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Understanding how emotions can affect pleasure has important implications both for people and for firms' communication strategies. Prior research has shown that experienced pleasure often assimilates to the valence of one's active emotions, such that negative emotions decrease pleasure. In contrast, the authors demonstrate that the activation of guilt, a negative emotion, enhances the pleasure experienced from hedonic consumption. The authors show that this effect occurs because of a cognitive association between guilt and pleasure, such that activating guilt can automatically activate cognitions related to pleasure. Furthermore, the authors show that this pattern of results is unique to guilt and cannot be explained by a contrast effect that generalizes to other negative emotions. The article concludes with a discussion of the implications of these findings for marketing and consumption behavior.

Keywords: emotion, hedonic consumption, guilt, pleasure

When Guilt Begets Pleasure: The Positive Effect of a Negative Emotion

Although pleasure is a fundamental component of any experience, people are often unaware of how different emotional states may affect their enjoyment (Kahneman, Wakker, and Sarin 1997). Indeed, much of what influences the experience of pleasure remains unknown. Specifically, people are often unaware of the way ambient emotions (e.g., unrelated emotions experienced before consumption) can influence their pleasure from consumption. For example, imagine a person reading a magazine as she awaits a spa treatment. She sees an article about the importance of recycling that triggers guilt for not doing it more often. Would these incidental feelings of guilt increase, decrease, or have no effect on her pleasure from the spa treatment? The question of how guilt might influence pleasure from consumption becomes especially noteworthy because the experience of guilt is typically associated with negative affect (Baumeister, Stillwell, and Heatherton 1994; Giner-Sorolla 2001). Thus, it might be concluded that experiencing guilt during consumption reduces pleasure. However, as the term "guilty pleasures" indicates, many products that

induce guilt are associated with heightened enjoyment. It therefore seems possible that when the consumption context activates guilt, it can heighten the expectation for, and subsequently the experience of, pleasure.

This article examines the pleasure people experience from hedonic consumption in the presence and absence of guilt. Prior research on emotions suggests that people's experiences assimilate to implicitly activated negative emotions (Pocheptsova and Novemsky 2010; Winkielman and Berridge 2004). This implies that priming guilt, a negative emotion, should have a negative effect on the pleasure experienced from consumption. However, we demonstrate that people who are primed with guilt subsequently experience greater pleasure than people who are not primed with guilt. Our central prediction that guilt increases pleasure from consumption is based on the underlying assumption that people maintain a cognitive association between guilt and pleasure in hedonic domains, such that priming guilt activates cognitions related to pleasure, which in turn increase the pleasure experienced from consumption.

In the remainder of this article, we first review prior research relevant to the effects of priming guilt on pleasure. This leads to several predictions that we test across six studies. The first three studies use different manipulations of guilt to test our main prediction and to rule out competing accounts for the pattern of results. Study 4 provides process evidence by testing for the proposed cognitive association between guilt and pleasure. Study 5 demonstrates the generalizability of these results, showing that the effect is not limited to food-related consumption. Finally,

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Study 6 illustrates a boundary condition by demonstrating that these effects are unique to hedonic experiences. We conclude with a discussion of the theoretical and practical implications of these findings.

CONCEPTUAL BACKGROUND

Much research has demonstrated that emotions (Lerner and Keltner 2000; Lerner, Small, and Loewenstein 2004), moods (Schwarz 2002), affect (Hsee and Rottenstreich 2004), and even the weather (Schwarz and Clore 1983) can have an effect on people's judgments and evaluations of products and experiences. For example, Schwarz and Clore (1983) demonstrate that people's assessments of their life satisfaction improved when the weather was pleasant, even though weather normatively should not influence judgments of one's life as a whole. Related research has shown that emotions (e.g., sadness) stemming from one experience may be carried over to a subsequent unrelated experience and affect behavior (Lerner, Small, and Loewenstein 2004). For example, negative emotions can reduce pleasure from unrelated stimuli (e.g., beverages; Winkielman and Berridge 2004). In summary, this research suggests that people's evaluations of stimuli often show assimilation to emotional valence, such that positive emotions lead to more positive evaluations and negative emotions lead to more negative evaluations. This assimilation can be observed both when emotions are actually experienced and when they are implicitly activated (e.g., through a semantic priming task).

We question, however, whether the story is always so straightforward. The main objective of the current research is to test whether, results from prior research notwithstanding, it is possible to increase pleasure by activating guilt. Prior research has defined guilt as a negative self-conscious, "moral" emotion that inhibits socially undesirable behavior (e.g., Tangney, Stuewig, and Mashek 2007) by focusing people on what they "should do" in a given context (Sheikh and Janoff-Bulman 2010) and increasing willpower (Hoch and Loewenstein 1991). Building on this work, related research has explored the consequences of activating guilt on people's acquisition behavior (Giner-Sorolla 2001; Zemack-Rugar, Bettman, and Fitzsimons 2007). In line with guilt's motivational properties, Zemack-Rugar, Bettman, and Fitzsimons (2007) observe that when primed with guilt, people high in guilt proneness exhibited more self-control, preferring options with more long-term benefits (e.g., school supplies) to options with more immediate rewards (e.g., CDs/DVDs). Although this research suggests that activating guilt can increase self-control, thereby attenuating the choice of hedonic alternatives (when other, more utilitarian alternatives are available), it does not directly address how priming guilt might influence the pleasure experienced from hedonic consumption, when such options are selected. To broaden understanding of the role of guilt in consumption behavior, the current set of studies extends what has previously been demonstrated about guilt and consumer behavior by addressing this question directly.

