

CHOOSING BY SELECTING OR REJECTING: HOW DECISION STRATEGY INFLUENCES CONSUMER SATISFACTION

Jane E. Machin, Radford University

ABSTRACT

Three experimental studies demonstrate that differences in *how* consumers reach a decision can influence satisfaction with the subsequent consumption experience. Relative to consumers who select liked options, consumers who decide by rejecting disliked options attend more to undesirable features of the options they discard. Rejecters can use this negative information to imagine worse possible alternative outcomes, mitigating potential dissatisfaction in the event of service or product failure. The moderating roles of experience valence (favorable or unfavorable) and salience of the foregone alternatives (present or absent) are examined, and two mediating processes are identified. The findings deepen our understanding of the antecedents to satisfaction and offer novel opportunities for marketing practitioners to influence and manage consumer satisfaction.

INTRODUCTION

Imagine Steve and Ross need to fly from Chicago to New York. Spirit Airlines and Delta each offer a daily nonstop service. Independently, Steve and Ross both decide on the Delta flight but they reach this choice very differently. Steve chooses by *selecting* Delta: “I love Delta. They are on time, the seats are spacious, and the air stewards are attentive. I want to fly with Delta.” Ross, on the other hand, flies Delta by eliminating, *or rejecting*, Spirit Airlines: “I loathe Spirit Airlines. They run late, the cabins are dirty, the seats are cramped and the air stewards

are neglectful. I do not want to fly with Spirit Airlines.” After the flight lands in New York, how satisfied is each passenger with the travel experience?

Decision strategy refers to the process used to make a choice (Shafir 1993)ⁱ. A rejection-based decision strategy occurs when the primary focus of the decision is on rejecting undesired option(s) and/or attribute(s). In the opening vignette, Ross uses a rejection-based decision strategy to eliminate Spirit Airlines. In contrast, Steve uses a selection-based decision strategy, focusing primarily on the attributes and/or option(s) that he desires. Given the positive relationship between consumer satisfaction and firm performance, identifying antecedents to satisfaction, dissatisfaction and complaining behavior (hereafter simply satisfaction) remains an important research priority (Powers and Valentine 2008; Curtis et al 2011; Dahl and Peltier 2015). That decision strategy might determine satisfaction with a product or service is a novel proposition that warrants investigation. If *how* consumers make choices can influence perceptions of the consumption experience, novel opportunities to manage satisfaction emerge. In the sections that follow, I connect for the first time three literature streams – decision strategy, counterfactual thinking and satisfaction – to theoretically support the proposition that how a decision is reached can influence satisfaction with the consumption experience. Results from three experiments are presented that test this conceptual framework.

Implications of the research for marketing practitioners as well as satisfaction researchers are outlined in the general discussion.

CONCEPTUAL FRAMEWORK

Decision Strategy. Decision strategy refers to the process used to make a choice (Shafir 1993). Consistent with past research, selection and rejection are used to describe dichotomous decision strategies (e.g. Shafir 1993; Meloy and Russo 2004). It is acknowledged, however, that decision strategy more likely reflects a continuum anchored at either end by selection and rejection. Inasmuch as both strategies change the status quo, rejection-based and selection-based decision strategies are considered equally dynamic (Ritov and Baron 1995). They are not, however, mirror images of each other, and can result in materially different outcomes (Shafir 1993). Of particular relevance here is research showing that selectors and rejecters attend to different information while making their choices (e.g. Shafir 1993; Meloy and Russo 2004; Laran and Wilcox 2011). First, decision strategy determines the *general valence* of information that is evaluated. Selectors give greater weight to all information that is positive, while rejecters prioritize all negative information (Meloy and Russo 2004). Second, decision strategy changes which *options* consumers scrutinize. Deciding between alternatives changes the status quo and decision makers feel accountable for that change (Ritov and Baron 1992). Since selectors change the status quo by electing liked items, they direct attention to the option(s) they might ultimately choose (Yaniv & Schul 2000; Mitsuda and Glaholt 2014). Rejecters, however, feel more accountable for the alternatives they will eliminate and thus attend more to the options that are ultimately discarded (Yaniv and Schul 2000; Mitsuda

and Glaholt 2014). Combining these separate findings for the first time, I hypothesize that, relative to a selection-based decision strategy, using a rejection-based decision strategy will direct attention specifically on *negative details about the ultimately foregone alternatives* (i.e. not just negative information in general). This has not been tested in extant literature and, if true, has important consequences for the generation and direction of counterfactual thoughts and, ultimately, satisfaction, discussed next.

Counterfactual thinking. Counterfactuals are thoughts about alternatives to past events. Counterfactual thinking acknowledges that events are not evaluated in isolation but are compared to alternative events that could, should, or might have happened (Epstude and Roese 2008; Byrne 2016). Counterfactual thinking can be characterized in various ways (Epstude and Roese 2008; Byrne 2016). Of particular relevance to the current research is the characteristic of counterfactual direction (Epstude and Roese 2008). In the case of upward counterfactuals, imagined alternative outcomes are better than the actual outcome. “If only” declarations typically characterize upward counterfactuals (e.g., “if only I had studied harder I would have gotten an A”). Downward counterfactuals, by contrast, often begin with “at least.” The imagined alternative outcomes are worse than the actual outcome (e.g., “at least I got a B without much effort”). I propose that counterfactual direction (upward or downward) will depend on *how* the decision was made. Specifically, I propose that compared to selectors, rejecters will generate more downward counterfactuals. That is, rejecters will be better able to imagine the worse possible outcomes, had they chosen the rejected item(s). This hypothesis follows from the argument that information focus will differ as a function of decision strategy.

To the extent that a rejection-based decision strategy leads the consumer to specifically consider the negative aspects of foregone alternatives, these thoughts will be more readily available to rejecters, favoring the generation of downward counterfactuals. By focusing on the disliked aspects of the ultimately eliminated alternative(s) during the decision making stage, rejecters should find it easier to imagine how a consumption experience could have been worse, had they consumed a rejected option. Returning to the travelers in the opening vignette, Ross, retrieving the negative thoughts he used to reject Spirit Airlines, should be better positioned than Steve to imagine worse alternative outcomes.

Satisfaction. Extant research on satisfaction is dominated by the expectation-disconfirmation paradigm (Powers and Valentine 2008; Diehl and Poynor 2010; Dahl and Peltier 2015). Under this model, consumers evaluate the experienced performance against a comparison standard (Halstead 1999; Niedrich, Kiryanova and Black 2005). Performance that exceeds expectations is satisfying while performance that fails expectations is dissatisfying (Oliver 1989; Diehl and Poynor 2010). A variety of comparison standards have been proposed, including the ideal (what “can be”) and the deserved (what “should be”), but predictive expectations (what “will be”) remain the most commonly used (Halstead 1999; Niedrich, Kiryanova and Black 2005; Diehl and Poynor 2010). In general, the comparison standard concerns the expected performance of the *chosen* option. For the most part, the expectation-disconfirmation paradigm pays little attention to the expected performance of the *non-chosen* options considered prior to finalizing the choice. Some research suggests, however, that foregone product attributes (Taylor and Burns 1999) or options (Taylor 1997; Mattson, Franco-Watkins & Cunningham

2012; Gu Botti and Faro 2015) continue to be relevant in satisfaction formation. For example, higher expected quality of foregone movies lowered satisfaction with the chosen movie (Taylor 1997) while the presence of a more attractive alternative partner elicited regrets about the current partner and a greater intention to switch (Mattson, Franco-Watkins and Cunningham 2012). More recently, Gu Botti and Faro (2015) found choice closure increased consumption satisfaction because the consumer ceased comparing the chosen item with the with the foregone alternative. The counterfactual literature provides additional support for the idea that outcomes *not* experienced might influence happiness (Epstude and Roese 2008; Byrne 2016). For example, students’ happiness with their letter grade depends not just on the grade they receive, but also on the grades they did *not* receive.

Extant research illustrates how attending to foregone alternatives can induce *upward* counterfactual thinking, where the imagined alternative outcome is better than the experienced outcome (Walchli and Landman 2003; Epstude and Roese 2008; Byrne 2016). Through affective contrast (Epstude and Roese 2008), imagining better alternative outcomes can induce feelings of regret which in turn decrease satisfaction with the product or service actually consumed (Taylor 2012). In contrast, I propose that attending to foregone alternatives has the potential to *increase* satisfaction through the generation of *downward* counterfactual thoughts. If, as proposed, a rejection-based decision strategy favors the generation of downward counterfactuals, contrasting these potentially worse outcomes with the product or service actually experienced should result in greater satisfaction. In other words, if rejecters, like Ross, reflect upon what might have been, they will be better able to imagine a worse hypothetical experience, if they had consumed the rejected alternative.

