Mentally Accounting for Restricted Funds: How Gift Cards Change Preferences

Nicholas Reinholtz (nsr2116@columbia.edu)
Columbia University
3022 Broadway, New York, NY 10027 USA

Daniel M. Bartels (bartels@uchicago.edu)
University of Chicago
5807 S. Woodlawn Ave., Chicago, IL 60637 USA

Jeffrey R. Parker (jeffparker@gsu.edu)
Georgia State University
PO Box 3991, Atlanta, GA 30302 USA

Abstract

Gift cards are a common form of restricted funds: The balance of a closed-loop (brand-specific) gift card can only be redeemed at the originating brand. We propose that this restriction compels the recipient of a gift card to consider how the funds can be spent, which leads to the formation of a brand-specific spending goal and corresponding mental account. Because purchases more representative of the retailer will be more strongly associated with the spending goal and mental account, we predict that individuals shopping with retailer-specific gift cards have an increased preference for products typical of the retailer.

Keywords: mental accounting; categorization; preference construction; consumer behavior

Introduction

The concept of mental accounting was introduced by Thaler (1985) to help explain human behavior inconsistent with basic microeconomic tenants. For example, people who have recently spent $50 on a basketball game are less willing to purchase tickets to a theater show than people who have recently received a $50 parking ticket (Heath & Soll, 1996). In microeconomics, both of these situations should be (roughly) equivalent: The decision maker is $50 poorer and has an opportunity to make another purchase. However, mental accounting suggests that the two losses come from different psychological accounts and are thus treated differently. For those who spent $50 on a basketball game, they are now considering spending even more money from their already depleted "entertainment account" on theater tickets. For those who received a $50 parking ticket, their "entertainment account" is presumably still fully funded.

A question that arises in mental accounting is which purchases get booked to which accounts. To address this question, Brendl, Markman, and Higgins (1998) proposed that mental accounts are formed around active goals. The account to which an individual transaction is booked depends on how well it represents the active goals of the different accounts. Mental accounts, in this framework, share properties with goal-derived categories (Barsalou, 1995). Transactions more typical or representative of an account's goal are more strongly associated with that account and thus more likely to be booked there.

In this paper, we further explore the categorical nature of mental accounts and test a novel prediction that comes from this framework: Initiating a mental account should change relative preferences for items that could be booked to the mental account based on how well the items represent the account's goal. While Brendl et al. (1998) propose a relatively passive process (how purchases are booked), our hypothesis involves a more active process regarding which purchases are made.

We test this prediction in situations where people decide what to buy with gift cards. Our hypothesis is that gift cards, which contain restricted funds, prompt their owner to form a spending goal (i.e., "Spend the value of this gift card at a permissible location") around which a mental account is initiated. Once the account is formed, preference should increase for purchases more representative this spending goal, as they will be more naturally booked to the open account.

Gift Cards, Brands, and Purchases

Gift cards are big business: In 2011, 80% of holiday shoppers reported planning to give a gift card over the holiday season, and approximately $28 billion was spent on gift cards in the United States (National Retail Foundation, 2011). The retail and service industries have long distinguished between closed-loop and open-use gift cards (Horne, 2007). Closed-loop (hereafter, brand-specific) gift cards are issued by, and are only redeemable for purchases from, a specific retailer. For example, Levi's offers gift cards that can only be redeemed at Levi's stores. In contrast, open-use gift cards are issued by an independent party and are redeemable for purchases from nearly any

retailer. American Express (AMEX) has become a popular source of open-use gift cards that can be used at any retailer that accepts regular AMEX cards.

In our research, we compare purchases intentions for people shopping with brand-specific gift cards to those shopping with open-use gift cards. Since a brand-specific gift card will impose a brand-specific purchase goal (and mental account) the person will likely evaluate potential purchases in terms of the degree to which they will satisfy this goal, effectively constructing an ad-hoc category of potential purchases. The process of generating ad-hoc categories is almost automatic and is hypothesized to be an important component of planning. Like natural categories, exemplars in ad-hoc categories tend to vary in their strength of association with the category (Barsalou, 1995). For example, if a person forms an ad-hoc category of *places to go on vacation*, *Paris* is likely to be more strongly associated with this category than, say, *Green Bay*. Following this logic, we expect that the extent to which any potential purchase satisfies the brand-specific purchase goal is a function of the degree to which that type of purchase is typical of (associated with) the brand. Thus, we expect that purchasing jeans at Levi's (*jeans* are highly associated with *Levi's*) will better fulfill the goal of *purchase from Levi's* than purchasing a less associated product, such as a sweater.

