

## Predicting Happiness: How Normative Feeling Rules Influence (and Even Reverse) Durability Bias

Stacy L. Wood

*University of South Carolina*

James R. Bettman

*Duke University*

Consumers' purchase decisions are often influenced by a simple assessment of how long they expect an anticipated purchase (e.g., buying a sports car or a new outfit) will make them happy. Unfortunately, affective forecasts are prone to durability bias (i.e., the overestimation of the duration of felt emotions in response to a future event). Here, this article suggests that normative beliefs, or "feeling rules," often underlie emotion forecasts. This account suggests that affective forecasts can be influenced by external normative communications and that conditions exist where affect duration may be underestimated rather than overestimated—thus demonstrating a reversal of durability bias. Such reversals occur when existing norms advocate attenuated emotional responses (e.g., one should not be overly impacted by minor setbacks or small imperfections). This article discusses how marketers can influence consumers' happiness forecasts by modifying salient norms for consumer groups or product categories.

Researchers are increasingly interested in the role of affect in choice and decision making. A particularly important topic for understanding affect's role in choice is how consumers forecast emotional responses to future events (e.g., how they will feel after buying some long-wanted product or consuming some highly desired good). In life, affective forecasts guide many decisions, large and small (J. Baron, 1992; Kahneman & Snell, 1990). In the marketplace, consumers approach those objects and events that they think will make them happy and similarly avoid those things they believe will make them unhappy. However, research in social psychology shows that people are poor affective forecasters; they systematically overestimate how long they will feel good after a future positive event (e.g., winning the lottery or getting tenure) and how long they will feel bad after a negative event (e.g., a romantic break-up or a sports team loss). This tendency to overestimate affective expectations is called *durability bias* and has been well-established in many contexts (see Wilson, Gilbert, & Centerbar, 2003, for a comprehensive review<sup>1</sup>).

Durability bias is both robust and influential, yet remains largely unexplored in consumer behavior. This is surprising given our understanding of how consumers make satisfaction judgments and the importance of satisfaction within the marketing literature. One generalization that can be drawn from extant satisfaction research is that consumers' *a priori* expectations have a strong influence on later judgments of consumption outcomes (e.g., Bolton & Drew, 1991; Oliver & DeSarbo, 1988). Clearly, then, it is important to understand how consumer expectations originate. Satisfaction researchers have long investigated many cognitive attribute- or benefit-based expectations (e.g., Bearden & Teel, 1983) but few have considered affective expectations despite compelling demonstrations of the influence of experienced emotion on satisfaction judgments (Oliver, 1993). Here, we examine a simple but powerful affective expectation—the global expectation of "How much happiness will this bring me?"—in the light of durability bias. Normative beliefs about probable or appropriate emotional responses are called "feeling rules" (e.g., upon receiving an award, one should feel happiness tinged with humility) and can influence one's answer to the question of "How much happiness?" We suggest that this has important theoretical and managerial implications for affective forecasts.

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<sup>1</sup>In their most recent work, Wilson and Gilbert (2003) included durability bias as part of an expanded form of emotional forecasting that they call "impact bias."

Correspondence should be addressed to Stacy L. Wood, Moore School of Business, University of South Carolina, Columbia, SC 29206. E-mail: wood@moore.sc.edu

Theoretically, the influence of feeling rules on durability bias suggests that conditions exist where a reversal of the durability bias may be observed. This is not a de-biasing condition, but rather the demonstration of bias in the opposite direction (individuals' underestimation of emotion rather than overestimation). Managerially, these findings suggest that external communications that offer normative information can sway consumers' expectations of emotion and thus can exacerbate, mitigate, or even reverse observed durability bias. We show that this normative influence can impact not only the expectation of emotion, but also how consumers later recall the experienced event.

### AFFECTIVE FORECASTS: DURABILITY BIAS AND FEELING RULES

#### When Do Affective Forecasts Matter to Consumers?

Emotions can result as an output from both consumer experiences (e.g., Havlena & Holbrook, 1986) and consumer decision making (e.g., anxiety in difficult choices; Luce, Bettman, & Payne, 2001). Consumers also use emotions as inputs to judgments or decisions (Pham, 1996), especially when products have salient hedonic characteristics (Pham, 1998). Thus, for experiential or hedonic goods (e.g., attending a concert or sporting event), consumers may attempt to predict the level of emotion that will be experienced in consuming that good. This may be especially true for quickly made decisions. Affective responses are part of the brain's "quick response" system and often guide actions or decisions that must be taken under time pressure. In such cases, the consumer may make a "gut-level" assessment of "How do I feel about it?" to make a decision. This is described as the HDIF (how do I feel) decision heuristic (Schwarz & Clore, 1988).

In addition, many consumer goods or decisions involve affective benefits, such as the enjoyment gained from a video game or the pride felt in driving a prestigious luxury car. Here, consumers may readily assess their anticipated feelings, not as a quick decision heuristic, but as a relevant product benefit. Findings across diverse domains within consumer behavior show that consumers often think in fairly complex terms of how a product will make them feel (e.g., "Eating that brownie will make me both happy and sad") and what expectations they hold for the duration of that emotion (e.g., "I will feel happy only as long as I am eating the brownie, and I will feel sad over my lack of control for the whole day"). The ubiquity of this type of affective forecast in consumer decision making raises the issue of whether consumers are good at such forecasts. Do consumers make accurate and consistent predictions of future

emotions' duration? Research from social psychology shows that this is not often the case.

#### The Demonstration of Durability Bias

Durability bias refers to the systematic overestimation of a future emotion's longevity. For example, when considering a positive future event, people expect to feel happy for a longer period than they actually experience when the event occurs. In classic studies of durability bias, Gilbert, Wilson, and other researchers looked at several different events that might engender emotional responses, such as the predictions of undergraduates on how unhappy they would be over the dissolution of a romantic relationship, of assistant professors on how happy they would be to get tenure, and of voters on how happy or unhappy they would be if their candidate won or lost. Across a number of different domains, predictions of emotion duration were significantly longer than were actually experienced after the target event.

Durability bias has been explained in terms of several theoretical bases or accounts. Some accounts are physiological in nature, such as the biological regulation account (Wilson et al., 2003), which suggests that durability bias is part of a larger biological motive to maintain a balanced and neutral emotional state. Wilson et al. (2003) suggested that the short-lived nature of emotional responses may ultimately stem from the biological importance of emotional experience as information and thus the need for experienced emotion to remain a sensitive scale. Other accounts involve cognitive biases, such as immune neglect and cognitive focalism (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000). Immune neglect refers to the human tendency to discount our body's emotional immune systems, thus underestimating the internal forces or coping mechanisms that will work to repair bad moods. Focalism suggests that overestimations of emotional duration arise because we focus on the predicted event and forget about other experiences that will co-occur with that event (e.g., the hurt of being fired may be ameliorated by the positive emotions that result from the warm support of friends and family). Recent research shows that both focal thoughts and, more important, the accessibility of those thoughts lead to stronger overestimations of emotional impact (Sanna & Schwarz, 2004).

However, our current understanding of durability is missing a discussion of what guides our expectations about emotional experience. In this research, we examine the role of normative "feeling rules" in affective predictions. Here we posit that the influence of normative beliefs suggests a viable account for when individuals may fall prey to durability bias and when this bias may be reduced or even reversed. In this way, the current research investigates the

role of an individual's beliefs about the emotional duration that *should* be experienced in a given situation and describes how these beliefs can influence both one's prediction of future affective states and the recall of past states. These beliefs may be internally held or suggested by social expectations. For example, a person who perceives himself or herself as a true fan of a particular Major League Baseball franchise (especially one thought to be cursed) may expect to be ecstatically happy for days after that team wins the World Series and may later recall an affective reaction that conforms to that normative expectation. Such expectations may be reinforced by ads and other cultural media (e.g., television programming, sports commentary, local opinion leaders) that promote a culture of fandom. Thus, we seek to provide new insight into the phenomenon of durability bias and how it may be influenced by normative beliefs.