Envisioning this conceivable worse outcome makes their current experience seem better by contrast (Epstude and Roese 2008). Selectors, like Steve, not having focused as much on the negative aspects of the foregone alternatives when making their decision, will be less able to imagine worse potential outcomes. Relative to rejecters, then, selectors will be less satisfied with their actual consumption experience. Importantly, this proposed sequence of events depends on two moderating characteristics, discussed next.

MODERATORS OF THE RELATIONSHIP BETWEEN DECISION STRATEGY AND SATISFACTION.

Valence of Experience. The likelihood of generating counterfactuals depends on the valence of the consumption experience (Taylor 1997; Walchli and Landman 2003; van Dijk and Zeelenberg 2005; Hafner, White and Handley 2016). Favorable experiences do not prompt counterfactual thinking. Lottery winners, for example, have little reason to dwell on alternative outcomes. Negative experiences, on the other hand, are aversive, motivating people to undo them (Epstude and Roese 2008; Byrne 2016; Hafner, White and Handley 2016). When this is not physically possible, people engage in counterfactual thinking to mentally undo the events in order to make themselves feel better (Epstude and Roese 2008; Byrne 2016; Hafner, White and Handley 2016). Losing the lottery, for example, prompts upward counterfactual thoughts: “If only I selected one different number I might have won.” Consistent with this literature, I propose that decision strategy will only influence satisfaction after an unfavorable consumption experience. While decision strategy should always lead to an increased focus on negative information about the foregone alternative, this differential information focus will only

become relevant following a product or service failure. In the opening vignette, for example, Ross’ attention to the negative aspects of Spirit Airlines while making his choice is only useful if the Delta flight disappoints in some way (e.g. take-off is delayed or the air steward is rude). In such instances, Ross and Steve are both motivated to mentally undo the adverse event. Ross, however, recalling the reasons he originally rejected Spirit Airlines, is better positioned than Steve to imagine worse possible alternative outcomes, had he flown with Spirit Airlines instead. Engaging in downward counterfactual thinking (e.g. “at least I didn’t fly with Spirit Airlines”) mitigates Ross’ disappointment with the Delta flight. If the Delta flight experience is smooth, however, neither traveler has a reason to imagine alternative outcomes. That is, after a favorable consumption experience, the different information focus at the decision making stage is irrelevant.

Saliency of Foregone Alternatives. The likelihood of generating counterfactuals also depends on the saliency of the foregone alternatives (Taylor, 1997; Droge, Halstead and Mackoy 1997; van Dijk and Zeelenberg 2005; Gu, Botti and Faro 2013). Since memory decays exponentially (Baddeley 1990), saliency of the foregone alternative diminishes quickly post-choice, hindering the generation of counterfactuals. State lotteries need to advertise, for example, to keep the possibility of winning salient in consumers’ minds. I propose that rejecters will only access their negative thoughts about the foregone alternatives when those alternatives are salient after the consumption experience. In the opening vignette, for example, Ross will only generate downward counterfactuals about his flight experience if he is reminded of the rejected alternative, such as seeing an advertisement for Spirit Airlines upon arrival. Some prior research supports this prediction. For example,

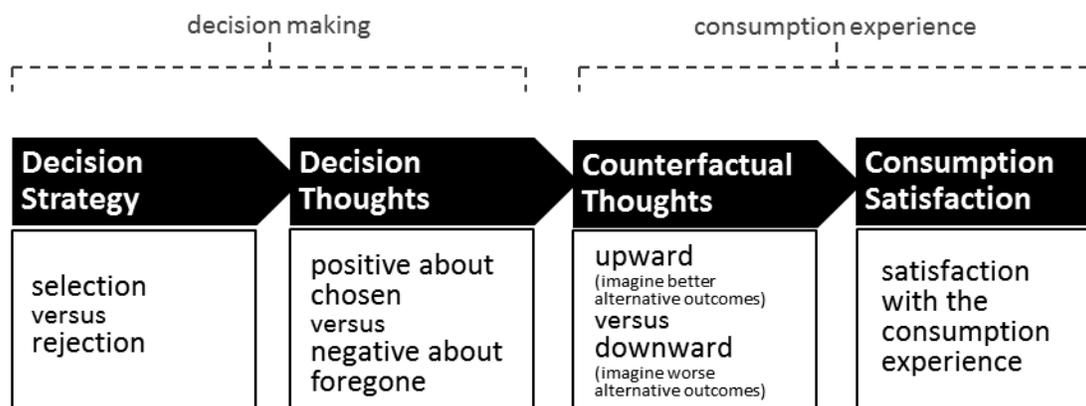
Keaveney, Huber and Herrmann (2007) find that buyers experience regret only when the foregone alternatives are salient; there is no regret when they consider just the chosen product.

The predicted manner in which decision strategy will influence satisfaction is summarized in Figure 1. I propose that decision strategy will first lead to differences in thought focus at the decision making stage. Rejecters, looking for reasons to eliminate options, will generate more negative

thoughts about the ultimately foregone alternatives, relative to selectors. If the foregone alternatives are salient following a product or service failure, these initial decision-thought differences will prompt counterfactual thoughts in different directions. Compared to selectors, rejecters will generate more downward counterfactual thoughts, leading to relatively greater satisfaction (or, in the context of a product or service failure, less dissatisfaction) with the actual consumption experience.

FIGURE 1

MODEL OF INFLUENCE OF DECISION STRATEGY ON SATISFACTION



Overview of Studies

Study 1

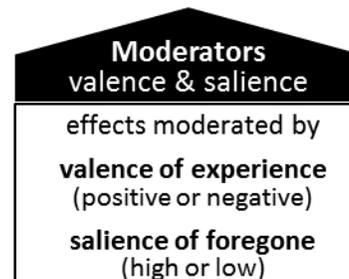
measures spontaneous decision strategy
tests mediating effect of counterfactual thoughts

Study 2

manipulates decision strategy between subjects
tests moderating effect of experience valence
tests mediating effect of counterfactual thoughts

Study 3

manipulates decision strategy between subjects
tests moderating effect of salience of foregone options
tests mediating effect of decision *and* counterfactual thoughts



EMPIRICAL OVERVIEW

Three studies investigate these proposed effects of decision strategy on satisfaction. In Study 1 decision strategy is measured to demonstrate that participants spontaneously use different decision making strategies and that the hypothesized effects generalize to occasions when participants decide freely how to reach their decisions. Held constant in study 1 were valence of the consumption experience (unfavorable) and the salience of the foregone alternatives (high). Studies 2 and 3 manipulate decision strategy (selection or rejection) and include the proposed moderators of the effects of decision strategy on satisfaction. Specifically, study 2 manipulates the valence of the consumption experience (favorable or unfavorable) and study 3 manipulates the salience of the foregone alternatives (high or low). The mediating role of counterfactual thinking is tested in all studies. The mediating effect of thoughts at the time of making the decision is tested in study 3. Formal research hypotheses are presented with each study.

