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Marketers are increasingly offering bundles that combine cross-category, seemingly unrelated items. This article examines the conditions under which framing a discount as savings on certain items of cross-category bundles is more effective for increasing bundle purchase. Three experiments show that the purchase of a cross-category bundle is more likely when the discount is framed as savings on the relatively hedonic component rather than as savings on the utilitarian component or on the total bundle. The authors explain the findings based on the notion that a discount provides a justification that increases the likelihood of hedonic purchases but has little impact on utilitarian consumption. The article concludes with a discussion of managerial implications of the findings.

Keywords: discounts, framing effects, hedonic–utilitarian products, pricing, product bundles

Price-Framing Effects on the Purchase of Hedonic and Utilitarian Bundles

Bundling or tying a discount to purchase aggregation is a common marketing practice (Stremersch and Tellis 2002). Although product bundles often contain items that are complementary or related, the practice of bundling cross-category, seemingly unrelated items is growing in the retail sector. For example, in online settings such as at Amazon.com, a customer commonly receives “Better Together” suggestions that often bundle unrelated products. Here, an offer might bundle a hand mixer with reed scent diffusers, and another offer might bundle a mixer/blender with a coffeemaker (see Appendix A).

Given the emergence of cross-category bundles of unrelated items, it is important to examine whether framing a discount for purchasing a bundle as savings on certain types of items in the bundle is more effective in increasing bundle sales than framing an equivalent discount as savings on other equally priced items or on the bundle as a whole. For example, imagine a person who is shopping for a reading lamp and comes across a special promotional offer that bundles a \$50 reading lamp with a \$50 sound card for an

intense gaming experience. The bundle offers a \$10 price discount that is framed either as savings on the lamp (“save \$10 on the lamp when you buy both the lamp and the sound card”) or as savings on the sound card (“save \$10 on the sound card when you also buy the lamp”). As the two price frames indicate, the monetary value of the bundle offer is identical and is contingent on the purchase of both items. Is this person more likely to buy the bundle when the \$10 discount is offered as savings on the lamp or on the soundcard?

Although prior research on how discount framing can influence the attractiveness of price promotions in bundle offers has focused on items that are related but differ in their value or importance (e.g., Chakravarti et al. 2002; Heath, Chatterjee, and France 1995; Mazumdar and Jun 1993; Yadav and Monroe 1993), the current research proposes an effective pricing strategy for bundles that aggregate items from unrelated product categories, even when the items do not differ in their value or centrality. As the example of the lamp and sound card bundle illustrates, one dimension on which products may systematically vary is whether their purchase is driven by utilitarian or hedonic considerations (Dhar and Wertenbroch 2000). In general, hedonic products are desired for pleasure, fantasy, and fun, whereas utilitarian items tend to fulfill basic needs or help accomplish functional or practical tasks (Strahilevitz and Myers 1998). Prior research has shown that the decision to purchase hedonic goods is often associated with guilt (Khan and Dhar 2006) and greater need for justification (e.g., Kivetz and Zheng 2006; Okada 2005). Drawing on this literature, we propose

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that the hedonic–utilitarian distinction can be instrumental in affecting price framing of cross-category bundles for which existing models of bundle pricing make no clear predictions. Specifically, we predict that framing a discount as savings on the hedonic item will be more effective in increasing the purchase likelihood of the bundle than an equivalent discount framed as savings on the utilitarian item. We show that a discount provides a justification that increases the likelihood of hedonic purchases, which are more guilt inducing, but has relatively little impact on utilitarian purchases, which typically involve less guilt. This notion also enables us to predict that framing a discount as savings on a hedonic item in a hedonic–utilitarian bundle will be more effective in increasing bundle sales than an equivalent saving on the same hedonic item when the other item in the bundle is also hedonic.

We organize the remainder of this article as follows: A brief review of prior research on bundling and purchase considerations in hedonic and utilitarian options leads to our predictions. Next, three experiments test our predictions and the proposed explanation based on guilt and the difficulty of justification associated with the purchase of hedonic alternatives. Finally, we discuss the theoretical and practical implications of the findings.

THEORETICAL BACKGROUND

Bundling is broadly understood as the practice of selling two or more products/services in a single package for a lower price, though the individual items may or may not be offered separately at their regular prices (Guiltinan 1987). Tying a discount to purchase aggregation can serve as an effective strategy to differentiate, to introduce new products, to reduce costs, and to cross-sell to a customer who may buy one, but not all, products offered in a bundle (Guiltinan 1987; Hanson and Martin 1990). Early research on bundling, rooted in the economic tradition (for a review, see Stremersch and Tellis 2002), sheds little light on how individual buyers might value bundle deals that offer the same price discount but frame it differently.