### The Normative Influence of Feeling Rules

The idea of rules or culturally mandated expectations of emotion is not new. In Sophocles's *Electra*, Electra is chided by the chorus and her mother for her excessive grief over her father Agamemnon's murder in light of his murder of his own daughter, Electra's sister. Hochschild (1983) referred to such expectations as feeling rules, defining them as rules, often observed as part of a social culture (e.g., Eid & Diener, 2001), that prescribe how a person should feel in the event of a specific occurrence. For example, an individual whose spouse has died may expect that he or she should feel grief for a certain period of time following the spouse's death and may further expect that others will judge poorly those behaviors that do not conform to this rule (e.g., going to a party or dating another person too soon after the loss). Robinson and Clore (2002) supported this, suggesting that people often access *situation-specific beliefs*, or beliefs about emotions that are likely to be elicited in a particular type of situation when they are asked to report on their emotions.

Thus, it is likely that normative feeling rules may impact affective forecasts of duration. In accord with the accessibility–diagnosticity framework (Feldman & Lynch, 1988), we posit that consumers faced with making a prediction about the emotional impact of future consumption are likely to consider information that is both salient and diagnostic as inputs to this decision. Another type of diagnostic and potentially accessible information is an individual's past experience. When a past experience is recent and easy to recall, the individual may not need to rely on norms to guide their future expectations and may report or recall norm-incongruent feelings (e.g., “Gee, I was surprised, but that little snide thing Bob said at work really upset me for a long time”). However, previously experienced emotion is often difficult to recall accurately or “re-experience” (Robinson &

Clore, 2002).<sup>2</sup> This inability to draw on concrete emotional memory tags makes retrospective accounts of emotion particularly prone to bias (e.g., Dubé & Morgan, 1996; Hsee & Abelson, 1991). Thus, even people who have experienced an event may be likely to rely on their situation-specific beliefs about affect and make future predictions based on what they believe they should feel, especially when past experience is distant or difficult to access. Further, feeling rules may influence recall of emotion duration by providing an anchor from which individuals do not sufficiently adjust (Chapman & Johnson, 2002). These rules may therefore influence both predicted and recalled duration.

We present four studies demonstrating that feeling rules influence predictions of future emotion duration, recall of past emotion duration, and the degree to which individuals overpredict or underpredict emotion duration.

## STUDY 1

As an initial test of the influence of feeling rules on affect duration, we sought a natural environment in which opposing rules might be simultaneously tested. To this purpose, we examine a common occurrence on university campuses—an athletic event. In particular, feeling rules were manipulated regarding the emotions to be expected after the participants' university football team won a game. Participants were university students, and the upcoming event was the first football game of the fall season against a notably weaker opponent. The university had experienced its first winning season in 10 years during the previous season; thus, the prevailing culture made two competing feeling rules valid. One feeling rule expressed a belief that the “true fan” of a winning team should celebrate for a long time after a

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<sup>2</sup>There is evidence that emotional intensity can increase peoples' memory for specific events (Christianson, 1992), although some emotionally charged events create amnesiac effects (Christianson & Loftus, 1987). Research demonstrating that emotions are correlated with better memory generally support a “motivated attention” explanation that ascribes memory to heightened attention to (and elaboration on) negative arousal, such as fear and anxiety responses (Johansson, Mecklinger, & Treese, 2004). However, this evidence is not as contradictory as it might seem to other research in diverse fields that demonstrates poor or biased memory for emotions (e.g., Kent, 1985; Levine & Safer, 2002). The former stream of research shows that emotions direct attention to important events that increase memory for the *event* (e.g., episodic memory) rather than memory for the emotion itself. Although this is still an area open to investigation, many researchers believe that emotional memory is largely a function of cognitive representations of the experienced emotion rather than a somatic neural “node” that can be retrieved. In this way, the emotion associated with the event must be reconstructed rather than retrieved and reconstructions can fall prey to several forms of bias, including prior expectations (Kent, 1985), current event appraisals (Levine & Safer, 2002), and peak-end rules (Fredrickson, 2000). The data here support the proposition that emotionally intense events (e.g., weddings, car crashes) are memorable but that accuracy in the recall of experienced emotions may be impacted by feeling rules that facilitate norm-congruent recall.

win against any opponent, and the other stated that the “true fan” of a winning team should not celebrate long after a win against a weaker opponent. Each feeling rule was presented to a separate group of participants, whereas a control group received no normative belief regarding a win. Predicted duration of happiness after a win (and sadness after a loss), actual duration of feelings, and retrospectively recalled duration of feelings were measured. We predict that rules for celebration should lead to a longer predicted duration and longer recalled duration than rules for no celebration but, more important, that there will be no differences in actual duration. We also anticipate that the control group will more closely resemble the feeling rule for the celebration group than the non-celebration group.

**Method**

*Participants*

Eighty undergraduate business students at a southeastern university were recruited and participated on three separate occasions over a 7-week period in exchange for partial course credit.

*Procedure*

Five days prior to the first football game of the season, participants were asked to fill out a short survey regarding their attitudes about the university football team and the upcoming game. The first part of the survey included a quote from another student, purported to be from a recent attitude survey. Thus, the public judgment of an in-group member was made salient (Crano & Hannula-Bral, 1994). Participants randomly received one of three different versions of this quote. The quotes (see Table 1) represented a “celebrate” rule, a “don’t celebrate” rule, or no rule (control). To instantiate acceptance or rejection of the rule, participants were asked to rate their level of agreement with the quoted student. Participants were then asked to estimate how happy they would be if the team won and, more important,

the duration of this feeling. We asked participants to rate their emotional experience before asking them to describe its duration not because we are interested in differences in the emotional level but rather because it better follows conversation norms (i.e., it is awkward to ask people how long an emotion lasted without first asking what that emotion was). Participants were also asked in the first survey to estimate the duration of sadness they would feel after a loss; however, the team did win the game; therefore, we focus on predicted, actual, and recalled happiness. The estimate of duration was open-ended (to avoid anchoring on any options provided), and all responses were later converted into number of hours. Although this introduced more variance across responses, we felt that it was more important to avoid cueing any expectation of “appropriate” responses by the range of a scale. Two days after the game (that was won by the university’s team), participants were asked to rate their actual level of happiness after the win and how long they experienced that feeling (immediate recall). Six weeks later, participants were asked to recall the level of happiness they experienced after the win and the duration of that level of happiness (delayed recall).

**Results and Discussion**

*Duration Measure*

Recall that we predicted that participants who were exposed to (and did not disagree with) a “celebrate” rule would predict a longer duration of happiness than those exposed to a “don’t celebrate” rule. However, we predicted that normative feeling rules would not impact actual experience and thus we would not observe differences in actual duration (as measured by immediate recall). Finally, we hypothesize that delayed recall of duration will resemble the initial pattern of predicted duration as memory for the experience fades and normative expectations are influential again.

Differences in predicted duration were observed (Figure 1). We first checked for disagreement with the normative statement. Sixty-five participants reported agreement (≥ 5

TABLE 1  
Statements for Rule Conditions for Study 1<sup>a</sup>

<i>Statements for Rule Conditions</i>			
	<i>“Celebrate” or “Be Excited” Rule</i>	<i>“Don’t Celebrate” or “Don’t Be Excited” Rule</i>	<i>No Rule</i>
Study 1	Recent attitude surveys have found out that xxxx fans are different from other football conference fans. xxxx fans report that a “true fan” should celebrate a lot after a win even against a weak opponent. When asked about this, one respondent answered, “I’d be glad my team won. No matter who we play, a win makes me feel happier than normal for a long period of time.”	Recent attitude surveys have found out that xxxx fans are different from other football conference fans. xxxx fans report that a “true fan” should not celebrate a lot after a win against a weak opponent. When asked about this, one respondent answered, “I’d be glad my team won, but it would only really make me feel happier than normal for a short period of time.”	Recent attitude surveys have found out that xxxx fans are different from other football conference fans. xxxx fans report many differences between what constitutes a “true fan.” When asked about this, one respondent answered, “I think football is the same, but the fans are different.”

