feedback on the task independent of participants' knowledge of their actual performance on it. As evidence for behavior in the form of an intention regarding the future, the dependent measure assesses willingness to perform the same task again. We predict that success feedback will augment interest in performing the task again, whereas negative feedback will create a divergence such that those choosing the task on the basis of feelings (vs. deliberation) will prove more interested in attempting the same task again.

Method

There were 91 undergraduate student participants (74% female) from an American university who were recruited to participate in a research study related to decision making. They were tested using an online computerized format and received course credit for their participation. They were told that they would be presented with two different types of task on which to work and that their task was first to choose the one that they preferred and then to perform that task.

As in the earlier studies, participants were randomly assigned to a condition in which they made their decision regarding the task based upon feelings or deliberation. The two task options were described as a visual task or a spatial task, and participants used only this description to choose one of the options. Despite this ostensible choice, all participants subsequently performed the same task. With this design, participants had the experience of making a real choice while holding constant the actual task performed (see Schrift & Parker, 2014).

We chose the descriptors of visual and spatial because both could reasonably apply to the task that all participants went on to perform: one item from the Raven's Progressive Matrices (Raven, 2000). This task presents participants with a number of shapes arranged in a 3 × 3 grid with the final shape in the sequence (in the lower right corner of the grid) missing. Participants are told that the task requires them to select which one of five different shapes accurately completes the pattern created by the eight displayed items. In general, these matrices range from very easy to very difficult, and we chose an item from the most difficult set as the task for our participants (see Figure 5). Furthermore, we modified the options presented to participants in that only four shapes were presented, removing the correct answer and leaving only four incorrect answers. In so doing, participants would be unable to know for certain whether they had selected the correct shape; pilot testing confirmed this to be the case among a separate sample from the same subject pool. We allowed our participants to spend as long as they wanted on the task.

These changes to the basic Raven design meant that once participants selected a shape, it was definitely incorrect, but they were incapable of knowing the accuracy of their selection. As such, we were able to manipulate performance feedback. Participants were randomly assigned to a condition in which they received either positive or negative feedback regarding their choice. In the positive feedback condition, participants were told, "Great, your answer was correct." In the negative feedback condition, participants were told, "Sorry, your answer was not correct." Participants then indicated how interested they were in working on a similar task again in the future on a scale ranging from 1 (*not at all*) to 7 (*very much*). Finally, they provided basic demographic information and were debriefed and dismissed.

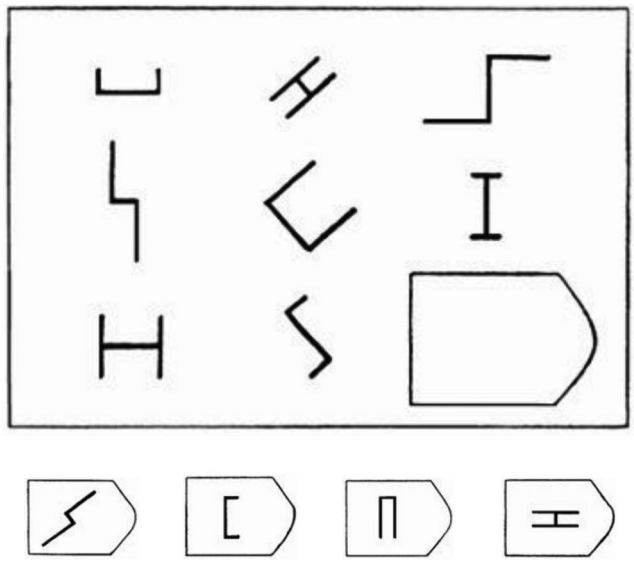

Figure 5. One-item Raven Task, Study 5.

Results and Discussion

Preliminary analysis. The specific task chosen did not vary as a function of decision strategy, $\chi^2(1, N = 91) = 0.25$, $p = .62$, suggesting that any differences observed between the decision strategy conditions cannot be attributed to item-specific features of chosen options.