Building on the notion that specific emotions (e.g., guilt) are accompanied by a variety of associated cognitions and behavioral outcomes, we posit that guilt is associated with pleasure in hedonic consumption domains for several reasons. First, general lay beliefs and associations

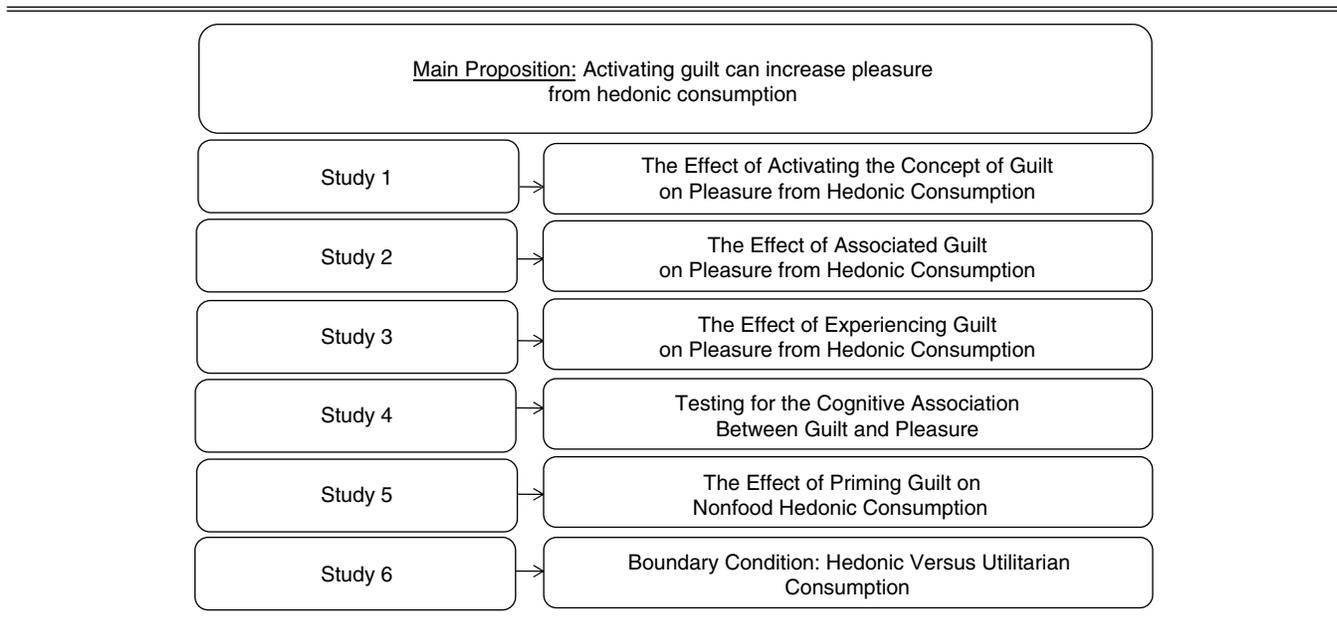
can be formed on the basis of external and environmental cues (Morris, Menon, and Ames 2001). Specifically, after repeated exposure to external sources promoting this link between the two, people may adopt an association between guilt and pleasure. For example, the popular press often characterizes products, ranging from lowbrow television shows (Ford 2012; Slattery 2012) to various types of comfort foods (e.g., Vong 2012), as guilt inducing and pleasurable—that is, guilty pleasures. There are countless examples of advertisements that leverage this association in subtle ways. Famously, the Las Vegas Convention and Visitors Authority launched the "What happens in Vegas, stays in Vegas" campaign, with commercials depicting people acting ashamed of their sinful indiscretions (e.g., a wild night of drinking) while grinning smugly as they departed the city. More generally, an online search for the term "guilty pleasures" yields nearly 19 million results, showing that a variety of book titles, movie titles, and song lyrics all incorporate the term. Finally, nearly two million websites are exclusively dedicated to providing lists of guilty pleasures for readers to peruse. In summary, the link between guilt and pleasure is widely promoted across various media forms. This suggests that the majority of consumers have been exposed to examples highlighting when and how guilt and pleasure can co-occur.

Second, associations can be generated through personal experiences and observations (Ross and Nisbett 1991). The experience of both guilt and pleasure during consumption may form the basis for the link between guilt and heightened pleasure. For example, Ramanathan and Williams (2007, Study 1) observe that immediately after indulging in a large cookie, both impulsive and prudent people experienced mixed emotions. Specifically, they demonstrate that people experienced both positive (e.g., pleased) and negative (e.g., guilty) emotions "strongly and equally." As with other cognitive associations (e.g., the link between a significant other and a goal; Fitzsimons and Bargh 2003), a link between guilt and pleasure may become automatic and nonconscious over time because of repeated internal coactivation (Bargh and Chartrand 1999).

When an association between a specific emotion (e.g., guilt) and a certain outcome (e.g., heightened pleasure) is established, activating the specific emotion may activate the corresponding link to the outcome (Lang, Bradley, and Cuthbert 1998). With the proposed cognitive association between guilt and pleasure in hedonic consumption domains, we posit that activating guilt can automatically activate cognitions related to heightened pleasure. Because cognitions serve as expectations that often dictate the actual enjoyment derived from an experience (Klaaren, Hodges, and Wilson 1994; Lee, Frederick, and Ariely 2006), we predict that expectations for pleasure lead to an increase in actual pleasure.

