The Role of Hedonic and Utilitarian Motives on the Effectiveness of Partitioned Pricing

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Abstract

The present research investigates how purchase motives (hedonic vs utilitarian) influence the effectiveness of partitioned versus combined pricing. Across four studies, we find that compared to combined pricing, partitioned pricing increases hedonic purchases, but not utilitarian purchases. We find this happens because consumers considering a hedonic purchase tend to feel anticipated guilt associated with their hedonic spending, and partitioned pricing is used as a guilt-mitigating justification for the spending. Specifically, consumers with a hedonic purchase motive underprocess a surcharge, which enables them to perceive the price of the product as lower than the actual, combined price. This lower price perception helps consumers justify their hedonic purchase as an act of saving money, and as a result, alleviates guilt. These effects are magnified among consumers who have high disposition to feel consumption guilt. When a price discount is offered, it attenuates the effectiveness of partitioned pricing because the price discount serves as a more effective justification by offering actual saving, not just the perception of saving. Our findings contribute to the pricing literature by uncovering a motivational factor influencing the effectiveness of partitioned (vs. combined) pricing, and offer a useful pricing guideline to product managers based on the product-pricing fit revealed in our research.

Keywords: Hedonic/Utilitarian Motivation, Partitioned Pricing, Justification, Guilt
Partitioned pricing, the practice of dividing price into base price and one or more mandatory surcharges, such as tax or shipping and handling fees, has become pervasive in the last two decades (Greenleaf et al. 2016). With the explosive growth in online transactions and associated development of various surcharges, partitioned pricing has become “the norm, rather than all-inclusive pricing” (Greenleaf et al. 2016, p. 107). Consistent with this growing practice, research findings have demonstrated that partitioned pricing increases demand for a product because consumers tend to underweight or ignore the surcharge, leading to a perceived total price that is lower than when the price is combined (Clark and Ward 2008; Lee and Han 2002; Morwitz, Greenleaf, and Johnson 1998).

However, other empirical evidence has suggested that discounting or ignoring a surcharge may not be consumers’ default response. Lewis, Singh, and Fay (2006) report that free shipping promotions are highly effective in increasing demand, suggesting that consumers pay a great deal of attention to a surcharge. Moreover, according to a survey conducted by Jupiter Communications (2001), more than 60% of online shoppers give up on their orders when shipping fees are added at the end of transactions. In addition, several studies have shown that consumers are more sensitive to changes in surcharge prices, such as shipping fee and sales tax, than changes in item prices (Lewis 2006; Smith and Brynjolfsson 2001). Therefore, despite the two decades of research on partitioned pricing, the factors that moderate the effectiveness of this pricing strategy are yet to be fully explored (Greenleaf et al. 2016).

In this research, we explore how hedonic and utilitarian purchase motives moderate the effectiveness of partitioned pricing compared to combined pricing. Because hedonic consumption is often perceived as discretionary or unnecessary, consumers tend to feel guilty about purchasing hedonic products (Choi et al. 2014; Khan and Dhar 2010; Okada 2005;
Strahilevitz and Myers 1998). Hence, marketing promotions that offer monetary benefits, such as price discounts, are particularly effective in justifying the monetary concern stemming from frivolous spending and alleviating the associated guilt (e.g., Khan and Dhar 2010; Mishra and Mishra 2011). Similar to price discounts, we propose that partitioned pricing can also be used as a guilt-mitigating justification for hedonic purchases. Specifically, consumers with a hedonic purchase motive will engage in underprocessing of a surcharge—that is, underweighting or ignoring the surcharge—which leads to a lower price perception than the actual combined price. This lowered price perception helps consumers justify their hedonic spending and alleviate their guilt. As a result, partitioned pricing will be more effective in increasing the demand for hedonic purchases than combined pricing. On the other hand, consumers with a utilitarian purchase motive will not underprocess the surcharge to use partitioned pricing as a guilt-mitigating justification because purchasing a needed item is unlikely to trigger guilt. Thus, we do not expect partitioned pricing to be more effective than combined pricing for utilitarian consumption.

In the following sections, we discuss research that is foundational to our hypotheses development. In doing so, we introduce several moderators that change our proposed effect, which further validates our proposed mechanism underlying the effect. We then present a pilot study and four main studies that test our hypotheses. Finally, we discuss the implications of our findings for both theory and practice.

**Conceptual Background**

**Past research on partitioned pricing and moderators for its effectiveness**

It is widely acknowledged that partitioned pricing increases demand compared to combined pricing because consumers often underprocess surcharge information, which results in a lower total price perception compared to the actual combined price (Greenleaf et al. 2016;
Morwitz et al. (1998). Morwitz et al. (1998) have proposed that consumers decide whether to process complete price information or not based on a cost-benefit analysis—a comparison between the perceived cost (e.g., time and cognitive effort) required to process complete information and the perceived benefit expected from accuracy. Unless considerable benefit is expected, consumers are inclined to adopt incomplete, but less effortful processing strategies. Morwitz et al. (1998) originally introduced two specific underprocessing strategies by which consumers can save time and effort. First, consumers can adopt heuristics in combining the partitioned prices, for instance, by anchoring on the base price and then insufficiently incorporating the surcharge when adjusting upward. Second, consumers may completely ignore the surcharge because they either fail to notice it or ignore it even after noticing the information. Since base price is often perceived to be more important and is presented earlier than a surcharge, consumers often underprocess surcharge information through these strategies.

