Tempted or Not? The Effect of Recent Purchase History on Responses to Affective Advertising

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Three experiments investigate the emotions that arise from buying or not buying at an unintended purchase opportunity and how they color evaluations of affective advertising appeals that are viewed subsequently. We demonstrate that buying can cause happiness tempered with guilt, while not buying causes pride. Consistent with the felt affect, respondents who had bought at time 1 subsequently prefer happiness appeals to pride appeals, while those who had refrained prefer pride appeals. Drawing attention to the initial purchase decision and varying the affect by manipulating the discount both moderate this effect. These results contribute to the literatures on self-regulation, emotions, and persuasion.

Consumers are constantly being exposed to marketing stimuli and go from moment to moment making strings of decisions. There is therefore a distinct possibility that a seemingly irrelevant prior decision may exert a continuing influence. Yet, much of consumer research analyzes each decision independent of preceding decisions. It has recently been demonstrated that emotions such as sadness and disgust induced by irrelevant episodes may carry over and affect financial decisions (Lerner, Small, and Loewenstein 2004). This research investigates one such case of intertemporal affective dynamics, where a decision at one point gives rise to specific emotions that then drive subsequent judgments. Specifically, we study the emotions that arise from choosing to buy or not buy at an occasion where one had not intended to buy. We focus on how these emotions then influence responses to affective appeals that are viewed subsequently.

We examine situations of unintended purchase because these occur frequently but have received scant research attention. As Stern (1962) suggests, often a need is activated only on exposure to a product. Research suggests that a substantial proportion of purchases may be in categories that consumers had not intended to buy. For instance, Bellenger, Robertson, and Hirschman (1978) found that up to 62% of purchases at a department store were for products not on the shopping list that the consumer entered the store with, and Heilman, Nakamoto, and Rao (2002) found that the mere presence of a promotion can prompt purchases in categories that consumers had not even had in mind. After consumers have had to decide to buy or not buy a chanced-upon item, they may often be exposed to advertising or promotional materials for completely unrelated products. This scenario is extremely likely in today's marketing environment and may occur in a store, online, while viewing catalogs, or simply when walking in a mall. Our question concerns the consumer's reactions to advertisements viewed subsequently for products that may be unrelated to the initial unintended purchase decision.

The results described in this article contribute to three streams of research. First, they add to the small but growing body of research on the interdependence of behaviors and judgments over time. Here, endogenous to a sequence of consumption occasions, the affect experienced on buying or not buying at time T1 moderates the evaluation of advertising seen at time T2. Our demonstrations of the specific and differentiated nature of the observed positive emotions,

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and the corresponding congruence effects over time, also contribute to the emerging literature on discrete emotions. Moreover, the specific emotions observed are the first experimental confirmation of those reported in Gardner and Rook's (1988) interviews. The following section develops the theoretical bases for predicting differentiated emotional responses to decisions made at unintended purchase opportunities and the possible consequent effects over time.

THEORETICAL FRAMEWORK

Several researchers have discussed various aspects of the interaction between affect and self-regulation (Carver and Scheier 1990; Fishbach, Shah, and Kruglanski 2004; Gardner and Rook 1988; Shiv and Fedorikhin 1999). Giner-Sorolla (2001) demonstrated that delayed-cost and delayed-benefit dilemmas correlated differentially with self-reports of various types of affect (studies 1 and 2) and that priming such affect led to differential amounts of snack food consumption (study 3). However, there remains relatively little experimental evidence of how various self-regulation-related situations may systematically generate different emotions or how these emotions may influence judgments in subsequent seemingly unrelated situations. The following analysis first develops hypotheses about the emotions felt upon buying or not buying at an unintended purchase opportunity and then discusses how these emotions may influence evaluations of advertisements encountered subsequently.

Affect Felt at Time 1

Goal Conflict and Mixed Emotions. Stern's (1962) taxonomy of impulse purchases refers to "suggestion impulse buying" or the fact that merely viewing a product may activate a need for it. This need is necessarily accompanied by the requirement to spend money where one had not planned to. Such temptations therefore challenge the overall goal of wealth maintenance, that is, not spending money unnecessarily (Wärneryd 1999). Fishbach, Friedman, and Kruglanski (2003) show that exposure to a temptation to violate a given goal (e.g., an attractive price) may automatically activate the goal itself (e.g., the goal of not spending money unnecessarily). We therefore propose that an unintended purchase opportunity may simultaneously trigger both—the goal of not spending and the goal served by acquiring and using the product.[1] These goals will be in conflict if they are activated beyond a threshold, which may then cause complex affective responses, since either decision, to buy or not buy, involves the protection or furthering of one goal at the cost of the other. Progress toward a goal can generate positive affect, while lack of progress toward or giving up on a goal can generate negative affect (Carver and Scheier 1990). As Carver and Scheier (1998) speculate, mixed emotions may therefore arise from situations involving trading off multiple goals. Therefore, specific to unintended purchase, both buying and not buying should generate positive affect from one source (acquisition or not spending) but also negative affect from the other source.

