

Running head: LOVE-HATE RELATIONSHIPS WITH FINANCIAL WINDFALLS

Target-Specific Affect Management:

The Case of Love-hate Relationships with Financial Windfalls

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Abstract

In this paper we study the regulation of affect attributed to a target object, which we label *target-specific affect management (TSAM)*. Although TSAM and affect regulation are complementary phenomena with an identical goal—reduction of negative affect—in some situations they impel different behaviors. We investigate TSAM by examining the behavioral consequences of combining negative affect with the positive affect inherent in financial windfalls, as in cases where a negative circumstance is linked to the money. We show that people have mixed feelings about windfalls in these situations and that they attempt to reduce the negative affect component of such “ambivalent windfalls” by “laundering” the money through relatively virtuous consumption. Alternatively, when only a hedonic option is available, people avoid consuming the windfall.

Target-Specific Affect Management:

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People's proclivity to manage their affect by engaging in actions aimed at altering or maintaining their emotions is well documented (Isen, 1984; R. J. Larsen, 2000; Russell, 2003; Thayer, 1996; Tice & Wallace, 2000). Affect or mood regulation refers to behaviors intended to maintain positive affective states or ameliorate negative ones.¹ In a representative experiment, emotionally distressed participants ate more snack foods than distressed participants who were led to believe that their (bad) mood could not be changed (Tice, Bratslavsky, & Baumeister, 2001). A related study showed that people engage in "cathartic" aggressive behavior in an attempt to reduce their feelings of anger (Bushman, Baumeister, & Phillips, 2001). Cialdini and colleagues have demonstrated that the propensity to engage in prosocial (helping) behaviors increases when people believe that the behavior will improve their mood (Cialdini, Darby, & Vincent, 1973; Cialdini & Kenrick, 1976; Schaller & Cialdini, 1988; but see Batson et al., 1989). Finally, people's desire to improve their mood can influence the products and gifts that they purchase for themselves (Baumeister, 2002; Mick & DeMoss, 1990).

Target-Specific Affect Management (TSAM)

Russell (2003) distinguishes between core affect, "the simplest raw (nonreflective) feelings evident in moods and emotions," and *attributed affect* (p. 148). Attributed affect is the distinct affective experience that is evoked when core affect can be attributed to an object. Whereas affect regulation refers to actions aimed at altering simple core affect, in this paper we study regulation of affect attributed to a target object. We label this *target-specific affect management (TSAM)*. Although TSAM and affect regulation share an identical goal—reduction

¹ We use affect regulation and mood regulation interchangeably.

of negative affect—managing object-specific affect can impel behaviors that are different from those predicted by affect regulation research. The difference arises because TSAM’s regulatory behaviors govern the specific interaction with the target of one’s attributed affect. In contrast, the regulatory behaviors of affect regulation are not directed at the underlying cause of core affect (this is true almost by definition; a mood is a diffuse emotional experience that is not connected to a specific cause).

In this paper we use financial windfalls as a case study to show that an object’s “affective tag” guides its use in systematic ways—people use an object in such a way to feel better about it. With financial windfalls, people’s feelings about the money determine how it is consumed.

The Case of Financial Windfalls

Financial windfalls are unexpected monetary gains that are spent more readily and frivolously than ordinary income (Arkes et al., 1994; Bodkin, 1959; Thaler & Johnson, 1990; but see Kreinin, 1961). For instance, people who receive an unanticipated payment (i.e., a windfall) for participating in a research study are more likely to purchase snacks at a concession stand than people who receive an anticipated payment (Arkes et al., 1994). Windfalls are an attractive case study because their well-established tendency to be spent frivolously provides an *a priori* expectation for their use under most circumstances. More importantly, windfalls are appealing because their receipt rarely evokes a neutral feeling: windfalls are inherently positive. However, occasionally negative feelings about the circumstance in which a windfall was obtained are attributed to the money (e.g., when receiving an inheritance). When negative affect is added to one’s positive feelings about a windfall, do the feelings cancel each other out, leading to a neutral affective tag? Or do the feelings occur simultaneously, leading to mixed feelings, or ambivalence?

Windfalls and Mixed Feelings

Cacioppo and Berntson's (1994) Evaluative Space Model (ESM) structures positive and negative affect in a bivariate space and implies that positive and negative feelings are separable. This structure allows for any pattern of affect, including co-activation of positive and negative feelings (see also Cacioppo, Gardner, & Berntson, 1999). Empirical evidence for this implication comes from studies of emotionally complex experiences such as college graduation (J. T. Larsen, McGraw, & Cacioppo, 2001) and reactions to “disappointing” monetary gains or “relieving” monetary losses (J. T. Larsen, McGraw, Mellers, & Cacioppo, 2003).

In cases where negative feelings about a circumstance are attributed to the windfall, the ESM predicts that people can feel ambivalent about the money. The ESM also accommodates reciprocal activation in people's experiences, where an increase in the intensity of negative feelings decreases the intensity of positive feelings. This may lead some people to report that the negative affect from the circumstance has overcome the positive affect from the windfall. Nevertheless, for expository simplicity we will label all windfalls whose receipt evokes negative affect as “ambivalent windfalls.” We do this in part because by definition windfalls always increase individual welfare, whether or not people expressly report this increase.

Avoidance and Laundering

In this paper we investigate TSAM by studying the behavioral consequences of combining negative affect with the positive affect inherent in financial windfalls. We argue that people engage in strategic consumption behaviors aimed at reducing the negative affect component of their mixed feelings (for a discussion of how emotions guide behavior see Loewenstein, Weber, Hsee, & Welch, 2001; Mellers, 2000; Slovic, Finucane, Peters, & MacGregor, 2002; Zajonc, 1980). And, although we acknowledge that there may be a variety of

strategies to manage one's target-specific affect (cf. R. J. Larsen [2000] for a discussion of various affect regulation strategies), we choose to focus on two that we speculate are quite common: avoidance and laundering.

Avoidance. The hallmark of affect regulation is that people only engage in regulatory behaviors when they think their actions will help them feel better. Similarly, we assert that when managing attributed affect people will use an object only if it will help them reduce their negative feelings about the object; otherwise, use of the object will be avoided, a phenomenon we label the *avoidance effect*. In the case of ambivalent windfalls, avoidance occurs when people are offered the possibility to purchase a hedonic item (e.g., jewelry).² We posit that spending on hedonics is avoided because such items are unlikely to reduce people's negative feelings about the money, as hedonic purchases are typically associated with negative affect due to guilt (Kivetz & Simonson, 2002). Note that our prediction differs from what might be expected in cases of affect regulation, where people consume a hedonic item in order to feel better (e.g., Baumeister, 2002; Tice et al., 2001).

We test the avoidance effect in a set of studies where participants are provided the choice either to spend their windfall on a hedonic item or to forgo (avoid) the expenditure altogether. We predict that the proportion of participants making the avoidant choice will be greater when the circumstance in which a windfall is obtained leads to greater negative feelings about the money.

Laundering. Laundering is undertaken when an option in the choice set is perceived as a means to reduce the negative affect component of an ambivalent windfall. We propose that people choose to consume ambivalent windfalls on virtuous options (e.g., purchase a recycling

bin) rather than hedonic options in order to “launder” or “cleanse” the money of its negative affect, a phenomenon we label the *laundering effect*. The logic of laundering is similar to that of Tetlock, Kristel, Osmon, Lerner, and Green’s (2000; Tetlock, 2002) notion of *moral cleansing*, whereby people express their intentions to engage in virtuous behaviors that will allow them to reduce the negative feelings that arise following exposure to morally corrosive tradeoffs.