Across a series of six studies, we test our central proposition that priming guilt increases the pleasure from hedonic consumption because of the cognitive association between guilt and pleasure (see Figure 1). Study 1 demonstrates the main proposition by showing that activating the concept of guilt increases the pleasure experienced from an actual hedonic consumption. Study 2 shows that this increased pleasure from consumption occurs even when people associate the guilt with the consumption object. Study 3 replicates the observed pattern when participants

Figure 1
OUTLINE OF STUDIES



are experiencing guilt and rules out an alternative account for this pattern of results by showing that guilt, and not other types of negative affect, leads to the increase in pleasure. Study 4 provides support for the mechanism underlying our effect and demonstrates that priming the concept of guilt makes pleasure-related cognitions more accessible. Study 5 extends these findings beyond the domain of food consumption to show that the effect of guilt on pleasure replicates in other domains of hedonic consumption. Finally, Study 6 tests whether these effects hold strictly for hedonic experiences, demonstrating a boundary condition for the observed effect. The article concludes with a discussion of the theoretical and practical implications for these findings.

STUDY 1: THE EFFECT OF ACTIVATING THE CONCEPT OF GUILT ON PLEASURE FROM HEDONIC CONSUMPTION

Method

One hundred three participants were paid to participate in a laboratory session in exchange for a small payment. Participants were randomly assigned to one of two between-subjects conditions (guilt prime vs. neutral prime). They first completed a priming task commonly used to activate concepts outside awareness (Wyer and Srull 1989). This task required participants to unscramble 16 sentences. In the guilt prime condition, eight of the sentences contained words that were semantically related to guilt (e.g., “guilty,” “remorse,” “sin”). In the neutral prime condition, participants unscrambled 16 neutral sentences containing no guilt-related words.

In the second phase of the experiment, participants were presented with a seemingly unrelated task, labeled “Taste Study.” Specifically, each participant received an unmarked plastic cup containing chocolate candies. No packaging or

description of the candy was provided. Those who reported having food allergies were eliminated from the study. All others were asked to consume the candies and then report how much they liked them on a seven-point scale (1 = “not at all,” and 7 = “very much”). They also reported their willingness to pay for a package containing 20 of the candies. Finally, participants were thanked and questioned for any suspicion about the purpose of the study. No one expressed any suspicion about the hypothesis or the connection between the two tasks. Three days later, all participants were contacted by e-mail, reminded of the experimental session, and asked to indicate how much they remembered liking the candies they had consumed in the “Taste Study” on a seven-point scale (1 = “not at all,” and 7 = “very much”).

Results and Discussion

Three participants reported having food allergies and were excluded from the study. We analyzed the data from the remaining 100 participants with an analysis of variance. We predicted that priming guilt would activate cognitions related to pleasure and thus increase pleasure from hedonic consumption. Consistent with our prediction, participants in the guilt prime condition reported liking the candy significantly more than participants in the neutral prime condition ($M_{\text{guilt}} = 5.31$, $M_{\text{neutral}} = 4.63$; $F(1, 98) = 5.03$, $p < .05$). Furthermore, consistent with greater liking, participants in the guilt prime condition reported a higher willingness to pay for a package of 20 of the candies than those in the neutral prime condition ($M_{\text{guilt}} = \$1.31$, $M_{\text{neutral}} = \$1.11$; $t(98) = -1.75$, $p < .1$).

Next, we examined whether participants primed with guilt also recalled the experience as being more pleasurable. We found the same positive effect of guilt on pleasure in participants’ retrospective ratings. The results from the follow-up question ($N = 65$) showed that three days after

completing the experiment, participants in the guilt prime condition accurately remembered liking the candies significantly more than participants in the neutral prime condition ($M_{\text{guilt}} = 5.23$, $M_{\text{neutral}} = 4.16$; $t(63) = -2.87$, $p < .01$). The priming manipulation had no effect on participants' likelihood of completing the follow-up measure ($P_{\text{guilt}} = 63\%$, $P_{\text{neutral}} = 67\%$; $p > .8$).

Study 1 demonstrates that activating the concept of guilt increases actual pleasure from hedonic consumption even when the guilt is entirely disentangled from the pleasure source. Note that we primed guilt in this study through a separate task that was unrelated to the consumption object (e.g., the chocolate candies). This inadvertent transfer is in line with prior research that shows that people attribute incidental affect to their immediate experiences (Higgins 1998; Schwarz and Clore 1983). However, it is possible that if the guilt were more directly attributable to the consumption object, the effect we observed in Study 1 could attenuate or even reverse because the stimulus might become associated with negative affect. However, in line with our proposed process, we expect that activating guilt that is directly associated with an actual consumption experience will increase pleasure compared with when no additional guilt is associated. Study 2 tests this directly.

STUDY 2: THE EFFECT OF ASSOCIATED GUILT ON PLEASURE FROM HEDONIC CONSUMPTION

Building on the findings of Study 1, Study 2 extends the inquiry to experiences when guilt is directly associated with the consumption object. Because the consumption of a hedonic food product is likely to generate feelings of guilt, especially when thoughts of health are made highly accessible, Study 2 manipulated guilt by priming participants with cognitions about health and then asking them to consume a food item that was clearly unhealthful (a chocolate candy bar). We predict that when a health goal is activated, participants will be more likely to associate guilt with hedonic consumption and thus will experience increased pleasure from consumption.