Primary analyses. We subjected the participants' interest in performing a similar task again to a 2 (strategy: deliberation vs. feelings) × 2 (feedback: positive vs. negative) ANOVA. We observed both a main effect of strategy, $F(1, 87) = 3.83$, $p = .053$, $\eta_p^2 = .04$, as well as a main effect of feedback, $F(1, 87) = 6.50$, $p = .013$, $\eta_p^2 = .07$, which were qualified by an interaction between the two, $F(1, 87) = 6.87$, $p = .01$, $\eta_p^2 = .07$. As illustrated in Figure 6, after receiving positive feedback, interest in performing the task again was equally high among participants who had chosen based on feelings ($M = 4.23$, $SD = 1.48$) and deliberation ($M = 4.43$, $SD = 1.04$), $F(1, 87) = 0.22$, $p > .6$. However, after receiving negative feedback, participants who had chosen based on feelings were more interested in another attempt ($M = 4.25$, $SD = 1.70$) than participants who had chosen based on deliberation ($M = 2.82$, $SD = 1.65$), $F(1, 87) = 10.59$, $p = .002$, $\eta_p^2 = .11$. Here, everyone looks to the future optimistically when prior performance has gone well, but people who make an initial choice based on feelings appear to bounce back more effectively in the face of negative feedback as it informs their future efforts.

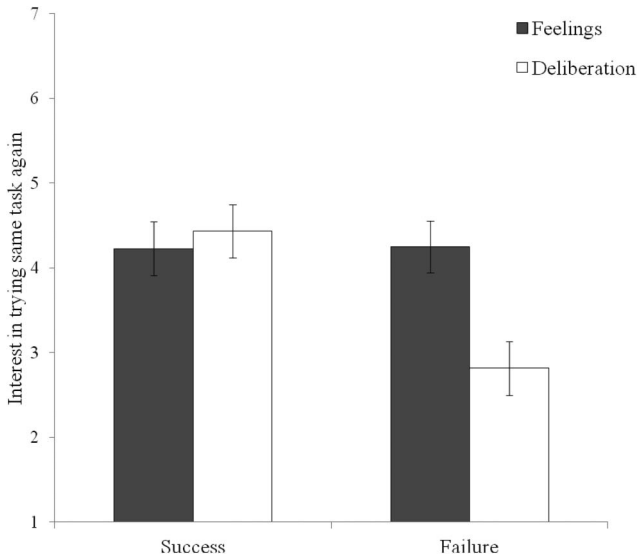

Figure 6. Interest in trying same task again as a function of feedback valence and decision strategy, Study 5. Bars indicate standard error.

Study 6: Protection, Real, and Delayed

In a departure from the hypothetical decisions made in Studies 1–4, participants made a real decision in Study 5: They actually performed the task after making a seemingly consequential decision. To provide further evidence of external validity, Study 6 asks participants to make a more realistic decision with more tangible consequences, selecting a mint and subsequently consuming it. Because the consumption of a mint requires the passage of at least some time, this revised design allows for a separate extension beyond the previous studies. In those studies, participants made decisions that were quickly followed by the opportunity to engage in choice protection; Study 6 introduces a time delay between the two. While participants consume their chosen mint, Study 6 has them complete a series of filler tasks that allows for the separation of choice making and choice protection to provide evidence that choice protection need not occur immediately.

While the nature of the new information that provides the opportunity for choice protection mirrors earlier studies (reading a negative review), having participants consume a mint allows for a novel assessment of choice protection (favorable evaluations of its performance). Introducing only negative feedback (and not positive feedback as a separate experimental factor), Study 6 incorporates additional nuance in including a control condition in which participants received no instruction regarding how to make their decision (to provide evidence for the direction of the effect) and a measure of the time it takes participants in all conditions to choose (see also Study 3B).

Method

There were 288 students and university affiliates as participants (59% female) who were recruited throughout the campus of an American university and asked to complete a research study involving a series of different tasks. They were tested using a lab computerized format and received $5 for their participation. They were told that the first part of the study was about perceptions of mints among students and university affiliates. Specifically, they were told: "We have partnered with a mint brand who is interested in how students and university affiliates respond to different mints. This part of the survey has been run at other schools before, and now we're running it here at [name of university]." They were then told that they would be shown descriptions of three different breath mints and that their task was to choose the one that they preferred. After they made their choice, they would receive a sample of the mint that they had chosen.