In contrast, although a person who receives an AMEX (open-use) gift card may choose to shop at Levi's, she will not do so with the imposed goal to purchase from Levi's. Instead, she may have a more general goal to purchase clothing. Likewise, this person will not have a mental account set up specifically for purchases from Levi's. Consequently, the degree to which a potential purchase is associated with the retailer should have significantly less of an effect on purchases made with open-use gift cards.

In sum, we predict that receiving a brand-specific gift card initiates a goal to purchase from that brand and funds a corresponding mental account. The active purchasing goal leads to the creation of an ad-hoc category of purchases that satisfy this goal to various degrees. The better a given item satisfies the brand-specific purchase goal, the more likely the item is to be chosen. Thus, our reasoning suggests that the likelihood of making purchases that are highly typical of (strongly associated with) the brand will be significantly higher when a person is paying with a brand-specific, versus open-use, gift card.

Brand-Purchase Associations

Brands vary in their focus/breadth. Whereas some brands are strongly associated with a variety of purchases (e.g., department stores), others are strongly associated with only a few, perhaps only one, type of purchase (e.g., specialty or boutique shops). We refer to these as general and focused brands, respectively. An ad-hoc category formed around the goal of purchasing from a general brand will be comprised mostly of products with similar brand typicality. For example, we would not expect large differences in purchase-typicality for different items of men's clothing in Macy's. For prospective purchases from Macy's, we expect shirts, khakis, and jeans to be considered fairly equivalent in terms of typicality. In contrast, an ad-hoc category formed around the goal of purchasing from a focused brand will likely contain only one or two highly brand-typical purchases as well as other less brand-typical purchases. For example, we expect jeans to be strongly associated with Levi's, but khakis and shirts to be only weakly associated. The impact of using a brand-specific gift card should vary depending on the relative focus, or generality, of a given brand. Purchases made from focused brands should be significantly more affected by the type of gift card used than purchases made from general brands.

To better understand the underlying logic, imagine two brands that sell four different products (e.g., jeans, sweaters, shirts, and jackets). Further, assume that *Brand A* is a general brand (i.e., people equally associate purchasing all four product types with this brand), while *Brand B* is a focused brand (i.e., people strongly associate purchasing one product type, say jeans, with this brand). Shoppers deciding what to purchase from *Brand A* should be largely unaffected by the type of gift card they use. All four potential purchases are equally associated with *Brand A* and, ceteris paribus, the likelihood of each potential purchase being chosen is fairly equal. Paying with an open-use gift card should not affect these likelihoods. More importantly, paying with a brand-specific gift should not affect these likelihoods either as the four potential purchases all equally satisfy the brand-specific purchase goal.

On the other hand, a shopper deciding what to purchase from *Brand B* should be significantly affected by the type of gift card they use. Again, only one potential purchase (e.g., jeans) is strongly associated with the brand. Thus, when shopping with an open-use gift card, the person may be a bit more likely to choose jeans. However, when shopping with a brand-specific gift card, the person should have an active brand-specific purchase goal. Moreover, this goal will be best satisfied by purchasing jeans, the most strongly associated product. Consequently, the person should be significantly more likely to choose the jeans (vs. a sweater, shirt, or jacket) from the focused *Brand B* when paying with a brand-specific (vs. open-use) gift card.

Critically, the impact of gift-card type on individual choice is not merely a function of how typical a given purchase is of the brand, but also whether this purchase is more or less typical than each of the other potential purchases contained in the shopper's consideration set. If all potential purchases are of equal typicality gift card-type should not impact the choice. However, if one or two potential purchases are significantly more typical than the others, gift-card type is likely to impact the choice.

Purchase-Typicality Gradients

In order to quantify brand breadth as defined above, we introduce the concept of a typicality gradient. We propose

that a reasonable measure of brand breadth is the slope of the typicality ratings of potential purchases to the brand. That is, if the potential purchases are organized in decreasing (or increasing) order of brand-typicality, the greater [lesser] the slope of those ratings, the more focused [general] the brand is, for our purposes.

As a concrete example, consider Figure 1, which presents a portion of the results from the current Study 1. As can be seen, the slope of typicality ratings is substantially steeper for Levi's than for J.Crew, indicating that Levi's is the more focused of the two brands. Jeans are very strongly associated with the Levi's brand and sweaters are associated to a much lesser degree. Accordingly, we would predict a brand-specific gift card to increase the relative purchase share of jeans and to decrease the relative purchase share of other items from Levi's. However, we would predict little difference in purchase shares for the products in J.Crew regardless of gift-card type.