<sup>a</sup>Athletic conference deleted here using “xxxx.”

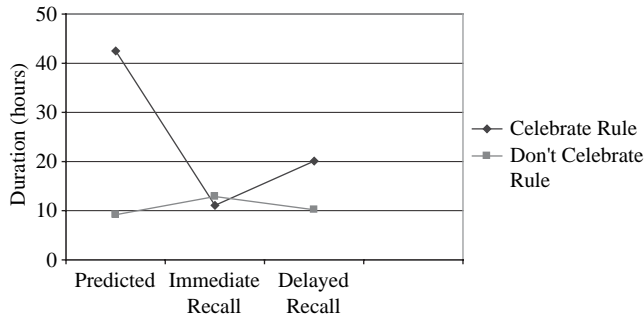


FIGURE 1 Study 1: Mean predicted, immediate, and delayed recall of happiness duration (in hours) as a function of rule.

on a 9-point scale ranging from 1 [*strongly disagree*] to 9 [*strongly agree*] with the student quote that served as our rule statement. Fourteen participants reported ambivalence or disagreement with the statement and were not used in this analysis.<sup>3</sup> One participant in the neutral condition did not respond to the agreement item. Participants predicted significantly longer durations in the “celebrate” ( $M=42.5$  hr) versus the “don’t celebrate” condition ( $M=9.2$  hr):  $F(1, 42)=4.87, p=.03$ . Immediate recall of duration did not differ between conditions (“celebrate,”  $M=11.1$  hr; “don’t celebrate,”  $M=12.9$  hr):  $F(1, 27)=0.045, p=.834$ . In addition, delayed recall of duration deviates from immediate recall of duration in directions congruent with the respective normative conditions. Delayed recall of duration of happiness increased from the immediate recall of duration in the “celebrate” condition ( $M=20.1$  hr) and slightly decreased in the “don’t celebrate” condition ( $M=10.2$  hr); both these differences in recall are in the correct direction but are not significant. Further, no participants reported disagreement with the normative statement to celebrate versus 7 in the “don’t celebrate” and 7 in the no rule conditions; this is in accord with our intuition that the population’s implicit rule (or normative tendency) is to celebrate all team wins despite the caliber of the opponent. As such, in a pattern similar to the “celebrate rule” group, participants in the no rule condition predicted long durations ( $M=43.1$  hr); their actual durations were smaller than those predictions ( $M=18.1$  hr); and

<sup>3</sup>Data from these 14 participants were removed from the data analysis rather than included with the counter-rule condition (i.e., people who disagreed with the “celebrate” rule included with the “don’t celebrate” condition and vice versa), as it was not clear whether disagreement was based on the normative emotion felt or the reason given for the normative emotion in the quote. Seven people disagreed with the “don’t celebrate” rule statement, and 7 people disagreed with the neutral statement. Inclusion of the disagreeing participants in the counter-rule condition did not change the pattern or significance of results. With the disagreeing participants included in their condition, “don’t celebrate” participants still predicted significantly shorter duration ( $M=42.5$ ) versus “celebrate” participants ( $M=13.5$ ),  $F(1, 49)=5.17, p=.028$ . The data from these 14 participants were included in the other analyses.

recalled duration of happiness increased from the immediate recall of duration ( $M=29.6$  hr). Given that an established normative rule for celebration against any opponent seemed to exist within the population, it is perhaps even more surprising that our fairly mild manipulation of the “don’t celebrate” normative statement did have such a strong dampening effect on predicted duration of happiness. However, these results may be qualified by participants’ desire to be consistent between stated beliefs and predictions. This concern is ameliorated later in the protocol used in Study 4.

We note here that demand artifact may be seen as a possible alternative explanation for these results. To obtain these results through demand, participants would have to cooperate at Time 1, *not* cooperate at Time 2, and then cooperate again at Time 3. However, norms and feeling rules are, by their essence, socially derived; thus, social influence is likely to be present even if specific hypothesis-guessing and subsequent helpful behavior are not. Study 4’s protocol is designed to avoid potential demand bias.

Another analysis that can offer some evidence of the influence of feeling rules on durability bias is the correlation between an individual’s agreement with a normative rule and their predicted duration of emotion. If the normative belief is impacting duration, we would expect to observe a positive correlation between stated agreement with the norm and duration of predicted happiness for participants in the “celebrate” condition and a negative correlation between stated agreement with the norm and duration of predicted happiness for participants in the “don’t celebrate” condition. For the “celebrate” condition, a Pearson correlation of  $r=+.483$  ( $p < .01; n=27$ ) is observed in line with our hypothesis. For the “don’t celebrate” condition, a negative correlation is observed ( $r=-.248$ ), but it offers only directional evidence ( $p=.13; n=23$ ), which is perhaps not surprising given the relatively small cell size.

Thus, the pattern of results supports our contention that feeling rules can influence the prediction of expected emotional duration. Feeling rules that one should celebrate such a win for a long time led to longer estimates of duration than rules that one should not celebrate a win against weak competition.

### Reversals of Durability Bias: “Get Over It” Norms

As stated, one intriguing and important implication of the aforementioned analysis is that, given a situation for which there are feeling rules for short duration of feelings, a person may experience a reversal of the durability bias (i.e., consumers may actually underpredict how long their feelings will last). For example, there may be rules that one should not bask in the glory of an award for too long, should not stay angry with a friend overly long, should not be sad or depressed too long about setbacks, or be overconcerned about one’s material possessions. We term these “get over

it" rules. It is possible that studying such situations might reveal conditions for which people underestimate how long their feelings might last.

Although such rules may be less prevalent than rules espousing extended celebration or depression following positive or negative events, they do exist. Imagine, for example, the practice during televised awards ceremonies of showing the immediate responses of all nominees, losers included, after the envelope is opened and the winner revealed. Losing nominees are expected to smile and applaud the winner and may even feel more pressure to attend post-ceremony parties, putting a good face on, than if they had won. Given a "get over it" rule situation, we may find that consumers predict shorter emotional duration times a priori than the times they report after experiencing the event. In addition, we posit that as memories of actual experience fade with the passing of time, normative feeling rules will influence recall of emotional duration. If this is so, then we should see a negative relation between recalled emotional duration and the delay between the event and the recollection of that duration for "get over it" situations—that is, recall of emotional duration should be longer for more recent experiences (less rule-congruent) and should become shorter (more rule-congruent) as time passes and actual affective experience or rule-inconsistent behaviors are forgotten.

## STUDY 2

In Study 1 we examined a situation in which a salient feeling rule might lead to overestimates of emotion duration and an opposing feeling rule might mitigate that bias. As noted, the feeling rule account suggests that there can exist situations in which rules might lead to underestimates and, hence, a reversal of the standard durability bias. We examine such a possibility in Study 2.

### Method

#### *Participants*

One hundred forty-five undergraduate students at a southeastern university were recruited through classes and participated at the end of a class period. It was necessary to find an existing "get over it" rule that would be familiar to this population and that would offer a roughly equal division of those who had experienced the situation and those who had not. Pretests with 20 undergraduates suggested that an appropriate situation would be the emotional reaction to finding a minor scratch to the paint of one's car. Participants in the pretest were first asked to respond to an open-ended question, "How would you expect a person to react if they found a minor dent or scratch on their car?" Written comments indicated that participants believed scratches and

dents were different in terms of their import and subsequent impact, with dents perceived as potentially more serious. Thus, we used the term "minor scratch." In addition, participants were asked to respond to the statement, "I think that when consumers find a dent or scratch on their car, they should get over it pretty quickly," on an 11-point scale ranging from 1 (*strongly disagree*) to 11 (*strongly agree*). Seventy percent of respondents indicated agreement at or above the midpoint. Thus, the prevailing norm for the population from which the sample (all participants) is drawn is that, for a minor scratch, the car owner is expected to feel upset but that the feeling should have a very brief duration.