STUDY 1: THE SPONTANEOUS INFLUENCE OF DECISION STRATEGY ON SATISFACTION AND COUNTERFACTUAL THINKING

Study 1 examines the effects of decision strategy on consumer satisfaction when participants are free to choose their decision making strategy. It is important to demonstrate that differences in decision strategy occur without prompting and that the hypothesized effects generalize to occasions when differences in decision strategy occur spontaneously. If consumers never choose by rejection in the real world, finding rejecters to be less dissatisfied after a product or service failure is a less compelling proposition. Research on consumer boycotts and anti-consumption behaviors provides some evidence of unprompted rejection based decisions

(Chatzidakis and Lee 2012; Albrecht et al 2013). Outside of boycotts, however, selecting liked options is widely presumed to be the dominant manner in which consumers make choices (Shafir 1993; Wilk 1997; Meloy and Russo 2004). Such a conclusion should be treated with caution. As Wilk (1997) points out, the choice to consume something is readily visible but the choice not to consume, “leaves no material trace and can be completely invisible (p. 181).” The physical presence of the chosen option, versus the absence of the foregone alternative, may lead consumers and researchers alike to infer that a choice was reached through selection, rather than considering the possibility that the absent foregone alternatives were rejected. Rejection based decisions may therefore be more prevalent than commonly presumed. For example, Burke, Eckert and Davis (2014) find 34% of consumers spontaneously make their consumption decision using rejection based reasoning. Study 1, then, measures decision strategy and holds constant for all participants the valence of the consumption experience (unfavorable) and the salience of the foregone alternatives (high). Consistent with my framework, when the foregone alternatives are salient consumers who spontaneously report using a more rejection (versus selection) based decision strategy should more readily generate downward counterfactuals, which are used to mitigate dissatisfaction following a product or service failure. Accordingly, I hypothesize that:

- H1a:** Using a more rejection (versus selection) based decision strategy will result in less dissatisfaction with an unfavorable consumption experience.
- H1b:** Using a more rejection (versus selection) based decision strategy will generate more downward

counterfactual thoughts (i.e. imagine worse potential alternative outcomes).

H1c: Counterfactual thinking will mediate the relationship between decision strategy and consumption satisfaction.

PARTICIPANTS AND PROCEDURE

Twenty-eight participants (staff and students recruited from two universities and a hospital) who had not eaten candy that day completed this study for financial remuneration. Under the guise of a pre-test to determine future candy use, participants were offered a choice between Skittles and M&Ms. Using language intended to be neutral and not exert influence on the decision strategy spontaneously used, participants were asked to “take one pack.” Pictures of each type of candy package were present throughout the study, ensuring the foregone alternative was highly salient as participants answered questions. After indicating their choice, participants were asked to self-report the way they reached their decision on three 10-point scales, anchored by “chose the candy I liked/avoided the candy I disliked”, “selected the candy I wanted/rejected the candy I did not want”, and “I just knew what I liked/I just knew what I disliked.” Next, participants indicated their agreement with four items on 10-point scales, anchored by “not at all/extremely,” which were measured how happy and confident they were with their chosen candy, how satisfied they expected to be and how likely they would be to change their mind if given the opportunity. Participants were then asked to imagine that the candy tasted stale, ensuring an unfavorable experience for all. As they imagined this negative experience, participants rated their satisfaction on three 10-point scales, anchored by “very dissatisfied/very satisfied”, “extremely disappointed/not at all disappointed”, “a lot of regret/no regret at all.” Participants then provided a self-reported measure of

counterfactual thinking adopted from Medvec and Savitsky (1997). This measure asked: “Are your thoughts more of the ‘at least...’ type or the ‘if only...’ type?” on a 10-point scale, anchored by “at least/if only.” “At least” thoughts represent downward counterfactual thinking and “if only” thoughts represent upward counterfactual thinking. Participants also rated the ease of the decision (“not at all/extremely”) and the perceived degree of choice (“very little/a lot”) to help rule out alternative explanations.

RESULTS

Decision Strategy A continuous decision strategy index was created by averaging the three decision strategy items ($\alpha = 0.95$). Higher numbers indicate using a more rejection-based strategy and lower numbers indicate using a more selection-based strategy. Responses ranged from 1 to 10, the full length of the scale. The mean response was 3.52 (2.67), indicating that the majority of participants tended towards a more selection-based strategy. This is not surprising given that candy is a familiar and liked category among the sample population. All analyses of dependent variables were conducted using the continuous decision strategy index as the measured predictor variable.

Choice. Logistic regression on choice of candy revealed no significant effect of decision strategy (chi-square = 0.22, $p = .64$), ruling out actual candy choice as an alternative explanation for the effects of decision strategy on satisfaction. This is consistent with previous research which finds no difference in choice between selectors and rejecters when choice options are functionally equivalent (Levin, Jasper and Forbes 1998).

Expectations. ANOVA of an index of the three pre-experience expectation items ($\alpha = 0.67$) revealed no significant effect of decision strategy ($F < 1$) ruling out

expectations as a mediator of decision strategy effects on satisfaction. Similarly, the items reflecting decision ease and degree of choice were also unaffected by decision strategy (all $p > .28$), ruling them out as alternative explanations for the results. Expectation and other measures were included in all studies to address potential alternative explanations that are examined more fully in the general discussion.

Satisfaction. A satisfaction index was created by averaging the three items measuring satisfaction with the imagined negative experience ($\alpha = 0.91$), such that higher index scores reveal greater satisfaction. ANOVA revealed a main effect of decision strategy on satisfaction ($b = 0.33$ (0.11); $F(1, 26) = 9.03$, $p < .01$). Since higher numbers indicate use of a rejection-based strategy, this result indicates that the more rejection focused the decision strategy, the more satisfied the participant was with the imagined unfavorable consumption experience. That is, participants who reported using a more rejection based strategy to make their choice also reported less disappointment with the product failure (i.e. imaginary stale candy). These results are consistent with hypothesis H1a. An analysis that controlled for expectations was also supportive. Compared to selectors, rejecters were less dissatisfied relative to expectations, consistent with H1a. Similar analyses that controlled for expectations were conducted for all studies and produced supportive results. Details are omitted for brevity's sake.

Counterfactuals. ANOVA of the counterfactual item revealed a main effect of decision strategy ($b = -0.35$ (0.17); $F(1, 26) = 4.11$, $p = .05$). Using an increasingly rejection-based decision strategy (higher numbers) led to more downward counterfactuals (lower numbers). Participants who were more rejection focused in their decision making reported more thoughts of potentially worse

alternative outcomes to the stale candy compared to those who were more selection focused. These results support hypothesis H1b.

Mediation. Analyses were conducted to test the mediating role of counterfactual thinking, following Baron and Kenny (1986). As reported previously, decision strategy had a significant effect on both satisfaction and counterfactual thinking. When added to the model for satisfaction, counterfactual thinking was marginally significant ($F(1, 24) = 3.45$, $p = .07$) and the effect of decision strategy became insignificant (from 0.33 (0.11) $t = 3.01$, $p < .01$ in the initial equation to 0.21 (0.20), $t = 1.06$, $p = .29$). These results support mediation, consistent with H1c.

Discussion. Study 1 provides support for H1a—H1c. Compared to a selection-based decision strategy, consumers who reported using a rejection-based decision strategy generated more downward counterfactual thoughts, which resulted in less dissatisfaction—when the foregone alternatives were salient and the (imagined) consumption experience was unfavorable. Importantly, decision strategy was self-generated spontaneously by participants and was not an artifact of laboratory manipulations. Nonetheless, study 1 has several limitations. First, to make stronger claims about causal order, the ensuing studies manipulate decision strategy. Second, studies 2 and 3 provide real consumption experiences rather than an imagined experience. Study 2 also manipulates the valence of the consumption experience, while study 3 manipulates the salience of foregone alternatives. Study 3 also examines the mediating role of decision thoughts in addition to counterfactual thoughts that were measured in all studies.

STUDY 2: SATISFACTION AND COUNTERFACTUAL THINKING AS A FUNCTION OF DECISION STRATEGY AND VALENCE OF EXPERIENCE.

Study 2 manipulates decision strategy (selection or rejection) and the valence of the consumption experience (favorable or unfavorable). Participants make a real choice and engage in a real consumption experience. Relative to selectors, I propose rejecters will generate downward counterfactuals which will mitigate dissatisfaction, but only when the consumption experience is unfavorable. No decision strategy differences in satisfaction are predicted when the consumption experience is favorable, because positive experiences do not prompt counterfactual thinking (Epstude and Roese 2008; Byrne 2016; Hafner, White and Handley 2016). Specifically, I hypothesize that:

- H2a:** Following an unfavorable (versus favorable) experience, users of a rejection-based decision strategy will feel less dissatisfied relative to users of a selection-based decision strategy.
- H2b:** Following an unfavorable (versus favorable) experience, users of a rejection-based decision strategy will generate more downward counterfactual thoughts (i.e. imagine worse alternative potential outcomes) compared to users of a selection-based decision strategy.
- H2c:** Counterfactual thinking will mediate the relationship between decision strategy, experience valence, and satisfaction (specifically mediated moderation in the context of the experimental design).