Goal-Based Appraisals and Specific Emotions. What specific types of emotions are likely to result from this decision to buy or not buy? A key proposition in the area of research on goal-based appraisals is that specific emotions are caused by distinct cognitive appraisals (Ellsworth and Smith 1988; Ortony, Clore, and Collins 1988), which are related to the specific "emotivational" goals and action tendencies involved (Roseman, Wiest, and Swartz 1994; see also Lerner and Keltner 2000). For example, Roseman (1991) proposes a taxonomy of discrete emotions based on various combinations of five outcome appraisals: motivational state, situational state, probability, legitimacy, and causal agency. Different emotions are predicted to derive from specific combinations of these appraisals. For instance, "pride" is reported for punishment-absent outcomes that are self-caused, where one deserves a positive outcome. Similarly, "joy" is reported in the presence of a certain reward where one deserves a positive outcome.

The idea that different goal-directed appraisals may be related to differentiated emotions provides a theoretical basis for survey findings where respondents report mixed feelings subsequent to an impulse purchase. For instance, Gardner and Rook (1993) found that happiness ("pleasure and excitement") was frequently reported after an impulse purchase, but this positive affect was equally tinged with guilt. This may be explained in the appraisal terms described above, as happiness derives from the presence of a certain reward (the purchased item), while guilt conversely derives from deserved punishment caused by actions taken by the self (the unplanned spending). This indicates that both buying and not buying at an unintended purchase opportunity should evoke specific combinations of positive and negative emotions. Specifically, we hypothesize that affective consequences of buying are likely to be happiness at having acquired something inherently pleasurable and guilt for having spent money unplanned, while consequences of not buying are likely to be pride at protecting the goal of not spending along with regret at passing up a tempting object (Carmon and Ariely 2000).

However, not all unintended purchase opportunities are the same. There may be situations where consumers experience multiple positive emotions. For example, buying at an extremely attractive purchase opportunity, such as when a tempting product is offered at a large discount, may engender both happiness from acquisition and pride at saving money. In this case the consumer who buys the product may feel that both goals—acquisition and savings—are furthered. Consequently, both affective states are likely to result.

[1] A pilot study not reported here supports this claim. Given a purchase opportunity, respondents not having preexisting purchase intentions (i.e., unintended purchase) reported that they thought equally about the product as well as the money they would have to spend when making the purchase decision (M's = 4.89 vs. 4.82 on seven-point scales anchored at "not at all"–"a lot"; $F < 1$), while those with prior intent focused on the products to be acquired rather than the money to be spent (M's = 5.41 vs. 4.32; $F(1, 131) = 26.24$, $p < .0001$).

Responses to Advertising Viewed Subsequently

How might these emotions influence responses to an advertisement viewed subsequently? A simple mood congruence prediction would say that those experiencing positive affect prefer appeals featuring positive affect, while those experiencing negative affect prefer negative affective appeals. This is not informative in this situation because all respondents may be experiencing both positive and negative affect. This prediction also does not distinguish between the specific emotions being felt or between different types of positive or negative affective appeals. The feelings-as-information framework provides a relevant basis for deriving hypotheses in this regard.

A vast literature has established that affective responses to targets are often used as sources of information in evaluations of the target (Schwarz and Clore 1983, 1996). Under this view, consumers in a good mood may misattribute the source of their feelings to a target advertisement and evaluate the ad favorably (Pham 1998). This reasoning may be extended from generalized moods to specific emotions. When consumers are faced with advertising that features happiness or pride appeals, they are likely to use their feelings as input to their ad judgment. However, they are unlikely to spontaneously reflect on the source of these emotions (i.e., the previous purchase decision). Hence, they are likely to misattribute their emotions to the advertising appeal and to evaluate the ad more favorably when the ad is a likely source of their felt emotion. When the ad features a pride appeal and consumers are feeling proud as a result of not giving in to a tempting purchase, they are likely to attribute their feelings of pride to the ad and to rate the ad favorably. A feeling of pride cannot be easily attributed to a happiness appeal; hence, the positive felt emotion is unlikely to carry over to ad evaluations in this case. An analogous argument can be made in the case of consumers who buy at an unintended purchase opportunity and are feeling happy at the time of exposure to an ad appeal. Hence, we predict that happiness appeals should be preferred over pride appeals by those who had previously bought, while pride appeals should be preferred to happiness appeals by those who had not previously bought. However, if the purchase was made under a heavy discount, we predicted that consumers are likely to feel happy as well as proud. In this case, the above reasoning suggests that both happiness as well as pride appeals will be favorably evaluated. These are our key propositions.