### *Procedure*

Participants in the main study were given a one-page survey to complete. The survey was titled "Consumer Survey: Minor scratches." The first question asked, "Have you ever left your car in a parking lot and come back to find a scratch on it?" If the respondent answered yes, she or he was directed to answer a set of questions pertaining to this particular incident. The specific incident questions asked the respondent to rate the degree to which he or she was upset and the duration of this feeling (and other filler questions that were not the focus of this study). We again used an open-ended question for duration but, different from Study 1, we included the phrase, "Please respond numerically; i.e., in minutes or hours," in parentheses to reduce the number of vague answers such as "a long time." All responses were converted later into minutes. Finally, respondents reported how long ago this incident occurred.

Respondents who had not experienced a scratch were asked to predict how upset they would feel if they found a scratch on their car and the expected duration of this feeling (as well as other filler questions). Again, the duration measure was open ended; all responses were then converted into minutes. This procedure of assessing both "experiencers" and "predictors" (or "non-experiencers") is similar to durability bias studies by Gilbert et al. (1998).

We anticipate that those who experience a scratch will report longer durations than those predicted by the non-experiencers, reversing the standard durability bias. We also expect that recalled duration will be longer for those who experienced a scratch more recently and shorter (more rule-congruent) for those whose experience was more distant in time.

## Results and Discussion

### *Duration Measure*

As expected, those who had experienced the scratched car reported a greater duration of emotional response ( $M=650$  min) than the predictions of those who had not ( $M=290$  min),  $t(1, 144)=1.799$ ,  $p=.035$ , reversing the standard durability bias effect. In addition, our rule-based

account suggests that consumers become more rule-congruent over time. Thus, as the discovery of the scratch becomes more distant in time, consumers should recall affective durations that are more in line with the non-experiencers' "get over it" rule. To test this, we divided the experiencers into two groups ("recent experience" and "past experience") using a mean split on event recency (reported by the respondent in days); this split occurred at 330 days. Consonant with our hypothesis for a reversal of the standard durability bias, "recent experiencers" reported significantly increased duration ( $M=829$  mins,  $n=33$ ) compared to non-experiencers ( $M=290$  min):  $t(1, 144)=2.117$ ,  $p=.019$ . In line with the hypothesis that as more time passes recall of emotion duration becomes more rule-congruent, those for whom more time had lapsed since the experience (past experiencers) reported means ( $M=370$  min,  $n=21$ ) that were not significantly different from those of non-experiencers ( $M=290$  min,  $n=19$ ):  $t(1, 144)=0.447$ ,  $p=.656$  (see Figure 2).

There is one alternative explanation for these results that, on the surface, appears plausible. One might argue that the longer duration for experiencers versus that predicted by non-experiencers does not indicate a reversal of durability bias but just a situation where the negative event may continue to impact consumers because the unfixed scratch serves as a reminder or continuing irritant. However, this "reminder" explanation is not plausible in the context of durability bias research. This explanation would predict that durability bias only operates for affective events that are discrete in time—in other words, the good or bad event happens and then is over and done with. This is not consistent with the body of research on durability bias. Durability bias is a surprising and robust bias largely because it operates for events that have continuing ramifications and, thus, should continue to impact individuals. Durability bias research finds that people experience shorter than predicted affective responses to such events as divorces, lottery winnings, failure

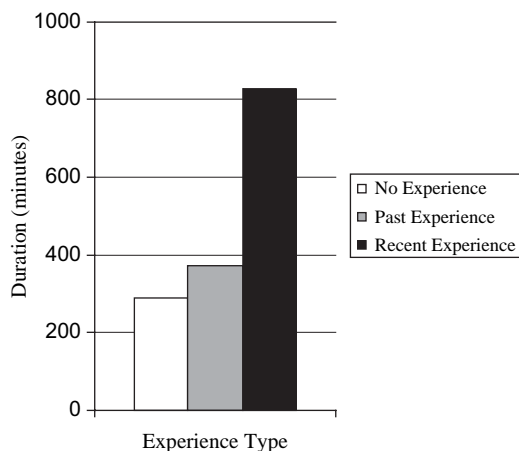


FIGURE 2 Study 2: Reversal of durability bias: Mean emotion duration (in minutes) as a function of experience type.

to get tenure, and even loss of physical abilities. In each of these events, the evidence of the event lingers. Thus, durability bias frequently occurs in the face of event reminders; such reminders, according to the alternative explanation, should lead to longer experienced than predicted durations—the opposite of what is found.

### STUDY 3

In Study 2 we examined the potential for a salient "get over it" feeling rule to lead to underestimates of emotion duration and thus a reversal of durability bias. Two questions arise from these findings: first, is this reversal only possible in negative situations where individuals may operate with a general desire to be optimistic about their feelings? In positive emotional experiences, are there "get over it" (or, perhaps, better stated as "no big deal") feeling rules? Second, to what extent does belief in the underlying normative rule influence individuals' predicted duration of emotion? In Study 3, we seek to replicate the reversal of durability bias within a positive emotional situation and to test normative belief as a mediating factor.

#### Method

##### Participants

Ninety-two professional master of business administration students (age,  $M=31.6$ ; 60 men) were recruited through classes and participated at the end of a class period. In this study, we looked for a positive experience that might engender a "get over it" norm. Because people are unlikely to urge others to get over a positive emotion, this may be better stated as the "no big deal" norm. Pretests with 25 adults recruited through a regional social organization (age range: 25–52) suggested that an appropriate situation is the act of buying oneself flowers. Researchers have noted the implications of durability bias for buying large consumer goods (e.g., disappointingly short durations of happiness after buying mansions vs. smaller houses or expensive sports cars vs. cheaper sports cars; Wilson & Gilbert, 2003). Conversely then, small treats may be surprisingly impactful if our cultural norms suggest that only "significant" purchases impact our happiness significantly. In addition, although flowers were considered a nice small treat, social norms appear to suggest that the act of buying them for oneself (vs. receiving them as a gift) is perceived as less desirable and, therefore, less impactful to experienced happiness.

##### Procedure

Participants in the main study were given a one-page survey to complete. The survey was titled "Consumer Survey: Grocery store flowers." The first question asked, "Have you ever bought flowers for yourself at the grocery store for no

special reason?” We specified a situation of inexpensive flowers that were not purchased for a special reason to better capture the experience of a small treat that was not tied to an event that was emotion generating in itself (e.g., a raise, a birthday, an academic article accepted at a top journal). If the respondent answered yes, she or he was directed to answer a set of questions pertaining to this particular incident. The specific incident questions asked the respondent to rate the degree to which he or she was pleased and the duration of this feeling. We again used an open-ended question for duration; and, like in Study 2, we included the phrase, “Please respond numerically; i.e., in minutes or hours” in parentheses to reduce the number of vague answers such as “a long time.” All responses were converted later into minutes.

To reduce potential variance in timeframe, we asked all respondents (both those who had and those who had not experienced the situation) to predict how pleased they would feel and the expected duration of this feeling if they bought themselves flowers at the grocery store *today*. Again, the duration measure was open-ended; all responses were then converted into minutes. Thus, both experiencers’ and non-experiencers’ estimations were assessed akin to other durability bias research (e.g., Gilbert et al., 1998). To test mediation of the normative belief, we asked all respondents (in Study 2, we only asked the non-experiencers) to indicate their belief in a normative statement about the duration of feeling likely in this situation (2 reverse-coded 11-point Likert-type scales for the following statements: “In general, I believe that any pleasure someone gets from buying themselves flowers lasts a very long time,” and “In my opinion, when people buy themselves flowers, they find the pleasure wears off in a few minutes”).