PARTICIPANTS AND PROCEDURE

The experimental design was a two (decision strategy: rejection versus selection) by two (experience valence: favorable versus unfavorable) between-subjects design. One

hundred and six staff and students participated in return for financial remuneration. The studies were conducted individually in private rooms. As a cover story, participants were told they would taste jelly beans from a local manufacturer who was considering producing university branded jelly beans. Participants were shown two bowls of jelly beans, one labeled with the name of their university and one with a competing local university. These labels added credibility to the cover story but more importantly they helped to ensure all participants chose the same bowl to taste from (their home university). While prior research has demonstrated differences in choices based on decision strategy (e.g. Shafir, 1993), in these studies it was important to keep the chosen option identical. Differences in satisfaction that arise from consuming different products (e.g. if Steve flew with Delta but Ross flew with Spirit Airlines) are not particularly interesting and can easily be explained by prior models of satisfaction. Ensuring all participants consumed jelly beans from the same bowl thus rules out different choices as an alternative explanation.

Decision strategy was manipulated by the verbal instructions given to the participants. In the selection condition, a research assistant, blind to the hypotheses, asked participants to “take the bowl of jelly beans you want to taste from.” In the rejection condition, participants were asked to “give back the bowl you do not want to taste from.” The manipulation also aimed to take advantage of the fact that, over the course of a lifetime, arm flexion (e.g. pulling something towards you) is associated with acquiring desired objects while arm extension (e.g. pushing something away from you) is associated with rejecting undesired objects (Laham et al 2015). Experience valence was manipulated by altering the samples provided to participants.

Participants were presented with either two bowls containing a mix of positive flavors (e.g. cherry and popcorn) or two bowls containing a mix of negative flavors (e.g. dirt and earwax)ⁱⁱ. No flavor labels were given. The beans were chosen to be of similar colors and variety across all conditions.

Participants were given a small container of jelly beans from the bowl they selected / did not reject and instructed to complete a taste-test survey with their sample of beans. To ensure the foregone alternative was equally salient and high in all conditions, pictures of the two bowls they initially chose from were printed on the questionnaire. Before tasting the jelly beans, participants indicated how they made their choice on a 10-point scale (“chose the bowl I wanted/avoided the bowl I did not want”) where higher numbers indicated use of a more rejection-based decision strategy. This served as a manipulation check on decision strategy. Participants next indicated their expected jelly bean enjoyment with four items: expected satisfaction (“not at all/extremely”), expected enjoyment (“not at all/a lot”) and expected taste (“very unpleasant/very pleasant”), each on 10-point scales, together with a pictorial scale featuring happy and sad faces (inspired by Wong and Baker 1988; usage instructions were given).

Participants were then given specific instructions to taste the jelly beans. After tasting the first bean, participants were asked to rate satisfaction using three items. The first item was the pictorial face scale. The remaining 10-point scales (anchored by “not at all/ a lot”) asked: “How disgusting did you find the jelly bean?” (reverse-coded) and “How delicious did you find the jelly bean?” Participants next rated that bean’s sweet, bitter, sour and salty flavor on a 10-point scale (anchored by “not at all/a lot”). This provided consistency with the cover story and served to check the valence

manipulation. Jelly beans in the favorable experience condition were expected to be rated sweeter and less bitter compared to jelly beans in the unfavorable experience condition. No difference was predicted for the sour or salty flavors because these tastes are not uniformly considered favorable or unfavorable. To help rule out some alternative explanations, participants rated decision ease (“not at all/extremely”) and degree of choice (“very little/a lot”) on 10-point scales. Finally, to ascertain the direction and degree of counterfactual thoughts, participants provided a self-reported measure of counterfactual thinking adopted from Medvec and Savitsky (1997). Participants were asked to indicate how much they agreed with two statements: “At least I didn’t choose the other bowl,” and “If only I had chosen the other bowl (reverse coded),” anchored by “disagree completely/agree completely” on a 10-point scale. “At least” thoughts represented downward counterfactual thinking (imagined worse alternative outcomes) and “if only” thoughts represented upward counterfactual thinking (imagined better alternative outcomes).

RESULTS

All analyses of dependent variables were conducted using ANOVA with decision strategy (selection/rejection), experience valence (favorable/unfavorable) and their interaction as predictor variables. Unless reported, all other effects were non-significant ($F < 1$).

Manipulation Checks. ANOVA of the self-reported decision strategy item revealed a main effect of decision strategy. Relative to selectors, rejecters were more likely to choose by avoiding the bowl of jelly beans they did not want to taste ($M_{\text{rejection}} = 5.59$ (3.77) versus $M_{\text{selection}} = 3.23$ (2.93); $F(1, 100) = 12.40$, $p < .01$); higher numbers indicate use of a more rejection-based decision strategy). Participants also rated the

jelly beans on the four taste measures (sweet, bitter, sour, and salty). As predicted, ANOVAs revealed a main effect of taste valence on sweetness and bitterness only. The favorable jelly beans were rated sweeter ($M_{\text{favorable}} = 5.24$ (1.45) versus $M_{\text{unfavorable}} = 4.56$ (1.74); $F(1, 100) = 4.64$, $p < .04$) and less bitter ($M_{\text{favorable}} = 1.58$ (1.32) versus $M_{\text{unfavorable}} = 2.53$ (1.78); $F(1, 99) = 9.53$, $p < .01$). The manipulations of decision strategy and experience valence were successful.

Expectations. An expectation index was created by averaging the four items measuring expected jelly bean enjoyment ($\alpha = 0.90$) such that higher index scores indicate higher expectations. ANOVA revealed decision strategy had no effect ($F < 1$) on expectations, offering further evidence that the hypothesized effects of decision strategy on satisfaction are independent of any effect on expectations. Unexpectedly, ANOVA revealed a main effect of valence such that jelly beans in the favorable experience condition were expected to taste better ($M_{\text{favorable}} = 7.05$ (1.56) versus $M_{\text{unfavorable}} = 6.21$ (1.87); $F(1, 100) = 6.05$, $p < .05$). While not predicted, this is attributed to the less appealing appearance of the unfavorable beans mentioned by some participants during debriefing.

Satisfaction. The three post-experience satisfaction items were averaged to form one post-experience satisfaction index ($\alpha = .91$), such that higher index scores indicate greater satisfaction with the jelly bean taste. ANOVA of this index revealed a main effect of experience valence ($F(1, 97) = 14.83$, $p < .01$), qualified by its interaction with decision strategy ($F(1, 97) = 11.17$, p

$< .01$). As expected, participants who chose by rejecting the unwanted bowl were significantly more satisfied with the jelly bean taste than participants who selected the bowl they did want to taste from, but only when the taste experience was unfavorable ($M_{\text{rejection}} = 6.88$ (1.91) versus $M_{\text{selection}} = 5.20$ (1.93); $F(1,97) = 9.76$, $p < 0.01$). There was no difference between rejecters and selectors when the taste experience was favorable ($M_{\text{rejection}} = 7.05$ (2.00) versus $M_{\text{selection}} = 7.86$ (1.70); $F(1,97) = 2.40$, $p = 0.12$; see Table 1 and Figure 2, panel A). This result is consistent with hypothesis H2a.

Counterfactual Thoughts. A counterfactual thought index was created by averaging the two items measuring counterfactual thinking ($\alpha = 0.52$) such that lower index scores indicate more downward counterfactual thinking. ANOVA of this index revealed a main effect of decision strategy ($F(1, 99) = 9.79$, $p < .01$), qualified by a marginally significant interaction with experience valence ($F(1, 99) = 3.47$, $p = .07$). As expected, when the consumption experience was unfavorable (the unpleasant flavored jelly beans), rejecters had more relatively more downward counterfactual thoughts compared to selectors ($M_{\text{rejection}} = 3.88$ (2.19) vs. $M_{\text{selection}} = 5.82$ (1.89); $F(1,99) = 11.66$, $p < 0.01$). In other words, participants who chose by rejection were more likely to think, "at least I didn't choose that other bowl." As predicted, when the experience was favorable, however, counterfactual thoughts did not differ ($M_{\text{rejection}} = 4.31$ (1.76) vs. $M_{\text{selection}} = 4.80$ (1.97); $F < 1$; see Table 1 and Figure 2, panel B). These results are consistent with H2b.