Past research has identified several factors that moderate the effectiveness of partitioned pricing by influencing the extent to which consumers process the surcharge information and incorporate it into the overall price perception. For instance, salience of the surcharge, which increases the amount of attention paid to the surcharge and thus the probability that it will be processed, negatively affects the attractiveness of partitioned pricing. Accordingly, the magnitude of the surcharge relative to the base price, or its font size that increases the surcharge salience, leads to a reduced or even reversed effect of partitioned pricing (Kim 2006; Kim and Kachersky 2006; Sheng, Bao, and Pan 2007; Xia and Monroe 2004). Multiple surcharges also increase surcharge salience and attenuate the attractiveness of partitioned pricing (Carlson and Weathers 2008; Xia and Monroe 2004).
Even if consumers notice surcharge information, they still may underprocess it if the associated processing is complicated and thus effortful. Morwitz et al. (1998) find that the format in which the surcharge amount is presented affects the difficulty/ease of processing and thus the attractiveness of partitioned pricing. Specifically, when a surcharge is presented as a percentage of the base price rather than in a dollar amount, consumers must exert extra cognitive effort to calculate the discounted price. Consequently, consumers are more likely to underprocess the surcharge, leading to a smaller recalled total price and increased demand (Morwitz et al. 1998).

Consumer trust for sellers also influences the extent to which consumers pay attention to surcharges and process the surcharge information when forming price perception (Carlson and Weathers 2008; Cheema 2008; Schindler, Morrin, and Bechwati 2005). Cheema (2008) shows that when sellers have a low reputation and thus consumers are suspicious of them, consumers are more likely to pay attention to and process surcharge information compared to when sellers have a medium or high reputation. Consequently, the positive effect of partitioned pricing is reduced when it is adopted by sellers with a low reputation. Similarly, Schindler et al. (2005) demonstrate that consumers who are chronically skeptical about a firm’s motive behind partitioned pricing, believing that surcharges are an unfair profit source for the firm, prefer combined pricing over partitioned pricing, presumably because they are more likely to attend to and process surcharge information when it is presented separately from the base price.

Other consumer characteristics that are not directly related to a surcharge can also affect the extent to which surcharge information is processed and, thus, the effectiveness of partitioned pricing (Burman and Biswas 2007; Cheema 2008; Lee, Choi, and Li 2014). For example, Lee et al. (2014) report that promotion-focused [prevention-focused] individuals, who tend to engage in a global [local] processing style that focuses on the central information (i.e., the base price)
[attends to peripheral information (i.e., the surcharge)], perceive partitioned pricing as more attractive than [equally attractive as] combined pricing.

While the aforementioned research has explored moderators that affect the processing of surcharge information, a few other studies have examined the moderators that are not directly related to price perceptions—for instance, the moderating role of the perceived benefit of secondary components in partitioned pricing. Bertini and Wathieu (2008) find that, compared to combined pricing, partitioned pricing increases [decreases] the preference for a product when the perceived benefit of the secondary component is positive [negative]. Likewise, Chakravarti et al. (2002) show that partitioned pricing is more effective than combined pricing when the secondary component is consumption-related (e.g., icemaker of a refrigerator), but less effective when it is performance-related (e.g., warranty of a fridge) because the former leads consumers to focus on consumption-related benefits, while the latter raises concern for potential product failures.

Despite the significant amount of research on partitioned pricing, extant research has largely neglected to examine the role of motivation underlying the effectiveness of partitioned pricing. We believe exploring the impact of motivation in the context of partitioned pricing is important because past research has heavily documented that motivation influences information processing, rendering implications for how surcharge information will be processed under different motivations (see Baumeister and Newman 1994, Dunning 1999, and Kunda 1990 for reviews). However, only a scant number of studies have taken this research focus. In fact, to the best of our knowledge, the aforementioned research by Lee et al. (2014) is the only past study that has explicitly explored the motivational influence (i.e., regulatory focus) on the attractiveness of partitioned pricing. Their findings indeed underscore the importance of understanding the role of motivation in relation to how consumers process partitioned price
information. The present research introduces another motivational moderator—purchase motive—that affects consumers’ processing of partitioned price information and its effectiveness over combined pricing.