We anticipate that those who have experienced self-bought flowers will predict longer durations than those predicted by the non-experiencers, reversing the standard durability bias. We also expect that normative beliefs will significantly mediate respondents’ predictions of emotional duration, but that this is likely to be a partial mediation due to other influential factors demonstrated in durability bias research (e.g., focalism, immune neglect).

## Results and Discussion

### Duration Measure

In this study, we assessed the predicted emotional duration (e.g., “If you bought flowers today ...”) for both experiencers and non-experiencers. This is a better and more conservative measure of durability bias as all participants had a similar timeframe. As expected, experiencers reported a greater predicted duration of emotional response ( $M=1,578$  min) than the predictions of those who had not ( $M=314$  min),  $t(1, 91)=27.908, p < .001$ , reversing the standard durability bias effect within a positive emotional experience.

It is plausible that differences in the expected pleasure associated with flowers might contribute to this effect. To test whether the reversal of durability bias is observed when holding pleasure relatively constant across groups, we also looked only at those participants (both experiencers and non-experiencers) who expressed a high level of expected pleasure from flowers. On an 11-point scale ranging from (*a little pleased*) to 10 (*extremely pleased*), respondents described their self-reported expected pleasure if they bought flowers that day; the median response to the item was 5. Using a median split, we split the respondents into a higher and lower pleasure group and analyzed only the responses from individuals in the higher pleasure group. In this subset of “flower lovers,” the reversal of durability bias is still observed. Experiencers predict longer durations ( $M=1,542$  min) versus non-experiencers ( $M=521$  min):  $F(1, 52)=9.09, p=.004$ . Further, experience remains a significant predictor of duration in a regression analysis ( $\beta=-.310; t=-2.195, p=.03$ ), but predicted pleasure is not ( $\beta=.209; t=1.479, p=.15$ ).

Similar to Study 2, we also tested the impact of experience recency on experiencers’ predicted duration. As noted earlier, a rule-based account suggests that consumers become more rule congruent over time. Thus, as the self-bought flowers become more distant in time, consumers should recall affective durations that are more in line with the non-experiencers’ “no big deal” rule. To test this, we divided the experiencers into two groups (“recent experience” and “past experience”) using a median split on event recency (reported by the respondent in days); this split occurred at 180 days. The means for the three groups were significantly different ( $M_{recent}=1,785$  min.,  $n=17; M_{past}=855, n=6; M_{non-experiencer}=345, n=69$ ):  $F(1, 89)=13.960, p < .001$  (see Figure 3). Simple contrasts reveal significant differences in durations predicted by recent and past experiencers ( $t=1.94, p=.05$ ), recent experiencers and

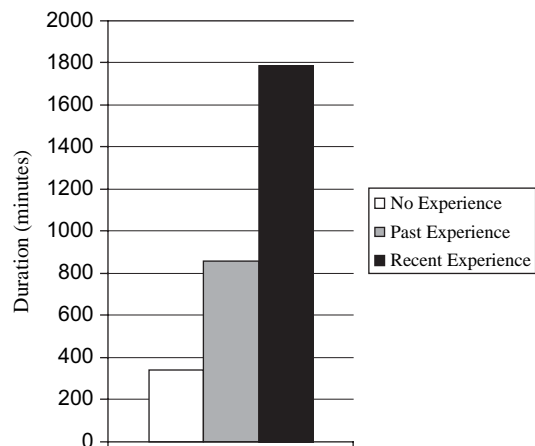


FIGURE 3 Study 3: Reversal of durability bias: Mean emotion duration (in minutes) as a function of experience type.

non-experiencers ( $t=3.27, p=.004$ ), all experiencers versus non-experiencers ( $t=3.34, p=.003$ ), and recent experiencers versus past or non-experiencers ( $t=-3.630, p < .001$ ). However, as also observed in Study 2, past experiencers did not significantly differ from non-experiencers ( $t=1.19, p=.239$ ). Although small cell size is a qualifying factor in some of these analyses, it is still important to note the observance of a significant pattern of results that matches that found in Study 2.

### *Mediation of Normative Belief*

To test the influence of normative belief on observed predictions of duration, we conducted a mediation analysis and Sobel test (R. M. Baron & Kenny, 1986). We first determined that the indicator variable (in this case, the respondents' experience or non-experience with the situation) was correlated significantly with the outcome variable, the respondents' predicted emotion durations ( $\beta = -.487; t = -5.283, p < .001$ ). We then determined that the indicator variable was correlated significantly with the mediator variable (in this case, the respondents' reported agreement with the normative statement):  $\beta = .402; t = 4.256, p < .001$ . Finally, we determined that the mediator variable is correlated significantly with the outcome variable, while controlling for experience or non-experience ( $\beta_{norm} = -.209; t = -2.104, p = .03$  and  $\beta_{experience} = -.401; t = -4.036, p < .001$ , respectively). Thus, we see that normative belief partially mediates the influence of experience on predicted emotion duration. We test the amount of this mediation (R. M. Baron & Kenny's, 1986, "indirect effect") using a Sobel test and find the influence to be significant (Sobel test statistic =  $-1.886, p = .05$ ).

Thus, Study 3 provides two important pieces of information. First, it demonstrates that reversals of durability bias may exist in the domain of positive experience as well as negative. Thus, although norms for long emotional response are quite common for both positive (e.g., winning the lottery) and negative (e.g., a romantic break-up) experiences and this may explain widespread observations of durability bias, we see that situations also exist for both positive and negative experiences in which cultural norms suggest a short emotional response (e.g., a "get over it" or "no big deal" norm). Second, we see evidence that belief in the stated "no big deal" feeling rule significantly influences respondents' predictions of their future emotional responses. As one would expect given other known influences such as focalism and immune neglect, feeling rules are a significant, but partial, mediator of predicted emotion duration.

## STUDY 4

In Study 1, we observed that normative messages (that conveyed information about feeling rules) could sway

consumers' predicted emotional durations. In Studies 2 and 3, we observed that this normative influence could lead to a reversal of durability bias when dominant feeling rules advocated a short "get over it" or "no big deal" emotional response. In this final study, we integrate these three studies to determine if normative messages can also influence duration predictions when a "get over it" rule exists. To better rule out social desirability or consistency bias as an alternative explanation, we use a nonconscious prime instead of an explicit normative message.

## Method

### *Participants*

Fifty-eight adults (age,  $M=35$ ; 50% women) were recruited through an online survey Web site (Zoomerang). The "minor car scratch" protocol from Study 2 was used.

### *Procedure*

Participants were first presented with an introduction that informed them that they would be asked to fill out a brief survey about how they would feel in a consumer scenario that they may or may not have experienced in the past. Participants were then asked to complete a short sentence-unscramble task prior to the survey; as a cover story for this unusual "marketing research" task, participants were told that the purpose of the sentence-unscramble task was to put all respondents into an equally neutral mood (wording from instructions stated: "In any survey of feelings, it is best to have survey respondents in a similar neutral state prior to filling out the survey. Thus, we need you to complete this first page of simple word puzzles immediately before you fill out the survey on the next page."). Similar to other common priming protocols (e.g., Epley & Gilovich, 1999), this unscramble task served as the nonconscious prime. The use of abstract concepts (e.g., emotion, achievement, affiliation) as primes are more effective and more prevalent in the literature than concrete instructions or directives (e.g., "go fast," "smile more," "work longer," etc.). For this reason, we used more abstract "impact" (strong or weak) primes rather than specific directives about length of time. In this, we followed other prime- or frame-protocol studies that sought to increase or decrease duration of emotional response using the hot-cool systems approach (e.g., Metcalfe & Mischel, 1999; Mischel, Ozlem, & Mendoza-Denton, 2004). In this research, participants were randomly assigned to one of two primes: a "hot" prime that made strong affective reactions salient or a "cold" prime that made weak affective reactions salient. In the unscramble task, participants were given eight sets of five words. For each set, they were asked to use at least four of the words to make a correct sentence. (Example: Set: IS TAXI VERY SHE NICE; Answer: *She is very nice.*) In the hot prime condition, four of the eight sets contained a word associated with strong affect (hot, excited,