We test the laundering effect in a set of studies where participants are offered the opportunity to spend a windfall on a virtuous option or offered a choice between a virtuous option and a hedonic option. We predict that the proportion of participants making a virtuous choice will be greater for windfalls obtained under circumstances that evoke negative feelings about the money compared to circumstances that simply evoke positive feelings.

Overview

Our empirical section is constructed as follows. We begin with an open-ended pilot study as an initial exploration of people’s past behavior with money they had mixed feelings about. Next we test our avoidance and laundering hypotheses in eight vignette studies that are divided into three sets (Study 1, 2 and 3). In Study 1 we demonstrate the avoidance effect. In Study 2 we show that TSAM is distinct from affect regulation. In Study 3 we demonstrate the laundering effect and its implications. Study 4 replicates the laundering effect using a windfall of real money. Finally, Study 5 extends our effects to a non-monetary windfall.

Pilot Study

We designed an open-ended pilot as a preliminary test of our hypotheses. People were asked about their real life experiences with positive and ambivalent windfalls and how they had spent the money.

² A hedonic good is one that is primarily characterized by a sensory or affective experience of

Method

One hundred and sixty-five undergraduates were asked both if they had ever received a windfall that they felt purely positive about and if they had ever received a windfall about which they had mixed feelings. If they had experienced one or both situations, they were asked how they had spent the money, what specific emotions were associated with the money, and why they had chosen to spend the money the way they did.

Results

Two research assistants, unaware of the purpose of the study, coded the expenditure responses into five categories: utilitarian (virtue) purchase, hedonic purchase, donated or used the money for a gift, saved (or invested) the money, or other. Inter-rater reliability for this item was .86; disagreements were resolved by discussion. The results supported our predictions about people's tendency to launder ambivalent windfalls. Table 1 presents the proportion of responses for each expenditure category. Although the proportions did not differ significantly for the last three categories, the data indicate an ambivalent windfall was more likely to be spent on utilitarian goods and less likely to be spent on hedonic goods than a windfall that carried purely positive feelings ($\chi^2 = 5.2$).³ When asked why they had spent the windfall in such a manner (inter-rater reliability .79 for this item), 19% of participants reporting about an ambivalent windfall indicated they had made their expenditure "in order to feel better about the money." Only 1% indicated the same for a purely positive windfall. Although preliminary, these findings hint at the possibility that feelings about a windfall influence how it is spent.

aesthetic or sensual pleasure and fun (Hirschman & Holbrook, 1982).

³ All null hypothesis tests are significant at the .05 level unless noted otherwise.

Study 1: The Avoidance Effect

Study 1 tests the hypothesis that people will tend to avoid spending ambivalent windfalls on a hedonic option because it is unlikely to help reduce the negative affect associated with the money. We demonstrate this avoidance effect in three vignettes that share a common structure: a condition where a financial windfall is received under circumstances that evoke positive affect about the money (Positive) and a condition where a financial windfall is received under circumstances that evoke negative affect in addition to positive affect about the money (Ambivalence). Following the scenario, each group is asked to complete a pair of unipolar emotion measures designed to assess the presence of a valenced feeling and, if present, its intensity:

When you think about the money, do you feel *good*?

____ Yes ____ No If you checked “Yes,” how *good* do you feel?

1	2	3	4	5	6	7
<i>Slightly</i>			<i>Moderately</i>			<i>Extremely</i>

When you think about the money, do you feel *bad*?

____ Yes ____ No If you checked “Yes,” how *bad* do you feel?

1	2	3	4	5	6	7
<i>Slightly</i>			<i>Moderately</i>			<i>Extremely</i>

For each participant we subtract the absolute value of the negative affect rating (N) from the positive affect rating (P), producing a scale that ranges from 7 to -7.⁴ This yields a summary measure of affect, P-N, that mirrors a bipolar affective continuum. We expect this difference to be greater in the Positive condition—indicating greater positive feelings about the windfall—than in the Ambivalence condition—indicating greater negative feelings. The shortcoming of

⁴ Note that here and throughout, when participants indicated “no” for a particular emotion, they were assigned a zero for that emotion.

representing people's affective experience on a bipolar continuum is that bipolar scales fail to distinguish ambivalence from neutrality (Cacioppo & Berntson, 1994). The unipolar emotions measures remedy this ambiguity by providing a direct, conservative test of mixed feelings (see Russell & Carroll, 1999); endorsing "Yes" to both questions is the critical indication of ambivalent feelings. (Answering "No" to both questions would indicate neutrality.) Therefore, in addition to P-N being lower, we also expect that rates of concurrent endorsement of positive and negative affect will be greater in the Ambivalence condition.

Following the unipolar emotions measures, participants are offered a hedonic consumption opportunity. The key dependent variables in this study are people's choice of and willingness-to-pay (WTP) for a given hedonic item; we predict that these will be lower for Ambivalence condition participants than their counterparts in the Positive condition. Of the studies below, 1a through 1c are conceptual replicates and are presented together. Study 1d is a variant of Study 1c, and is designed to address a potential alternative explanation. At the end of the section, we present a mediation analysis to confirm that people's feelings about the windfall indeed determine their choices.

Studies 1a-1c

All participants in these studies were undergraduates who were randomly assigned to one of two conditions, Positive or Ambivalence. Each study was run on separate occasions using different populations. Table 2 presents the text of the scenario for each condition. The Positive condition was designed to elicit generally positive feelings about the windfall, whereas the Ambivalence condition was designed to elicit greater negative feelings—and in turn greater rates of ambivalence—because the negative circumstance could be associated directly with the windfall. In Study 1a, which we call Found Money, the windfall is found either in a jacket

pocket (Positive) or on the ground and had ostensibly belonged to someone else (Ambivalence).⁵ In Study 1b (Brother's Gift) the money is either received from a wealthy brother (Positive) or from a presumably financially strapped brother (Ambivalence). Finally, in Study 1c (Uncle's Gift) the money is associated with an uncle's visit (Positive) or with his illness (Ambivalence). After reading the scenario participants completed the unipolar emotions measures and were then presented with the option to purchase a hedonic item (1a: ice cream desert; 1b: designer sunglasses; 1c: a stereo system; see Table 2). Participants who had indicated a preference for the hedonic item were asked their WTP for the option as well. We expected to find that respondents in the Ambivalence condition would be less likely to purchase the hedonic item because such expenditure is unlikely to help them undo their negative feelings about the windfall.

Results

Our experimental manipulation was effective. The summary measure of affect, P-N, was greater in the Positive condition than in the Ambivalence condition for all three studies (see Table 2). We also find that a greater proportion of participants in the Ambivalence condition endorse feeling both good *and* bad about the money. Table 3 presents mean values of positive (P) and negative (N) affect about the money for each condition, as well as the proportion of participants indicating they felt only positive feelings (Good), only negative feelings (Bad), neutral feelings (Neut.), and ambivalent feelings (Amb.).

The results of the purchase decisions also conformed to our predictions in all three studies (see Table 2 for a summary of the choice results). Ambivalence condition participants were less likely to report that they would purchase the hedonic item, indicating a greater

⁵ We presented a separate group of participants ($n = 81$) with a less subtle version of the Ambivalence condition in which they found "a \$10 bill that someone must have lost." The

propensity to avoid. Stated willingness-to-pay (WTP) responses also revealed the expected pattern: Positive condition respondents spent more than Ambivalence condition respondents (see Table 2 for mean WTP for each condition). We find that the significant effect of WTP is due to the purchase decision; the WTP of people in the Ambivalence condition who purchased hedonic item were indistinguishable from the people in the Positive condition that purchased the hedonic item. In other words, simply spending less does not appear to have been an effective strategy to reduce the negative affect about the windfall.⁶ Instead, we argue that participants avoided the expenditure altogether.