**Hedonic (vs. utilitarian) purchase motive and anticipated guilt**

Past research has often classified products based on their associated purchase motives: (1) utilitarian motive oriented by functional or practical needs and (2) hedonic motive oriented by sensual pleasure, fun, or fantasies (e.g., Batra and Ahtola 1991; Crowley, Spangenberg, and Hughes 1992; Hirschman and Holbrook 1982; Strahilevitz and Myers 1998). Although utilitarian products can be discretionary, hedonic products are often perceived as relatively more discretionary, unnecessary, frivolous, and even decadent than utilitarian products (Okada 2005; Strahilevitz and Myers 1998). Certain product categories are highly associated with one of these motives. For instance, designer clothes, luxury watches, chocolates, and flowers are generally perceived as hedonic products, whereas paper towels, detergents, microwaves, and personal computers are considered primarily as utilitarian products (Dhar and Wertenbroch 2000; Hirschman and Holbrook 1982; O’Curry and Strahilevitz 2001; Okada 2005; Strahilevitz and Myers 1998). Despite such an aggregate perception toward a product, the product may still incorporate both hedonic and utilitarian aspects concurrently (Batra and Ahtola 1991; Crowley et al. 1992; Voss, Spangenberg, and Grohmann 2003). Accordingly, depending on a consumer’s usage and consumption motive, a product can be perceived as either utilitarian or hedonic, which may differ from the aggregate perception (Pham 1998). For instance, although a personal computer is primarily perceived as a utilitarian product in the aggregate (Dhar and Wertenbroch 2000), a consumer considering the purchase for its functional features related to work would
perceive it as utilitarian, whereas another consumer considering it for entertainment would see it as hedonic.

Due to the frivolous and discretionary nature of hedonic consumption, consumers tend to experience anticipated guilt when considering a hedonic purchase (Choi et al. 2014; Mishra and Mishra 2011; Okada 2005; Strahilevitz and Myers 1998). That is, consumers tend to feel guilty about spending money on pleasurable but unnecessary products. Because much of the anticipated guilt stems from monetary concerns associated with discretionary spending (e.g., see Choi et al. 2014, study 3), past research has shown that price discounts or pricing plans that are perceived to offer monetary benefits work as effective guilt-mitigating justifications. For example, Mishra and Mishra (2011) show that price discounts, rather than bonus packs, increase consumers’ preference for vice/hedonic food, although the opposite is true for virtuous/utilitarian food, because a price discount “justifies their [vice/hedonic] purchase as a prudent act of saving money,” whereas a bonus pack makes it harder to justify consuming more of the vice (p. 197). Khan and Dhar (2010) also show that a price discount framed as savings on a hedonic product rather than a utilitarian product of a heterogeneous bundle consisting of both products increases the purchase likelihood of the bundle because the former justifies the hedonic purchase better than the latter. Likewise, sales promotions and nine-ending pricing, which is often perceived as offering a price discount compared to round-ending pricing, have a positive impact on purchase likelihood of hedonic (vs. utilitarian) products (Choi et al. 2014; Kivetz and Zheng 2017).

We propose that partitioned pricing can also be used as a guilt-mitigating justification for consumers making hedonic purchases. Specifically, we expect that the hedonic purchase motive motivates consumers to underprocess surcharge information to perceive the product price as lower than the actual, combined price because this lower price perception helps to justify their
discretionary spending and alleviate the associated guilt. In other words, consumers considering hedonic purchases use partitioned pricing as a guilt-reducing justification. We believe this is possible because a vast amount of past research has documented that motivation directs how people process information in a way that satisfies their desires (e.g., Baumeister and Newman 1994; Dunning 1999; Kunda 1990), as we elaborate in the subsequent section.

**Motivated underprocessing of surcharge**

Past research has documented that motivation can affect different aspects of information processing—for example, attention level, weighing of information, and interpretation of information—to reach a desired conclusion (Baumeister and Newman 1994; Dunning 1999; Kunda 1990). “Managing attention is generally the first and often the most effective way to control [...] the outcome” (Baumeister and Newman 1994, p. 6). For instance, Baumeister and Cairns (1992) show that because people are motivated to maintain positive self-views, participants in their studies coped with unfavorable personality evaluations by reducing the amount of time they spent reading the evaluations. Sweeney and Gruber (1984) also show that supporters of President Nixon were motivated to maintain their political stance by ignoring the news on the Watergate scandal, whereas those who opposed Nixon followed the news closely. In both cases, participants noticed the source of goal-inhibiting information, but did not pay additional attention to it so that the information was not encoded and further processed.

Other streams of research have tested whether an emotion-management goal directs people’s attention in a way that can accomplish the goal. For instance, several eye-tracking studies have reported that people who are motivated to regulate their emotions pay less attention to negative emotion-evoking stimuli (e.g., angry faces) than those without such a motivation (Mather and Carstensen 2003; Xing and Isaacowitz 2006). Likewise, in post-purchase situations,
consumers strategically expose themselves more to information that supports their decision than to information that goes against their decision to minimize the post-purchase dissonance that elicits unpleasant feelings (Higgins, Rhodewalt, and Zanna 1979; Jonas et al. 2001; Oshikawa 1969). All of these studies suggest that consumers with a hedonic purchase motive, who desire to alleviate their guilt, are likely to direct their attention away from the surcharge (and focus on the base price) to form a lower price perception, which helps to justify their hedonic spending. As a result, these consumers will underprocess the surcharge. Similar to participants in the aforementioned studies, consumers may notice the surcharge, but refused to process it further.