turbulent, passionate; e.g., Set: YELLOW HOT BIRD THE IS). In the cold prime condition, four of the eight sets contained a word associated with weak affect (cool, relax, calm, perspective; e.g., Set: YELLOW COOL BIRD THE IS; see the appendix). This approach is also similar to Schachter and Singer's (1962) seminal idea that emotional experience requires both physiological arousal and emotional interpretation. After participants completed the sentence unscramble task, they completed the "minor car scratch" survey. Again, participants indicated whether they had experienced the situation of finding a small scratch on their car after leaving it in a parking lot. The survey was similar to that used in Study 2, with a few modifications initiated in Study 3. Thus, unlike Study 2 but similar to Study 3, all participants (both experiencers and non-experiencers) were asked to predict their expected duration of negative feeling *if* they found a scratch on their car *today*. (It should be noted that in both Studies 3 and 4, experiencers typically predicted times that were identical to those that they recalled and, thus, their recalled and predicted durations do not differ.) Again, the dependent variable of interest was the predicted duration of feeling upon finding a scratch, which was measured in an open-ended response and later converted into minutes. We expect that experiencers will report longer durations than non-experiencers—replicating the findings of Study 2—and that the nonconscious prime will influence duration such that the hot prime leads to longer predicted durations than the cold prime—akin to the explicit normative message in Study 1.

## Results and Discussion

### *Duration Measure*

We conducted an analysis of variance of the 2 (Prime) × 2 (Experience) between-subject design for predicted duration as the dependent variable. As expected and repeating the findings of Study 1, those who had experienced the scratched car reported a significantly greater duration of emotional response ( $M=60$ ,  $SD=71$ ,  $n=24$ ) than the predictions of those who had not ( $M=35$ ,  $SD=53$ ,  $n=26$ ),  $F(1, 49)=7.01$ ,  $p=.01$ , reversing the standard durability bias effect. In addition, in line with the findings of Study 1, the non-conscious prime significantly influenced affective duration; respondents (both experiencers and non-experiencers) who were exposed to the hot prime predicted longer durations ( $M=58$ ,  $SD=78$ ) than those in the cool condition ( $M=41$ ,  $SD=68$ ),  $F(1, 49)=4.32$ ,  $p=.04$ .

It is interesting to note that there is also a significant interaction between the two independent variables,  $F(1, 46)=6.23$ ,  $p=.02$ , which qualifies the interpretation of the main effects. It appears that the cool prime served to "correct" (or dampen or shorten) the emotional responses predicted by experiencers:  $M_{hot}=128$  versus  $M_{cool}=42$ ,  $F(1, 22)=7.27$ ,  $p=.01$ ; but did not affect non-experiencers:

$M_{hot}=31$  versus  $M_{cool}=39$ ,  $F(1, 24)=0.14$ ,  $p=.72$ . In this domain, where a "get over it" feeling rule exists, the non-experiencers were rule-congruent in the face of either prime, but experiencers (who had diagnostic and accessible experience that was counter to the feeling rule) reported rule-incongruent durations when they received the rule-incongruent prime and were rule-congruent (not significantly different than the non-experiencers) when they received the rule-congruent prime. It is somewhat difficult to directly compare this interaction result to the findings in Study 1 because of the dichotomy between experiencers and nonexperiencers measured in this study. However, if we recall that all participants in Study 1 were, in essence, "experiencers," then we can see a repeated pattern where individuals with experience of an affective event can be influenced by messages that make different norms salient. This is an interesting distinction with important public policy ramifications; perhaps only those with experience (that we know is often ambiguous "data" open to multiple interpretations; Hoch, 2002) are influenced by normative or counternormative messages. For those with existing feeling rules and no experience, the extant rule is dominant.

In addition, because an online survey collection method was used, we replicated this study with a convenience lab sample of 24 undergraduates recruited from two marketing courses. We found the same pattern of results for both the main effects of experience (experiencers predict longer durations than nonexperiencers;  $F[1, 20]=4.95$ ,  $p=.03$ ), prime (participants exposed to the hot prime predict longer durations;  $F[1, 20]=6.57$ ,  $p=.01$ ), and the interaction (the hot prime increased the experiencers' predicted durations but did not impact nonexperiencers' predictions;  $F[1,20]=8.42$ ,  $p < .01$ ). Surprisingly, variance in predicted duration was lower in the online sample than in this lab sample.

## GENERAL DISCUSSION

### Theoretical Implications

In this work, we argue that feeling rules influence durability bias (a robust bias that holds important implications for consumer behavior) and demonstrate how making normative feeling rules salient impacts consumers' predicted emotional responses to experienced events. In Study 1, a counternormative statement mitigated durability bias. Participants exposed to a salient feeling rule that implied the inappropriateness of a long emotional reaction to the outcome of a real event (and one that was important to them) predicted shorter durations for their feelings than those exposed to a feeling rule that advocated a longer emotional reaction. In Studies 2, 3, and 4, we explored the potential for normative situations where a reversal of durability bias would be observed. The data from these studies consistently

show that when a salient feeling rule advocates a shorter “get over it” reaction, experiencers predict longer durations for their feelings than non-experiencers. Further, there is evidence that experiencers’ expectations about emotion become more rule-congruent over time. In Study 1, the longitudinal data showed that the feeling rule did not influence the duration of emotion reported immediately after the event. However, Studies 2 and 3 showed that, with time, recall of duration became more rule-congruent (i.e., shorter when the rule suggested shorter durations).

Taken broadly, these results are consistent with recent research that demonstrates the ability of attitudinal primes to facilitate norm-congruent behavior (e.g., conversational norms, Haberstroh, Oyserman, Schwarz, Kuhn, & Li-Jun, 2002; conformity, Epley & Gilovich, 1999). Perhaps more important, our propositions concerning the role of feeling rules in durability bias also suggest conditions under which durability bias should be ameliorated or may be reversed. We show that where feeling rules dictate short emotional reactions, consumers underestimate the duration of their emotional response to an event, thus reversing the standard durability bias. Further, as suggested by our conceptual framework, memory for duration becomes more rule-congruent as time passes. Although underestimation of duration is unique with respect to the current body of research on durability bias, it is not as iconoclastic as may be perceived. Recent research in social psychology suggests that individuals’ reactions to intense states may recede more rapidly than their reactions to less intense states, although consumers predict the opposite (Gilbert, Lieberman, Morewedge, & Wilson, 2004).

Evidence from these studies has theoretical ramifications for several diverse domains within consumer psychology. First, the results speak directly to issues of affect regulation. In affect regulation research, we see that people give priority to emotional regulation over other self-regulatory goals (Tice, Bratslavsky, & Baumeister, 2001) and that this regulation is adaptive or strategic in that it is generally appropriate to a forthcoming task faced by the individual (Cohen & Andrade, 2004). Thus, this research further highlights the importance of individual’s intuitive beliefs about expected emotions. In regulating affect, consumers must predict what consumption behaviors will generate desired emotions, and we demonstrate that feeling rules provide information about the normative emotional outcome to be gained from a particular event (e.g., buying oneself a treat). Because affect-regulation is a common motivational force, such rules must necessarily be influential in consumption behavior. However, although research in affect regulation has studied the impact of one’s perceived ability to change his or her current affective state on regulatory behavior, no study has yet examined whether perceptions of duration of the emotional “fix” will also impact one’s choice of regulatory behavior. In other words, will one still eat a chocolate to improve one’s mood if reminded that the gustatory happiness is more

short-lived than expected? This remains an interesting research avenue.<sup>4</sup>

Second, this research may offer some insight into customer satisfaction and other domains where expectations and experience interact to shape judgments over time. The extant customer satisfaction literature has shown that emotions can color both expectations and experiences (e.g., Fournier & Mick, 1999; Oliver, 1993) and, more recently, that expectations can drive emotional experiences and subsequent product evaluations (Wood & Moreau, 2006). If this is so, the source of expectations becomes more important. Here, we suggest that feeling rules offer a relevant source of expectations, and we may infer that they will subsequently impact satisfaction judgments (e.g., how one evaluates the caterer for one’s wedding reception vs. a business luncheon).