Related to our focus, research in consumer psychology has shown that, controlling for the absolute level of a price discount, the attractiveness of a bundle offer is sensitive to framing of the price discount. This research mainly focuses on bundles that aggregated complementary and related products (e.g., a computer and a printer) and examines how framing an equivalent discount on items of different value and centrality or on the bundle as a whole affected the overall evaluation of the deal (Chakravarti et al. 2002; Heath, Chatterjee, and France 1995; Yadav and Monroe 1993). Two main frameworks emerge from this research stream. One framework suggests that a bundle offer is more attractive when the discount is offered on the item that is more central or more preferred (Yadav 1994). A second framework builds on a reference-dependent evaluation (Kahneman and Tversky 1979) and suggests that discounting a product valued on the steepest portion of the value function, which is usually the lower-priced product, better enhances the overall value of the bundle (Janiszewski and Cunha 2004).

Although these two frameworks significantly advance the understanding of how consumers value aggregate offers, they mainly apply to bundles of complementary and related products that differ in relative value, importance, or both.

As such, these frameworks do not readily extend to cross-category bundles, which comprise unrelated but often equally central and similarly valued products, such as a bundle consisting of a \$30 box of chocolate and an equally attractive \$30 textbook. As this example illustrates, one dimension on which unrelated alternatives may vary is whether their purchase is motivated by utilitarian, practical considerations or hedonic, pleasure-seeking ones (Dhar and Wertenbroch 2000). This intrinsic distinction provides a relevant context to study cross-category bundles for which existing models of bundle pricing make no clear predictions. Although unrelated items in a bundle can be all hedonic, all utilitarian, or some combination of the two, we focus on bundles of unrelated products that contain one hedonic and one utilitarian item because consumers often buy both types of products together to balance somewhat conflicting consumption goals (for a review, see Khan, Dhar, and Wertenbroch 2005).

Building on the differences in hedonic and utilitarian nature of the product bundles, we propose that framing an equivalent discount on a hedonic good in relation to a utilitarian good is likely to affect the attractiveness of the bundle, even when the items are of equal value and are equally central to the bundle. Specifically, we predict that the purchase of a bundle will be more likely when the discount for its purchase is framed as savings on the hedonic component than as savings on the utilitarian component or on the total bundle. Our proposition is rooted in consumer choice research, which notes that hedonic items are associated with greater guilt (Dahl, Honea, and Manchanda 2003; Khan and Dhar 2006) and therefore require greater justification (Kivetz and Zheng 2006; Okada 2005). Thus, the purchase of hedonic items can be enhanced by reducing the guilt associated with their purchase (Dhar and Wertenbroch 2000; Khan and Dhar 2007; Okada 2005). For example, guilt-reducing justifications, such as higher effort requirements, donations to charity, and unrelated virtuous acts (Khan and Dhar 2006; Kivetz and Simonson 2002; Strahilevitz and Myers 1998), have all been shown to increase the purchase of hedonic products. Consistent with these methods, price discounts can also make it easier to purchase a hedonic item by providing a guilt-reducing justification. Thus, we predict that in bundles containing both hedonic and utilitarian items (hereinafter, “heterogeneous bundles”), framing a discount as savings on the hedonic component will make it easier to justify the purchase of the bundle. Conversely, framing an equivalent discount as savings on a utilitarian item, which needs little justification, will not be as effective in enhancing the purchase of the bundle. However, framing the discount differently will not influence the purchase likelihood of homogeneous bundles, which contain only hedonic or only utilitarian items, because framing a discount on one versus the other item does not render a more effective purchase justification.¹ For example, a discount on a hedonic item will not serve as sufficient justification for purchasing a bundle when the other item is also hedonic and guilt inducing. Accordingly, we predict the following:

¹The term “homogeneous” does not imply that the items are related or complementary. It is used only to suggest that the bundled products are similar in their hedonic–utilitarian nature.

Proposition: In heterogeneous bundles, discounting a hedonic item is more effective in increasing bundle purchase than discounting a utilitarian item; framing an equivalent discount on different items does not affect purchase likelihood in homogeneous bundles.

We test our main proposition and the underlying mechanism in three studies. Study 1 demonstrates support for the main proposition and rules out some potential alternative accounts. Study 2 provides process support by demonstrating that the anticipated guilt in a hedonic purchase mediates the effect of different discount framings on the purchase likelihood of a bundle. Finally, Study 3 extends the findings to consequential choices and other bundling contexts. We conclude with a discussion of the theoretical and managerial implications of our findings.