These predictions are supported by Lee and Aaker's (2004) demonstration that perceptual fluency may cause messages congruent with regulatory states to be processed more effectively. Our premise is also consistent with research showing that the value of "feeling right" from regulatory fit transfers onto the persuasiveness of messages (Cesario, Grant, and Higgins 2004). However, Cesario et al. (2004) studied messages framed in terms of eagerness or vigilance, which are conceptually different from the affect-related focus of the current study.

In the following sections, we first describe a study that investigates the emotions that arise from either buying or not buying at an unintended purchase opportunity. We then describe two experiments that test the basic hypothesis in different ways and test important boundary conditions. Study 2 shows that the pattern of ad evaluations differs across regular and heavy discount conditions in a manner consistent with the affect felt at time 1. Study 3 then provides support for the proposed affect misattribution mechanism by demonstrating that the effect can be eliminated if attention is drawn to the source of the felt emotion—the initial purchase decision. To avoid demand effects, the consumption opportunities at time 1 and time 2 are not only intrinsically different (scenario vs. advertisement) but also feature different product categories (books and software). Note that endogenous to the consumption sequence, the integral affect contingent on the decision at time 1 would act as incidental affect at time 2.

STUDY 1—AFFECT FELT ON BUYING OR NOT BUYING

The aim of the first study was to investigate the emotional responses to buying or not buying at an unintended purchase opportunity. We expected that those who had bought would feel guilty for having spent money but happy at having acquired something, while those who had not bought would feel proud of their restraint but also regretful at the missed opportunity.

Method

Three hundred twenty-four students at a large Northeastern university were presented a scenario in which they were strolling through a mall waiting for a friend and came upon an attractive sale on software products that they had not really intended to buy. In order to disguise the task, allow for heterogeneity in preferences, and guard against the lone alternative bias, the temptation was presented as a choice between two equally attractive offers (see Dhar 1997). These offers had been pretested to be equally attractive, and the prices and deal amounts ($45.00 discounted to $19.95) had been equated as well as calibrated such that approximately half the sample would choose to buy one of the two offers while the other half would not buy either offer. Given these offers, respondents indicated whether they would buy either one or not buy at all. They were then presented with an alphabetized 25-item affect scale, based largely on Richins (1997) with relevant items added from Izard (1977) and Simonson (1992). These items consisted of affective terms such as "happy," "proud," "guilty," and "remorseful." Respondents indicated the extent to which each item reflected how they felt when they thought of having spent or not spent money at the sale. All responses were on a four-point scale anchored at 1 = not at all, 2 = a little, 3 = moderately, and 4 = strongly.

Results and Discussion

The 25-item scale used to measure affect was factor analyzed, and a four-factor solution explaining 63% of the variance was obtained. The extracted factors mapped onto the predicted constructs—guilt (eigenvalue 7.51), happiness (5.28), pride (1.80), and remorse (1.08). Fifty-four percent of respondents chose to buy at the unintended purchase opportunity. In order to investigate the predicted different affective responses to buying versus not buying, a 2 × 4 mixed ANOVA was run, with purchase decision (buy vs. not buy) as the between-subjects factor and affect (guilty vs. happy vs. proud vs. remorseful) as the within-subjects factor. Scores on each affective dimension were calculated by averaging all items that loaded higher than .5 on only that factor.[2] The between-subjects factor was significant such that not buying caused less affect overall than buying (M's = 1.45 vs. 1.64, $F(1, 323) = 20.38$, $p < .0001$), and this was qualified by a significant interaction ($F(1, 323) = 45.37$, $p < .0001$; see fig. 1). Follow-up contrasts indicated that respondents were likely to feel more guilt if they had bought than not bought (M's = 1.57 vs. 1.28, $F(1, 323) = 19.08$, $p < .0001$) and also more happiness (M's = 2.20 vs. 1.66, $F(1, 323) = 56.74$, $p < .0001$), less pride (M's = 1.56 vs. 1.73, $F(1, 323) = 4.40$, $p < .05$), and, contrary to predictions, more remorse (M's = 1.21 vs. 1.12, $F(1, 323) = 4.44$, $p < .05$). Additional analyses conducted using factor scores from the factor analysis replicated these results.

These results support the hypothesis that both buying and not buying at an unintended purchase opportunity give rise to specific combinations of emotions. Specifically, buying seems to give rise to happiness tempered with guilt and a little remorse, while not buying causes pride. A follow-up study, not reported here for reasons of brevity, investigated whether the same pattern of results would be obtained if product-focused affect ("the product that you acquired or did not acquire") were solicited rather than spending-focused affect ("the fact that you spent or did not spend money"). It is possible that respondents who did not buy might report more regret when asked to focus on the product as opposed to the spending. The nature of the product was also manipulated, since different types of products may induce different reactions. We found that the results replicated those of study 1. The same affective factors were observed, and focusing respondents on the product as opposed to the spending did not create a noticeable difference in the patterns of reported emotions.[3] Studies 2 and 3 investigate the conditions under which these emotions have an influence on advertising that is encountered subsequently.