Study 1d: Uncle's Gift Revisited

One objection to the interpretation that people's choices in our studies are affect-driven is that we create a demand effect by measuring respondents' emotions prior to their choices. Instead of serving as a simple manipulation check, perhaps the emotion measures cued respondents to focus attention on their feelings about the windfall, which in turn influenced their choices. In order to test this explanation we presented the Uncle's Gift scenarios (Study 1c) to two hundred and fifteen undergraduates (Positive $n = 108$; Ambivalence $n = 107$) of the same subject population as the original study.⁷ The questionnaires were identical in all respects except that participants made their purchase choice prior to completing the emotion measures. Contrary to the alternative explanation, we predicted that participants in the Ambivalence condition would still be more likely to avoid making the expenditure than those in the Positive condition. That is, there would be no difference across orders in the choice proportions.

results were identical to those in the Ambivalence condition presented above, supporting our contention.

⁶ This is true in all subsequent studies unless otherwise noted.

⁷ It must be noted that, while the participants in this study came from an identical population as in Study 1c, participants were only randomly assigned *within* each study.

Furthermore, the results of the emotions measures across the two studies should not differ because avoiding the expenditure should have no effect on the negative affect associated with the ambivalent windfall.

Results

The data confirmed our prediction. The choice proportions replicated the previous study: 53% of participants in the Ambivalence condition indicated they would purchase the stereo in question compared to 71% in the Positive condition ($\chi^2 = 7.34$; Study 1c: 58% vs. 76%). The WTP results reflected this choice pattern (Ambivalence $M = \$74.12$ vs. Positive $M = \$122.87$; $t = 2.4$). Also, the difference between positive and negative affect ratings (P - N) in the Ambivalence condition was smaller than in the Positive condition ($M = 0.2$ vs. 4.8, respectively; $t = 7.9$), replicating results of Study 1c ($M = 1.7$ vs. 5.1, respectively). Finally, twenty-one percent of participants in the Ambivalence condition endorsed feeling both positive and negative affect, compared with 11% in the Positive condition ($\chi^2 = 3.6$), also replicating the results of Study 1c (29% vs. 18%, respectively; see Table 3 for a summary of the emotion measures). Thus, it does not appear that the emotion measures introduce demand characteristics to our studies.

Affective Mediation

Although we have demonstrated that participants in the Ambivalence condition are more likely to avoid making a hedonic purchase, we have yet to show that their feelings in fact guide these choices. We conducted an analysis to test whether the influence of the scenario on WTP

values is mediated by affect.⁸ A significant mediation would confirm that people's feelings about their windfall influence their purchase decisions.

Mediation is supported when three conditions are met (see Baron & Kenny, 1986). First, condition (the predictor) must be correlated with WTP (the criterion); second, condition must be correlated with affect (the mediator); and, third, when WTP is simultaneously regressed on condition and affect, the relationship between condition and WTP should drop significantly. Condition was dummy coded (Positive = 1 and Ambivalence = 0) in the analysis, and $P - N$, our summary measure of affect, was the mediator.

Figure 1 presents diagrams of affect as a mediator of the association between condition and WTP for hedonic items in Studies 1a through 1c. Due to extreme WTP values in Study 1b, we conducted the analysis on log WTP values. Numbers to the right of the slash are standardized coefficients from the simultaneous analysis; all others are bivariate correlations. In each case a Goodman (1) version of the Sobel test (Goodman, 1960) established affect as a significant mediator of the relationship between scenario and WTP; Found Money ($z = 3.7$), Brother's Gift ($z = 2.1$), and Uncle's Gift ($z = 3.7$). From the mediation we can conclude that people's feelings about the windfall influenced their spending behaviors in our studies.

Study 2: Distinguishing TSAM from Affect Regulation

Although avoiding hedonic alternatives seems to contradict the expectation of affect regulation research (e.g., Baumeister, 2002; Tice et al., 2001), it is plausible that Study 1 participants avoided using their windfall simply in order not to worsen their overall mood rather than to manage their specific feelings about the money. To more clearly distinguish TSAM from affect regulation, we add a third condition—which we call Situational Ambivalence—to our

⁸ We use WTP because its variance is closely associated with choices ($r > .70$ in all cases) and

experimental design where the circumstance that gives rise to negative affect is unrelated to the windfall directly. This new condition is designed to induce negative feelings about a situation, while largely maintaining a positive affective tag on the target object (the windfall). If people's feelings are specific to the windfall and their behaviors are targeted at managing their feelings about this object, then the propensity to avoid should be greater in the Ambivalence condition than either the Situational Ambivalence or Positive conditions.

Method

One hundred twenty-one undergraduates were presented with one of the following three scenarios at random as part of a larger set of questionnaires.

Positive ($n = 39$)

Imagine that you check the mail and find a card from your uncle that contains a \$200 cash gift for your high school graduation.

Ambivalence ($n = 41$)

Imagine that you check the mail and find a card from your uncle that contains a \$200 cash gift for your high school graduation. As you finish reading the card, you receive a phone call from your mother and she informs you that your uncle has just been diagnosed with a very serious illness.

Situational Ambivalence ($n = 41$)

Imagine that you check the mail and find a card from your uncle that contains a \$200 cash gift for your high school graduation. As you finish reading the card, you receive a phone call from your mother and she informs you that a very close family friend has just been diagnosed with a very serious illness.

The Ambivalence condition was presumed to induce positive and negative affect for the same reason as in Studies 1c and 1d. We expected participants to maintain a positive affective tag on the windfall in the Situational Ambivalence condition due to the fact that the family friend's illness had no relation to the windfall received from the uncle. Following the scenario,

because it is a continuous variable that can be analyzed with linear regression.

respondents were presented the unipolar emotion measures and, subsequently, the option to spend the money on a stereo (as in Study 1c).

Results

The data support the distinction between affect regulation and TSAM. Participants in the Ambivalence condition were significantly less likely to indicate they would make the stereo purchase (34%) than either participants in the Positive condition (64%; $\chi^2 = 7.2$) or participants in the Situational Ambivalence condition (56%; $\chi^2 = 4.0$). Furthermore, there was a non-significant difference in the intention to purchase the stereo between the Positive and Situational Ambivalence conditions (64% vs. 56%, respectively; $\chi^2 = 0.6, p > .45$). The WTP data showed a similar pattern. Stated WTPs were nearly identical in the Positive and Situational Ambivalence conditions ($M = \$115.51$ and $\$118.76$, respectively), but significantly greater than in the Ambivalence condition ($M = \$65.12$; $F(1,120) = 4.1$).

An analysis of P-N found that participants in the Ambivalence condition reported the greatest degree of negative feelings about the windfall ($M = -0.4$), followed by participants in the Situational Ambivalence condition ($M = 1.7$; $t = 2.1$), who in turn reported more negative feelings than participants in Positive condition ($M = 5.2$; $t = 3.5$). The underlying structure of affect showed that in order for the windfall to possess a mixed affective tag, the negative circumstance needs to be directly associated with the money: participants in the Ambivalence condition were significantly more likely to endorse both positive and negative feelings about the windfall (37%) than participants either in the Positive condition (15%; $\chi^2 = 4.6$) or the Situational Ambivalence condition (15%; $\chi^2 = 5.2$). In summary, the pattern of data suggests that in order for avoidance to occur, people's negative affect must be tied to the windfall; simply feeling generalized negative affect does not give rise to the same pattern of behavior.