STUDY 1: DIFFERENTIAL EFFECT OF DISCOUNT FRAMING ON BUNDLE PURCHASE

Method

Three hundred sixty participants from a national online pool completed a scenario-based study as part of a larger experimental session to win a \$25 Amazon.com gift card. The study had a 3 (discount frame) \times 6 (bundle composition) between-subjects design. We asked participants to imagine that they are looking for a certain item (Item X) on Amazon.com when they come across a deal bundling Item X with another unrelated but equally priced item (Item Y). We then manipulated the first factor, discount frame, by randomly assigning participants to one of three conditions: We told some participants that the deal offered a discount on X if they purchased it along with Y (\$20 off X), and we told others that the deal offered the same discount on Y (\$20 off Y) if purchased together with X; the remainder of participants did not receive any discount (for an example of different discount frames, see Appendix B).

The second factor, bundle composition, had six combinations. Specifically, using two hedonic (H_a = barbeque grill, and H_b = fondue set) and two utilitarian items (U_a = office chair, and U_b = printer), we formed six, two-pair bundle combinations: two homogeneous bundles pairing only hedonic or only utilitarian items (H_aH_b , U_aU_b) and four heterogeneous bundles pairing one hedonic and one utilitarian item (H_aU_a , H_aU_b , H_bU_a , H_bU_b). In summary, the study had a 3 (discount frame: no discount, discount on Item 1, discount on Item 2) \times 6 (bundle composition: H_aH_b , U_aU_b , H_aU_a , H_aU_b , H_bU_a , H_bU_b) design (see Table 1). Participants indicated their likelihood of buying the bundle on a nine-point scale (1 = "not at all likely," and 9 = "very likely").

We selected the items for the bundles on the basis of a pretest, in which 20 participants from the same pool as the main study rated several items as primarily hedonic or primarily utilitarian on a nine-point scale (1 = "primarily utilitarian," and 9 = "primarily hedonic"). Following Strahilevitz and Myers (1998), we described a utilitarian item as something that is desired to fulfill a basic need or to accomplish a functional or practical task, and we described a hedonic item as something that is desired for pleasure, fantasy, and fun. A barbeque grill ($M = 7.60$) and a fondue set ($M = 7.90$) were selected as the two hedonic items, and an office chair ($M = 2.40$) and a printer ($M = 2.75$) were selected as the two utilitarian items. We pretested the items to ensure that they were of similar attractiveness ($M_{\text{barbeque grill}} = 5.10$,

$M_{\text{fondue set}} = 5.70$, $M_{\text{office chair}} = 5.05$, $M_{\text{printer}} = 5.15$) on a nine-point scale (1 = "not at all attractive," and 9 = "very attractive") using a separate group of 20 participants who indicated how attractive these items were at the given price.

Results and Discussion

To analyze the data, we first created a measure of relative purchase likelihood for the various bundles. To do so, we subtracted the mean purchase likelihood in the corresponding no-discount control frame from each purchase likelihood observation in the other two discount frames. Next, we separated the resulting 12 cells into homogeneous bundles (H_aH_b and U_aU_b) and heterogeneous bundles (H_aU_a , H_aU_b , H_bU_a , H_bU_b). Because the effect of discount frame on purchase did not vary across the four heterogeneous bundles ($F(3, 190) = .37$, $p > .50$), we collapsed them together to form one heterogeneous bundle. Because the homogeneous pairings (both hedonic or both utilitarian) also did not interact with discount frame ($F(1, 76) = .02$, $p > .90$), we collapsed them into one pairing. Thus, four cells remained: two discount frames for one homogeneous and one heterogeneous bundle.

We then conducted a 2 (discount frame: discount on Item 1 versus discount on Item 2) \times 2 (bundle type: homogeneous versus heterogeneous) analysis of variance to test our main proposition. The results revealed a significant main effect of discount frame ($F(1, 236) = 6.84$, $p < .01$), showing that framing an equivalent discount on different items in the bundle affects the purchase likelihood of the bundle. A mar-

Table 1
EFFECT OF DIFFERENT DISCOUNT FRAMES ON THE MEAN PURCHASE LIKELIHOOD OF PRODUCT BUNDLES

Bundle Type and Composition	Discount Frame (Item Discounted)	Mean Purchase Likelihood of the Bundle	
Homogeneous	H_aH_b	H_a	3.15
		H_b	3.25
		Neither	2.65
	U_aU_b	U_a	3.40
		U_b	3.40
		Neither	2.95
Heterogeneous	H_aU_a	H_a	4.20*
		U_a	3.10
		Neither	2.75
	H_aU_b	H_a	5.50*
		U_b	3.65
		Neither	3.40
	H_bU_a	H_b	4.45*
		U_a	3.15
		Neither	2.80
	H_bU_b	H_b	4.30*
		U_b	3.20
		Neither	3.05

*Significantly greater than the corresponding "neither" discounted condition at $p = .05$.