[2]The items used were guilt (blameworthy, guilty, upset with myself); happiness (eager, enthusiastic, excited, fulfilled, happy, joyful, thrilled); pride (proud, relieved, satisfied); remorse (remorseful, sad, miserable).

[3]Similar patterns were observed when the time 1 decision was manipulated by random assignment (cf. Arkes, Kung, and Hutzel 2002) rather than measured.

FIGURE 1

STUDY 1 RESULTS

STUDY 2—THE EFFECT OF A PRIOR PURCHASE DECISION ON SUBSEQUENT AD EVALUATIONS

Study 1 demonstrated how responses to unintended purchase opportunities can have complex affective consequences such as happiness and pride. This experiment tests our hypotheses that happiness appeals will be evaluated more favorably if one has previously bought, while pride appeals will be preferred if one has not bought. If the offer is extremely attractive—for example, available at a large discount—those who buy will feel proud as well as happy because they furthered their goals of controlled spending as well as acquisition. Hence, both types of appeals should be effective here. Neither the pride nor the happiness appeals should be as effective in the case of those who do not buy at a large discount.

Method

Participants and Procedure. Two hundred thirty-seven students were recruited at a large Northeastern university, namely, Columbia University; this was relevant to the stimulus design. On arrival at the laboratory, they were randomly assigned to experimental conditions and presented with a packet containing stimuli for several unrelated studies, including this study. The materials for this study were at the top of the packet. The experiment was presented in two parts, with the time 1 decision being presented as a "Decision-Making Study," followed by a separate and apparently unrelated "Advertisement Appraisal Study." Participants worked through the packet at their own pace and upon completion were paid, thanked, and debriefed.

Stimuli and Design. This experiment was in the form of a 2 (level of T1 discount: regular vs. heavy) × 2 (T1 decision: buy vs. not buy) × 2 (advertising appeal: pride vs. happiness) between-subjects design. All respondents were presented with an unintended purchase scenario similar to that used in study 1, except that the chanced-upon sale

was for books and not software. In the regular discount condition, the list price of the books was $55.00 discounted to $29.95. The products and price points had been pretested to be reasonably attractive, yet not overly so, and within the discretionary spending budget of the subject population so as to maximize goal conflict. The reduced price in the heavy discount condition was $19.95. Given this scenario, respondents indicated a decision to buy or not as well as their propensity to buy on a 100-point scale.

All participants then moved on to the ostensibly unrelated ad appraisal study, introduced as a pretest for an advertisement that the campus bookstore was planning to run in the university newspaper. This ad featured a sale on a set of software products, all pretested to be equally attractive to this population. The ad in all conditions featured the same photograph of smiling students, the same body copy with brief product descriptions, and the same message stating, "As a special summer offer, Columbia University teams up with leading software providers to offer you any of the top games or personal hobby software of the year 2003." The nature of the appeal was manipulated by altering the headline, caption, and tag line, as follows. The pride appeal featured the headline "The Pride of a Columbia Lion" and the caption "Acing the last exam. Winning the big race. Receiving deserved recognition. Proud to be a Columbia Lion." (adapted from Aaker and Williams 1998). The tag line read "Be Proud." The headline for the happiness appeal was "Happy to be at Columbia!" The caption was identical except for exclamation marks instead of periods in the punctuation. The tag line read "Be Happy!" The ad appeal in all conditions was designed to be relevant to the advertised products without cuing the T1 decision in any explicit way. After viewing the ad, participants responded to an overall ad attractiveness measure, a five-item A_{ad} scale (Aaker and Williams 1998), and a purchase intention measure, all on 13-point scales, and, finally, the same 25-item affect scale as in study 1.

Results

Ad Attractiveness at T2. A 2 (discount at T1) × 2 (decision at T1) × 2 (appeal) between-subjects ANOVA on the ad attractiveness measure found a significant main effect for decision at T1 ($F(1, 229) = 5.85$, $p < .05$) qualified by two significant two-way interactions, between decision at T1 and appeal ($F(1, 229) = 6.48$, $p < .05$) and between decision at T1 and discount ($F(1, 229) = 6.51$, $p < .05$), and a significant three-way interaction ($F(1, 229) = 8.19$, $p < .005$; see fig. 2, top panels). Planned contrasts were run, comparing across T1 decision within the two types of appeal and within the two levels of discount. As predicted, respondents who saw a regular discount at T1 found the happiness appeal at T2 more attractive if they had bought (vs. not bought) at T1 (M's = 6.71 vs. 4.50, $F(1, 229) = 7.39$, $p < .01$). Conversely, they found the pride appeal more attractive if they had not bought (vs. bought) at T1 (M's = 5.97 vs. 3.65, $F(1, 229) = 7.21$, $p < .01$). Results in the heavy discount at T1 condition revealed the expected reversal among those exposed to the pride ads, such that those who had bought at T1 found the pride appeal significantly more attractive at T2 compared to those who had not bought at T1 (M's = 5.79 vs. 3.57, $F(1, 229) = 6.72$, $p < .01$). Those who had bought under high discount also found the happiness appeal more attractive than those who had not bought at T1 (M's = 5.59 vs. 3.63, $F(1, 229) = 5.68$, $p < .05$). Similar patterns, not reported here for reasons of brevity, were observed on the A_{ad} ($\alpha = .97$) as well as purchase intent ($\alpha = .92$) measures.