Even when a piece of information attracts one’s attention, this information can be weighted differently according to the person’s motivation (Ahluwalia 2000, 2002; Baumeister and Newman 1994; Chaiken, Giner-Sorolla, and Chen 1996; Dunning 1999). For instance, Ahluwalia (2000, 2002) shows that when evaluating a brand or politician, participants who are motivated to defend their favored brand/politician tend to increase the weight on the positive attributes of the brand/politician, while reducing the weight on negative attributes, compared to participants without the motivation or with a different motivation (e.g., accurate evaluation motive). Many other studies have also shown that people overweight goal-satisfying information and underweight goal-inhibiting information (e.g., by questioning the validity of the information source) (see Baumeister and Newman 1994 and Kunda 1990 for reviews). These findings again suggest that consumers motivated to justify their hedonic purchase will underweight the surcharge or completely ignore it (i.e., assign zero weight) as the surcharge inhibits their motivation to justify the hedonic spending by perceiving the overall price to be relatively cheap.

Beyond influencing attention and weighting of information, motivation can also guide how information is interpreted (e.g., Balcetis and Dunning 2006; Voss, Rothermund, and
Brandtstädter 2008). For example, Balcetis and Dunning (2006) find that participants interpreted ambiguous information that could be perceived in two different ways (e.g., a figure that could be seen as number 13 or B) in the way that was more advantageous to the self. Utilizing unobtrusive methods (e.g., eye tracking), they validate that participants saw only the favorable interpretation; not that they saw both interpretations but reported only the favorable one after assessing (i.e., weighting) them. In addition, people tend to set a lower decision threshold, requiring less evidence, for accepting the favorable interpretation over the unfavorable one (Baumeister and Newman 1994; Dunning 1999; Voss et al. 2008). These findings suggest that, for hedonic purchases, the surcharge may be interpreted in a way that is easier to justify, for instance, as insignificant or irrelevant. Based on this interpretation, it is likely that the surcharge will be ignored or underweighted when forming the overall price perception.

**Hypotheses**

Building on the past research on motivated information processing, we propose that consumers with a hedonic purchase motive will engage in motivated underprocessing of the surcharge—that is, ignore or underweight the surcharge—as the lowered price perception helps to justify their hedonic purchase. In other words, consumers will use partitioned pricing as a guilt-mitigating justification for their hedonic spending. Consequently, compared to combined pricing, partitioned pricing increases the demand for hedonic purchases. On the other hand, consumers with a utilitarian purchase motive will not use partitioned pricing as a guilt-mitigating justification because these consumers are not likely to feel guilt from their utilitarian spending. Therefore, we do not expect a positive impact of partitioned (vs. combined) pricing on utilitarian purchases. We formally hypothesize these expectations:

**H1:** Compared to combined pricing, partitioned pricing increases the intention to make hedonic purchases, but not the intention to make utilitarian purchases.
If partitioned pricing increases hedonic purchases because it serves as a guilt-mitigating justification through a lowered price perception, its effectiveness will be attenuated when another, more explicit justification for hedonic purchases (e.g., price discount) is present. Specifically, when a price discount is offered, consumers considering a hedonic purchase no longer need to form a lower price perception by underprocessing the surcharge because a lower price is actually offered, not just the perception. Consequently, the positive impact of partitioned (vs. combined pricing) will be attenuated. Therefore, we hypothesize:

**H2a:** When a price discount is absent, partitioned (vs. combined) pricing increases the intention to make hedonic purchases, but not the intention to make utilitarian purchases.

**H2b:** When a price discount is present, the positive impact of partitioned (vs. combined) pricing on the intention to make hedonic purchases is attenuated.

If partitioned pricing serves as a justification for hedonic purchases when a price discount is absent, partitioned pricing will alleviate the anticipated guilt associated with hedonic spending, compared to combined pricing. This differential amount of guilt will mediate the positive impact of partitioned (vs. combined) pricing on hedonic purchases when price discount is absent (i.e., a moderated mediation by guilt for the effect hypothesized as H2a). On the other hand, when price discount is present, partitioned pricing loses its role as a guilt-mitigating justification; hence, partitioned pricing will not affect feelings of anticipated guilt. Accordingly, anticipated guilt will not mediate the relationship between pricing type and purchase motive when price discount is present (i.e., H2b will not be mediated by guilt). In sum, we hypothesize¹:

**H3a:** When price discount is absent, the reduced level of anticipated guilt mediates the impact of partitioned (vs. combined) pricing on the intention to make hedonic purchases, but not the intention to make utilitarian purchases (i.e., moderated mediation by guilt).

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¹ Combining H3a and H3b, we hypothesize moderated moderated mediation—mediation by guilt moderated by purchase motive (hedonic vs. utilitarian) and by price discount (absence vs. presence).
**H3b:** When a price discount is present, anticipated guilt no longer mediates the relationship between pricing type and purchase motive on the purchase intention.