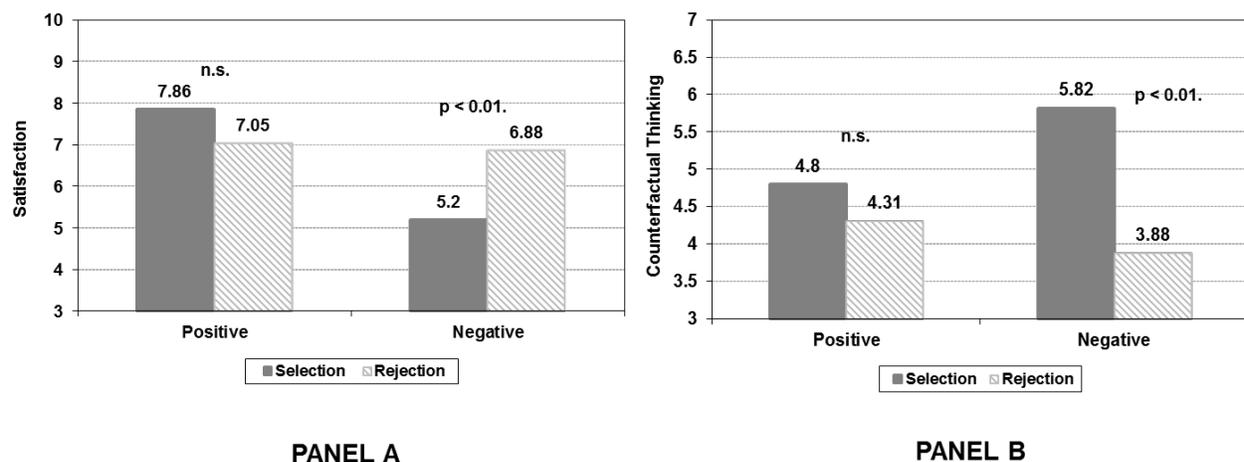
TABLE 1

STUDIES 2 and 3: EFFECT OF DECISION STRATEGY AND MODERATORS ON SATISFACTION AND COUNTERFACTUAL THINKING

	SELECTION STRATEGY		REJECTION STRATEGY	
<u>Moderator: Experience Valence</u>	Negative	Positive	Negative	Positive
<u>Study 2</u>				
N	22	27	25	27
Satisfaction	5.20 (1.93)	7.86 (1.70)	6.88 (1.91)	7.05 (2.00)
Counterfactual Thinking	5.81 (1.89)	4.80 (1.97)	3.88 (2.19)	4.31 (1.76)
<u>Moderator: Salience of Foregone</u>	Salient	Not Salient	Salient	Not Salient
<u>Study 3</u>				
N	49	46	47	39
Satisfaction	4.00 (1.93)	4.68 (2.06)	5.38 (1.72)	4.43 (2.00)
Counterfactual Thinking	6.35 (2.40)	5.96 (1.93)	4.84 (2.23)	6.05 (2.54)

FIGURE 2

SATISFACTION AND COUNTERFACTUAL THINKING AS A FUNCTION OF DECISION STRATEGY AND VALENCE OF EXPERIENCE (STUDY 2).



High numbers on Satisfaction mean greater satisfaction (less *dissatisfaction*); Low numbers on Satisfaction mean less satisfaction (more *dissatisfaction*).

High numbers on Counterfactual scale mean more “upward” counterfactuals (“if only” thoughts that imagine better alternative outcomes).

Low numbers on the Counterfactual scale mean more “downward” counterfactuals (“at least” thoughts that imagine worse possible outcomes).

Mediation Analyses. Hypothesis H1c predicts “mediated moderation” (Muller, Judd and Yzerbyt (2005). Counterfactual thoughts mediate the influence of decision strategy on satisfaction, but only when the experience is unfavorable. As reported previously, both satisfaction and counterfactual thinking were a function of the interaction of decision strategy and experience valence. When counterfactual thinking and its interaction with experience valence were added to the model predicting satisfaction, ANOVA revealed a significant mediator-moderator interaction ($F(1, 94) = 7.04, p < .01$) that reduced the significance of the interaction of decision strategy and experience valence from $-2.49 (0.75), t = -3.31, p < .01$ to $-1.76 (0.78), t = -2.23, p < .05$. These results support partial mediated moderation and are consistent with H2c.

Discussion. Study 2 provides support for H2a – H2c: rejecters experience greater satisfaction compared to selectors when they have an unfavorable consumption experience, but satisfaction does not differ when the experience is favorable. The effects are attributed to a process of counterfactual thought generation. Specifically, when the foregone alternative is salient during consumption (as in this study), an unfavorable experience leads rejecters to generate downward counterfactuals. These thoughts are then recruited to mitigate dissatisfaction. When the experience is favorable, there are no differences in counterfactual thinking and satisfaction does not differ. Having established the moderating role of experience valence, study 3 examines the moderating role of salience of the foregone alternative within a negative consumption experience.

STUDY 3: SATISFACTION AND COUNTERFACTUAL THINKING AS A FUNCTION OF DECISION STRATEGY

AND SALIENCE OF THE FOREGONE ALTERNATIVE

The first objective of study 3 is to investigate the moderating role of salience of the foregone alternatives. Studies 1 and 2 held salience of alternatives constant and high. In these cases, rejecters (versus selectors) were readily able to generate downward counterfactuals that mitigated dissatisfaction with the unfavorable consumption experience. As memory decays exponentially, however, removing the reminder of the disliked foregone alternative means rejecters are less likely to spontaneously generate counterfactual thoughts and, as a result, dissatisfaction will not be mitigated. The second objective of study 3 is to develop a deeper understanding of the psychological processes that mediate the effects of decision strategy on satisfaction. Study 2 only found partial mediation. One potential reason for this is that the measure of counterfactual thinking, a difficult concept to grasp, was insufficient. Study 3 thus bolsters measurement of counterfactual thinking. Study 3 also includes some other constructs designed to help rule out alternative explanations. Finally, study 3 investigates the role of thoughts at the decision making stage. Recall that it is differences in thought focus while consumers make their decisions that later drive the counterfactual thought variation. Specifically, compared to selectors, rejecters will attend more to negative information about options they ultimately forego while making their decision. This information will be more readily available to rejecters for the generation of downward counterfactuals, which in turn will mitigate dissatisfaction, when the foregone alternatives are salient. Accordingly, I hypothesize that:

H3a: When salience of the foregone alternative is high (versus low), users of a rejection-based decision strategy will feel less dissatisfied relative to

users of a selection-based decision strategy.

- H3b:** When salience of the foregone alternative is high (versus low), users of a rejection-based decision strategy will generate more downward counterfactual thoughts (i.e. imagined worse alternative outcomes) compared to users of a selection-based decision strategy.
- H3c:** A rejection- (versus selection-) based strategy will lead to more negative thoughts about the foregone alternative at the decision making stage.
- H3d:** The difference in thoughts at the decision making stage will mediate the relationship between decision strategy, salience of the foregone alternative and counterfactual thoughts (specifically mediated moderation in the context of the experimental design).
- H3e:** Counterfactual thoughts will mediate the relationship between decision thoughts, salience of the foregone alternative and satisfaction (specifically mediated moderation in the context of the experimental design).
- H3f:** Together, decision thoughts and counterfactual thoughts will fully mediate the relationship between decision strategy, salience of the foregone alternative and satisfaction (specifically mediated moderation in the context of the experimental design).

PARTICIPANTS AND PROCEDURE

The experimental design was a two (decision strategy: selection versus rejection) by two (foregone alternatives salient: high versus low) between-subjects design. A total of 184 staff and students participated. The cover story about university branded jelly beans,

tasting procedure and decision strategy manipulation were identical to study 1. In this study however, every subject had an unfavorable taste experience and salience of the foregone alternative was manipulated between participants. In the high salience condition, a picture of the two bowls appeared on the questionnaire pages where the taste measures were taken. The picture was omitted in the low salience condition. To ascertain thought direction and thought valence during the decision process, participants immediately wrote down all thoughts that went through their mind as they decided which bowl of jelly beans to taste. Before tasting any beans, participants indicated how happy, satisfied and confident they were in general with the selection of beans they would be tasting using 10-point scales, anchored by “not at all/a lot.” Participants also indicated their expected enjoyment of the taste of the beans on seven items: the pictorial face scale used in study 2, how delicious they expected the beans to taste, how disgusting they expected them to taste (reverse scored), expected taste pleasure, satisfaction, happiness, and disappointment (reverse scored) on 10-point scales anchored by “not at all/a lot.” Participants were then instructed to taste the jelly beans and rated their satisfaction with the experience on the same seven scales. As in study 2, participants also indicated which of the four primary tastes (sweet, sour, salty, bitter) they detected in the jelly beans.