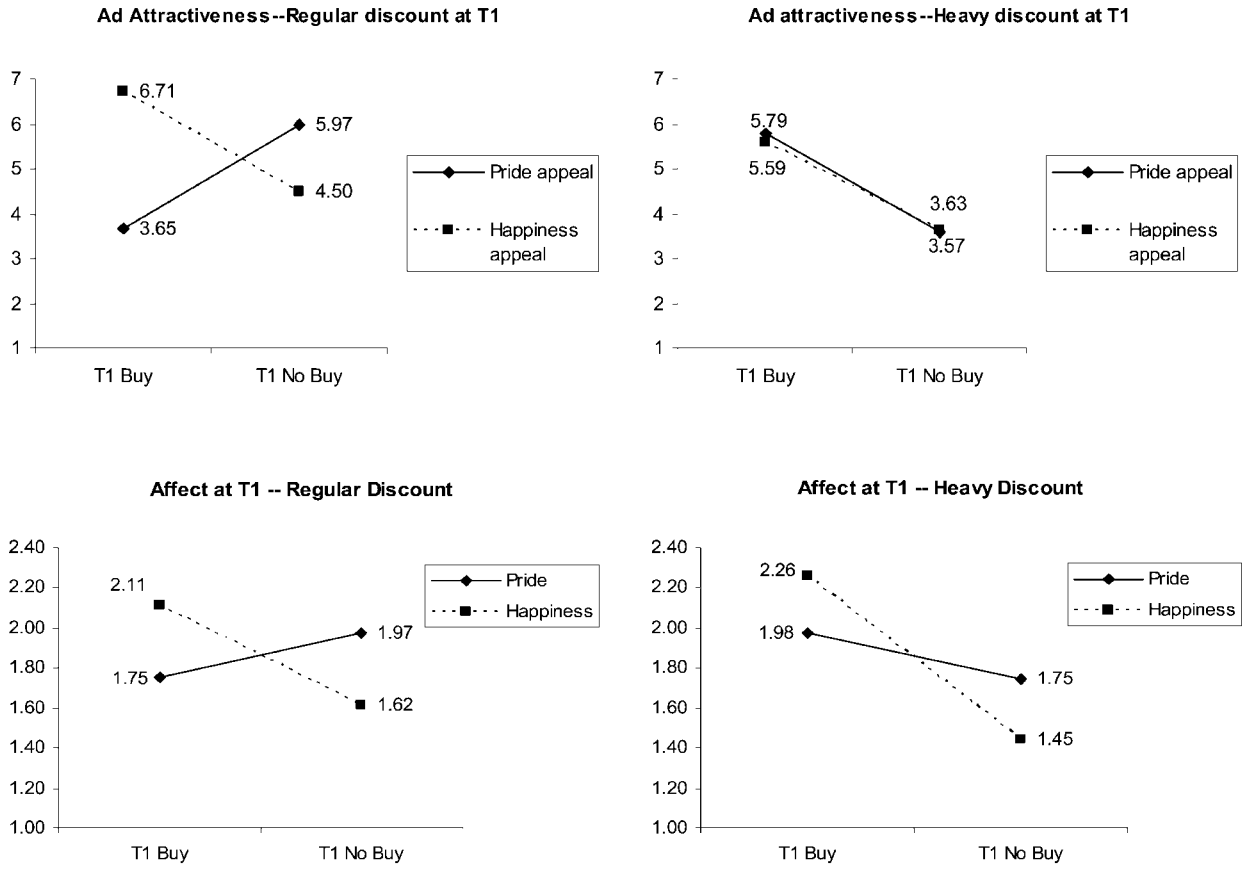
Affect Felt at T1. Responses to the 25-item affect scale were factor analyzed, and a four-factor solution explained 62% of the total variance. While the factors obtained in study 1 were happiness, guilt, remorse, and pride, here guilt and remorse appeared collapsed into one factor, and anger stood out as a separate factor. The emergence of this new factor provides preliminary indication that the introduction of the heavy discount might have influenced affective responses to buying or not buying at T1. Happiness, pride, remorse/guilt, and anger scores were computed by averaging items that loaded uniquely and heavily onto each individual factor. The four affect scores were then entered into a 2 × 2 × 4 mixed design, with discount at T1 and decision at T1 as the between-subjects factors, and the four types of affect as the repeated measure. Results showed a significant main effect for decision at T1, such that those who bought reported more intense affect than those who did not buy (M's = 1.66 vs. 1.41, $F(1, 233) = 26.04$, $p < .0001$). This was qualified by interactions with overall reported affect ($F(1, 233) = 14.05$, $p < .0001$), discount at T1 ($F(1, 233) = 3.81$, $p < .06$), and a three-way interaction ($F(1, 233) = 6.26$, $p < .05$; see fig. 2, bottom panels). Planned contrasts revealed that under a regular discount, buying caused significantly more happiness than did not buying (M's = 2.11 vs. 1.62, $F(1, 233) = 16.98$, $p < .0001$), while not buying caused somewhat more pride than did buying (M's = 1.97 vs. 1.75, $F(1, 233) = 3.14$, $p < .08$). These results are identical to those obtained in study 1. However, a different pattern emerges under a heavy discount. Here, while buying is still seen to cause more happiness than not buying (M's = 2.26 vs. 1.44, $F(1, 233) = 46.31$, $p < .0001$), it also causes marginally more pride than not buying (M's = 1.98 vs. 1.75, $F(1, 233) = 3.42$, $p < .07$). Hence, the presence of a heavy discount alters the pattern of affective responses and differentially influences the evaluations of advertising appeals viewed at time 2.