We conducted a pretest to verify that priming health increases the guilt associated with consuming a chocolate candy bar. Forty participants were randomly assigned to either a health prime condition or a neutral prime condition and were shown pictures of six magazine covers. In the health prime condition, four of the magazines were health related, whereas in the neutral prime condition, none of the magazines were related to health. After reviewing the magazine covers, participants were asked to reference one magazine (health prime condition = *Nutrition*; neutral prime condition = *Shutterbug*) and write a short paragraph answering the question: "Why is this magazine more popular now than ever?" Next, participants were given what they believed was an unrelated survey. They were asked to imagine that they were participating in a chocolate tasting featuring a new candy bar that was being test marketed. Embedded in a series of filler questions was the question, "How guilty would you feel consuming the candy bar?" (1 = "not at all guilty," and 5 = "very guilty"). As we expected, participants in the health prime condition indicated that they would feel more guilty consuming the candy bar than those in the neutral prime condition ($M_{\text{health}} = 3.84$,

$M_{\text{neutral}} = 2.42$; $F(1, 39) = 3.99$, $p < .05$). These results suggest that priming health is an effective means to increase the guilt associated with consuming a chocolate candy bar. Note that though we observe an increase in the associated guilt when health is primed, a separate pretest ($N = 20$) confirmed that the same manipulation did not affect how unhealthful participants perceived the candy bar ($F < 1$).

Method

Forty female undergraduate students participated in this study in exchange for a small monetary compensation. Participants were randomly assigned to one of two between-subjects conditions (health prime vs. neutral prime) and completed the priming manipulation described in the pretest. Next, participants completed a taste test that was identical to the "Taste Study" in Study 1. The food item provided was a chocolate candy bar that was being test marketed locally (no wrapper or description of the candy was provided). Finally, participants were thanked and questioned about the purpose of the study. No one correctly guessed the hypothesis of the study or the connection between the two tasks.

Results and Discussion

We predicted that priming guilt would increase pleasure from consumption, even when that guilt is directly associated with the consumption experience. Consistent with our prediction, participants in the health prime condition reported liking the candy bar significantly more than participants in the neutral prime condition ($M_{\text{health}} = 5.82$, $M_{\text{neutral}} = 5.00$; $t(38) = -2.0$, $p < .05$). Thus, these results suggest that the positive effect of priming guilt on pleasure is not limited to ambient or unrelated guilt (Study 1).

Taken together, Studies 1 and 2 support our proposition that activating guilt increases the pleasure experienced from consumption. Next, we examine whether these effects persist when the guilt is actually experienced affectively rather than primed in an ostensibly unrelated task. Prior research has shown that priming a concept (as in Study 1) does not necessarily activate the emotional experience of the primed concept (Niedenthal et al. 2005). It is possible, therefore, that cognitive associations linked to guilt (i.e., pleasure) influence pleasure ratings only when people are not actually experiencing the emotion. When people are experiencing the emotion of guilt, the actual feelings of negative affect associated with guilt might counter or even overwhelm any cognitive activation of a positive expectation for pleasure and thereby result in guilt decreasing pleasure (Winkielman and Berridge 2004).

Study 3 addresses this possibility. In addition, we test a possible alternative explanation for the effect of guilt on pleasure—namely, that priming guilt establishes a negative standard in comparison to which the hedonic consumption experience seems more positive (see Schwarz and Bless 2007). Prior research has documented examples of such contrast effects. For example, Bless and Wanke (2000) find that a politician who is compared with a scandal-ridden opponent (a negative standard) is perceived as more trustworthy than a politician who is compared with a more moderate adversary. Although prior research demonstrating that people's evaluations assimilate to incidental emotions (Winkielman and Berridge 2004) suggests that such emotions usually do not set standards against which people

contrast their actual experiences, we test for this empirically in Study 3. If the effect of priming guilt on pleasure is caused by such a contrast, this positive effect should extend to other incidental negative emotions as well.

Study 3 tests these alternative explanations by activating actual feelings of guilt or disgust before consumption and comparing their effects on pleasure. We chose to activate disgust because, like guilt, disgust is a negatively valenced emotion that can be associated with food (Rozin and Fallon 1987). We expect to find that activating feelings of guilt will increase pleasure, replicating the previous results. Furthermore, we expect that feelings of disgust will not increase pleasure, as our account proposes that the positive effect of guilt on pleasure is driven by the learned cognitive association between guilt and pleasure, which does not exist between other types of negative emotions and pleasure.

STUDY 3: THE EFFECT OF EXPERIENCING GUILT ON PLEASURE FROM HEDONIC CONSUMPTION

Method

One hundred eight undergraduate students participated in this study in exchange for a small monetary compensation. Participants were randomly assigned to one of three between-subjects conditions (guilt, disgust, or a neutral prime). They first completed an emotion induction task adapted from Fischhoff et al. (2003). Participants in the guilt (disgust) condition were asked to think about three to five events that made them feel guilty (disgusted) and to write several sentences about each one. They were next asked to pick one of those events and to describe the event in detail so that someone reading the description might feel guilty (disgusted). Participants in the neutral prime condition were asked first to think about and write down three to five activities they did that day and then to focus on and describe in detail how they typically spend their evenings.