Figure 1: Typicality by product category for Levi's and J.Crew. Error bars show standard errors.

In what follows, we present five studies that find support for these predictions. Study 1 is an extensive norming study, designed to measure the perceived typicality for existing products from different brands. Study 2 finds that purchase typicality is more predictive of purchase intentions for participants presented a brand-specific gift card when shopping at a focused (vs. general) brand. Study 3 tests the generalizability of the results by using different brands from those in Study 2 and finds that these patterns are strongest amongst those most familiar with the brands. Studies 4 and 5 find that the observed effects can occur even when participants encounter a novel brand (e.g., a restaurant) if appropriate typicality cues are available to the participant (e.g., calling a menu item "world famous" vs. "today's special").

Study 1

To determine the typicality of different purchases, we identified six pairs of brands which share an overlapping selection of products. For example, Levi's and J.Crew both sell jeans, sweaters, jackets, khakis, belts, and t-shirts. We recruited 69 participants to rate all possible purchases (e.g., jeans from Levi's) on three typicality dimensions: typicality of purchase, frequency of purchase, and exemplify of purchase. Participants responded to the questions, one at a time, in blocks consisting of all six products for a single brand (shown on the same screen) for a single question. The order of the individual questions and question blocks were randomized across participants. To screen for attention, we computed a Cronbach's alpha for each participant's responses across question types and removed participants whose scores were lower outliers (alphas more than 1.5 × IQR below the first quartile). We dropped responses from seven respondents (median alpha = 0.89, all alphas > 0.65). To compute a typicality index, we averaged the responses for each product-brand pair for each person and then averaged these scores across the sample. The purchase-typicality structure for these well-known brands was very consistent across people, supporting previous arguments that brands function as categories (Joiner, 2007).

From this study, we identified several brand pairs with significantly different purchase typicality gradients across a subset of their products. These brand pairs and their corresponding purchase-typicality gradients are reported in Table 1 and the results for Levi's and J.Crew are illustrated in Figure 1.

Table 1: Purchase typicality gradients for different brand pairs (standard errors shown in parentheses).

	Jeans	Jackets	Khakis	Sweaters
Levi's	8.91 (.04)	7.06 (.22)	6.01 (.30)	4.97 (.23)
J.Crew	7.01 (.23)	7.49 (.15)	7.91 (.17)	8.10 (.16)
	Organic Veg.	Vitamins	Fresh-Baked	Frozen Food
WholeFds	8.41 (.19)	7.12 (.22)	6.98 (.25)	6.51 (.28)
Safeway	5.88 (.29)	6.20 (.22)	6.98 (.25)	8.18 (.17)
	Watches	Sunglss.	Belts	Shoes
Fossil	8.10 (.19)	6.36 (.28)	5.51 (.27)	4.10 (.25)
Target	6.61 (.22)	7.21 (.20)	7.23 (.18)	7.40 (.19)

Study 2

In this study, we examine whether possessing a brand-specific (vs. open-use) gift card will influence purchase intentions. We focus on a single brand pair: Levi's (a focused brand) and J.Crew (a general brand). Our prediction is that possessing a brand-specific Levi's gift card (vs. an open-use gift card) should increase preferences for jeans relative to other available products. At J.Crew, however, possessing a brand-specific (versus an open-use) gift card should have little effect on preferences.

Method

We conducted a 2 (store: Levi's vs. J.Crew) × 2 (gift card: brand-specific vs. open-use) between subjects experiment with 339 participants. Participants were first asked to: "Imagine you were just given a $200 [gift card to Levi's / gift card to J.Crew / AMEX gift card] by someone close to

you. Please take a minute to write a few sentences about this person and why he or she would have given you this gift card."

Participants then responded to the main dependent measure: "Now imagine you find yourself a few days later at [Levi's / J.Crew]. How likely would you be to buy something from each of the following product categories? Please allocate 100 points based on how likely you would be to buy from each category (0 = very unlikely, 100 = very likely)." Participants then allocated the 100 points, using a constant sum allocation, across four product categories: jeans, jackets, khakis, and sweaters.

Results

As a preliminary test of our predictions, we conducted a MANOVA analysis on the purchase intentions for both retailers, with gift-card type as the independent measure. The type of gift card significantly affected the distribution of purchase intentions for those in the narrow brand (Levi's) condition ($F(3,163) = 3.49$, $p < .02$), but not in the broad brand (J.Crew) condition ($F(3,168) = 1.33$, $p > .26$). The distributions of purchase intentions are shown in Figure 2.