Notes: Each discount condition (e.g., discount on H_a in bundle H_aU_a ; $M = 4.20$) is compared with the corresponding no-discount control for that bundle composition (e.g., neither discounted in bundle H_aU_a ; $M = 2.75$). The difference in purchase likelihood is significant (at $p = .05$) between hedonic and utilitarian discount frames in all heterogeneous bundles. No differences are significant in the homogeneous bundles.

ginally significant main effect of bundle type also emerged ($F(1, 236) = 3.25, p = .07$), suggesting that discounts increased the purchase likelihood of the heterogeneous bundles more than that of homogeneous bundles. More important, consistent with our proposition, the main effects were qualified by a significant discount frame \times bundle type interaction ($F(1, 236) = 7.95, p < .01$). That is, framing the discount on one versus the other item in the bundle had a significant effect on the heterogeneous bundles ($M_{\text{Item 1}} = 1.61$ versus $M_{\text{Item 2}} = .27$; $t(158) = 4.61, p < .001$) but not on the homogeneous bundles ($M_{\text{Item 1}} = .47$ versus $M_{\text{Item 2}} = .52$; $t(78) = .13, p > .90$). Direct comparison of the heterogeneous bundles showed that the likelihood of a bundle purchase was significantly higher when the discount was framed as savings on the hedonic items ($M_H = 4.61$) than when the same discount was framed as savings on the utilitarian items ($M_U = 3.28$; $t(158) = 4.54, p < .001$).² Together, the results demonstrate support for the proposition that in heterogeneous bundles discounting, a hedonic item is more effective in increasing bundle purchase likelihood than discounting a utilitarian item, whereas framing an equivalent discount on different items does not affect purchase likelihood in homogeneous bundles.

Next, we examined whether discounting a hedonic product in heterogeneous bundles is more effective in increasing the purchase likelihood of a bundle than discounting the same hedonic product in a homogeneous bundle. As Table 1 shows, we find that when H_a was discounted in the homogeneous bundle ($H_a H_b$), it did not significantly increase the purchase likelihood of the bundle compared with the corresponding no-discount control condition ($M_{H_a \text{ discounted}} = 3.15$ versus $M_{\text{No discount}} = 2.65, p > .30$). However, when the same item was discounted in the heterogeneous bundles, it significantly increased the purchase likelihood of both bundles $H_a U_a$ ($M_{H_a \text{ discounted}} = 4.20$ versus $M_{\text{No discount}} = 2.75, p = .01$) and $H_a U_b$ ($M_{H_a \text{ discounted}} = 5.50$ versus $M_{\text{No discount}} = 3.40, p < .01$) relative to the corresponding no-discount control conditions. Similarly, while discounting H_b did not significantly increase the purchase likelihood of the homogeneous bundle $H_a H_b$ ($M_{H_b \text{ discounted}} = 3.25$ versus $M_{\text{No discount}} = 2.65, p > .20$), discounting the same item significantly increased the purchase likelihood of both the heterogeneous bundles $H_b U_a$ ($M_{H_b \text{ discounted}} = 4.45$ versus $M_{\text{No discount}} = 2.80, p < .01$) and $H_b U_b$ ($M_{H_b \text{ discounted}} = 4.30$ versus $M_{\text{No discount}} = 3.05, p < .05$) beyond the control conditions, in which no discount was offered. In summary, the results illustrate that discounting the same hedonic item is particularly effective in increasing bundle purchase likelihood when the second item in the bundle is utilitarian compared with bundles in which the second item is also hedonic.

In addition to providing evidence for our main proposition, Study 1 helps rule out several alternative accounts for the framing effects in bundle pricing. For example, it could be argued that discounts on the hedonic items might be perceived as infrequent and, therefore, more attractive than discounts on the utilitarian items. Another possible account could be that people might be more likely to already possess the utilitarian items, and therefore discounting these items is less effective in increasing bundle sales than discounting

hedonic items, which people might be less likely to possess. Finally, it is possible that people are more familiar with utilitarian items than with hedonic items and that discounts on less familiar items are more effective in raising bundle sales. If our results were driven primarily by differences in attractiveness, prior ownership, rarity, and/or familiarity of hedonic versus utilitarian items and not the ease of justification, we would expect a similar increase in the purchase likelihood of a bundle when the same hedonic item is discounted in a homogeneous or a heterogeneous bundle. Given that we found reliable differences across different bundle types, these explanations are unlikely to account for the results.³

We propose that the pattern of our results arises because a discount framed as savings on a hedonic component of the bundle increases the overall attractiveness of the bundle by reducing guilt and thus justifying the difficulty associated with purchasing hedonic items. By focusing on the heterogeneous bundles, Study 2 provides support for this underlying mechanism by testing for the proposed guilt-reducing role of framing discounts on hedonic items.