As in the earlier studies, participants were randomly assigned to a condition in which they were asked to make their decision based upon feelings, based upon deliberation, or without explicit instruction as to the decision strategy that they should use. They were then presented with information about the three mints, named Mint A, Mint B, and Mint C. Each mint was defined by four attributes, two of which were identical (sugar-free and $4.40 per tin). The other attributes included flavor (Mint A: cool fruit; Mint B: cinnamon; Mint C: cherry berry) and a final attribute that was nonalignable across the mints (Mint A: prevents dry mouth; Mint B: improves mental focus; Mint C: fights dental plaque).

After learning about the mints, participants chose the one that they preferred. As in Study 3B, the electronic software recorded how much time participants spent on this page. Next, they were provided with a sample of their chosen mint "to enjoy during the next few, unrelated tasks" that lasted several minutes. Upon completing this series of unrelated tasks, participants were reminded of the original cover story in which the mint company had previously run the same study at other schools. They were further informed as to the ostensible results from students at those schools rating how refreshing the mints were, listed in the following order (from best to worst) to provide negative feedback: [name of one unchosen option], [name of other unchosen option], [name chosen option]. To lend credibility to this operationalization, the experimental software took the name of each participant's chosen mint and piped it into the position of the worst option and placed the two unchosen options ahead in rank in random order. Participants were then asked to indicate how refreshing they found their mint to be on a scale ranging from 1 (*not at all refreshing*) to 7 (*very refreshing*). We targeted how refreshing the mint was because it required direct experience to evaluate, capitalizing on our naturalistic design. Finally, they provided basic demographic information and were debriefed and dismissed.

Results and Discussion

Preliminary analysis. The specific mint chosen did not vary as a function of decision strategy, χ^2 (4, $N = 288$) = 7.28, $p = .12$, suggesting that any differences observed between the decision strategy conditions cannot be attributed to item-specific features of chosen options. Further, the time to make the decision did not vary as a function of decision strategy, $F < 1$, $p > .7$, suggesting that any differences observed between conditions cannot be attributed to decision speed.

Primary analysis. The degree to which the mint was found to be refreshing varied as a function of decision strategy, $F(2, 285) = 4.37$, $p = .014$, $\eta_p^2 = .03$. Post hoc analyses (LSD) revealed that participants who chose based on feelings found the mint to be more refreshing ($M = 4.05$, $SD = 1.72$) than those who chose

based on deliberation ($M = 3.55$, $SD = 1.62$), $p = .038$, $d = .30$, or those who chose without explicit instructions ($M = 3.38$, $SD = 1.63$), $p = .005$, $d = .40$. The latter two conditions did not differ in the degree to which the mint was found to be refreshing, $p > .4$. This final study showcases choice protection as a phenomenon that applies even to the consumption and evaluation of real choice options, that persists even with a delay between the decision and the opportunity for protection, and that benefits only feeling-focused decisions (i.e., does not hold among participants in a no-manipulation control condition) independent of the speed with which people peruse and select from the choice set.

General Discussion

We conceptualize choosing among options as a beginning rather than an ending. As such, it becomes possible to view decision making as an action that initiates a cascading series of further events. One particular subset of such events involves the introduction of new information, capable of posing a threat to chosen options and affording decision makers the opportunity to look upon what they chose in a particularly favorable light—to engage in choice protection—when postchoice trajectories are not seamlessly perfect but instead involve internal or external feedback that suggests the sailing is anything but smooth. When approaching decisions, people often stick with the conventional wisdom that prescribes a reasoned, deliberative approach to making choices (Hsee et al., 2015; Janis & Mann, 1977). The results of seven studies propose that this inclination may not be in their best interest, or at least not in the best interest of their choices, as people who instead relied upon intuitive feelings in selecting among options proved to be more resolute protectors of their choices. This pattern of results held across several diverse choice domains, from technology to trinkets to tasks, and assessments of choice protection.

Thus, the present research broadens the scope of feelings in decision making from questions of what people select to the extended issue of how they think and act in the service of that choice. This postchoice consideration lends greater nuance to cognitive dissonance theory (Brehm, 1956; Festinger, 1957; Harmon-Jones, 1999) by which the mere making of a choice results in an amplification of positive feelings toward chosen options (and derogation of foregone options). Rather than a unilateral enhancement of appreciation for all choices (see also Beggan, 1992), our investigation notes that being instructed to rely upon intuitive feelings or upon deliberation moderates the course for the subsequent defense of the things people come to call their own. Our instructions proved to change how participants protected their choices without changing what they chose (i.e., the relative choice share across the different options) or, in Studies 3B and 6, how long it took them to choose. This opens the door for future research to consider choice protection arising in response to both how the initial choice is actually made and the mere perception of how it was made.