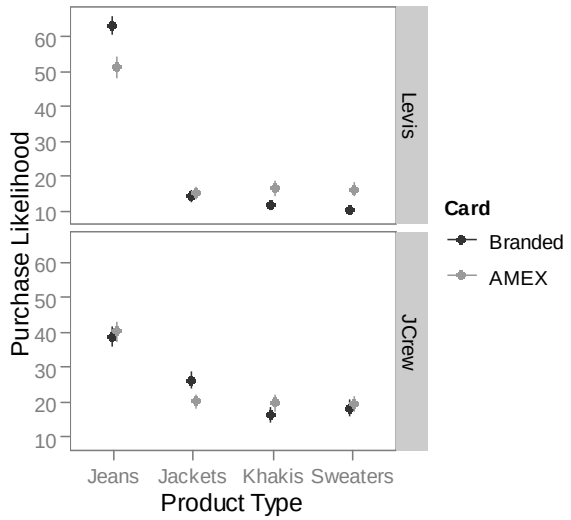

Figure 2: Purchase intentions by condition. Error bars show standard errors.

We also created a test statistic for each participant by regressing the participant's purchase intentions obtained from this study onto the average purchase-typicality ratings obtained in in Study 1. The slope of this within-participant regression served as our between-participant test statistic. This test statistic indicates the extent to which the average purchase-typicality scores (from Study 1) predict the individual participants' purchase intentions. A higher value on the test-statistic (i.e., a more positive slope) shows that the participant had a stronger inclination toward highly typical products. Thus, for the narrow brand, Levi's, we should expect larger values on the test statistic for participants shopping with a brand-specific gift card than those shopping with an AMEX gift card. Indeed, this is what we find ($\beta_{\text{brand-specific}} = 13.6$ vs. $\beta_{\text{open-use}} = 8.9$, $t(165) = 3.18$, $p < .01$). In contrast, we neither expected nor found a difference on the test statistic for those in the broad brand (J.Crew) condition ($\beta_{\text{brand-specific}} = -20.2$ vs. $\beta_{\text{open-use}} = -18.1$, $t(170) = .41$, $p > .68$).

Study 3

Whereas Study 2 used a within-subject measure of relative purchase likelihood (i.e., a constant sum tradeoff), Study 3 uses a between-subject measure of purchase intentions. Further, Study 3 expands the number of brand-pairs under examination to three and examines the moderating role of brand familiarity. A store-branded gift card should only lead to an increase in preference for brand-typical products when one is familiar with the brand.

Method

We conducted a 2 (gift card: brand-specific vs. open-use) × 2 (brand: A vs. B) × 2 (product: more typical of brand A vs. more typical of brand B) × 3 (brand pair replicates: Levi's/J.Crew, Fossil/Target, Whole Foods/Safeway) between-subjects design with a within-subject replication ($N = 331$). Participants completed the same gift-card manipulation as in Study 2. Following the manipulation, participants were instructed: "Now imagine you find yourself a few days later at [Store Name]. How likely would you be to buy [Product Type]?" Participants then rated their likelihood of purchasing the target product on a 9-point scale anchored at "Very Unlikely" and "Very Likely." Each participant completed the procedure twice, once with an open-use gift card and once with a brand-specific gift card (order was randomized and replicates came from different brand pairs). Participants then indicated how familiar they were with each brand on a 1-7 scale (anchored at "not at all familiar" and "very familiar").

Results

To determine whether the within-subject replications influenced purchase intentions, we conducted a four-way ANCOVA with gift-card type, product typicality, brand familiarity, and response order as independent variables. This analysis revealed no significant effects of response order or its interactions (all Fs < 1) so we collapsed across this factor for the remaining analysis.

A three-way ANCOVA on the remaining variables revealed a significant three-way interaction between gift-card type, product typicality, and brand familiarity ($F(1,654) = 4.34$, $p < .04$). The effect of owning a store-branded gift card was different for those with high- and low-brand familiarity. The same interaction we observed in Study 2 occurs for people with high (median or above) brand familiarity ($F(1,422) = 8.26$, $p < .01$). These people tend to increase their preference for high-typicality products when shopping with a brand-specific (versus AMEX) gift card. However, for those with below-median

familiarity, the interaction between gift-card type and product typicality disappears ($F(1,232) < 1$). Instead, we observe a marginally significant main effect of owning a store-branded gift card ($F(1, 232) = 3.10$, $p < .08$), suggesting that possessing a store-branded gift card will increase the likelihood of purchasing *any* product from the target store—not just the ones that are highly typical. This makes sense: If a person is not familiar with a given brand, she is also likely to be unfamiliar with the typicality of purchases from that brand. Additionally, it is doubtful that a person would spend an open-use gift card on an unknown brand, which would explain the uniform increase in purchase intentions observed in the brand-specific gift-card condition.