It is possible, however, that the illness to the close family friend in the Situational Ambivalence condition was not sufficiently negative to trigger avoidance. As a manipulation check, we added a version of the Situational Ambivalence condition ($n = 48$) to our study where the unipolar emotion measures asked participants how they felt about the *situation* rather than the gift money. Participants overwhelmingly (79%) endorsed having only negative feelings about the situation—clearly their “mood” was negative (P-N: $M = -4.5$). Nevertheless, the choice results support our contention that an *affective tag* is necessary to influence choice in this context: 60% of these participants selected the stereo, a non-significant difference from the Positive condition (64%; $\chi^2 = 0.1$) or the original Situational Ambivalence condition (56%; $\chi^2 = 0.2$), while remaining significantly greater than the Ambivalence condition (34%; $\chi^2 = 5.0$).

Discussion

In Studies 1 and 2 we present evidence supporting an avoidance strategy when potential expenditures are not likely to reduce the negative affect component of ambivalent windfalls. Respondents confronted with either the possibility of spending their ambivalent windfall on a hedonic good or avoiding expenditure altogether chose the latter strategy more frequently than recipients of positive windfalls. Moreover, we show that the effect cannot be attributed to a more general case of affect regulation that might occur when people are in a bad mood.

While we suggest that participants did not view the dessert expense in Study 1a, for example, as a means to reduce their negative affect, we did not present them with an alternative that might. In the next study we do precisely that: participants receive money in a hypothetical scenario and are either given the option to make a virtuous expenditure or given the choice between purchasing a hedonic item and a virtuous item.

Study 3: The Laundering Effect

Study 3 consists of four vignettes that are structured similar to those in Study 1. We again present respondents with one of two scenarios: a condition where a financial windfall is generally positive (Positive) or a condition wherein the circumstances in which the windfall was obtained are expected to produce negative affect in addition to positive affect about the money (Ambivalence). Once again we check the overall affective reaction to the windfall (i.e., P-N) and the degree of concurrent endorsement of positive and negative affect in each condition. The dependent variable is the propensity to choose a relatively virtuous option in each condition; we expect this propensity to be greater in the Ambivalence condition. We conclude with an analysis that tests whether affect indeed mediates choice in our studies.

Study 3a: Consulting Bonus

One hundred and forty-six graduate and professional students were presented with one of the following two scenarios at random as part of a larger questionnaire packet:

Positive ($n = 75$)

Imagine that as part of a small, private consulting project you receive a \$1000 bonus for helping increase the sales of a local furniture manufacturer.

Ambivalence ($n = 71$)

Imagine that as part of a small, private consulting project you receive a \$1000 bonus for helping increase the sales of a local cigarette manufacturer.

We assumed that the latter scenario would elicit greater negative affect because increasing the sale of cigarettes would likely be construed as promoting a social ill. Participants then completed the same unipolar emotions measures as in Study 1. Following the emotions measures they were presented the choice below:

Around the time you receive the bonus check from the [cigarette/furniture] manufacturer, you also receive a letter from one of your favorite charities requesting a contribution.

Would you donate all or some of your bonus to the charity?

Yes

No

If yes, what is the maximum amount of money you would be willing to donate?:
\$ _____

Whereas participants in Study 1's Ambivalence conditions were expected to avoid spending their windfall, here we thought that they would make the expenditure because we assumed that the virtuous donation would allow them to reduce the negative affect component of their mixed feelings about the money.

Results

The data confirmed the effectiveness of our manipulation. The difference between positive and negative affect ratings (P-N) in the Ambivalence condition was lower than in the Positive condition ($M = 0.3$ vs. 5.3 , respectively; $t = 8.8$). Furthermore, Ambivalence condition participants were over five times more likely to endorse both positive and negative feelings about the money than Positive condition participants (22% vs. 4%; $\chi^2 = 11.1$). Table 4 shows number of participants and mean values of positive (P) and negative (N) affect for each condition, as well as the proportion of participants indicating they felt only positive feelings (Good), only negative feelings (Bad), neutral (Neut.), and ambivalent (Amb.).

People in the Ambivalence condition did not differ from their Positive condition counterparts in stated likelihood of donating their windfall (90% vs. 88%, respectively). However, in this study a more telling difference is the amount of money allotted for donation because the large size of the bonus in the scenario made it likely that participants would make at least a *minimal* donation. Ambivalence condition participants indicated that they would donate more than twice the amount of money than their Positive counterparts ($M = \$383.45$ vs. $\$180.46$, respectively; $t = 3.9$). Median values, which are less influenced by extreme scores than means, were \$200 and \$100 for the Ambivalence and Positive conditions, respectively. It is noteworthy

that the proportion of respondents who indicated that they would donate their entire bonus was 22.5% for the Ambivalence condition, but only 5.3% for the Positive condition ($\chi^2 = 9.1$).

Study 3b-3d: The Emotional Effect of Laundering on Affective Tags

Study 3a provided participants a choice between a virtuous option (laundering) and avoidance; the remaining studies present a choice between a virtuous item and a hedonic item. Following their choice participants were asked to indicate their WTP for each option in the event that they were permitted to split their windfall. All participants were undergraduate college students; as the studies in this section are conceptual replicates, we present their results simultaneously.

We argue that laundering is a strategy used to reduce the negative affect component of a windfall's tag. This implies that when a windfall is laundered, negative affect should decrease, leading to a concomitant decrease in rates of ambivalence. To test this hypothesis, we crossed an order factor with our standard scenario conditions (Positive and Ambivalence), as we had done in Study 1d: participants were either asked to complete the emotion measures prior to making the choice (Emotion 1st) or asked to make their choice prior to completing the emotion measures (Choice 1st). We predicted that participants in the Ambivalence condition would still choose and indicate greater WTP for the virtuous alternative more often than participants in the Positive condition, irrespective of order. In the Choice 1st order of the Ambivalence condition, however, we expected to find a significant drop in the proportion of respondents endorsing both positive and negative affect, as the choice of expenditure should have reduced negative feelings for these participants.

In Study 3b, which we label Aunt's Gift, participants are told they either receive money from an aunt who has come for a visit (Positive) or has just passed away (Ambivalence). Study

3c, Bonus at Work, uses social comparison to evoke negative affect. In the scenario participants are told they receive a bonus from their employer and that an equally-deserving co-worker either receives the same amount (Positive) or twice as much (Ambivalence). Finally, in 3d (Disappointing Win) participants are told either that they have won a lottery outright (Positive) or that they have won a lottery but could have won substantially more money (Ambivalence; see J.T. Larsen et al., 2003). Table 5 presents the wording for each study, as well as the hedonic and virtuous choices used.

Results

Our manipulation proved effective for all studies. We begin with the results for the Emotion 1st conditions because the emotion measures in the Choice 1st conditions serve as additional dependent variables. P-N was lower in the Ambivalence condition than in the Positive condition as expected (see column 3 in Table 5). Furthermore, in all studies the Ambivalence condition/Emotion 1st respondents were more likely to endorse both positive and negative affect than their Positive condition counterparts.

The choice results supported our hypotheses. As expected, there was no statistically significant effect of question order on choices, so for ease of exposition we pooled the data across the scenario factor (ignoring order). Respondents' choice patterns indicated a laundering effect: in every study participants in the Ambivalence condition were more likely to choose the virtuous option (see column 5 in Table 5). WTP values mirrored this trend; participants who received the ambivalent windfall allocated significantly more money to the virtuous option.

Crucially, a significant reduction in the proportion of participants endorsing both positive and negative affect occurred when choices were elicited first compared to when emotions were elicited first in the Ambivalence conditions of all studies (Aunt's Gift: 50% to 11% for Emotion

1st vs. Choice 1st, respectively, $\chi^2 = 13.3$; Bonus at Work: 31% to 18%, $\chi^2 = 3.7$; Disappointing Win: 26% to 9%, $\chi^2 = 4.1$). The proportion of participants endorsing negative affect in the Ambivalence conditions dropped when choices were elicited first, as well (Aunt's Gift: 75% to 43%, for Emotion 1st vs. Choice 1st, respectively, $\chi^2 = 7.6$; Bonus at Work: 59% to 27%, $\chi^2 = 19.3$; Disappointing Win: 40% to 17%, $\chi^2 = 4.1$). The reduction in ambivalence rates and the drop in negative affect suggest that the choice of the virtuous option was an effective means to "launder" the windfall from its negative affect.