A pretest conducted on a separate sample of participants drawn from the same pool ($N = 73$) verified that the emotion induction manipulation activated feelings of guilt (disgust) as intended. Participants were randomly assigned to the guilt, disgust, or control conditions and completed the emotion induction task. Afterward, all participants rated the extent to which they were currently experiencing feelings of guilt, disgust, and fear on a scale from 1 ("not at all") to 7 ("very strongly"). As we expected, participants in the guilt condition reported greater guilt than those in the neutral emotion condition ($M_{\text{guilt}} = 3.59$, $M_{\text{neutral}} = 2.58$; $t(70) = 2.28$, $p < .05$) and those in the disgust condition ($M_{\text{disgust}} = 2.3$; $t(70) = 3.2$, $p < .01$). Furthermore, participants in the disgust condition reported greater disgust than those in the neutral emotion condition ($M_{\text{disgust}} = 3.52$, $M_{\text{neutral}} = 1.89$; $t(70) = 3.2$, $p < .01$) and those in the guilt condition ($M_{\text{guilt}} = 2.41$; $t(70) = -2.41$, $p < .05$). There were no differences in reported fear ($ps > .5$).

In the second phase of the experiment, participants completed a taste test that was identical to the "Taste Study" in Studies 1 and 2. The food item provided was one chocolate truffle. After consuming the truffle, participants indicated how much they enjoyed the truffle on a nine-point scale (1 = "not at all," and 9 = "very much"). Finally, participants were thanked and questioned about the purpose of the study. No one correctly guessed the hypothesis of the study or the connection between the two tasks.

Results and Discussion

We predicted that respondents experiencing feelings of guilt would derive greater pleasure from hedonic consumption than respondents feeling disgust or those in the control condition. Consistent with our prediction, participants in the guilt condition reported liking the candy significantly more than those in either the disgust ($M_{\text{guilt}} = 5.85$, $M_{\text{disgust}} = 4.78$; $t(105) = 2.25$, $p < .05$) or the control ($M_{\text{control}} = 4.88$; $t(105) = 1.98$, $p < .05$) conditions. Although we made no predictions as to how disgust would affect enjoyment compared with the control, no significant difference occurred in the ratings for liking between these two conditions ($M_{\text{disgust}} = 4.78$, $M_{\text{control}} = 4.88$; $p > .5$).

Study 3 builds on the previous studies by demonstrating that experiencing the emotion of guilt can also increase pleasure. Furthermore, Study 3 shows that the contrast between a negative emotion and a positive experience alone does not increase pleasure. If this were so, experiencing guilt or disgust would have similarly increased pleasure as compared with the control condition. However, Study 3 shows that only experiencing guilt had this effect. A separate study contrasted the effect of guilt on pleasure with a different negative emotion, anger. Consistent with the results of Study 3, participants experiencing guilt reported enjoying the candy significantly more than those experiencing anger or those in a control condition.

So far, the studies demonstrate the robustness of the effect of guilt on pleasure: Activating the concept of guilt, implicitly associating guilt with the consumption stimulus, and activating actual feelings of guilt all increased the pleasure that consumers derived from actual hedonic experiences. We posit that these effects occur because of a cognitive association between guilt and pleasure, whereby the activation of guilt activates cognitions related to heightened pleasure. Building on our existing results, Study 4 tests for this cognitive association by activating the concept of guilt and testing for an increase in pleasure-related cognitions.

STUDY 4: THE EFFECTS OF PRIMING GUILT ON PLEASURE ACTIVATION

Method

Fifty-eight participants from an online pool participated in this study in exchange for entry into a lottery for a gift card. Participants were randomly assigned to one of two between-subjects conditions (guilt prime vs. neutral prime). They first completed the same priming task as in Study 1. In the second phase of the experiment, participants were given a study labeled "Pattern Recognition and Word Completion Study" and told that their task would be to convert word fragments into English-language words. They were instructed that they would be given seven word fragments to complete (e.g., "C H _ _ _") and that they must use the exact number of letters as there were spaces to complete the word (e.g., "CHAIR," "CHORE"). Prior research has shown that such word completion tasks are an effective means of testing the mental accessibility of different concepts (Zhong and Liljenquist 2006). Of the seven word fragments, three ("E N _ _ _," "P L E _ _ _ _," "T A _ _ _") could be completed as pleasure-related words ("ENJOY," "PLEASURE," "TASTE") or as neutral

words (“ENTER,” “PLEADING,” “TABLE”). The dependent variable was the total number of pleasure-related words formed.

Results and Discussion

We predicted that priming guilt would increase the mental accessibility of pleasure-related words. Consistent with our prediction, participants in the guilt prime condition identified significantly more pleasure-related words than participants in the neutral prime condition ($M_{\text{guilt}} = 1.52$, $M_{\text{neutral}} = 1.14$; $F(1, 57) = 5.57$, $p < .05$). The results of Study 4, therefore, support our prediction that a cognitive association exists between guilt and pleasure, such that activating guilt increases the accessibility of pleasure-related cognitions.