STUDY 2: TEST OF MEDIATION FOR THE EFFECT OF DISCOUNT FRAMING ON BUNDLE PURCHASE

Method

One hundred fourteen students at a large northeastern university took part in the study for partial course credit. We asked participants to imagine that they had come across an offer that bundled a hedonic and a utilitarian item. We used a pretest to select a sweater with a university logo as the relatively hedonic item ($M = 5.80$) and a textbook as the relatively utilitarian item ($M = 1.60$; $t(38) = 7.60, p < .001$). We also pretested these items (on a nine-point scale) and determined that they were perceived to be of similar attractiveness at \$50 ($M_{\text{Sweater}} = 5.60$ versus $M_{\text{Book}} = 6.40$; $t(38) = 1.40, p > .10$).

In two discount frames, participants imagined that while they were at the university bookstore to purchase a textbook, they came across a deal bundling the textbook and the sweater that offered a saving of \$10, contingent on the purchase of the bundle. Although we held the total cost of the bundle constant across the conditions, one condition framed the discount for purchasing the bundle as \$10 off on the textbook if purchased with a \$50 sweater, and the other condition framed a \$10 discount on the \$50 sweater when purchased with the \$50 textbook. Before deciding whether to buy the bundle (i.e., sweater along with the book), all participants indicated how guilty they would feel on a nine-point scale (1 = "not at all guilty," and 9 = "very guilty") if they were to purchase the sweater along with the book. After the guilt measure, participants indicated their likelihood of buying the bundle on a nine-point scale (1 = "not at all likely," and 9 = "very likely"). Finally, we debriefed participants and thanked them for their time.

Results and Discussion

First, the preference results replicated the main proposition. That is, the mean purchase likelihood of the bundle

²The direct contrasts between the two discount frames were also significant at $p = .05$ in each heterogeneous bundle.

³The study in the "General Discussion" that frames the same blender as hedonic versus utilitarian further rules out these explanations. If these accounts were driving the results, framing the same item as hedonic or utilitarian should make no difference.

(i.e., the textbook and the sweater) was significantly higher when the discount for purchasing the bundle was framed as savings on the hedonic sweater ($M = 5.20$) than when an equivalent discount was framed as savings on the utilitarian textbook ($M = 4.50$; $t(112) = 2.0$, $p < .05$). We proposed that framing the discount for purchasing the bundle as savings on the hedonic item would increase the purchase likelihood of the bundle by reducing the anticipated guilt in purchasing such items. In support of this hypothesized role of guilt, discount frame (on hedonic or utilitarian item) had a significant effect on anticipated guilt in buying a hedonic item ($\beta_1 = .20$; $t = 2.50$, $p < .05$). That is, participants anticipated less guilt in buying the hedonic sweater along with the textbook when the discount for purchasing the bundle was framed as savings on the sweater ($M = 4.30$) than when an equivalent discount for purchasing the bundle was framed as savings on the textbook ($M = 5.40$; $t(112) = 2.50$, $p = .01$). Consistent with our proposed explanation, the analysis also fulfilled the criteria for a mediation model (Baron and Kenny 1986). First, as we reported previously, there was a significant effect of discount frame on the choice likelihood of the bundle. Second, anticipated guilt from buying the hedonic item significantly affected the choice of the bundle ($\beta_3 = .30$; $t = 3.50$, $p < .01$). Finally, including anticipated guilt in buying the hedonic item as an explanatory variable significantly reduced the effect of discount frame ($\beta_2 = .10$; $t = 1.30$, $p = .20$), while the effect of anticipated guilt remained significant ($\beta_3 = .30$; $t = 3.10$, $p < .01$). A Sobel test for the mediation model was also significant ($z = 2.0$, $p < .05$). The results of the mediation test support our account that the purchase of a bundle is more likely when an equivalent discount for its purchase is framed as savings on the hedonic component than savings on the utilitarian component because it reduces the guilt involved in hedonic purchases.

The purpose of Study 3 is twofold. First, it provides a conceptual replication of the effect for consequential choices. Second, it introduces an additional condition in which the discount for purchasing the bundle is framed as savings on the bundle as a whole rather than on any single component. Because many marketplace situations describe the discount for bundle purchase as savings on the total purchase rather than on any particular item, this condition provides useful theoretical and managerial insights. From a theoretical viewpoint, it provides insight into whether people reallocate the overall discount in ways that help them justify the hedonic purchase or whether they process the discount at the level at which it is framed. On the basis of prior research in mental accounting, which implies that money allocated to different mental budgets remains coupled with the account to which it gets assigned (Thaler 1985), we predict that framing the discount as savings on the total purchase will be less effective in increasing bundle sales than offering an equivalent discount on a hedonic item. From a managerial viewpoint, this suggests that framing the discount on the hedonic item in the bundle is superior to framing it on the total purchase.