Affective Mediation

We again conducted a mediation analysis to examine the degree to which affect accounts for the association between the condition (Positive or Ambivalence) and WTP for the laundering option. The analysis was performed on Studies 3a and the Emotion 1st conditions of 3b - 3d.

Figure 2 presents affect (P - N) as a mediator of the association between scenario and WTP for the virtuous options. Numbers to the right of the slash are standardized coefficients from the simultaneous analysis; all others are bivariate correlations. The Goodman (1) version of the Sobel test established affect as a significant mediator of WTP for two out of four of the vignettes: Consulting Bonus ($z = 4.06$) and Inheriting Money ($z = 2.40$), but not Bonus at Work ($z = .16$; $p > .80$) or Disappointing Win ($z = .16$; $p > .85$). We offer a possible reason for this lack of significance in the General Discussion.

Study 4: Laundering Actual Money

Heretofore our studies have presented evidence for avoidance or laundering using hypothetical vignettes. In order to enhance the ecological validity of our findings, we conducted a conceptual replication of the laundering studies using an actual windfall.

Method

Eighty-one undergraduates were asked to complete a one page “market research questionnaire” as an unexpected addendum to an unrelated experiment in which they had participated for partial course credit. The survey included questions about participants’ demographics, purchase habits for toiletries and cosmetics, preference for certain stores, whether those stores also sold cigarettes, and online purchase of toiletries (the latter two were mixed in with the other questions). Having completed the survey, participants received a sheet titled “Explanation” that read as follows:

Thank you for participating in this project. The questionnaire you completed is designed to compare how consumers judge their experiences when they are actually shopping versus when they are not at the store.

The form then stated that the project had either been funded by a grant from a leading cigarette manufacturer (Ambivalence) or by a grant from a leading personal computer manufacturer (Positive), and included each company’s logo and company description for realism (participants were randomly assigned to one of these two conditions). Two one dollar bills were clipped to the bottom of the form. Right above the money participants were presented with the following choice between a virtuous expenditure and a hedonic expenditure:

To thank you for your help, you are being given \$2 to use in order to purchase one of the two coupons described below.

Please indicate which coupon you would prefer to receive in exchange for the money.

_____ Coupon to save money on textbooks. Receive \$2 off any textbook purchase at the [the university bookstore].

_____ Coupon to save money on ice-cream. Receive \$2 off any purchase at [a local ice cream parlor].

Participants then checked off their choice and handed the \$2 to the experimenter in exchange for the coupon (the experimenter was blind to the condition). After receiving the money, the experimenter debriefed the participants and returned the money to them.

We did not assess feelings about the windfall in this study because we wanted to preserve the cover story that the money was simply a surprise reward for completing the survey.

However, based on a pre-test survey and the results of Study 3a we expected people in the Ambivalence condition (cigarette company) to have more negative feelings about the money and therefore be more likely to engage in laundering.

Results

The results conformed to our prediction. Whereas 44% of participants in the Ambivalence condition elected to use their money for the virtuous option (textbook coupon), half that proportion, 22%, chose this option in the Positive condition ($\chi^2 = 4.2$). This demonstrates that people's inclination to launder windfalls of their negative affect component holds even when the options in question involve real monetary consequences.

Study 5: Non-monetary Windfalls

Although we have restricted our experiments to financial windfalls, TSAM could obviously be extended to other target objects. For instance, occasionally events occur that lead to unanticipated free time. As in the case of financial windfalls, a windfall of time can be a source of positive affect, but the time may be “spent” differently depending on the circumstances in which it was gained.

Method

One hundred and sixty one undergraduates were presented with one of the following two scenarios at random as part of a larger set of questionnaires:

Positive ($n = 81$)

Imagine that you arrive at your class on a Thursday afternoon. There is a note on the door that says, “Class has been cancelled. Your professor has had minor car trouble and will not be able to make it.”

Ambivalence ($n = 80$)

Imagine that you arrive at your class on a Thursday afternoon. There is a note on the door that says, “Class has been cancelled. Your professor has had a serious car accident and will not be able to make it.”

The Ambivalence condition was designed to elicit both positive and negative affect for obvious reasons—even though it may be thrilling to have class canceled, no student wishes that such free time will come as a result of such acute misfortune. Participants were asked to rate their feelings about this “free time” on unipolar emotion measures. They were then presented the following choice:

You are considering two possible uses for the free time. Please circle the option you would choose:

Doing something
“productive”

Doing something
“fun”

We expected that respondents in the Ambivalence condition would be more likely to launder their free time by engaging in something productive.

Results

Our manipulation was effective. First, the difference between positive and negative affect ratings (P-N) in the Ambivalence condition was lower than in the Positive condition ($M = -1.0$ vs. 5.6 , respectively; $t = 12.4$). Second, participants in the Ambivalence condition were significantly more likely to indicate both positive and negative feelings about the free time than their Positive condition counterparts (29% vs. 5%; $\chi^2 = 25.3$).

As expected, those in the Ambivalence condition were more likely to launder their time windfall by engaging in a “productive” activity (virtue) rather than a “fun” activity (hedonic): 59% percent chose to do something productive in this condition, while only 41% did so in the Positive condition ($\chi^2 = 6.1$).

General Discussion

Affect regulation refers to actions people undertake in order to alter or maintain their affect when it has no reference to a target object (Russell, 2003). In this paper we examine situations where affect is attributed to an object, and test two types of behaviors that people might engage in when managing such affect. We show that even though the goals of affect regulation and TSAM are the same—to reduce negative affect—they can sometimes give rise to different behaviors. Financial windfalls serve as an effective case study for TSAM because of their inherently positive nature and because previous research on consumer spending provides an *a priori* prediction on how the money will be consumed. Of course, TSAM should extend to other objects, as we demonstrate in Study 5.

Study 1 consisted of three vignettes demonstrating an avoidance effect—people who received a windfall linked to a negative circumstance avoided using the money to purchase hedonic goods when such items were the lone option in a choice set. In Study 2 we show that TSAM prompts behaviors that are different from those expected by affect regulation. The data indicate that simply feeling bad about a situation, rather than specifically about the windfall, does not give rise to avoidance. In Study 3 we show that when people receive an ambivalent windfall, they are more likely to use it on a virtuous expenditure compared to people who receive a positive windfall. We label this phenomenon the laundering effect, and provide direct evidence for the “management” aspect of TSAM using a question order manipulation in which we demonstrate that following a virtuous choice negative feelings about the windfall are attenuated. Furthermore, we show that affect mediates the relationship between the situation in which a windfall is obtained and WTP for virtuous items and hedonic items. Study 4 replicates the laundering effect using windfalls of real money. Finally, in Study 5 we show that laundering occurs for (non-monetary) windfalls of time.

Limitations and Possible Alternatives

A number of cognitive explanations could be fashioned for any individual experiment in our set (see Tetlock & Levi, 1982, for a discussion of cognitive alternatives to affective and motivational theories). For example, one could argue that expectations of the giver explain the spending behavior in Studies 1b, 1c, or 3b. Or, perhaps in some of the studies the Ambivalence scenarios could be considered more unusual or complex than the Positive scenarios, therefore requiring greater depth of processing, which in turn might reduce impulsive purchases. Note, however, that Study 2's Ambivalence and Situational Ambivalence conditions were equally complex, yet impelled the different purchase behaviors that we had predicted. While in some cases these piecemeal alternatives may seem compelling, our affect-based approach can more parsimoniously account for the full array of studies we report. Nonetheless, some limitations and alternatives should be addressed in greater detail.