Having demonstrated our proposed effect and shown support for the proposed process, we emphasize that the studies so far have demonstrated the effect of guilt on the pleasure derived from the consumption of food items. Although we propose that the observed effect is driven by the link between guilt and pleasure in hedonic consumption domains, a possible alternative account for the pattern of results might be that guilt influenced pleasure indirectly by changing the health perceptions of the food items. Specifically, it could be that priming guilt caused the food items to be perceived as less healthful, which in turn led participants to experience greater pleasure by applying the “unhealthy = tasty” intuition (Raghunathan, Naylor, and Hoyer 2006). Although Study 2 showed that the activation of guilt did not affect the perceived healthfulness of the chocolate, Study 5 further rules out this alternative account by testing for the effect of guilt on pleasure from nonfood hedonic consumption. Because the “unhealthy = tasty” intuition does not apply in domains in which pleasure and health are unrelated, replicating our effect in a nonfood context further supports our theoretical account based on the cognitive association between guilt and pleasure. Because the cognitive association observed in Study 4 should exist for hedonic consumption in other domains, we expect the pattern of results observed in the studies reported thus far to generalize to other types of consumption in which guilt and pleasure are commonly coactivated. Study 5 tests for this directly using the experience of browsing online dating profiles.

STUDY 5: THE EFFECT OF PRIMING GUILT ON NONFOOD HEDONIC CONSUMPTION

Method

Sixty-four female participants who reported not being in a committed relationship were drawn from an online pool and participated in this study in exchange for entry into a lottery for a gift card. Participants were randomly assigned to one of two between-subjects conditions (guilt prime vs. neutral prime). They first completed the same priming manipulation as in Studies 1 and 4. Next, all participants were presented with a task labeled “Finding Romance Online.” For this task, participants were asked to imagine that they had decided to “see who’s out there” by using a new online dating website. They were then told that they would be shown five online dating profiles of men who lived in their local area. The participants then reviewed

the five male profiles. Next they reported how much they enjoyed reviewing the profiles on a scale from 0 (“not at all”) to 100 (“very much”; adapted from Galak, Redden, and Kruger 2009). They also responded to the question, “Are you more interested in online dating now than you were before you started this study?” (1 = “definitely not,” and 5 = “definitely yes”). Finally, participants were thanked and questioned about the purpose of the study. No one correctly guessed the hypothesis or any connection between the two tasks.

Results and Discussion

We predicted that participants in the guilt prime condition would derive greater enjoyment from reviewing the profiles than those in the neutral prime condition. Consistent with our prediction, participants in the guilt prime condition reported enjoying reviewing the online profiles significantly more than participants in the neutral prime condition ($M_{\text{guilt}} = 48.83$, $M_{\text{neutral}} = 31.55$; $F(1, 63) = 5.02$, $p < .05$). Furthermore, participants in the guilt prime condition reported greater interest in online dating than those in the neutral prime condition ($M_{\text{guilt}} = 1.97$, $M_{\text{neutral}} = 1.48$; $F(1, 63) = 4.70$, $p < .05$). Building on the prior studies, the results of Study 5 demonstrate that the effect of guilt on pleasure from consumption extends to situations in which health perceptions are not a factor. Furthermore, the pattern of data shows that the effect of guilt on pleasure can generalize to hedonic consumption contexts that do not involve food.

Having demonstrated our proposed effect using a variety of hedonic stimuli and shown support for the proposed process, we next attempted to test for a boundary condition for the effect of guilt on pleasure. In the previous experiments, we assumed that the link between guilt and pleasure was specific to hedonic consumption domains, and as a result, we tested for the effects of guilt on pleasure exclusively in such contexts. However, it remains possible that the cognitive association we observed in Study 4 could extend across different consumption contexts, in which case the activation of guilt could increase pleasure from different types of experiences (e.g., more utilitarian endeavors). Study 6 tests this by manipulating both the activation of guilt and the nature of the consumption experience (watching a more hedonic versus a more utilitarian video). By doing so, we are able both to test for a conceptual replication of our observed effect in an additional nonfood domain (watching a hedonic video) and to examine the nature of the consumption experience as a boundary condition to our observed effect. Because we propose that the cognitive link between guilt and pleasure is strictly relevant in the context of hedonic experiences, we do not expect the same pattern to emerge for more utilitarian endeavors.

STUDY 6: THE EFFECT OF PRIMING GUILT ON HEDONIC VERSUS UTILITARIAN CONSUMPTION

Method

Pretest. To identify two videos—one that was comparatively more hedonic and enjoyable and one that was more utilitarian and practical—participants ($N = 194$) from a U.S.-based online pool were randomly assigned to view one of the videos and asked to rate them on a variety

of dimensions (all seven-point scales). The first video was intended to be more hedonic and enjoyable and depicted a baby otter at play, accompanied by narration. The second video was intended to be more utilitarian and depicted how to use various technical features of a social networking site, accompanied by narration. The pretest confirmed that participants considered the first video more enjoyable ($M_{\text{hedonic}} = 4.94$, $M_{\text{utilitarian}} = 3.45$; $F(1, 193) = 37.97$, $p < .01$) and more lighthearted ($M_{\text{hedonic}} = 2.73$, $M_{\text{utilitarian}} = 2.04$; $F(1, 193) = 14.12$, $p < .01$) than the second, which they considered more practical ($M_{\text{hedonic}} = 3.82$, $M_{\text{utilitarian}} = 4.34$; $F(1, 193) = 13.86$, $p < .01$; all scales anchored by 1 ["not at all"] and 7 ["very much"]). From these pretest results, we selected these stimuli for use in the main experiment.