STUDY 3: GENERALIZING THE IMPACT OF DISCOUNT FRAMING TO REAL CHOICES

Method

Eighty-three female students at a major northeastern university received \$10 and an opportunity to buy some items at special discount for their participation. Participants were

paid \$10 after completing some questionnaires that were clearly unrelated to the choices that followed. Next, they were shown a box of chocolate with the university logo and a set of three binders with the university logo. Both items were offered at \$6 individually and were priced slightly lower than the corresponding retail prices at the university bookstore to induce purchase. We selected these items after conducting a pretest in which the box of chocolate was determined to be mainly hedonic ($M = 7.60$) and the binders were viewed as mainly utilitarian ($M = 1.30$; $t(28) = 11.0$, $p < .001$). Moreover, there was no difference in the attractiveness of these items at \$6 ($M_{\text{Chocolate}} = 6.10$, $M_{\text{Binders}} = 6.50$; $t(28) = .60$, $p > .50$).

We told participants that they could buy any single item for \$6, or they could buy the bundle with both items and get an additional \$2 discount. We manipulated the framing of the discount in three between-subject conditions. Specifically, we described the discount on bundle purchase as \$2 savings on the chocolate, on the binders, or on the total purchase. The items were priced such that everyone could buy the bundle with the cash they had received for participating in the study. In all conditions, we recorded participants' purchase decisions.

Results and Discussion

The results support the main proposition. As we predicted, the likelihood of purchasing a bundle was significantly higher when the discount for purchasing the bundle was framed as savings on the hedonic chocolate (82%) than when an equivalent discount for bundle purchase was framed as savings on the utilitarian binders (52%; $\chi^2(1, N = 55) = 5.70$, $p < .05$). In addition, compared with the condition that framed the discount for purchasing the bundle as savings on the hedonic chocolate, share of the bundle purchase was lower in the condition that framed an equivalent discount for purchasing the bundle as savings on the total purchase (61%; $\chi^2(1, N = 56) = 3.10$, $p = .07$). Moreover, there was no significant difference in the share of bundle purchase when the discount for purchasing the bundle was framed as savings on the utilitarian item than when an equivalent discount was framed as savings on the total purchase ($\chi^2(1, N = 55) = .40$, $p > .50$).

Together, these findings support the idea that a discount for purchasing a bundle is more effective when it is framed as savings on a hedonic item because it provides an added justification for the purchase of the bundle. The results also suggest that though people can reallocate savings as they want, the discount earned remains associated with the item on which it is originally framed.

GENERAL DISCUSSION

Offering price discounts that are contingent on the purchase of product bundles has become a common promotional tool in today's market environment. Unlike prior research and marketing practice that has mainly focused on bundling of related or complementary items, the practice of offering cross-category bundles is growing. For example, car dealerships commonly offer bundle deals that aggregate security systems with shine protection plans or leather maintenance systems with tire warranties. Other examples of such cross-category purchase aggregations include cruise packages that bundle fun and vocational training, health tourism deals that bundle medical procedures with vacation, and service bundles (e.g., Comcast) that aggregate telephone

and cable services. The potential for such cross-category bundles is even greater in online retail settings (e.g., Amazon.com, Buy.com, Shopping.com), in which technological advances have made it feasible to spontaneously bundle different types of products without needing to manage complementarities between them. By focusing on such cross-category bundles, the current research examines how framing a discount for purchasing a bundle as savings on certain items of the bundle can be more effective than framing an equivalent discount as savings on other equally priced items.

We differentiate between the hedonic and the utilitarian nature of the items in a bundle and demonstrate that a bundle purchase is more likely to occur when a discount for purchasing the bundle is framed as savings on the hedonic component than savings on an equally priced and equally attractive utilitarian item (Studies 1–3). Our proposition is based on the explanation that framing the discount on the hedonic item provides a justification that reduces the guilt associated with the purchase of such items. However, because no such guilt is associated with the purchase of utilitarian items, framing the discount as saving on the utilitarian component of the bundle has little additional impact. In support of our explanation, we show that the anticipated guilt in a hedonic purchase mediates the effect of discount framing on the likelihood of bundle purchase (Study 2). Moreover, we illustrate that discounting a hedonic item in heterogeneous (hedonic–utilitarian) bundles is more effective than discounting the same item in a homogeneous (hedonic–hedonic) bundle. This finding is consistent with the notion that though discounting a hedonic item in heterogeneous bundles can justify purchase of the whole bundle, discounting the same hedonic item may not serve as a sufficient justification when the second item in the bundle is also a guilt-inducing hedonic product.