Also, we study feeling rules as domain-specific norms. Clearly, though, within cultures where any given norm prevails, there may be individuals who hold beliefs counter to that norm. Our data suggests that belief strength matters to normative influence. One idea that our data do not address is whether normative influence on durability bias depends on personal, situational, or cultural traits. It may be that, akin to effects of misattribution of affect, normative influence is strongest when the individual’s attention is not drawn to this input prior to the evaluative judgment. Perhaps awareness of the normative cue might cause people to contrast away from the feeling rule effect. The results from Study 4 also suggest that use of a “cool focus” from the hot-cool systems model may cause individuals to counter common long-duration norms. These remain as future research questions.

Ultimately, this normative account for durability bias suggests one reason why individuals continue to demonstrate durability bias rather than learn from disconfirming experiences. If normative feeling rules guide our initial predictions of emotional duration, then it is likely (especially given poor recall for experienced emotion) that we may rely on those same norms in trying to remember how we felt during a past event. Norms influence what behaviors are appropriate in any given situation and, more important, may be recalled as evidence of norm-congruent feelings. Memories of such behaviors may be both relatively accessible, diagnostic (Lynch, Marmorstein, & Weigold, 1988; Robinson & Clore, 2002), and also biased in the direction of the rule (i.e., more behaviors are potentially both enacted and remembered if the rule is for a longer duration). If this is so, encouraging recall of behaviors may lead to increased estimates of duration (where the rule is for a long duration) if recall precedes estimates of duration, but not if recall follows duration estimates. This may also depend on the

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<sup>4</sup>We thank an anonymous reviewer for this suggestion for future research.

intensity of the emotional events, as one may imagine events that feeling rules might advocate as painful but short-lived (e.g., ripping off the band-aid) or less intense but lingering.<sup>5</sup> Future research is necessary to determine how asymmetries in the recall of experienced behaviors versus experienced emotions contribute to the ongoing “durability” of durability bias. Such an investigation would contribute to the expanded conceptualization of durability bias (what Wilson et al., 2003, called “impact bias”) as well as our understanding of how emotional “peak states” impact the evaluation of experiences.

### Managerial and Policy Implications

We argue that understanding the feeling rules acting within a population helps us to predict which events will be more or less emotionally impactful than individuals expect. In particular, rules related to experiences (e.g., remaining excited about gifts, ignoring minor problems, savoring intense positive experiences, and regretting negative ones for a long time) may be critical for shaping the relations among consumers’ affective predictions, their experiences, and recall of those experiences. How may managers use an understanding of durability bias and its antecedents in subsequently shaping marketing tactics?

This research suggests that firms may attempt to help consumers answer the question, “How much happiness will this bring me?,” by providing normative information in marketing messages. In particular, firms that sell hedonic experiences (e.g., travel or vacation destinations, athletic franchises, restaurants, movie industries) or products with a strong hedonic appeal (e.g., sports cars, cosmetics, jewelry) should invest in marketing messages that increase consumers’ pre-purchase beliefs in the normative impact of their experience or product on experienced emotions. Perhaps the best examples of this sort of normative advertising are the ongoing strategies adopted by Disney and De Beers, which paint a rosy picture of the vacation or gift-giving experience, respectively. A more tongue-in-cheek version of this strategy is Celebrity Cruises’s ad campaign depicting a couple who are depressed about real life after the cruise (“I used to be a king . . .,” sighs the man in the ad), suggesting that the entire cruise is so flawlessly happy that it makes real life seem unbearable in comparison. In a like vein, sports franchises could promote the “legacy” aspect of attending a game by showing a normative portrayal of fan culture where fans talk about their experience for years to come, perhaps in the manner of old WWI recruiting posters that showed a future vision of children asking their fathers, “Daddy, what did *you* do in the Great War?” However, the interaction effect observed in Study 4 suggests that this sort

of campaign may be most effective with consumers who have some sort of prior experience.

From a policy perspective, durability bias may impact consumers’ important health decisions—specifically the decision to engage in preventative exams and health monitoring. These preventative health behaviors represent an important arena of consumption behavior (see Block & Keller, 1995; Keller, Lipkus, & Rimer, 2003). Consumers may forego regular detection-oriented exams (e.g., mammograms, colorectal exams) because they overestimate how badly they would feel during the procedure and how badly they would feel if they received bad news in the form of a positive or false-positive test result (Luce & Kahn, 1999). Although it seems irrational to be swayed by this potential for negative feeling when early detection can materially improve a patient’s chances of recovery, Keller et al. (1993) showed that affective states do impact women’s intentions to sign up for mammograms. This research suggests that one tactic for health messages designed to increase the annual use of mammogram testing would be to create counter-norms for posttest emotions—in this case arguing for the *celebration* of the good news of a negative test result (e.g., suggesting to women that their loved ones should take them out for a post-mammogram celebration dinner each year). Because many norm-based marketing campaigns may target consequential public policy practices (e.g., the prevention of smoking among teens), the distinction between the efficacy of such campaigns for experiencers versus non-experiencers should be further investigated in future research.

Finally, there is another smaller but material ramification of this work that may assist in the growing body of work on emotion within consumer behavior. Many emotion research protocols require participants to recall experiences after a significant delay. In such situations, it is important for researchers to note how retrospective recall of experienced emotion may be tied to normative expectations of how “one should have felt” and that this tendency to be rule-congruent increases as time passes after the event. Thus, what may appear to be discrepancies in participants’ reports of experienced affect from one time period to the next may be natural shifts induced by existing situational feeling rules.

In conclusion, this research shows that emotional predictions are strongly impacted by normative beliefs about what one should feel in a given situation. Inaccuracy in affective forecasting can lead to poor consumer decisions, as when consumers pay premiums for attributes with affective impact they cannot easily predict (like a home buyer considering the impact of extra square footage or a nice view). In addition, this work suggests that consumers may remember less about their true affective experiences in different norm-incongruent consumption experiences—from attending a surprisingly boring sports event to experiencing bad customer service at a five-star resort—and remember feeling durations congruent with dominant norms. Ultimately, then,

<sup>5</sup>We thank an anonymous reviewer for this insight into the interaction of impact and duration.

one way to change consumers' anticipation and recall of emotionally laden experiences may be to change the feeling rule for the situation through messages that communicate counter-norms or alternative feeling rules.