One may argue that guilt is a prominent source of negative affect in some of the studies we present, and that people tend to spend money they feel guilty about differently than money that carries no such feeling. It is plausible that negative affect due to guilt is more likely to impel people to avoid and, in particular, to launder, as indicated by research about the effectiveness of guilt feelings in inducing charitable donations (Strahilevitz & Myers, 1998) and as demonstrated in Study 3a where people donate more of their bonus after helping a cigarette manufacturer increase its sales. Indeed, in our pilot study we asked people to indicate the type of negative affect they experienced for their ambivalent windfall and found that the majority of responses were guilt (61%), followed by generalized negative affect (bad, sad, or negative; 38%).

Study 3c (Bonus at Work), however, shows that our hypothesized effect still holds when the source of negative affect is anger or disappointment generated by an upward social

comparison. Similarly, the disappointing win study (3d) demonstrates that laundering can arise in the case of a close-call counterfactual (Kahneman & Tversky, 1982; Kahneman & Varey, 1990) where people narrowly miss winning a larger prize. It is interesting to note, however, that in both studies (3c and 3d) the mediation analysis failed to reach statistical significance. We speculate that this failure is attributable to the lack of correspondence between the type of negative feelings associated with the money and the type of negative feelings that participants perceive would arise from consuming the hedonic item. In some of the scenarios where guilt plays a large part in evoking negative affect, the match between the guilt associated with the money and the guilt associated with the purchase of a hedonic item is fairly strong, and people appear more driven to avoid guilt-inducing hedonics in favor of laundering consumption opportunities. This issue of matched emotions may be worth exploring in future research.

Another potential limitation, one that we do not address directly in our experiments, relates to the possibility that people avoid using the windfall on a hedonic good because of an affective tag's rate of decay. The fact that people's choices and feelings were identical irrespective of question order in Study 1d (the uncle's gift revisited scenario) suggests that avoidance alone does not reduce the negative affect component of an ambivalent windfall. Instead, people might avoid spending ambivalent windfalls because the longer they keep the windfall in their wallet or bank account, the greater the likelihood that the feelings attached to the windfall will dissipate (in this sense putting the money in the bank serves a laundering function). In other words, one factor that may limit or enhance detection of our effects is the period elapsed between the time a windfall is obtained and the opportunity to use it. If such an opportunity occurs far enough in the future, we would expect our effect to diminish. It is possible, however, that for very large windfalls that enable very large one-time purchases (e.g.,

car), the purchase opportunity itself might cue the mixed feelings that people had when they received the windfall, irrespective of the time elapsed.

Feelings about Money and Mental Accounting

The idea that people might have negative feelings about money they have received has been suggested elsewhere (e.g., Zelizer, 1994). Moreover, the notion that people attempt to reduce their negative feelings about their money has also been addressed. For instance, anthropologist Parker Shipton (1989) found that members of the Kenyan Luo tribe use “bitter” money (i.e., money earned from certain taboo transactions) differently than other money and even hold ceremonies to “purify” the tainted money before its consumption.

The predominant research paradigm on consumer spending, however, proposes that people track their financial activities using a set of purely cognitive categories or mental accounts (Heath & Soll, 1996; Henderson & Peterson, 1992; Kahneman & Tversky, 1984; Linville & Fischer, 1991; Thaler, 1985, 1990). In this sense feelings play no role in the mental accounting of windfalls; the propensity to spend a sum of money depends upon the category it is assigned to, not the feelings it engenders. In the case of windfalls, the money is usually assigned to a current income account, which is a mental account typically designated for spending. To be sure, our affect-based approach and mental accounting are not incompatible (see, e.g., Prelec & Loewenstein, 1998), as the affective response to the windfall sometimes may follow some form of appraisal processes. This appraisal subsequently gives rise to a feeling, similar to Fiske’s (1982) model of schema-triggered affect in social judgments. In contrast to the traditional notion of mental accounting, however, we demonstrate empirically that expenditures of windfalls are mediated by feelings about the money, irrespective of the mental account. An important feature of our studies is that we create vignettes where the prediction from a mental accounting

perspective is identical across conditions. Thus, differences in spending patterns can be plausibly attributed to target-specific affect management.

The notion that negative feelings about money can influence its consumption may shed light on a puzzle that arose in early studies about people's proclivity to spend windfalls. On the one hand, Bodkin (1959) used a sample of American World War II veterans to show that windfalls are spent at a rate higher than ordinary income. The veterans had unexpectedly received National Service Life Insurance dividends made possible because premiums had been computed on the basis of too high an expected casualty rate. On the other hand, Kreinin (1961) and Landsberger (1966) presented evidence that Israeli Holocaust survivors who had received reparations from the German government spent this windfall at lower marginal rates than their regular income (except when reparations represented less than ten percent of income).⁹ Many persuasive reasons have been proposed for these contradictory findings; they are beyond the scope of this discussion (see exchange between Bodkin, 1959, 1963, 1966 and Kreinin, 1961, 1963). We offer one more explanation: the WWII veterans' windfall could be considered "happy" money—it had been distributed because casualty rates had been lower than expected. In contrast, it is easy to imagine the Holocaust survivors feeling ambivalent about their windfall, and consequently avoiding its use.

TSAM and Public Policy

Several "real-world" phenomena take on similar characteristics to the scenarios reported herein, and hint at the importance of TSAM in public policy settings. While the following discussion is admittedly speculative, we feel that the examples below represent behaviors that are consistent with the hypotheses presented in this paper.

The 2001 Bush tax rebate distributed a budgetary surplus to eligible taxpayers in a purported attempt to stimulate the economy, spurring a lively debate about how the money could be used to fund social programs. Consider the following reactions culled from postings at Rejecttherebate.com, a world-wide-web site dedicated to “protest the Bush cut”: “I have been both saddened and disgusted...,” “[we are] upset,” and “[I find it] disturbing.” While the authors of these postings might be unrepresentative beneficiaries of the Bush rebate, we believe that their reactions reflect a strong negative affective tag on an object generally considered to be quite positive. Indeed, the negative component of this tag may have prompted the rebate recipients to launder the money: most indicated they would donate the money to charity and some revealed they would send the money back to the U.S. Treasury Department.

A second example relates to performance bonuses. In recent years teachers at East Chapel Hill High School in affluent Chapel Hill, North Carolina have been awarded bonuses based on their students’ standardized test performance (Jackson, 2000). A group of teachers opposed this form of incentive, and chose to donate their bonuses to a school in rural North Carolina whose students come from a lower socioeconomic background. We surmise that the teachers’ donation was a way to launder the negative feelings they had about their bonus.

Finally, recent research shows that people prefer public goods (e.g., parks) rather than money in compensation for public harms, such as pollution of a local stream by a factory (Mansfield, Van Houtven, & Huber, 2002). Mansfield et al.’s (2002) preferred explanation for this finding dovetails with our laundering strategy. They maintain that public goods “psychologically mitigate” public harms, and that in some situations accepting money for a public harm simply makes people feel guilty. We suggest that monetary compensation will carry

⁹ Marginal propensity or rate of consumption, as defined in the economic literature, is change in

an ambivalent affective tag, and, as a result, will be avoided. A public good, however, can function as a means to launder the money.

Conclusion

In this paper we show that people's motivation to reduce their negative feelings extends beyond their mood or incidental affect to situations where affect is attributed to a specific object. Using financial windfalls as a case study, we show that this target-specific affect management prompts behaviors that are different from those that people engage in during affect regulation. In a recent review Russell (2003) writes: "Although direct evidence is scarce... attributed affect thus guides current behavior to the Object and provides information for future interactions with that Object" (p. 159). We consider this investigation of TSAM, and the avoidance and laundering strategies it impels, as an initial foray in the study of the behavioral consequences of attributed affect.