We constructed the current bundles with relatively equal prices and attractiveness to control for other reasons discount framing might matter in product bundles. For example, according to a reference-dependent framework (Kahneman and Tversky 1979), assigning a discount to a product valued on the steepest portion of the value function (i.e., the less valued items) enhances the overall value of the bundle (Janiszewski and Cunha 2004). Another account based on the weighted additive approach suggests that when two unequally preferred items are evaluated for purchase as a bundle, discounting the more preferred or focal item also enhances the evaluation of the bundle (e.g., Yadav 1994). To avoid susceptibility to these alternative accounts, we controlled for perceived differences in the value of the items by using equally priced and equally attractive items. Although we limited our analysis to such bundles to isolate the effect of justification-based processes, the results should also extend to bundles of differently priced items. Further research is needed to examine whether differences in the value, attractiveness, and centrality of the bundled items interact with their hedonic versus utilitarian nature and discount framing.

Although bundling research and practice has mostly focused on stimulating purchase of complementary goods, our research suggests that bundles can also effectively aggregate products that tap into distinct goals (e.g., binders may help achieve an academic goal, but chocolate is desired for experiential purposes). The findings generate several implications for marketing practitioners. A straightforward implication is that retailers can encourage greater purchase

of indulgent products by bundling them with everyday utilitarian items and framing the discount for bundle purchase as savings on the item that is more difficult to justify. Similarly, marketers of products that are typically purchased as gifts for others (e.g., 1-800-Flowers.com, Wine.com) can stimulate sales by providing instant discounts for items purchased for the buyer's own use (e.g., "with an order of 12 roses for your loved one, get six lilies for yourself at half price"). That is, gift purchases for others do not induce guilt and therefore require little or no justification (Thaler 1985). Therefore, bundling them with a guilt-inducing purchase (e.g., flowers for self) and discounting the indulgent element will help increase sales of the bundle. In line with this idea, we examined participants' willingness to buy a bundle that contained a \$50 reading lamp (utilitarian) and a \$50 blender for making exotic cocktails (hedonic) and offered a \$10 discount. The blender was framed either as for participants' own use or as a gift for their roommates. The results show that framing a discount for purchasing the bundle as savings on the blender significantly increased the purchase likelihood of the bundle when the blender was for personal use ($M_{\text{Blender}} = 5.10$ versus $M_{\text{Lamp}} = 4.0$; $t(65) = 2.36$, $p < .05$) but not when the blender was framed as a gift for someone else ($M_{\text{Blender}} = 4.10$ versus $M_{\text{Lamp}} = 4.30$; $t(68) = .44$, $p > .50$).

Moreover, to enhance bundle purchase, not only can marketers bundle items driven by different goals, but they may also be able to balance competing goals associated with the bundled items. For example, consider a bundle consisting of a car theft protection system and a paint protection plan. Although framing the discount on different components may not be effective in increasing this bundle's sales when both items are perceived as utilitarian, framing one of the items as relatively hedonic and turning the bundle from a homogeneous to a heterogeneous bundle (e.g., by framing the paint protection plan as preserving the car's new look and shine versus as preventing rusting and discoloration) may successfully increase sales. We tested this idea by offering participants a \$10 discount on buying a bundle that consisted of a \$50 lamp and a \$50 blender. The blender was described as either hedonic or utilitarian respectively by informing participants that it was "great for making exotic cocktail drinks and was a good tool for a luxurious lifestyle" or "that it was great for making healthy shakes and was a very useful tool for a healthy life." The results show that when the blender was described as serving a hedonic goal, the likelihood of purchasing the bundle significantly increased when we framed the discount as saving on the blender compared with when we framed the discount as saving on the lamp ($M_{\text{Lamp}} = 5.26$ versus $M_{\text{Blender}} = 6.60$; $t(68) = 3.02$, $p < .01$). However, when the blender was described as serving a utilitarian goal, framing an equivalent discount as savings on the lamp or the blender made no significant difference in bundle purchase likelihood ($M_{\text{Lamp}} = 5.60$ versus $M_{\text{Blender}} = 5.20$; $t(68) = .78$, $p > .40$).

Finally, our results imply that people may not be automatically motivated to interpret a discount for purchasing a bundle in a manner that makes it easier to justify bundle purchase. Study 3 finds that framing a discount as savings on total purchase is not as effective in increasing bundle sales as framing an equivalent discount as savings on the hedonic item. An implication of this finding is that people process the discount as it is offered and do not reallocate it to a specific item. Had participants been motivated to reallocate the

Appendix A
EXAMPLES OF ONLINE PRODUCT BUNDLES

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Shop All Departments Home & Garden Browse Brands & Products Bestsellers Bedding & Bath

Prime To get this item by **Wednesday, Aug 20** order with **Get Free Shipping for a full month with a Free Trial of Amazon Prime** [learn more](#) [FREE Upgrade on this item](#)

Braun M880 Multimix 4-in-1 Hand Mixer
Other products by [Braun](#)
★★★★☆ (170 customer reviews)

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Price: **\$26.57** & this item ships for **FREE with Super Saver Shipping.** [Details](#)
You Save: **\$33.42 (56%)**
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Hamilton Beach 52283WV 12-Speed Wave-Action Blender, Red
Other products by [Hamilton Beach](#)
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List Price: ~~\$39.99~~
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You Save: **\$5.00 (13%)**
[Special Offers Available](#)

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Ships from and sold by **Amazon.com**. Gift-wrap available.