Main study. One hundred eighty-eight participants drawn from the same online pool completed this study in exchange for entry into a lottery for a gift card. Participants were randomly assigned to one of four between-subjects conditions on the basis of a 2 (prime: guilt vs. neutral) \times 2 (video type: hedonic vs. utilitarian) design. They first completed the same priming manipulation as in Studies 1, 4, and 5. Next, all participants were told they would be watching a video clip and that following the video clip, they would be asked a short set of questions. After watching the video clip, participants indicated how much they enjoyed watching the video clip and how likely they would be to watch the video clip again, if given the chance (1 = "not at all," and 7 = "very much"). Finally, participants were thanked and questioned about the purpose of the study. No one correctly guessed the hypothesis or any connection between the two tasks.

Results and Discussion

We predicted that the nature of the consumption experience (hedonic vs. utilitarian) would moderate the effect of guilt on pleasure from consumption. In particular, we expected that participants in the guilt prime condition would derive greater enjoyment from viewing the hedonic video than those in the neutral prime condition but that this effect would be attenuated for the utilitarian video. To test this prediction, we averaged participants' ratings on the two dependent measures (enjoyment and likelihood of watching the video again; $R = .717$, $p < .001$) to create a composite measure of enjoyment. Next, we conducted a 2 \times 2 analysis of variance on the composite measure as a function of three independent variables: prime (guilt vs. neutral), the video type (hedonic vs. utilitarian), and the interaction between the two. As we expected, a significant interaction between the prime and the video type occurred on enjoyment ($F(1, 185) = 3.89$, $p = .05$). In addition, a main effect of video type emerged ($F(1, 185) = 58.90$, $p < .001$), demonstrating that, in general, people enjoyed the hedonic video more than the utilitarian video. There were no other main effects.

Consistent with our previous findings, participants in the guilt prime condition reported enjoying the hedonic video significantly more than participants in the neutral prime condition ($M_{\text{guilt}} = 5.01$, $M_{\text{neutral}} = 4.30$; $t(86) = -2.16$, $p < .05$). Among participants watching the utilitarian video, however, we did not observe the same effect of guilt on pleasure. Guilt had no effect on enjoyment ($M_{\text{guilt}} = 2.79$, $M_{\text{neutral}} = 2.99$; $p > .5$).

Study 6 builds on the previous studies and examines the effect of guilt in another consumption domain—videos. The findings suggest that the type of experience (e.g., hedonic vs. utilitarian) moderates the effect of guilt on pleasure, such that guilt only increases enjoyment derived from hedonic consumption.

GENERAL DISCUSSION

People often seek immediate pleasure from consumption. As a result, understanding how specific emotions can affect pleasure from consumption has both theoretical and practical significance. This research shows that guilt can actually increase the pleasure derived from hedonic consumption. Specifically, our studies demonstrate that activating incidental guilt, either by priming the concept of guilt (Study 1) or by actual feelings of guilt (Study 3), increases pleasure from consumption. Study 2 demonstrates that even guilt that is directly associated with the consumption experience increases pleasure. Furthermore, we find that this increase in pleasure is unique to the activation of guilt and cannot be generalized to other negative emotions or attributed to a contrast effect (Study 3). In support of our proposed process, Study 4 demonstrates that consumers maintain a cognitive association between guilt and pleasure. Finally, Studies 5 and 6 show that this effect generalizes beyond food consumption to other types of hedonic consumption (i.e., reviewing online dating profiles and watching videos).

This research contributes to a growing body of literature examining the multifaceted nature of specific negative emotions and their implications for behavior. Although prior work has found that people's experiential assessments (e.g., liking) often assimilate to the valence of their emotions (positive vs. negative; Winkielman and Berridge 2004), we suggest that this is not always the case by showing that guilt, a negative emotion, can increase pleasure from hedonic consumption. This finding adds to recent research testing for important moderators to the effects of specific negative emotions on behavior. For example, Aarts et al. (2010) show that anger, an emotion that is traditionally associated with avoidance motivations, can be associated with approach motivations in reward contexts. Furthermore, De Hooze et al. (2011) find that though guilt is traditionally conceptualized as a moral emotion, which promotes prosocial motivations, these motivations only extend to victims and may come at the expense of others. Similarly, our research suggests a more nuanced understanding of the heretofore one-sided perspective regarding the negative influence of guilt on hedonic products.

Although our findings demonstrate that the activation of guilt increases pleasure from hedonic consumption, people might not be aware of this relationship. To test people's beliefs about the relationship between guilt and pleasure, we conducted a series of vignette studies designed to parallel our experience studies. For example, in one vignette, we asked participants to imagine that they were trying a dessert on different occasions: On one occasion, they felt guilty before consuming the dessert, and on the other occasion, they felt no guilt before consuming the dessert. They then predicted in which consumption occasion they would consider the dessert more enjoyable. A significantly greater proportion of participants predicted that the dessert would be more enjoyable when they felt no guilt (94% vs. 6%);

$\chi^2(1) = 31.4, p < .0001, n = 39$; this analysis excludes the 13% of participants who predicted that guilt would have no effect on their enjoyment). We replicated this pattern using a between-subjects design in which participants were assigned to a “prior guilt” or “no prior guilt” condition and then rated the pleasure they expected to receive from consuming a dessert (1 = “no enjoyment at all,” and 9 = “lots of enjoyment”). Participants in the “no prior guilt” condition expected to receive more pleasure than those in the “prior guilt” condition ($M_{\text{no prior guilt}} = 5.82, M_{\text{prior guilt}} = 5.00$; $t(38) = -2.0, p < .05$). These findings indicate that though guilt and pleasure share a cognitive association, people do not maintain a lay belief that experiencing guilt will increase their pleasure from consumption. Thus, we can infer that the observed effect of guilt on pleasure operates nonconsciously; that is, people lack awareness of this automatic process (Chartrand 2005).