Discussion

The pattern of results on affect reported after a T1 purchase decision was almost identical to the results on the T2 ad attractiveness, attitude, and purchase intent measures. We suggest that consumers who buy are happy; if they are then exposed to an ad featuring a happy appeal, they attribute their happiness to the happy ad and hence evaluate it more

FIGURE 2

STUDY 2 RESULTS



favorably than consumers who do not buy and are not feeling happy. Respondents who choose not to buy at a regular discount feel a certain amount of pride; they attribute their pride to the pride ad appeal and hence evaluate it more favorably than those who do not buy. It is noteworthy that respondents feeling proud (happy) do not respond favorably to happiness (pride) appeals; we argue that this is because the attribution of their emotional state to the ad is not an easy one to make in these situations. These results argue against simple valence-based mood congruence predictions and are consistent with the proposed affect misattribution mechanism.

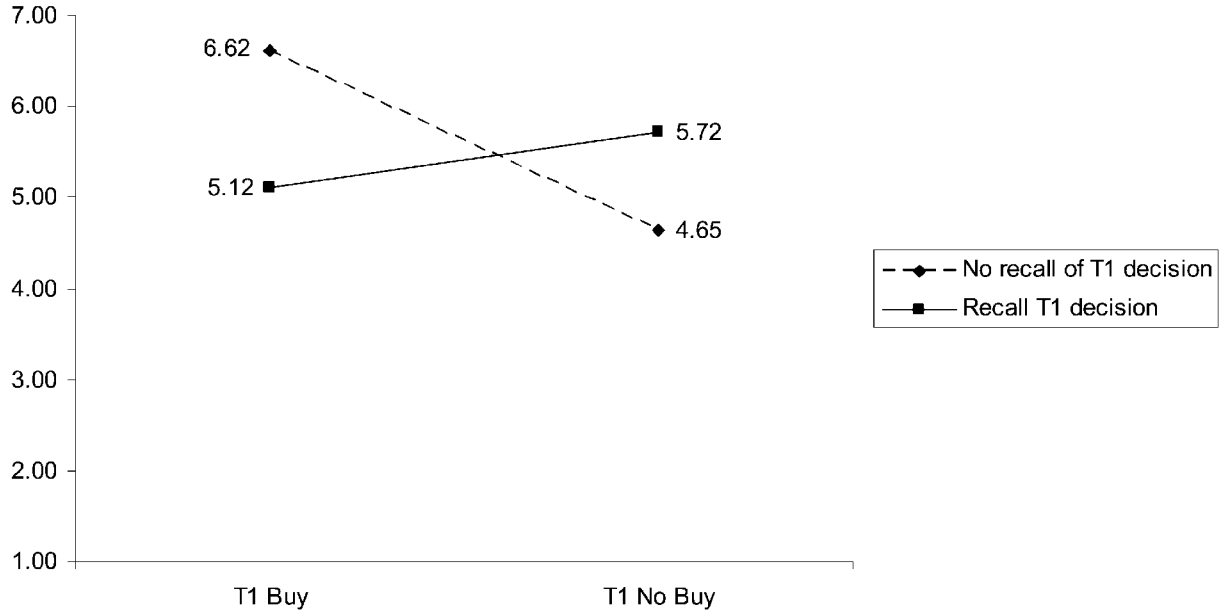
The reversal on reported pride from regular to heavy discount levels is noteworthy. Study 1 and the regular discount condition in this experiment show that not buying at an unintended purchase opportunity can cause pride. However, faced with a heavy discount, those who choose to buy report feeling both happiness and pride, while those who do not buy report less of both. Evidently a heavy discount causes some consumers to seize the deal, generating happiness from the acquisition as well as pride, presumably from the large amount of money saved. Other consumers, who may not have been as favorably disposed toward the product, pass on the sale with much less emotion. The lower amount of pride reported at not buying under such conditions is possibly a symptom of less conflict felt. Consistent with reported emotions, happy as well as pride appeals are evaluated more favorably under a buy decision under heavy discount compared to a no buy decision.