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Buy this item with [Hamilton Beach 43253 Ensemble 12-Cup Coffeemaker, Red](#) Hamilton Beach today!

 +  **Total List Price: \$99.98**
Buy Together Today: \$82.48
[Add both to Cart](#)

discount as savings on the hedonic item, our initial discount frames (as savings on total purchase, on the utilitarian item, or on the hedonic item) should not have made any difference. Our results are consistent with the findings in mental accounting research, which show that consumers allocate money to different mental budgets and that money remains coupled with the account to which it gets assigned and is not treated fungibly across different mental budgets (Heath and Soll 1996; Thaler 1985). Further research could explore the

conditions under which shoppers might reframe the discounts. For example, prior research has shown that a motivation to arrive at preferred conclusions can enhance the use of information and strategies that are most likely to yield the desired conclusion (Jian and Maheswaran 2000; Kunda 1990). Thus, it is possible that under heightened preference for a hedonic option, people are more motivated to justify its purchase by reframing a discount on total purchase as savings on the hedonic items.

Appendix B
SAMPLE STIMULI FOR STUDY 1

A: Discount Frame 1

Imagine that you are looking for a Grill. You go to Amazon.com and find one that you like.

As you are about to order, you see a bundle deal offering a discount if you buy a fondue set along with the grill. Consider the deal below:

<p><u>George Foreman Indoor/Outdoor Grill</u></p>	<p><u>World Cuisine Stainless Steel Fondue Set</u></p>
<p><i>Barbecue season is right around the corner. With this grill you can fire up some baby back ribs in style. A perfect grill for entertaining.</i></p>	<p><i>Fondue with chocolate, caramel, cheese and more. An ultimate accessory for every home entertainer and highlight of every party.</i></p>
	<p style="text-align: center; font-size: 2em; color: red;">+</p>  <p style="color: purple; font-weight: bold; font-size: 1.2em;">Save \$20!!!</p>
<p>Use outdoors on pedestal or indoor on table-top Fat collects in easy-to-empty tray 17" of generous cooking space Scratch and stick resistant Weight 21 pounds 1 year limited warranty</p>	<p>Mixed usage burner (fuel or gel) 6 bowls included - each 6 fluid ounces 6 color-coded fondue skewers Stainless steel 15 inches diameter pot Hand or machine wash 1 year limited warranty</p>
<p><u>Price: \$79</u></p>	<p><u>Price: \$79</u></p>

The deal offers a \$20 discount on the fondue set if you buy the bundle (i.e. both the grill and the fondue set together).

Assuming that you don't already have a fondue set and you quite like this one, how likely are you to buy the bundle and **save \$20 on the fondue set?**

Definitely NOT											Definitely BUY
buy the bundle											the bundle
1	2	3	4	5	6	7	8	9	9	9	

Appendix B
CONTINUED

B: Discount Frame 2

<p style="text-align: center;">D FD Dæd'Id' DD d DD</p> <p><i>Barbecue season is right around the corner. With this grill you can fire up some baby back ribs in style. A perfect grill for entertaining.</i></p>  <p style="text-align: center;">Save \$20!!!</p> <p style="text-align: center;">Buy Grill + Fondue Set & get the Grill for only \$59</p> <p>Use outdoors on pedestal or indoor on table-top Fat collects in easy-to-empty tray 17" of generous cooking space Scratch and stick resistant Weight 21 pounds 1 year limited warranty</p> <p style="text-align: center;">Price: \$79</p>	<p style="text-align: center;">fl D C d' Sæd' Sd FdD' S d</p> <p><i>Fondue with chocolate, caramel, cheese and more. An ultimate accessory for every home entertainer and highlight of every party.</i></p>  <p>Mixed usage burner (fuel or gel) 6 bowls included - each 6 fluid ounces 6 color-coded fondue skewers Stainless steel 15 inches diameter pot Hand or machine wash 1 year limited warranty</p> <p style="text-align: center;">Price: \$79</p>
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The deal offers a \$20 discount on the grill if you buy the bundle (i.e. both the grill and the fondue set together).

Assuming that you don't already have a fondue set and you quite like this one, how likely are you to buy the bundle and _____?

Definitely NOT buy the bundle	1	2	3	4	5	6	7	8	9	Definitely BUY the bundle
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Notes: No discount was offered in the control condition.

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