Study 4

An important question is raised by the results of Study 3 is whether brand-specific gift cards influence preferences only when the person is familiar with the brand. Our predictions turn on the person's ability to evaluate potential purchases in terms of their typicality to the brand, rather than on how familiar the person is with the brand. Studies 4 and 5 examine how environmental cues allow people unfamiliar with the brand to infer the relative typicality of potential purchases. For instance, if a person is visiting a new restaurant and sees one item described as "world famous," she is likely to infer that this item is frequently purchased at the restaurant. Moreover, if she is making her purchase with a brand-specific gift card, this "world famous" option should be more representative of her newly created, restaurant-specific mental account, increasingly the likelihood she will choose this dish.

Method

One hundred twenty-six participants were recruited to participate in a larger battery of online studies. Seven participants were dropped for failing an attention check question before the target study. Participants read a scenario in which a person ("Dave") was visiting a new city and was going to eat dinner at a restaurant he had not previously visited. Participants were told that Dave would be paying for dinner with a gift card his friend had recently given him for his birthday. The type of gift card varied between participants: restaurant-branded versus an AMEX gift card. All participants were then shown a menu for the restaurant and asked to rank the five items on the menu in terms of how likely Dave would be to purchase each. One item on this menu was labeled "world famous" and a second was labeled "today's special" (the items associated with these labels were counterbalanced between participants). Our prediction was that participants with a brand-specific (vs. AMEX) gift card would be more influenced by the "world famous" versus "today's special" purchase-typicality cue and thus be more likely to purchase the "world famous" than the "today's special" item.

Results

To compare the rankings of the target menu items between conditions, we created a test statistic by subtracting each participant's ranking of the "world famous" item from her ranking of the "today's special" item. Higher values on this test statistic indicate a stronger preference for the "world famous" item (e.g., if a participant rates the "world famous" item first and the "today's special" item third, the test statistic for this participant would be 3 – 1 = 2). Because this test statistic is not distributed normally (there can be no zero value), we compared the two conditions using a Wilcoxon test. As predicted, this test revealed that participants in the restaurant-branded gift-card condition had a stronger relative preference for the "world famous" (vs. "today's special") item ($M = .41$) compared to those in the open-use condition ($M = -.21$; $W(119) = 1391$, $p = .035$).

Study 5

Study 5 also tests whether people will use environmental cues to infer the typicality of potential purchases from an unknown brand when shopping with a brand-specific gift card. In contrast to Study 4, this study was first person (participants imagined themselves in the scenario) and used naturally occurring brand-product associations to test our hypothesis. Specifically participants were asked to imagine that they were at a German beer hall and were deciding what dish they would order for their meal. One of these dishes (bratwurst) was expected to be significantly more associated with German beer halls than the others. Accordingly, we predicted that those participants told they were shopping with a brand-specific gift card would indicate a greater likelihood of choosing this dish than those shopping with an open-use gift card.

Method

One hundred sixty-one participants were recruited to participate in a larger battery of online studies. Six participants were dropped for failing an attention check question related to this study. All participants were asked to imagine that a friend had suggested they try a local German beer hall and that this friend had given them a gift card. Participants were randomly assigned to one of three gift card conditions: (i) brand-specific, (ii) open-use (AMEX), or (iii) open-use with a brand-specific business card. The latter condition, which was designed to control for priming effects, presented participants with both the AMEX gift card and a business card for the beer hall that was virtually identical in appearance to the gift card in the brand-specific condition. Participants were asked to indicate on 1 to 9 scales how likely they would be to purchase each of four dishes: (i) a chicken sandwich with fries, (ii) a hamburger with fries, (iii) a bratwurst with fries, and (iv) nachos (chicken or vegetarian). We predicted that participants in the brand-specific gift card condition would indicate a greater likelihood of purchasing the bratwurst relative to

those in the two open-use conditions. As this was not a constant sum task and, therefore, tradeoffs were not forced, we did not predict differences across gift-card conditions in the likelihood of ordering any of the other three dishes.