STUDY 3—DRAWING ATTENTION TO THE INITIAL PURCHASE DECISION

Study 2 suggests that happiness experienced on buying at T1 colors evaluations of advertising viewed at T2. Our explanation of this effect relies on the affect misattribution view that the feeling of happiness is misattributed to the ad resulting in increased ad evaluations. If this is the case, directing attention to the emotion and its source before the ad is viewed should cause a correction in the misattribution of the emotion to the ad and hence eliminate the effect (Schwarz and Clore 1983). Study 3 tested this proposition. We restricted the investigation to happy ads viewed after a heavy discount at T1 because this combination evoked the most happiness on buying, as seen in study 2.

FIGURE 3

STUDY 3 RESULTS



Method

Seventy students were recruited at Columbia University as before. The procedure mirrored that of experiment 2.

This experiment was in the form of a 2 (T1 decision: buy vs. not buy) × 2 (recall of T1 decision vs. no recall) between-subjects design. All respondents were first presented with the heavy discount scenario used in study 2, after which they indicated their decision to buy or not as well as their propensity to buy on a 100-point scale. The decision to buy was measured as before. Respondents in the no recall condition then moved on to the ad appraisal study as in study 2, featuring only the happy ad. In contrast, before being presented with the ad appraisal study, respondents in the recall condition were asked to recall the book-buying scenario that they had just gone through by writing down what their decision had been and how it had made them feel. This manipulation was intended to direct their attention to any affect that they may be experiencing, as well as its source. Then, after viewing the ad, all participants responded to the five-item A_{ad} scale used in study 2, a two-item fluency measure ("How easy was the ad to understand/process?"; Lee and Aaker 2004), and a three-item ambivalence measure ("When you saw this ad, how uncomfortable/confused/conflicted did it make you feel?"; Williams and Aaker 2002). All measures were taken on 13-point scales.

Results

Attitude to the Ad. The five items assessing A_{ad} were averaged to form a composite measure ($\alpha = .97$), which was submitted to a 2 (decision at T1) × 2 (recall) between-subjects ANOVA. Only the interaction term was significant ($F(1, 66) = 4.60$, $p < .05$). Planned contrasts revealed that in the no recall condition, those who had bought at T1 were significantly more favorable toward the happiness appeal than those who had not bought (M's = 6.62 vs. 4.65, $F(1, 66) = 5.58$, $p < .05$), thereby replicating study 2. In contrast, in the recall condition, there was no significant difference in ad evaluations regardless of whether they had chosen to buy or not (M's = 5.12 vs. 5.72, $F < 1$; see fig. 3). Calling attention to the source of the affect made respondents correctly attribute their happiness to their buying decision. Because their happiness was no longer attributed to the ad, attitudes to the ad were attenuated (M's = 6.62 vs. 5.12, $F(1, 66) = 3.43$, $p < .07$). This pattern of correction is consistent with the proposed affect misattribution mechanism.

Alternative Explanations. The two items measuring fluency were averaged to form a composite measure ($\alpha = .95$) that was submitted to a 2 (decision at T1) × 2 (recall) between-subjects ANOVA. Only the main effect of recall was significant, such that those who had been made to recall their initial decision reported greater fluency than those who had not (M's = 8.62 vs. 6.59, $F(1, 66) = 5.28$, $p < .05$). There was no main effect of decision at T1 ($F < 1$) and no interaction ($F < 1$). The finding that felt emotion as induced by prior purchase decisions did not influence ease of ad processing rules out the fluency explanation for the pattern of results.

The three items measuring ambivalence were also averaged to form a composite measure ($\alpha = .76$). A 2 (decision at T1) × 2 (recall) between-subjects ANOVA on this mea-

sure again revealed only a significant main effect of recall, in this case such that recalling the initial decision led to less reported ambivalence than not recalling the decision (M's $= 4.14$ vs. 5.82, $F(1, 66) = 6.13$, $p < .05$). Again, the lack of a time 1 decision effect ($F < 1$) and any interaction ($F < 1$) help to rule out a differential elaboration account for the results.

Taken together, these results support the proposed affect misattribution account for the influence of unintended purchases on evaluations of advertisements seen subsequently. Our results indicate that fluency and differential elaboration cannot account for the observed variations in A_{ad} across conditions. The finding that recalling the T1 decision leads to less ambivalence toward the ad suggests that recalling the decision, with its attendant goal conflict, leads respondents to attribute any felt ambivalence to the T1 decision rather than the ad at T2. Future research is needed to pursue this line of inquiry and further triangulate on the process driving the results observed here.