Our hypothesis development built from prior research on intuitive feelings and their relation to the protection of choices. In one sense, the present investigation adds to the growing list of contexts in which feelings prove beneficial. People struggle to stay on track when their choices run the risk of falling victim to scrutiny, and our research identifies feeling-based decision making as a promising strategy that should afford greater postchoice tenacity in applied settings. Noteworthy examples include health regimens and retirement savings plans: Might people be more likely to stick to their exercise commitments and less likely to skip a monthly contribution to their investment portfolio if they chose those options based on their feelings? Additionally, at a public policy level, perhaps health campaigns should encourage a populace that continues to struggle with obesity to choose diet and exercise regimens based on their feelings in the interest of helping them to maintain a healthy lifestyle. While our results suggest that these possibilities should hold water, our window of investigation remains somewhat limited, examining opportunities for choice protection encountered not long after making the triggering decision (but see Study 6). Accordingly, the longitudinal tail of the long-term remains an opportunity for future investigation.

Though these examples (physical and financial well-being) suggest that the protection of choice can prove beneficial, this need not always be the case. Disengagement from a failing course of action can prove just as important, allowing individuals to deploy limited resources (e.g., time, money) toward more fruitful investments (Klinger, 1975). Accordingly, for the types of choices optimized with dynamic consideration and reconsideration, the openness to revision provided by deliberation may prove the more helpful approach. To underscore this point, feeling-focused decision making itself does not always confer the benefit of encouraging optimal choices (Mikels, Cheung, Cone, & Gilovich, 2013; Shiv & Fedorikhin, 1999), perhaps driven in part by an enhanced motivational distortion of decision-relevant information (Woolley & Risen, 2018) entirely consistent with our findings. Mikels and colleagues (2011) found that undergraduates generally made better choices when they relied on feelings, but only for certain decisions: Feelings boosted accuracy when choosing among vacations and apartments but not among physicians and medical treatments. Participants in that study were, of note, undergraduates, so it stands to reason that feelings may only provide a benefit to decision makers in contexts with which they have sufficient experience (i.e., vacations and apartments, and not health decisions, the latter of which may have been decided via a family plan; see also Dijksterhuis, Bos, Van der Leij, & van Baaren, 2009). Moderators of our effect, documenting the superiority of feelings, seem to hinge upon the prescriptive value of adhering to choice protection and what people know about the domain in which they choose.

Apart from these implications surrounding when to advise people to follow their feelings, future work might also examine the upstream mechanics by which feeling-focused choice operates. Returning to the relationship between affect and attitudes, reliance on affect appears sufficient but not necessary to bolster attitude strength (See, Petty, & Fabrigar, 2008, 2013). Instead, holding an attitude simply perceived as being informed by affect—regardless of its true connection to affect—grants the attitude-holder a degree of strength in that attitude absent from people who perceive their attitude as informed otherwise (Teeny & Petty, 2018). For that reason, perception—and not necessarily reality—holds sway not only with respect to attitude strength but also the upstream construct of the true self, which has been implicated in feeling-focused choice (Maglio & Reich, 2019). Specifically, because affective reactions occur naturally and effortlessly, people see them as emanating from the desires of who they are at a fundamental and inescapable level, causing options chosen via reliance on feelings

to seem especially aligned with the preferences of this true self. Though the true self might not exist as a verifiable reality, people believe in it—and behave in turn in response to its dictates—as a construct that warrants empirical consideration, even if limited to lay conceptualizations and not those articulated scientifically.

This connection to the true self pinpoints particular moderators that future research might identify with respect to the focal phenomenon in the present investigation. The present set of studies asked participants which option they preferred—in other words, to select the option toward which they held the most favorable opinion. Instead, people might also make decisions on the basis of negative affect, as in the case of using a different criterion (a discrete negative emotion, like fear or disgust, informing the best choice of Halloween mask) in selecting something, or in the case of rejecting (rather than selecting) options from a choice set (as well as selecting from a set of all negative options). To this, the present investigation offers two separate speculations. With respect to negative affect, we propose that even evaluations seeking to optimize a negative emotion can recruit the affect heuristic to make choices. Despite asking which option best facilitates negative emotion, questions around these choices still aspire to best facilitate some outcome, albeit a negative outcome (e.g., Hershfield & Alter, 2019), which should prove particularly responsive to a feeling-based inquiry into how best to maximize those (desired yet negative) feelings.