In addition, Mishra and Mishra (2011) find that participants with a high disposition to feel guilt experience a greater amount of guilt from a hedonic/vice purchase and, thus, the price discount serves as a particularly effective guilt-mitigating justification for these consumers, more than for consumers with a low disposition to feel guilt. This finding indicates that consumers high (vs. low) in dispositional guilt will be more motivated to underprocess the surcharge and use partitioned pricing as a guilt-mitigating justification. Consequently, compared to combined pricing, partitioned pricing will lead to a greater increase in hedonic purchase intention for consumers with a high disposition to feel guilt versus consumers with a low disposition to feel guilt. In addition to the mediation by situational guilt hypothesized in H3a, moderation by chronic guilt will provide further support for our proposed mechanism that partitioned pricing serves as a guilt-mitigating justification. Therefore, we hypothesize:

**H4:** The individual differences in disposition to feel guilt magnify the positive effect of partitioned (vs. combined) pricing on the intention to make hedonic purchases.

**Overview of Studies**

In the following section, we present the results of a pilot study and four main studies that test our hypotheses. The pilot study provides preliminary evidence for motivated underprocessing of a surcharge when the purchase motive is hedonic (vs. utilitarian) by demonstrating that a hedonic (vs. utilitarian) purchase motive decreases the accuracy in recalling the surcharge price. Study 1 confirms our main proposition that partitioned (vs. combined) pricing is indeed effective in increasing the purchase intention for hedonic purchases, but not for utilitarian purchases (H1). Studies 2 to 4 provide support for our proposed mechanism that partitioned pricing increases the demand for hedonic products because it serves as a guilt-
mitigating justification. Study 2 demonstrates that the partitioned pricing increases hedonic purchases only when a price discount is absent (H2a), but not when a discount is present (H2b), indicating that partitioned pricing serves as a guilt-mitigating justification for hedonic purchases, as a price discount does (Khan and Dhar 2010; Mishra and Mishra 2011). Study 3 provides mediation-based process evidence by showings that partitioned (vs. combined) pricing effectively reduces anticipated guilt associated with hedonic purchases and, as a result, increases the purchase intention for hedonic products when a price discount is absent (H3a). However, this mediation by guilt is not observed when a price discount is present (H3b). Study 4 shows that the individual differences in disposition to feel guilt magnify the positive impact of partitioned (vs. combined) pricing for hedonic purchases (H4), suggesting that partitioned pricing is particularly effective in reducing guilt for consumers who are prone to feel guilty.

**Pilot Study: Motivated Underprocessing of Surcharge Information**

The objective of the pilot study is to gain preliminary insight into our proposed mechanism involving the underprocessing of a surcharge when consumers have a hedonic purchase motive versus a utilitarian motive. We test this by examining whether participants’ accuracy in recall and recognition of a surcharge decreases under a hedonic motive as opposed to a utilitarian motive.

**Method**

One-hundred and one participants ($M_{age} = 35.2$, 50 males and 51 females) were recruited through Amazon Mechanical Turk (MTurk) and were randomly assigned to one of two purchase motive conditions: hedonic or utilitarian. Participants were asked to imagine a situation in which they were purchasing a new laptop. The purchase motive was manipulated by asking participants to imagine different motives for purchasing the laptop. Specifically, participants in the hedonic
condition imagined buying a new laptop because their current one, while possessing good quality, was old-fashioned in terms of style. In contrast, in the utilitarian condition, participants imagined buying a new laptop due to the poor functionality of their old laptop. Next, participants were asked to describe a past personal experience that was similar to the situation they just imagined. This manipulation has been used in past research to successfully elicit hedonic and utilitarian purchase motives (e.g., Choi et al. 2014). A pretest also confirmed the effectiveness of our manipulation. Specifically, 58 participants were recruited through MTurk and evaluated the purchase circumstance on a single bipolar scale (1 = utilitarian, 9 = hedonic). Following past research, definitions of the purchase motives were provided (utilitarian: defined as useful, practical, and functional, something that helps achieve a goal; hedonic: defined as pleasant and fun, something that is enjoyable and appeals to the senses) (e.g., Khan and Dhar 2010). As anticipated, participants in the hedonic condition reported the circumstance to be more hedonic ($M = 5.17$) than those in the utilitarian condition ($M = 3.69$; $t(56) = 2.41, p < .05$).

Next, all participants viewed an advertisement for the 13-inch MacBook Air (see Web Appendix). The base price was $932.00 and the shipping fee was $6.50, which reflected the market price of the product at the time. After they viewed the advertisement, participants were asked to recall and write down the shipping fee they saw in the ad. Participants were then presented with a range of prices (i.e., $6.00, $6.50, $6.99, $60.00, $65.00, and $69.99) and were asked if they could recognize which was the actual shipping fee. Finally, participants reported their demographic information, including their age and gender, and were thanked for their participation.