To ascertain direction and degree of counterfactual thoughts, participants indicated how much they agreed with five statements on a 10-point scale anchored by “disagree completely/agree completely”, “I wish I had chosen the other bowl”, “I am glad I did not choose the other bowl (reverse coded)”, “At least I didn’t choose the other bowl (reverse coded)”, “If only I had chosen the other bowl” and “If I had to choose again, I would choose a different bowl.” Finally,

participants responded to a manipulation check on decision strategy by rating their agreement with six statements on a 10-point scale anchored by “strongly agree/strongly disagree”, “I knew which bowl I wanted to select”, “I knew which bowl I wanted to reject”, “I knew which bowl I desired”, “I knew which bowl I did not desire”, “I knew which jelly beans I wanted to taste” and “I knew which jelly beans I did not want to taste.” Participants also rated the decision process on five seven-point scales (easy/difficult, interesting/uninteresting, effortful/effortless, satisfying/dissatisfying, worthwhile/frustrating) and rated the degree of choice on one seven-point scale anchored by “many good products/few good products.” Finally, participants indicated their liking and frequency of consumption of jelly beans, using 10 point scales anchored by “not at all”/ “a lot.”

RESULTS

Unless otherwise reported, all analyses of dependent variables were conducted using ANOVA with decision strategy (selection/rejection), salience of foregone alternatives (salient/not) and their higher-order interaction as predictor variables. Unless reported, all other effects were non-significant (F 's < 1).

Manipulation Checks. A decision strategy index was created by averaging the six items measuring decision strategy ($\alpha = 0.73$), such that higher index scores indicate use of a rejection-based strategy. ANOVA of this index showed a main effect of decision strategy ($F(1, 178) = 8.31, p < .01$) such that participants in the rejection condition were more likely to use a rejection-based strategy compared to participants in the selection condition ($M_{\text{rejection}} = 5.65 (1.92)$ versus $M_{\text{selection}} = 4.83 (1.79)$). All other effects were non-significant ($p > .19$).

Expectations. ANOVA of the average of the items measuring expectations ($\alpha = 0.92$) revealed no effects for decision

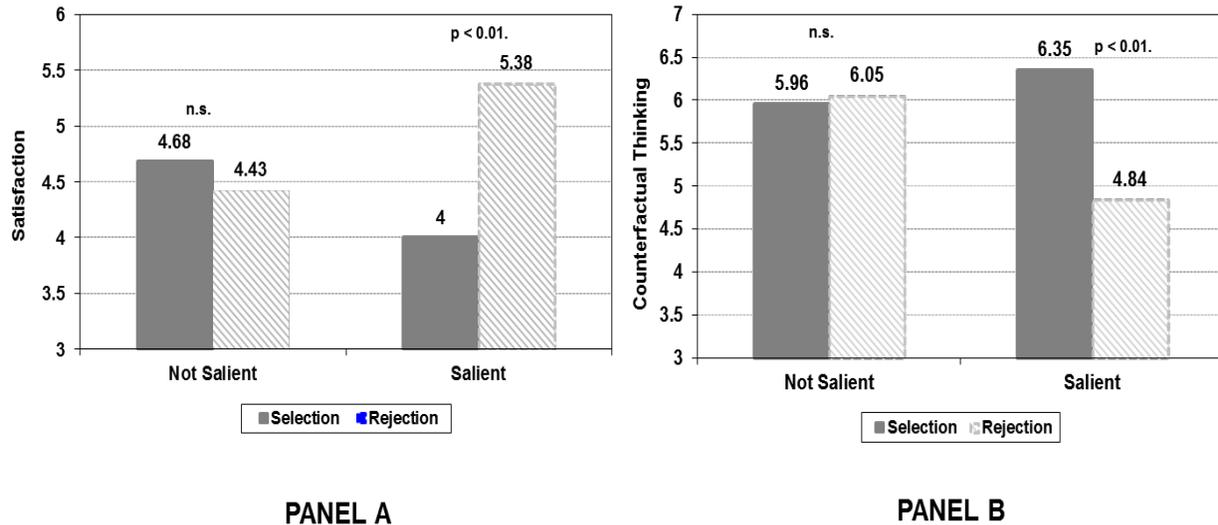
strategy, salience of foregone alternatives or their interaction (all $p > .11$). This null finding helps rule out the possibility that decision strategy drives differences in expectations that subsequently affect post-experience satisfaction and is consistent with studies 1 and 2.

Satisfaction. ANOVA on the average of the items measuring satisfaction for each bean tasted ($\alpha = 0.93$) reveals a main effect of decision strategy ($F(1, 177) = 3.76, p = .05$), qualified by a significant interaction with salience of foregone alternatives ($F(1, 177) = 7.98, p < .01$). Rejecters were more satisfied than selectors when the foregone alternatives were salient ($M_{\text{rejection}} = 5.38 (1.72)$ versus $M_{\text{selection}} = 4.00 (1.93)$; $F(1, 177) = 12.13, p < 0.01$) but satisfaction did not differ when the foregone alternatives were not salient ($M_{\text{rejection}} = 4.43 (2.00)$ vs. $M_{\text{selection}} = 4.68 (2.06)$; $F(1, 177) < 1$; see Table 1 and Figure 3, panel A). Participants who used a rejection-based decision strategy were less dissatisfied with the unfavorable flavor jelly beans, but only when the foregone alternatives were salient.

Counterfactual Thoughts. ANOVA on the average of the five counterfactual thought items ($\alpha = 0.82$) revealed a significant main effect of decision strategy ($F(1, 180) = 4.44, p < .05$) qualified by a significant interaction with salience of the foregone alternative ($F(1, 180) = 5.62, p < .02$). When the foregone alternatives were salient, rejecters reported more downward counterfactual thoughts compared to selectors ($M_{\text{rejection}} = 4.84 (2.23)$ vs. $M_{\text{selection}} = 6.35 (2.40)$; $F(1, 180) = 10.77, p < .01$). That is, rejecters reported more thoughts of the “at least” type compared to selectors. When the foregone alternatives were not salient, decision strategy had no effect ($M_{\text{rejection}} = 6.05 (2.54)$ vs. $M_{\text{selection}} = 5.96 (1.93)$; $F < 1$; see Table 1 and Figure 3, panel B). These results support H3b.

FIGURE 3

SATISFACTION AND COUNTERFACTUAL THINKING AS A FUNCTION OF DECISION STRATEGY AND SALIENCE OF FOREGONE ALTERNATIVE (STUDY 3).



High numbers on Satisfaction mean greater satisfaction / less dissatisfaction.

High numbers on Counterfactual scale mean more “upward” counterfactuals (“if only” thoughts that imagine better alternative outcomes).

Low numbers on the Counterfactual scale mean more “downward” counterfactuals (“at least” thoughts that imagine worse possible outcomes).

Decision Thoughts. H4c predicts that, compared to a selection-based decision strategy, a rejection-based decision strategy should lead to more negative thoughts about the foregone alternative at the decision making stage. To test this, participants’ open-ended cognitive responses, taken right after they made their choice of bowl from which to taste, were coded by two judges blind to the experimental conditions and hypotheses. For each participant, the judges counted the number of independent thoughts in total and classified each independent thought into one of seven potential categories: a positive, a negative or a neutral thought about the chosen alternative; a positive, a negative, or a neutral thought

about the foregone alternative; or an irrelevant thought. Inter-coder agreement was 82% and disagreements were resolved through discussion. The total number of independent thoughts ranged from one to seven and the median number of thoughts per participant was three. Negative thoughts about the foregone alternative primarily focused on the perceived unpleasant appearance of the competing school, even though both bowls contained the same types of beans (e.g. “the [competing school] beans looked less appetizing”; “the [competing school] beans were ugly”; “the [competing school] bowl’s colors were too muted and muddy”; “the [competing school] jelly beans look sad”). Positive thoughts about the

chosen alternative focused primarily on the appearance of the chosen school (e.g. “I preferred the lighter colors in [chosen school]”; “the [chosen school] jelly beans looked like they would taste good”; “the colors in the [chosen school] were brighter and more appealing”; “[chosen school] looked nicer; more clear, bright colors”). A difference score was constructed by subtracting the number of negative thoughts about the foregone alternative from the number of positive thoughts about the chosen alternative for each participant. This index captured the ratio between negative thoughts of the foregone alternative that an individual had relative to positive thoughts about the chosen alternative. ANOVA on this difference score revealed a main effect of decision strategy ($F(1, 180) = 37.36, p < .01$) such that rejecters had more negative thoughts about the foregone alternative (relative to the number of positive thoughts about the chosen alternative) compared to selectorsⁱⁱⁱ ($M_{\text{rejection}} = 0.54 (1.35)$ versus $M_{\text{selection}} = 1.68 (1.12)$). These results support H3c: decision strategy influenced the valence and direction of thoughts during the decision making process such that rejecters had more negative thoughts about the foregone alternative compared to selectors. It is worth noting that ANOVA on the total number of thoughts revealed no significant effects (F 's < 1), which helps rule out differential involvement or effort as a function of decision strategy.