Whereas those choice options might be desired yet negative, decision makers also can find themselves between a rock and a hard place, forced to navigate their way out from undesired negativity. Should they have to reject—rather than, as in the present studies, select—an option from a set, they might identify and choose the option that seems most negative. Should they have to select an option from a set comprised entirely of undesirable—rather than, as in the present studies, presumably desirable—options, they might identify and choose the option that seems least negative. Such feeling-based evaluation, to be sure, would comprise a sense of affect-based responding to information defining choice options. Still, being attuned to negative reasons—building a case against selection or doing the least harm in choosing—differs from building a case toward selection of a desirable option, as in the present investigation and the affect heuristic more broadly. Because people mentally distance their true selves from that which is undesirable and negative (Strohminger, Knobe, & Newman, 2017), we predict that the established relationship between a focus on feelings and choice protection should hold only for choices that entail making desirable choices (and not for rejections or choices from uniformly negative sets; e.g., Kruger, Burrus, & Kressel, 2009) insofar as people see their choices as positive manifestations of their true selves.

Should feelings fail to foster choice protection in the rejection or begrudging selection of negative options, then a similar pattern of diminishment might result for any context in which intuitive, feeling-focused decision making does not invoke the true self. We offer one additional possibility: choosing for others. Beyond the many established differentiations between choices for the self and choices for someone else (Polman, 2012a, 2012b; Polman & Emich, 2011; Polman & Vohs, 2016; Polman & Wu, 2019), it may well be impossible—even in relying on feelings—for decision makers to see their true selves reflected in choices made for others. A minimal, direct prediction that might follow is that decision makers would fail to engage in choice protection—regardless of decision strategy—when making decisions for others. Should this be the case, then it might inform a broader, evolving definition of choice protection. For instance, perhaps choice protection necessitates protection of the self, with the self altogether absent from the equation when another person receives the outcome of the decision. However, a more nuanced prediction could argue that, for certain kinds of choices for other people, decision makers do involve the self (e.g., surrogates incorporating their own preferences into medical decisions for others; Marks & Arkes, 2008; gifts that give an element of the self; Polman & Maglio, 2017). For these kinds of choices, perhaps feeling-focused decision makers would, in fact, engage in choice protection, made manifest by a firm resolve that the recipient particularly appreciated or benefitted from the choice. The example of choosing for others illustrates how future application of choice protection to particular decision contexts should allow for further refinement of both the precursors to it and outcomes by which to document it.

Lastly, the present investigation sought to study the consequences of decisions based primarily upon feelings or deliberation, and our experimental methodology reflects this intent: In the interest of examining process-pure decision making, we adopted minimalistic and internally valid manipulations of decision strategy, developed and implemented by prior investigations that also used manipulation checks to verify their efficacy (Epstein, Donovan, & Denes-Raj, 1999; Mikels et al., 2011). Nonetheless, the strength in construct validity is offset by a potential weakness in ecological validity. Away from explicit instruction in the research laboratory, people tailor their decision strategies toward feelings or deliberation depending on many nuanced factors in the choice environment (Avnet, Pham, & Stephen, 2012; Epstein & Pacini, 1999; Greifeneder et al., 2011; Inbar, Cone, & Gilovich, 2010; Pocheptsova, Amir, Dhar, & Baumeister, 2009). For example, choice architects seeking to apply our findings may wish to present options using pictures rather than words (Hsee & Rottenstreich, 2004), color images rather than black-and-white images (Lee, Amir, & Ariely, 2009; Maglio & Reich, 2019), and fluent rather than disfluent descriptions of the choice information (Alter, Oppenheimer, Epley, & Eyre, 2007), all of which have been shown to enhance situation-level reliance on feelings. While our findings speak to a number of outcomes documenting choice protection, we await future research to probe the extent to which similar feeling-derived effects arise when evoked through any number of other means.

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