Theoretical Implications

Although our studies used several different manipulations to show that activating guilt can increase pleasure from consumption, further research might examine additional boundary conditions for this proposed effect. Specifically, research might test whether the source of the guilt or the size of the transgression moderates the effect of guilt on pleasure. With the exception of two studies (Studies 2 and 3), we primed guilt semantically using sentence scrambles. In Study 2, we activated guilt by priming a goal (health) and then having participants consume a product that conflicted with that goal (chocolate), inducing the type of guilt that results from a failure in willpower (Hoch and Loewenstein 1991); in Study 3, we simply asked participants to recall a time they felt guilty. In none of these studies did we explicitly prime the participants with guilt that was associated with harming another person, though guilt is often discussed as an emotional response that results from causing interpersonal harm (Nelissen and Zeelenberg 2009; Zeelenberg and Breugelmans 2008). Further research might test whether this different source of guilt can similarly increase pleasure or whether other-focused guilt might decrease pleasure because of associated regret (Zeelenberg and Breugelmans 2008) or the activation of specific cognitions (e.g., a friend’s pain) unrelated to pleasure. Likewise, none of our studies explicitly primed guilt that resulted from violating deep-seated moral norms (e.g., drug or alcohol abuse; infidelity; Sheikh and Janoff-Bulman 2010). Although we believe our demonstrations are sufficient to generalize to a variety of common consumer experiences, it is possible that these more intense forms of guilt will not lead to parallel results on pleasure. Research might also explore whether the size of the transgression moderates the observed pattern of results. In our studies, we purposefully used relatively minor, everyday transgressions (e.g., one chocolate truffle) to draw inferences relevant to consumers; however, it might be that for larger temptations (e.g., an entire chocolate cake), the sheer magnitude of the act would evoke considerations that might override any positive incidental carryover effects of guilt.

The current studies highlight an important wedge between the role of guilt in acquisition and consumption of hedonic products. Specifically, we tested for the effects of guilt on pleasure from a stimulus that was predetermined

for consumption. It is important to contrast the increased pleasure from consumption that we observe with how guilt might affect choice or acquisition of hedonic items. Prior research has found that manipulations of guilt generally decrease choice of hedonic options (Giner-Sorolla 2001; Zemack-Rugar, Bettman, and Fitzsimons 2007). These findings converge to suggest that a guilt prime operates in a very different manner in acquisition or choice contexts than in consumption contexts. However, although priming guilt might reduce the overall likelihood of selecting an indulgent option in a decision context, some people still choose to indulge even when they feel guilty both in the real world and in the choice experiments we describe herein. Our data imply that when the focus is on the consumption context, guilt may actually lead to experiencing greater pleasure. Further research might examine this more systematically by testing the different effects of guilt on the choice of, and experience from, hedonic options.

Practical Implications

We believe the current research has important practical implications. First, because a cognitive association exists between guilt and pleasure, when designing communications, marketers of hedonic services or products might benefit from highlighting the guilty aspects of their goods in addition to, or perhaps even instead of, just the pleasurable aspects associated with consumption. For example, compare a spa advertisement that reads “for a truly *guilty* experience” with one that reads “for a truly *pleasurable* experience.” The advertisement selling a “guilty experience” would automatically bring to consumers’ minds thoughts and expectations of pleasure, much like the “pleasurable experience” advertisement. In addition, such communication might be more persuasive because a purely positive appeal might be viewed skeptically and considered manipulative (see Bhatnagar, Aksoy, and Malkoc 2004).

Second, as products become more commoditized, marketers are attempting to differentiate the experiences they offer (Pine and Gilmore 1998) and maximize consumers’ value from such experiences. Our findings suggest that retailers that provide hedonic experiences (e.g., a massage at a spa; a dessert at a restaurant) should consider using cues that activate guilt during the consumption experience to maximize consumers’ pleasure. This could be done in a variety of ways, for example, by using in-store communications, such as displays or illustrations, that evoke guilt.

Our results also suggest implications for policy makers designing communications intended to curtail consumer interests in potentially harmful types of hedonic consumption (e.g., drinking, drug and tobacco use). Such organizations face the dual objective of preventing new users from initially trying the products and encouraging existing users to cease consumption. Prior research showing that guilt can have a self-regulatory function suggests that associating guilt with the consumption experience may dissuade nonusers from initial trials (Zemack-Rugar, Bettman, and Fitzsimons 2007). However, for existing users, associating guilt with the experience could have a counterproductive effect. If highlighting the guilt associated with the experience enhances their pleasure from consumption, doing so might actually reduce their likelihood of cessation.

In summary, the research findings offer a deeper and more nuanced understanding of how guilt is related to pleasure and how that relationship affects consumers' judgments. Although further research is necessary to test the boundaries of these effects, we believe that the current set of studies contributes toward understanding people's experience of pleasure and offers implications for both them and firms.

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