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Table Captions

Table 1: Proportion of responses assigned to each expenditure category for situations where respondents had mixed feelings about the windfall (Ambivalence) or only positive feelings (Positive).

Table 2: Text of scenarios and key results for Study 1. Alternate wordings are in brackets [Ambivalence/Positive]. For each scenario, a summary measure of affect (P-N) and the proportion of participants who endorse mixed feelings (Amb.) about the windfall are presented for the Ambivalence (Ambiv.) and Positive conditions. The proportion of participants in each condition choosing the hedonic options are also presented along with the average willingness-to-pay (WTP) for condition.

Table 3: Summary of emotions results for each scenario in Study 1. Average values for positive affect (P) and negative affect (N), as well as the proportion of respondents endorsing only positive affect (Good), only negative affect (Bad), neutral (Neut.) and ambivalence (Amb.), are shown for the Ambivalence (Ambiv.) and Positive conditions.

Table 4: Summary of emotions results for each scenario in Study 3. The data are presented separately for scenarios where emotions or choices were measured first. Average values for positive affect (P) and negative affect (N), as well as the proportion of respondents endorsing only positive affect (Good), only negative affect (Bad), neutral (Neut.), and ambivalence (Amb.), are shown for the Ambivalence and Positive conditions.

Table 5: Text of scenarios and key results for Studies 3b-3d. Alternate wordings are in brackets [Ambivalence/Positive]. For each scenario, a summary measure of affect (P-N) and the proportion of participants who endorse mixed feelings (Amb.) about the windfall are presented for the Ambivalence (Ambiv.) and Positive conditions crossed with question order (Emotions 1st vs. Choice 1st). The proportion of participants choosing the virtuous options are also presented with the average willingness-to-pay (WTP) for the virtuous option in each condition.

Figure Captions

Figure 1: Affect (P-N) as a mediator of condition (Positive or Ambivalence) and willingness-to-pay (WTP) for the hedonic options in Studies 1a, 1b, 1c, and 1d. Numbers to the right of the slash are standardized coefficients from the simultaneous analysis; all others are bivariate correlations between variables. Asterisks (*) indicate statistically significant associations.

Figure 2: Affect (P-N) as a mediator of condition (Positive or Ambivalence) and willingness-to-pay (WTP) for the virtuous options in Studies 3a - 3d. Numbers to the right of the slash are standardized coefficients from the simultaneous analysis; all others are bivariate correlations between variables. Asterisks (*) indicate statistically significant associations.

Table 1

Expenditure	Situation	
	Ambivalent	Positive
Hedonic	.15	.32
Utilitarian	.43	.34
Donate/Gift	.10	.03
Save/Invest	.28	.28
Other	.04	.03

Table 2

Study	Scenario	Emotions Results	Choice	Choice Results
1a Found Money	Imagine you go out to dinner (cost \$41.50) with your significant other at a recently opened, hip restaurant in a nearby neighborhood in your city. As you walk down the street to your car after dinner, you unexpectedly find a \$10 bill [on the ground/in your jacket pocket]. You place the bill [back] in your pocket and continue your trip home.	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 2.6 4.7 $t = 4.2$</p> <p>Amb. 0.31 0.15 $\chi^2 = 6.4$</p>	On your way back home you see the new gourmet ice cream parlor that you have been meaning to check out. Would you stop at the parlor and use the money you found to treat you and your significant other to ice cream for dessert?	<p><u>Ambiv.</u> <u>Positive</u></p> <p>Choice .78 .95 $\chi^2 = 6.4$</p> <p>WTP \$6.95 \$8.16 $t = 2.1$</p>
1b Brother's Gift	Imagine that your brother, [who is a struggling artist/who is a wealthy banker], gives you \$75 as a gift for your high school graduation.	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N -0.4 4.9 $t = 11.8$</p> <p>Amb. .31 .08 $\chi^2 = 19.9$</p>	You are shopping soon after graduation and see fancy designer sunglasses that you like. Would you use the gift money to purchase the sunglasses?	<p><u>Ambiv.</u> <u>Positive</u></p> <p>Choice .38 .52 $\chi^2 = 4.3$</p> <p>WTP \$23.22 \$32.12 $t = 1.6$¹⁰</p>
1c Uncle's Gift	Imagine that your uncle, [who has just been diagnosed with a very serious illness/who has just come for a visit], unexpectedly gives you a cash gift of \$200 for your high school graduation.	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 0.2 5.1 $t = 11.9$</p> <p>Amb. .29 .18 $\chi^2 = 4.1$</p>	You have been considering purchasing a stereo system, but until now you could not afford it. Would you use your uncle's gift to purchase the stereo?	<p><u>Ambiv.</u> <u>Positive</u></p> <p>Choice .58 .76 $\chi^2 = 11.3$</p> <p>WTP \$100.42 \$146.92 $t = 3.4$</p>

¹⁰ Due to extreme outliers this difference failed to reach statistical significance in the Brother's Gift scenario ($t = 1.6$; $p < 0.11$). When values were log-transformed in order to attenuate the effect of extreme values the predicted difference was statistically significant ($t = 2.0$).

Table 3

	Found Money (1a)		Brother's Gift (1b)		Uncle's Gift (1c)		Uncle's Gift (1d)	
	Ambiv.	Positive	Ambiv.	Positive	Ambiv.	Positive	Ambiv.	Positive
P	4.2	5.2	2.7	5.2	2.6	5.6	2.9	5.4
N	1.6	0.5	3.0	0.3	2.5	0.5	1.9	0.4
Good	.53	.82	.30	.89	.34	.78	.39	.86
Bad	.14	.03	.36	.02	.30	.02	.32	.02
Neut.	.02	.00	.03	.01	.07	.02	.08	.01
Amb.	.31	.15	.31	.08	.29	.18	.21	.11
<i>n</i>	87	87	114	115	123	122	107	108

Table 4

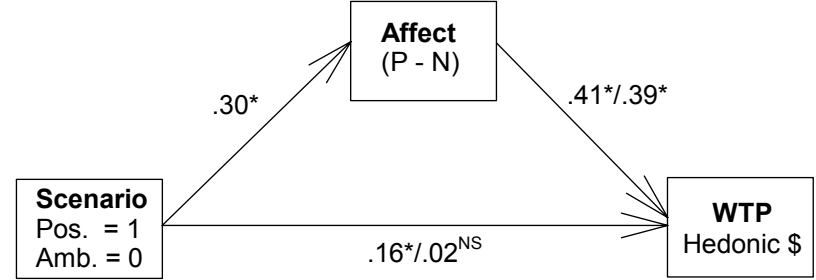
	Consulting (3a)		Aunt's Gift (3b)				Bonus at Work (3c)				Disappointing Win (3d)			
	Emotions 1st		Emotions 1st		Choice 1st		Emotions 1st		Choice 1st		Emotions 1st		Choice 1st	
	Ambiv.	Pos.	Ambiv.	Pos.	Ambiv.	Pos.	Ambiv.	Pos.	Ambiv.	Pos.	Ambiv.	Pos.	Ambiv.	Pos.
P	2.7	5.4	2.6	5.4	3.3	6.0	3.1	6.1	4.7	5.8	3.7	5.2	4.4	4.7
N	2.4	0.2	2.8	0.7	1.9	0.4	2.8	0.1	.89	0.1	1.4	0.2	0.6	0.3
Good	.38	.93	.19	.74	.54	.89	.41	.97	.70	.92	.54	.93	.78	.85
Bad	.34	.03	.25	0	.32	0	.28	.01	.09	.01	.15	.00	.07	.07
Neut.	.06	.00	.06	.04	.03	.00	.00	.00	.03	.02	.06	.00	.06	.02
Amb.	.22	.04	.50	.22	.11	.11	.31	.02	.18	.05	.26	.07	.06	.09
<i>n</i>	71	75	36	37	38	36	92	91	92	95	54	56	54	54