Results
Surcharge recall. Consistent with our expectation, the percentage of participants who recalled the exact surcharge amount was significantly smaller in the hedonic condition (\(M = 26\%\)) than in the utilitarian condition (\(M = 45\%; X^2(1) = 3.89, p = .049\)). Since recalling the exact surcharge price would be too stringent a criterion for recall accuracy, we conducted an additional analysis that allowed for some leeway. Specifically, we recoded the recalled amount as accurate if the left digit of the recalled amount matched the actual surcharge price (i.e., $6.50). That is, the recalled amounts between $6.00 and $6.99 (i.e., +/- 7.6% of the actual surcharge)\(^2\) were treated as accurate. Again, a smaller percentage of participants recalled the surcharge correctly in the hedonic condition (\(M = 38\%\)) than in the utilitarian condition (\(M = 63\%; X^2(1) = 5.75, p = .017\)).

Surcharge recognition. The percentage of participants who recognized the surcharge accurately was smaller in the hedonic condition (\(M = 44\%\)) than in the utilitarian condition (\(M = 56\%), but the difference was not reliable (\(X^2(1) = 1.59, p > .208\)). However, when leeway was allowed (i.e., treating the recognized price with the same left-digit as an accurate response), the percentage of participants who recognized the surcharge was marginally smaller in the hedonic condition (\(M = 79\%\)) than in the utilitarian condition (\(M = 92\%; X^2(1) = 3.31, p = .069\)).

Allowing some leeway in recognition accuracy increased the overall recognition rate in both conditions, but the difference between the conditions became more evident.

Discussion

The decreased recall accuracy among participants with a hedonic purchase motive compared to those with a utilitarian motive suggests that a hedonic motive led participants to underprocess the surcharge information. On the other hand, the recognition accuracy showed a less reliable difference between the two groups. It seems that participants in both motive

\(^2\) Past research used +/- 5% leeway (Morwitz et al. 1998), but we thought counting the recalls that matched the left-digit of the actual surcharge would be more adequate for our context.
conditions paid a similar level of initial attention required for noticing the surcharge, but those with hedonic (vs. utilitarian) motive withdrew from paying additional attention to fully process the surcharge.

**Study 1: The Impact of Purchase Motive on the Effectiveness of Partitioned Pricing**

The purpose of this study was to test our main proposition that, compared to combined pricing, partitioned pricing increases the purchase intention for hedonic purchases, but not for utilitarian purchases (H1).

**Method**

One hundred and forty-six participants ($M_{age} = 20.8$ years, 94 males and 52 females) were recruited from a large Midwestern university and were randomly assigned to one of four conditions in a 2 (purchase motive: hedonic, utilitarian) × 2 (pricing: partitioned, combined) between-subjects design. As in the pilot study, the purchase motive was primed by asking participants to imagine a shopping situation with a specific purchase motive in mind. Specifically, in the hedonic condition, participants imagined that they wanted to buy a new set of headphones because their current ones, while possessing excellent sound quality, were old-fashioned in terms of style. In the utilitarian condition, participants imagined that they wanted to buy a new set of headphones because their current set had poor sound quality. Using the same purchase motive manipulation check used in the pilot study, a pretest ($N = 42$) confirmed that participants in the hedonic condition reported the shopping situation to be more hedonic ($M = 8.04$) than those in the utilitarian condition ($M = 4.63$, $t(40) = 5.90$, $p < .001$).

Next, all participants viewed an advertisement for Sennheiser HD 238 headphones (see Web Appendix). In the partitioned pricing condition, the price was stated as $79$ (base price) and $3.95$ (shipping and handling fee). In the combined pricing condition, the price was stated as
$82.95. After spending some time to look at the ad, participants responded to two questions that measured their intention to purchase the headphones (“the likelihood of purchasing the headphones” and “the probability that I would consider buying the headphones”; α = .95) using a 7-point Likert-type scale (1 = very low, 7 = very high).

**Results and Discussion**

A 2 × 2 ANOVA was conducted to test whether partitioned (vs. combined) pricing increased purchase intention for hedonic products, but not for utilitarian products (H1). Consistent with H1, we found a significant interaction between purchase motive and pricing (F(1, 142) = 6.40, p = .013, η² = .043), indicating that the effectiveness of partitioned (vs. combined) pricing depends on purchase motive. Specifically, partitioned (vs. combined) pricing increased purchase intention significantly when participants were primed with a hedonic purchase motive (Mpartitioned = 4.07, Mcombined = 3.20, F(1, 142) = 5.14, p = .025, η² = .035), but not when they were primed with a utilitarian motive (Mpartitioned = 3.84, Mcombined = 4.32, F(1, 142) = 1.69, p > .19). Study 1 confirmed the moderating role of purchase motive for the effect of partitioned (vs. combined) pricing on purchase intention.