Mediation Analyses. Three mediation analyses were conducted to test the hypothesized relationships between decision strategy, decision thoughts, counterfactual thoughts and satisfaction (see Figure 1). Decision strategy is predicted to drive the valence (favorable or unfavorable) and target (chosen or foregone alternative) of decision thoughts. Following an unfavorable consumption experience, and when the foregone alternatives are salient,

these different decision thoughts will influence counterfactual direction (upward or downward). Counterfactual direction then determines dissatisfaction with the unfavorable consumption experience. Together, decision thoughts and counterfactual thoughts will explain how choosing by selection versus rejection can influence satisfaction. Following the multi-step process suggested by Baron and Kenny (1986) and the process for detecting mediation with a moderator in Muller, Judd and Yzerbyt (2005), support for the hypothesized relationships is found.

H3d predicts that the difference in thoughts at the decision making stage will mediate the relationship between decision strategy and counterfactual thinking, when the foregone alternative is salience. As reported earlier, decision thoughts were a function of decision strategy. Also as reported earlier, counterfactual thinking was a function of the interaction of decision strategy and salience of the foregone alternative. When decision thoughts were added to the model predicting counterfactual thoughts, the interaction between decision thoughts and salience was significant ($F(1, 178) = 8.83, p < .01$) and the interaction between decision strategy and salience was reduced to non-significance (from $-1.59 (0.67) t = -2.37 p < .05$ to $-0.65 (0.73) t = -0.90, p > .37$). In other words, decision strategy drove differences in decision thoughts such that rejecters had relatively more negative thoughts about the non-chosen alternative. These differences in thinking while making the decision then drove the direction of later counterfactual thinking. More negative thoughts about the foregone alternative led to more downward counterfactuals, when the foregone alternatives were salient. These results support H3d.

H3e predicts that counterfactual thoughts will mediate the relationship

between decision thoughts and satisfaction, when the foregone alternative is salient. To test this, first satisfaction was analyzed as a function of decision thoughts, salience of foregone alternatives and their interaction. The interaction was significant ($F(1, 177) = 9.67, p < .01$) such that the more negative thoughts about the foregone alternative (relative to the number of positive thoughts about the chosen alternative) the greater the satisfaction, when the foregone alternatives were salient ($b = -.69 (0.23), t = -3.11, p < .01$). Second, counterfactuals were analyzed as a function of decision thoughts and salience. ANOVA revealed a significant interaction ($F(1, 180) = 12.93, p < .001$) such that the more negative thoughts about the foregone alternative, the more downward counterfactuals were generated, when the foregone alternative was salient. Third, counterfactuals and their interaction with salience were added to the model predicting satisfaction. ANOVA revealed a main effect of counterfactuals ($F(1, 175) = 35.69, p < .0001$), qualified by a significant interaction with salience ($F(1, 175) = 4.81, p < .05$). Importantly, the interaction of decision thoughts and salience was reduced (from $-0.69 (0.23) t = -3.11, p < .01$ to $-0.41 (0.21) t = -1.92, p = .06$) when counterfactuals were included. Different thoughts at the decision making stage drove counterfactual direction, which in turn influenced satisfaction, when the foregone alternatives were salient after the unfavorable consumption experience. H3e is supported.

H3f predicts that, together, decision thoughts and counterfactual thoughts will fully mediate the relationship between decision strategy and satisfaction. Satisfaction was analyzed as a function of decision strategy, salience of foregone alternatives, the interaction of decision strategy and salience, counterfactuals, the interaction between counterfactuals and

salience, decision thoughts, and the interaction of decision thoughts with salience. When the two mediators were included, the estimate for the interaction effect of the manipulated variables was reduced ($0.99 (0.57), t = 1.73, p = .09$). Decision thoughts, and their interaction with salience, were both reduced to insignificance ($p > .22$). There remained only a main effect of counterfactuals ($F(1, 173) = 32.81, p < .001$) and its interaction with salience ($F(1, 173) = 6.07, p < .05$). H3f is supported.

Discussion. Study 3 provides additional evidence that decision strategy influences post-experience satisfaction. Specifically, when a consumer has an unfavorable consumption experience, a rejection-based strategy can mitigate dissatisfaction. The process is moderated by the salience of the foregone alternatives, such that rejecters will experience less dissatisfaction after an unfavorable experience only when the foregone alternatives are salient. Together decision thoughts and counterfactual thoughts mediate the process. Focusing on the option they do not want while making their choice leads rejecters to have more negative thoughts about the foregone alternative—both in absolute terms and relative to the number of positive thoughts about the chosen alternative. In this study, where all participants have an unfavorable consumption experience, reminding participants of the foregone alternative prompts them to generate counterfactual scenarios. Rejecters, with their prior negative thoughts about the foregone alternative, are better able to generate downward counterfactuals (i.e. “at least I didn’t choose that other bowl) compared to selectors. Imagining worse possible alternative outcomes helps the participant mitigate dissatisfaction. When the foregone alternatives are not made salient, however,

counterfactuals about possible alternative outcomes are not spontaneously generated and no difference in satisfaction ensues. The analyses reported previously, including the mediated moderation analysis, provide full support for this process account.

GENERAL DISCUSSION

Given the importance of customer satisfaction to firm performance, identifying and understanding the antecedents to satisfaction, dissatisfaction and complaining behavior is vitally important (Powers and Valentine 2008; Curtis et al 2011; Dahl and Peltier 2015). In particular, there has been a call for theories of satisfaction formation that go beyond the still dominant expectation-disconfirmation paradigm (Perkins 2012; Dahl and Peltier 2015). This research presents support for the novel idea that *how* you make your decision can influence how satisfied you are with the subsequent consumption experience. Studies 1-3 demonstrate that a rejection-based decision strategy leads to greater satisfaction (less dissatisfaction) compared to a selection-based decision strategy—when the consumption experience is unfavorable and the foregone alternatives are salient. Thoughts at the time of the decision and counterfactual thoughts generated after the unfavorable experience mediate this relationship. Decision strategy leads to a differential information focus during the choice process such that rejecters have more negative thoughts about the non-chosen alternative relative to selectors. Making the foregone alternative salient reminds rejecters of the option(s) they disliked and the reasons for that negative opinion. This directs counterfactual thinking downward (“at least I am not experiencing that other, worse, option I decided to reject”), which mitigates dissatisfaction. For selectors, who are less likely to generate negative thoughts about the foregone alternative during the choice

task, reminding them of the foregone alternative only reminds them that there was a potentially better outcome. These more upward focused counterfactuals (“if only I chose that other option”) do little to minimize dissatisfaction and may even worsen it. These differences only occur following a product or service failure. When the experience is favorable there is no aversive event for participants to mentally undo with counterfactual thinking. Study 2 establishes the moderating role of valence of experience. Study 3 demonstrates the moderating role of salience of the foregone alternative. Study 1 shows the hypothesized effects occur when differences in decision strategy occur spontaneously rather than being experimentally manipulated. All studies provide evidence that differences in counterfactual direction mediate the relationship between decision strategy and satisfaction. Study 3 provides further process evidence by illustrating that decision thought differences lead to differences in counterfactual direction.