Results

As expected, no significant differences were found across gift-card conditions in the likelihood of ordering any of the three non-bratwurst dishes (Fs $\leq$ 1.86, ps $\geq$ .15, controlling for age and gender in this and subsequent ANOVAs). In contrast, a significant effect was found for the bratwurst dish ($F(1,150) = 4.82$, $p < .001$), with participants in the brand-specific condition being significantly more likely to order the bratwurst ($M = 5.83$) than those in either the open-use ($M = 4.68$; $F(1,150) = 5.30$, $p < .03$) or the open-use, business card ($M = 4.30$; $F(1,150) = 8.81$, $p < .004$) conditions. Thus, natural brand-product correlations allowed the participants to infer the relative typicality of the products, resulting in brand-specific gift cards once more influencing preferences.

General Discussion

In line with common intuition, we find that some brands are strongly associated with purchases from one or a few product categories ("focused brands"), while other brands have a more uniform purchase association profile ("general brands"). For focused brands, we found that people indicate a higher preference for items perceived to be typical when shopping with a brand-specific gift card. We propose that receiving a brand-specific gift card initiates a purchasing goal which is better satisfied by purchasing products more strongly associated with the brand. The results of Studies 2 and 3, which use well-known brands, are consistent with this proposed process. Studies 4 and 5 found that brand-specific gift cards also influence purchases from unfamiliar brands when purchase typicality can be inferred from external cues.

This research has both practical and theoretical implications. On the practical side, it is important for retailers to understand how people shopping with gift cards may have different purchase motivations than people shopping with other funds. This research suggests that if retailers can predict when people will be shopping with gift cards, they may be able to tailor their product offerings accordingly. For example, if a person is shopping at Levi's with a gift card, or at a time of year when gift cards are more commonly used (e.g., right after the holidays), the retailer might steer this person to the store's signature line of jeans or toward clothing in which the branding is more prominent. Also, our findings may imply that higher-margin, high-typicality goods might sell better at times when gift card redemption is higher.

These studies also examined implications derived from theorizing about ad hoc categories (Barsalou, 1995) and mental accounting (Henderson & Peterson, 1992). In particular, the current studies help extend the goal-representativeness view of mental accounting (Brendl, Markman, & Higgins, 1998). We also find that—for the brands that we test, anyway—brand categories, or the associations between products and brands, tend to be represented similarly across people: There is considerable agreement between people on the typicality of different purchases. Also, the fact that purchases made with brand-specific gift cards were appreciably affected by the "world famous" versus "today's special" labels in Studies 4 and 5 offer preliminary insight into how brand categories are formed—people readily drew inferences about purchase typicality even from these relatively sparse cues. Moreover, these purchase typicalities can have a predictable influence on purchase intentions in some situations. Specifically, highly typical items are more likely to be purchased when a person is shopping with a brand-specific gift card, and thus has an active goal to purchase from the given brand. These results point to some of the potentially profound behavioral and economic implications of understanding how people construct and use mental representations of products, purchases, and brands.

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References

Barsalou, L. W. (1995). Deriving categories to achieve goals. *Goal Directed Learning. MIT Press, Cambridge MA*, 121-176.

Brendl, C. M., Markman, A. B., & Higgins, E. T. (1989), Mental accounting as self-regulation: Representativeness to goal-derived categories. *Zeitschrift für Sozialpsychologie*, *29*, 89-104.

Cheema, A. & Soman D. (2006). Malleable mental accounting: The effect of flexibility on the justification of attractive spending and consumption decisions. *Journal of Consumer Psychology*, *16*(1), 33-44.

Heath, C., & Soll, J. B. (1996). Mental budgeting and consumer decisions. *Journal of Consumer Research*, *23*(1), 40-52.

Henderson, P. & Peterson, R. (1992). Mental accounting and categorization. *Organizational Behavior and Human Decision Processes, 51*, 92-117.

Horne, D. R. (2007). Gift cards: Disclosure one step removed. *Journal of Consumer Affairs*, *41*(2), 341-350.

Joiner, C. (2007). Brands as categories: Graded structure and its determinants. *Advances in Consumer Research*, *34*, 500.

National Retail Federation (2011). Eight in ten holiday shoppers plan to give gift cards this holiday season, according to NRF. Retrieved December 10, 2011 from http://www.nrf.com/.

Thaler, R. H. (1985). Mental accounting and consumer choice. *Marketing Science*, *4*(3), 199-214.