GENERAL DISCUSSION

The studies described above demonstrate that complex emotions can arise from decisions to either buy or not buy at an unintended purchase opportunity. These emotions can then carry over and color evaluations of advertising that is viewed subsequently. This research makes three key contributions. First, it adds to the growing body of work studying behavior across consumption events. The innovation here is that affect generated at one point in time, endogenous to the consumption sequence, influences responses to an unrelated advertisement at a later point in time. Second, the research adds to the relatively new literature on mixed emotions. Rather than combinations of generalized positive and negative affect, specific mixtures of differentiated emotions are predicted theoretically and observed empirically. We believe that this is the first experimental demonstration that unintended purchase decisions may be antecedent to specific combinations of emotions. The specific emotions caused by buying or not buying on these occasions are predicted to arise based on the view of emotions as arising from goal-based appraisals. Our research can be viewed as an empirical test of the appraisals underlying pride and happiness.

It is important to note that while the theoretical framework we use might appear similar to that developed by Giner-Sorolla (2001), there are some key differences. Conflict generated at a purchase decision is conceptually different from the guilty pleasure–grim necessity distinction, because it is not strictly true that people have an immediate goal to acquire (one that leads to short-term pleasure) and a long-term goal to save money (that leads to guilt or regret). People may plan consumption well in advance, and the goal served by acquisition and usage may also be realized independent of hedonic value either immediately or in the long term, depending on the type of product considered. In this context, we observe the same pattern of emotional responses across both virtues (long-term benefit) and vices (short-term benefit). Moreover, we believe that restraint from buying is also not necessarily due to grim necessity. The goal of not spending, with an eye toward wealth maintenance, is conceptually different from the goal of saving, as visualized in extreme cases as belt-tightened survival. For instance, restraining overexpenditure, thereby putting money in a bank account, can by itself generate intrinsic motivation and provide pleasure (Wärneryd 1999, 266). Giner-Sorolla (2001, experiment 3) demonstrates interesting effects of existing affect on subsequent behavior, and it would be a natural extension of that research to investigate analogous effects of mixed emotions. However, the effect of the interaction of specific negative and positive emotions is beyond the scope of this article.

Our third main contribution is that we add to the feelings-as-information literature by demonstrating that specific emotions (as opposed to generalized moods) may be used as input when evaluating a target object, as long as the felt emotion is easy to attribute to the target. Feelings of pride, for example, can be attributed to an ad that features pride in being a member of the respondent group (i.e., student at the university). This results in enhanced evaluations of the advertisement. Feelings of happiness, however, are not easy to attribute to an ad that features a pride appeal; hence, ad evaluations are not affected by felt emotion even though the emotion is positively valenced.

Some important caveats apply to the results described above. Studies 2 and 3 provided a first look into how the emotions generated at an unintended purchase opportunity may influence subsequent judgments. The time 1 decision, which generates the mixed emotions, was in both cases operationalized as a scenario with the time 2 opportunity operationalized as an ad response. Our results were obtained using this specific setup, and hence we do not make any claims about generalizability. Second, specific emotional appeals were chosen to test the theory because they were relevant to the affect generated at T1 and also to control for valence. Clearly, these do not represent the universe of affective appeals. As mentioned above, it would be interesting to look at other emotions, such as guilt and remorse as observed in study 1, and combinations of emotions in specificity as well as valence. A third question concerns the bracketing of the two episodes. As Read, Loewenstein, and Rabin (1999) discuss, choices may be bracketed in several ways. The bracketing here was temporal, with the T2 appeals following closely on the T1 scenario. We cannot tell whether the affect is strong enough to linger across other such situations or is too ephemeral to transcend all but the strongest bracketing. One instance in which our operationalization seems particularly relevant is shopping on the Internet—presumably making a purchase decision and putting an item into the shopping basket should enhance feelings of happiness and hence responses to happiness-based appeals seen on the next Web page. This has implications for the design of Internet shopping sites.

Future research can build on these demonstrations in several ways. For instance, it would be interesting to study responses to mixed emotional appeals, since it is possible

that a T1 decision that generates mixed emotions may also increase tolerance for mixed emotions at T2 (Williams and Aaker 2002). This would imply that a mixed pride and happiness appeal would work best after a decision to buy at a heavy discount. There may also be differences in emotions experienced at the time of making the decision as opposed to the point of payment, which also may influence responses to types of affective ad appeal. Indeed, the intensity of affect felt on exposure to an ad may itself be dependent on prior state. Further, Fishbach et al. (2003) demonstrate individual differences in counteractive control effects, which may lead to variations in the extent of experienced conflict and thereby moderate our observed effects. As such, the nature of the products viewed at T1 and T2, the joint effects of affect and cognition, and various different types of bracketing are all variables whose effects may only be guessed at. All of these suggest that the effect of emotions across unintended purchase opportunities is an area with much potential for future research.

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