MARKETING IMPLICATIONS AND THEORETICAL CONTRIBUTIONS

At the broadest level, this research suggests that marketing managers need to consider what decision strategy consumers are most likely to use when choosing a brand. In situations where a consumer is likely to experience a product or service failure, managers might consider encouraging consumers to adopt a rejection-based decision strategy. The airline industry, for example, with its high rates of dissatisfaction (Butsunturn and Roberts 2015), might seek ways to encourage rejection based-decision making. In the medical arena, where frequently all treatment options have adverse side effects, using a rejection based-decision strategy may mitigate patient dissatisfaction with their chosen remedy. To the degree that

consumers later remember the foregone options, choosing by rejection should mitigate potential dissatisfaction with the experience. For example, announcements for departing flights could remind flyers of foregone alternatives upon arrival in the terminal. Some research also suggests that salience of non-chosen alternatives remains elevated for high-involvement choices (Droge, Halstead and Mackoy 1997).

An open question is how firms might effectively influence decision strategy. Negative comparative advertising may work: by highlighting the negatives of a competing product, such advertising may encourage consumers to reject the competitor product, as opposed to selecting their product. People in intermediary service roles, such as real estate agents, are in a position to encourage their clients to use rejection-based decisions. If the outcome does not meet client expectations (e.g. the roof leaks within a week of closing on a new house), dissatisfaction may be mitigated by reminding clients of the options they rejected. Industry consolidators or wholesalers could also facilitate rejection based decision making. For example, Google Flights, an online travel booking site, gives consumers the ability to exclude disliked airlines as well as select preferred airlines.

From the consumer's perspective, the research suggests that choice of decision strategy may be a useful coping strategy. In general, it would be better to use a rejection-based decision strategy whenever a product or service failure is possible. An obvious candidate is choice among guaranteed negative alternatives, such as in medical decision making. However, rejection-based decision strategies may also be relevant in more everyday consumer decisions. For example, when a decision is important and hard to reverse, like selecting a cell phone carrier, using a rejection-based decision

strategy would provide a way to reduce disappointment in case the experience proves less than perfect.

From a theoretical perspective, the present research contributes to three literatures—satisfaction, counterfactual thinking and decision strategy—that are currently largely disconnected. First, this research informs the satisfaction literature. The present investigation introduces for the first time decision strategy as a driver of consumption satisfaction. In contrast to the dominant expectation-disconfirmation model, which emphasizes the relative performance of the *chosen* alternative, these studies reinforce the importance of considering the *non-chosen* alternatives, not only before the consumption experience but afterwards as well (Droge, Halstead and Mackoy 1997; Taylor 2012; Gu Botti and Faro 2015). Furthermore, since performance expectations did not differ by decision strategy, the traditional expectation-disconfirmation model cannot easily account for the observed differences in satisfaction. More broadly, this research demonstrates that seemingly irrelevant contextual factors leading up to, or framing, a choice may prove more important to satisfaction formation than currently supposed. Shafir (1993)'s original studies on decision strategy form part of an extensive stream of research that challenges traditional economic concepts by demonstrating the sensitivity of choices to contextual factors external to the options themselves (Dhar and Gorlin 2013; Trueblood et al 2013). It is possible that other properties of the choice task environment may influence satisfaction, opening up new avenues for research on satisfaction formation that go well beyond the expectation-disconfirmation model.

The present research deepens our understanding of the relationship between counterfactual thinking and satisfaction. Extant literature focuses predominantly on

upward counterfactual thoughts as drivers of satisfaction and other behaviors (Epstude and Roese 2008; Byrne 2016). In the present studies, a rejection-based decision strategy spontaneously generates *downward* counterfactual thoughts, which are then used to mitigate dissatisfaction. These results suggest that downward counterfactuals may play a more important role than traditionally supposed. By investigating the relationship between selection, rejection and counterfactual thinking, these studies also introduce decision strategy as an important antecedent for the direction and content of counterfactual thinking. The research also provides the first empirical test of salience of the alternative outcome as an antecedent to spontaneous counterfactual thought generation.

Finally, these studies also develop the decision strategy paradigm. Extant research on decision strategy focuses on differences in the choice outcome between selectors and rejecters (e.g. Shafir 1993; Meloy and Russo 2004; Laran and Wilcox 2011). The studies here demonstrate that decision strategy has important downstream, post choice consequences, even when the same option is chosen. Future research could examine other satisfaction related outcomes such as complaining and complimenting behavior, loyalty, and repurchase intentions. The studies also demonstrate that decision strategy matters when consumers are faced with options that are substantively equivalent, rather than being enriched or impoverished (Shafir 1993); comprising different hedonic and utilitarian attributes (Dahr and Wertenbroch 2000) or featuring preference-consistent or inconsistent options (Laran and Wilcox 2011). The thought listing task also provides the first direct evidence that decision strategy leads to differences in cognitive thoughts, something that to date has only been inferred from the choices made. Finally, in contrast to prior

research which suggests that a rejection-based decision strategy is less preferred (Shafir 1993) or only used to reduce a large choice set to a more manageable consideration set, after which a selection-based strategy is adopted (Yaniv and Schul 2000), study 1 demonstrates that some consumers naturally adopt a more rejection-based decision strategy to make their final choice.

ALTERNATIVE EXPLANATIONS AND FUTURE RESEARCH DIRECTIONS

It is possible to rule out several alternative explanations with existing evidence. Across all the studies no systematic differences in the final choice, the perceived ease of the strategy or the perceived amount of choice were found, helping to rule these out as alternative explanations. The present studies also found no differences in expectations, helping to rule them out as alternative explanations. Some other explanations are more difficult to rule out and might be better viewed as complementary. For example, it is likely that specific emotions also play a role in mediating the process from decision strategy to satisfaction. No research has examined whether selection and rejection induce different emotional reactions, but it seems possible and further research is warranted. One clear area to start would be to try to separate two components of dissatisfaction, namely regret and disappointment. Empirical evidence suggests these have different antecedents and consequences (Taylor 2012; Jang, Cho and Kim 2013). While no explicit predictions were made about regret and disappointment separately in my studies, to the extent that the content of counterfactual thinking generated by rejection- and selection-based strategies differs, it seems likely that decision strategy may influence regret and disappointment in different ways.

The present research finds salience of the foregone alternatives is an important moderator variable. Future research is warranted to understand how foregone alternatives become salient in the real world. Future research should also examine the magnitude of the product or service failure that is necessary for decision strategy to matter. Research is also needed to better understand the antecedents of decision strategy. Finally, the current studies only used binary choice sets within food consumption settings. Future research should seek to replicate the result with larger choice sets and in different product and service categories and even non consumption situations, such as the hiring of new employees or making undergraduate course selections.

Overall, the present research provides evidence that a rejection-based decision strategy can lead to greater satisfaction than a selection-based decision strategy—when the consumption experience is unfavorable and the foregone alternatives are salient. Differences in decision thoughts and counterfactual thoughts drive this divergence in satisfaction. And so, to return to the question posed in the opening vignette: Ross, who rejected Spirit Airlines, should feel more satisfied than the Steve, who selected Delta—if the flight experience was unfavorable and they saw a Spirit Airlines advertisement as they left the airport. After all, things could have been much worse!

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Jane E. Machin, PhD
 Department of Marketing,
 The College of Business and Economics,
 Radford University, P.O. Box 6917,
 Radford, VA 24142
 jmachin@radford.edu
 540 831 6402 (office)
 540 267 6060 (cell)

ⁱ Various terminology has been used in the literature to reflect this distinction, including: accept / reject (Shafir 1993), select / reject (Meloy and Russo 2004), accept / eliminate (Yaniv and Schul 2000),

choose / reject (Levin, Jasper and Forbes 1998), and acquire / forfeit (Dhar and Wertenbroch 2000). For the purposes of the present research, “selection” and “rejection” are adopted as the most comprehensive terminology. Users of each decision-making strategy will also be referred to as selectors or rejecters.

ⁱⁱ The negative flavor jelly beans came from Jelly Belly “Bertie Bott’s Every Flavor Beans” which are also sold in the Beanboozled Jelly Belly packs.

ⁱⁱⁱ The index is positive for both conditions, indicating that all participants had, on average, more positive thoughts about the chosen bowl relative to the number of negative thoughts about the foregone bowl. This is not surprising given that they were expecting a favorable taste experience (eating jelly beans) and had no a priori reason to believe the experience would be disagreeable. Nonetheless, rejecters expressed more negative thoughts about the foregone alternative relative to selectors.