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### REFERENCES

- Baron, J. (1992). The effect of normative beliefs on anticipated emotions. *Journal of Personality and Social Psychology*, *63*, 320–330.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Bearden, W. O., & Teel, J. E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, *20*, 21–28.
- Block, L. G., & Keller, P. A. (1995). When to accentuate the negative: The effects of perceived efficacy and message framing on intentions to perform a health-related behavior. *Journal of Marketing Research*, *32*, 192–203.
- Bolton, R. N., & Drew, J. H. (1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, *17*, 375–384.
- Chapman, G. B., & Johnson, E. J. (2002). Incorporating the irrelevant: Anchors in judgments of belief and value. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 120–138). Cambridge, England: Cambridge University Press.
- Christianson, S. A. (1992). Emotional stress and eyewitness memory: A critical review. *Psychological Bulletin*, *112*, 284–309.
- Christianson, S. A., & Loftus, E. F. (1987). Memory for traumatic events. *Applied Cognitive Psychology*, *1*, 225–239.
- Cohen, J. B., & Andrade, E. B. (2004). Affective intuition and task-contingent affect regulation. *Journal of Consumer Research*, *31*, 358–367.
- Crano, W. D., & Hannula-Bral, K. A. (1994). Context/Categorization Model of Social Influence: Minority and majority influence in the formation of a novel response norm. *Journal of Experimental Social Psychology*, *30*, 247–276.
- Dubé, L., & Morgan, M. S. (1996). Trend effects and gender differences in retrospective judgments of consumption emotions. *Journal of Consumer Research*, *23*, 156–162.
- Eid, M., & Diener, E. (2001). Rules for experiencing emotions in different cultures: Inter- and intranational differences. *Journal of Personality and Social Psychology*, *81*, 869–885.
- Epley, N., & Gilovich, T. (1999). Just going along: Nonconscious priming and conformity to social pressure. *Journal of Experimental Social Psychology*, *35*, 578–589.
- Feldman, J., & Lynch, J. G. (1988). Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior. *Journal of Applied Psychology*, *73*, 421–435.
- Fredrickson, B. (2000). Extracting meaning from past affective experiences: The importance of peaks, ends, and specific emotions. *Cognition & Emotion*, *14*, 577–606.
- Fournier, S., & Mick, D. (1999). Rediscovering satisfaction. *Journal of Marketing*, *63*, 5–24.
- Gilbert, D. T., Lieberman, M., Morewedge, C. K., & Wilson T. D. (2004). The peculiar longevity of things not so bad. *Psychological Science*, *15*, 14–19.
- Gilbert, D. T., Pinel, E. C., Wilson, T. D., Blumberg, S. J., & Wheatley, T. P. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, *75*, 617–638.
- Haberstroh, S., Oyserman, D., Schwarz, N., Kuhn, U., & Li-Jun, J. (2002). Is the interdependent self more sensitive to question context than the independent self? Self-construal and the observation of conversational norms. *Journal of Experimental Social Psychology*, *38*, 323–329.
- Havlena, W. J., & Holbrook, M. B. (1986). The varieties of consumption experience: Comparing two typologies of emotion in consumer behavior. *Journal of Consumer Research*, *13*, 394–404.
- Hoch, S. J. (2002). Product experience is seductive. *Journal of Consumer Research*, *29*, 448–454.
- Hochschild, A. R. (1983). *The managed heart: The commercialization of human feeling*. Berkeley: University of California Press.
- Hsee, C. K., & Abelson, R. P. (1991). Velocity relation: Satisfaction as a function of the first derivative of outcome over time. *Journal of Personality and Social Psychology*, *60*, 341–347.
- Johansson, M., Mecklinger, A., & Treese, A. (2004). Recognition memory for emotional and neutral faces: An event-related potential study. *Journal of Cognitive Neuroscience*, *16*, 1840–1853.
- Kahneman, D., & Snell, J. (1990). Predicting utility. In R. M. Hogarth (Ed.), *Insights in decision making: A tribute to Hillel J. Einhorn* (pp. 295–310). Chicago, IL: University of Chicago Press.
- Keller, P. A., Lipkus, I. M., & Rimer, B. K. (2003). Affect, framing, and persuasion. *Journal of Marketing Research*, *60*, 54–64.
- Kent, G. (1985). Memory of dental pain. *Pain*, *21*, 187–194.
- Levine, L. J., & Safer, M. A. (2002). Sources of bias in memory for emotions. *Psychological Science*, *11*, 169–173.
- Luce, M. F., Bettman, J. R., & Payne, J. W. (2001). *Emotional decisions: Trade-off difficulty and coping in consumer choice*. Chicago, IL: The University of Chicago Press.
- Luce, M. F., & Kahn, B. F. (1999). Avoidance or vigilance? The psychology of false-positive test results. *Journal of Consumer Research*, *26*, 242–259.
- Lynch, J. G., Marmorstein, H., & Weigold, M. F. (1988). Choices from sets including remembered brands: Use of recalled attributes and prior overall evaluations. *Journal of Consumer Research*, *15*, 169–184.
- Metcalf, J., & Mischel, W. (1999). A hot/cool system analysis of the delay of gratification: Dynamics of will-power. *Psychological Review*, *106*, 3–19.
- Mischel, W., Ozlem, A., & Mendoza-Denton, R. (2004). *Sustaining delay of gratification over time: A hot/cool systems perspective*. New York: Columbia University Press.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, *20*, 418–430.
- Oliver, R. L., & DeSarbo, W. S. (1988). Response determinants in satisfaction judgments. *Journal of Consumer Research*, *14*, 495–507.
- Pham, M. T. (1996). Cue representations and selection effects of arousal on persuasion. *Journal of Consumer Research*, *22*, 373–387.
- Pham, M. T. (1998). Representativeness, relevance, and the use of feelings in decision making. *Journal of Consumer Research*, *25*, 144–159.
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, *128*, 934–960.
- Sanna, L. J., & Schwarz, N. (2004). Integrating temporal biases: The interplay of focal thoughts and accessibility experiences. *Psychological Science*, *15*, 474–481.
- Schachter, S., & Singer, J. E. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review*, *69*, 379–399.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The informative function of affective states. In K. Fiedler & J. P. Forgas (Eds.), *Affect, cognition, and social behavior* (pp. 44–62). Toronto: Hogrefe.
- Sophocles. (2004). *Electra* (J. M. Walton & M. Macdonald, Trans.). London: Nick Hern.

Tice, D., Bratslavsky, E., & Baumeister, R. F. (2001). Emotional distress regulation takes precedence over impulse control: If you feel bad, do it! *Journal of Personality and Social Psychology, 80*, 53–67.

Wilson, T. D., & Gilbert, D. T. (2003). Affective forecasting. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35, pp. 345–411). New York: Elsevier.

Wilson, T. D., Gilbert, D. T., & Centerbar, D. B. (2003). Making sense: The causes of emotional evanescence. In I. Brocas & J. D. Carillo (Eds.), *The psychology of economic decisions. Volume 1: Rationality and well-being* (pp. 209–233). New York: Oxford University Press.

Wilson, T. D., Wheatley, T. P., Meyers, J. M., Gilbert, D. T., & Axsom, D. (2000). Focalism: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology, 78*, 821–836.

Wood, S. L. & Moreau, C. P. (2006). From fear to loathing? How emotion influences the evaluation and early use of innovations. *Journal of Marketing, 70*, 44–57.

APPENDIX: PRIME MANIPULATION

In any survey of feelings, it is best to have survey respondents in a similar neutral state prior to filling out the survey. Thus, we need you to complete this first page of simple word puzzles immediately before you fill out the survey on

the next page. Thank you for your participation in this research!

Sentence Scramble Task:

*Below are lists of five words. Use at least four of the words to make a correct sentence.*

**Example:**

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	IS TAXI VERY SHE NICE__	Answer: She is very nice.___
1.	YELLOW HOT BIRD THE IS	[YELLOW COOL BIRD THE IS]
2.	THE WAS EXCITED FUN PLAY	[TO WANT WE RELAX QUIET]
3.	WHERE PENCILS DOG MY IS	[WHERE PENCILS DOG MY IS]
4.	GREEN THE WEAR BOOK HAT	[GREEN THE WEAR BOOK HAT]
5.	RUDE SEA THE WAS TURBULENT	[SHARE LAKE THE WAS CALM]
6.	COATS APPLE PAINTED ONE HE	[COATS APPLE PAINTED ONE HE]
7.	PASSIONATE IDEAS SOON WANT WE	[PERSPECTIVE KEEP IN IT NOW]
8.	SPEAKER OUR SWAM FRIEND TODAY	[SPEAKER OUR SWAM FRIEND TODAY]

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