**Study 2: Moderating Role of Price Discount**

If partitioned pricing (vs. combined pricing) increases purchase intention for hedonic purchases because it serves as a guilt-mitigating justification for hedonic purchases, its effectiveness will be attenuated by the presence of another, more explicit justification. Since past research has reported that a price discount can serve as a guilt-mitigating justification for hedonic purchases (Khan and Dhar 2010; Mishra and Mishra 2011), study 2 tested whether partitioned pricing increases hedonic purchases only when a price discount is absent (H2a). When a price discount is present, partitioned pricing loses its role as a guilt-alleviating justification to the price
discount and, as a result, partitioned pricing no longer increases hedonic purchases compared to combined pricing (H2b). This moderating role of price discount validates that, similar to price discount, partitioned pricing is used as a guilt-reducing justification for hedonic purchases.

**Method**

Two hundred and forty-five participants ($M_{age} = 35.4$ years, 114 males and 131 females) were recruited from MTurk and were randomly assigned to one of eight conditions in a $2 \times 2 \times 2$ between-subjects design. Unlike earlier studies, the purchase motive was manipulated using different products that were primarily perceived as either hedonic or utilitarian: flowers vs. an all-season floor mat. Using different product categories to manipulate hedonic versus utilitarian motives has been widely adopted in past research as doing so enhances practical implications, for instance, for marketers managing these specific product categories (e.g., Khan and Dhar 2010; Dhar and Wertenbroch 2000; O’Curry and Strahilevitz 2001; Okada 2005; Strahilevitz and Meyers 1998). Using the same purchase motive manipulation check used in the pilot study, a pretest ($N = 45$) confirmed that the flowers were perceived as more hedonic than the floor mat ($M_{flower} = 7.06$, $M_{mat} = 3.78$, $t(43) = 4.56$, $p < .001$).

All participants viewed an advertisement on either the flowers or the all-season floor mat, depending on the purchase motive condition (see Web Appendix). We used the average market price for each product. In the flowers/partitioned pricing condition, the price was set as $34.99 (base price) and $11 (shipping and handling fee), whereas in the flowers/combined pricing condition, the price was set as $45.99 (including shipping and handling fee). On the other hand, in the floor mat/partitioned pricing condition, the price was set as $149 (base price) and $13 (shipping and handling fee), whereas in the floor mat/combined pricing condition, the price was
set as $162 (including shipping and handling fee). In the price discount present condition, around a 30% discount was offered (e.g., $25.99 + $8 for flowers/partitioned condition; $109 + $10 for floor mat/partitioned condition). Both regular and discounted prices were displayed in the price discount present condition. In contrast, in the price discount absent condition, none of the discount-related information was presented. After spending some time to examine the advertisement, participants reported their purchase intention on two items identical to those used in study 1 ($α = .92$). Finally, participants reported their demographic information. We removed one outlier, following Tukey’s (1977) procedure, that fell outside the interval $[Q1-1.5 \times IQR ; Q3 + 1.5 \times IQR]$, which resulted in 244 qualified participants for our analyses ($M_{\text{age}} = 35.4$ years, 114 males and 130 females). Including this outlier did not affect our hypothesized effects (e.g., the three-way interaction, $p = .042$; the two-way interaction within the price discount absent condition, $p = .016$).

**Results**

*Purchase intention.* To test whether partitioned (vs. combined) pricing effectively increased the purchase intention for the flowers but not for the floor mat when the discount was absent (H2a), whereas this effectiveness of partitioned pricing for the flowers is attenuated when the discount is present (H2b), we conducted a $2 \times 2 \times 2$ ANOVA with purchase motive, pricing, and price discount as predictors. We observed a significant three-way interaction effect ($F(1, 236) = 4.87, p = .028, \eta^2 = .02$) (Figure 1). Consistent with our predictions (H2a), when the price discount was absent, a significant two-way interaction between purchase motive and pricing was found ($F(1, 236) = 6.98, p = .009, \eta^2 = .029$). Replicating the results of study 1, the intention to purchase the flowers was higher when partitioned pricing was adopted ($M = 4.08$) than when combined pricing was adopted ($M = 3.24, F(1, 236) = 4.62, p = .033, \eta^2 = .019$), but this
difference was not observed for the floor mat ($M_{\text{partitioned}} = 3.90, M_{\text{combined}} = 4.50; F(1, 236) = 2.49, p > .11$). On the other hand, when the price discount was present, the effectiveness of partitioned (vs. combined) pricing no longer depended on the purchase motive ($F(1, 236) < 1, p > .65$) (H2b).

Discussion

Study 2 confirmed that partitioned pricing is used as a guilt-mitigating justification for hedonic purchases when a price discount is absent. On the other hand, when a price discount was present, participants no longer used partitioned pricing as a justification for their hedonic purchase because the discount already justified their hedonic purchase as an act of saving money by offering an actual saving, not just a perceived saving that partitioned pricing offers.