Table 5

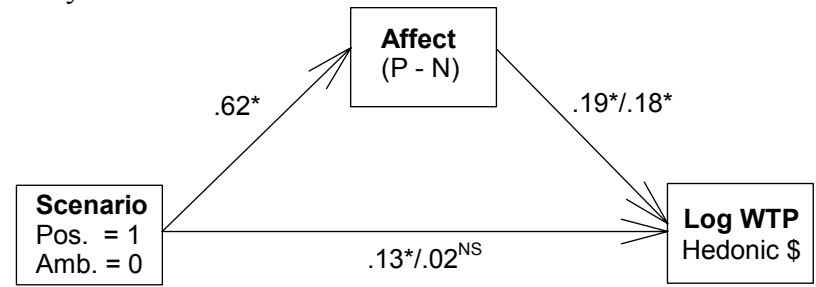
Study	Scenario	Emotion Results (Emot.1st)	Choice	Choice Results	Emotions Results (Choice 1st)
3b Aunt's Gift	Imagine that right before the holidays your aunt [passes away/comes to visit] and [leaves/gives] you a \$200 cash gift.	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N -0.2 4.7 $t = 7.7$</p> <p>Amb. .50 .22 $\chi^2 = 5.5$</p>	<p>You are considering two possible uses for your aunt's money:</p> <p>Pay for educational expenses/A spring break beach vacation</p> <p>If you could split the money between both options, how much would you designate for each?</p>	<p><u>Ambiv.</u> <u>Positive</u></p> <p>Choice_(virtue) .66 .35 $\chi^2 = 13.8$</p> <p>WTP_(virtue) \$119.33 \$91.35 $t = 3.8$</p>	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 1.4 5.6 $t = 2.1$</p> <p>Amb. .11 .11 $\chi^2 = 0^{NS}$</p>
3c Bonus at Work	Imagine that at the end of the year, the manager at your company awards you with a \$250 bonus for your hard work on a project. Your co-worker, [despite having been with the company just as long as you and who works just as hard/inexplicably receives a \$500 bonus/who has been with the company just as long as you and who works just as hard, understandably also receives a \$250 bonus].	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 0.3 6 $t = 10.7$</p> <p>Amb. .31 .02 $\chi^2 = 28.2$</p>	<p>You are considering two possible uses for the money. Please circle the option you would spend the money on:</p> <p>Donate to your favorite charity/ Television</p> <p>If you could split the money between both options, how much would you designate for each?</p>	<p><u>Ambiv.</u> <u>Positive</u></p> <p>Choice_(virtue) .20 .08 $\chi^2 = 10.6$</p> <p>WTP_(virtue) \$56.90 \$48.16 $t = 3.4$</p>	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 3.8 5.7 $t = 4.7$</p> <p>Amb. .18 .05 $\chi^2 = 7.4$</p>
3d Disappointing Win	Imagine [that you pick the four winning numbers in a local lottery sweepstakes and win a \$300 cash prize. You missed the fifth winning number by one digit. Had you picked all five numbers correctly, you would have won \$30,000./that you pick the four winning numbers in a local lottery sweepstakes and win a \$300 cash prize].	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 2.4 5 $t = 4.9$</p> <p>Amb. .26 .07 $\chi^2 = 7.1$</p>	<p>You are considering two possible uses for your prize money. Please circle the option you would spend the money on:</p> <p>Pay for educational expenses/A spring break beach vacation</p> <p>If you could split the money between both options, how much would you designate for each?</p>	<p><u>Ambiv.</u> <u>Positive</u></p> <p>Choice_(virtue) .55 .41 $\chi^2 = 4.1$</p> <p>WTP_(virtue) \$159.48 \$129.88 $t = 2.6$</p>	<p><u>Ambiv.</u> <u>Positive</u></p> <p>P - N 3.8 4.4 $t = 1.0^{NS}$</p> <p>Amb. .09 .06 $\chi^2 = 0.5^{NS}$</p>

Figure 1

Study 1a: Found Money



Study 1b: Brother's Gift



Study 1c: Uncle's Gift

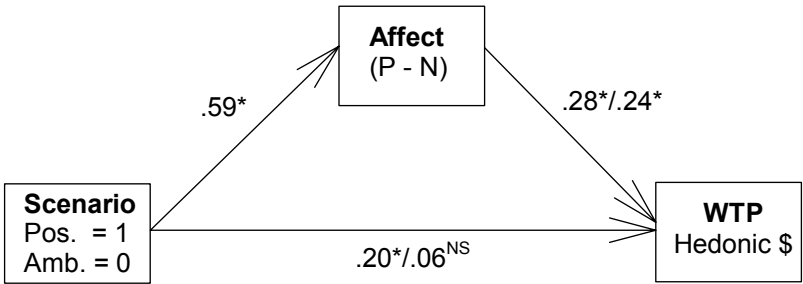
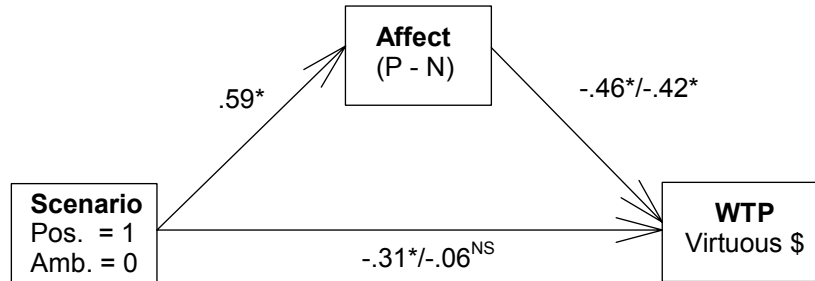
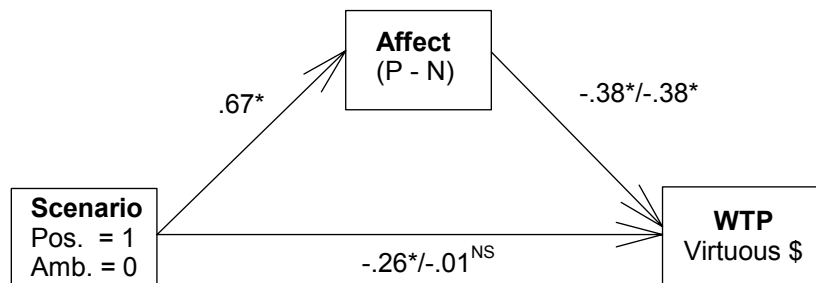


Figure 2

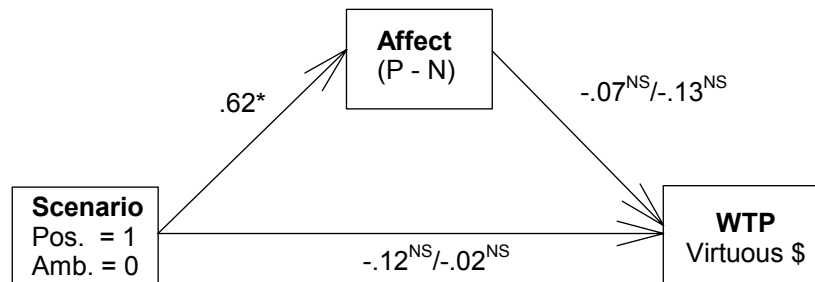
Study 3a: Consulting Bonus



Study 3b: Inheriting Money



Study 3c: Bonus at Work



Study 3d: Disappointing Win