Because the price was different for the two products, the price difference could have caused the observed results. Specifically, past research has shown that factors affecting the salience of a surcharge (e.g., surcharge magnitude and its reasonableness) changes the effectiveness of partitioned (vs. combined) pricing (e.g., Sheng et al. 2007; Xia and Monroe 2004). Accordingly, if the shipping and handling fee for the flower ($11$) was perceived as more reasonable and thus decreased its salience compared to the surcharge for the floor mat ($13$), it could have resulted in the greater effectiveness of partitioned (vs. combined) pricing for the flower. Hence, we conducted a post-test ($M_{\text{age}} = 36.0$ years; 28 males and 32 females) to verify if the different surcharge amounts had affected the perception of the surcharge for the two products. Participants reported whether the surcharge was outrageous, too high, or reasonable ($r$), whether they felt comfortable with the surcharge ($r$), and whether the retailer is ripping off customers by charging the surcharge ($\alpha = .83$; ($r$ indicates reverse coding) on a 7-point Likert-type scale ($1 = $
strongly disagree; 7 = strongly agree). We did not find any difference in these surcharge perceptions between the two products ($M_{\text{flower}} = 3.47$ vs. $M_{\text{mat}} = 3.60$, $F(1, 58) < 1, p > .67$). Still, we acknowledge that this null effect cannot fully rule out any potential confounding effect resulting from the different surcharge amounts. Hence, we control the surcharge price (as well as the base price) in the next study.

**Study 3: Mediating Role of Anticipated Guilt**

The purpose of study 3 was to offer mediation-based process evidence by directly measuring the feelings of anticipated guilt. We test our prediction that the positive impact of partitioned (vs. combined) pricing on the purchase intention for hedonic products is mediated by the reduced anticipated guilt when a price discount is absent (H3a). In contrast, when a price discount is present, we expect that the pricing type does not affect the anticipated guilt and the purchase intention even when consumers are considering a hedonic purchase (H3b).

**Method**

Three hundred and ninety-three participants were recruited through MTurk ($M_{\text{age}} = 38.4$ years, 156 males and 237 females) and were randomly assigned to one of eight cells in a 2 (purchase motive: chocolate, wireless mouse) $\times$ 2 (pricing: partitioned, combined) $\times$ 2 (price discount: absent, present) between-subjects design. All participants viewed an advertisement of either Godiva Connoisseur dark chocolate or the Logitech computer wireless mouse, according to the purchase motive condition to which they were assigned (see Web Appendix). Unlike study 2, we used the same price for the chocolate and the wireless mouse. In the partitioned pricing condition, the price of the advertised product was stated as $29.64 (base price) and $3.50 (for shipping), whereas the price was noted as $33.14 (shipping included) in the combined pricing condition. In the discounted price condition, “Today’s deal” was offered, which was about 17%
lower than the base price (the surcharge price remained the same). Both the discounted price and the regular price were stated in the discount price condition.

Participants reported their purchase intention on two items identical to those used in study 1 ($\alpha = .96$) and on three items for anticipated guilt (“how guilty/uneasy/reluctant would you feel about spending money on purchasing the product?”; $\alpha = .92$), using a 7-point Likert-type scale ($1 = $not at all, $7 = $extremely). Participants then responded to a manipulation check for purchase motive identical to the one used in the pilot study ($1 = $utilitarian, $9 = $hedonic). Finally, participants reported their demographic information.

**Results**

*Manipulation check.* As expected, chocolate ($M = 8.01$) was perceived to be more hedonic than the computer mouse ($M = 3.27, t(391) = 23.71, p < .001$).

*Purchase intention.* To examine whether partitioned (vs. combined) pricing effectively increased purchase intention for the hedonic product, but not for the utilitarian product, and whether this effect was observed only when the price discount was absent but not when it was present, we conducted a $2 \times 2 \times 2$ ANOVA with purchase motive, pricing, and price discount as predictors. A marginally significant three-way interaction effect was observed ($F(1, 385) = 2.84, p = .093, \eta^2 = .007$) (Figure 2). A decomposition of this interaction per price discount condition yielded a significant two-way interaction between purchase motive and pricing when the discount was absent ($F(1, 385) = 6.30, p = .012, \eta^2 = .016$). Consistent with H2a, when a price discount was absent, partitioned (vs. combined) pricing increased participants’ purchase intention for the chocolate ($M_{\text{partitioned}} = 3.47, M_{\text{combined}} = 2.64; F(1, 385) = 5.76, p = .017, \eta^2 = .015$), but not for the wireless mouse ($M_{\text{partitioned}} = 4.10, M_{\text{combined}} = 4.48; F(1, 385) = 1.29, p >
.25. In contrast, consistent with H2b, the two-way interaction was no longer significant when the price discount was present ($F(1, 385) < 1, p > .88$).

Anticipated guilt. To examine whether partitioned pricing reduced anticipated guilt when the price discount was absent, but its role as a guilt-mitigating justification was lost when the price discount was present, we conducted a $2 \times 2 \times 2$ ANOVA with purchase motive, pricing, and price discount as predictors. A significant three-way interaction was observed ($F(1, 385) = 4.47, p = .035, \eta^2 = .011$) (Figure 3). A decomposition of this three-way interaction per price discount condition revealed a significant two-way interaction between purchase motive and pricing when the price discount was absent ($F(1, 385) = 4.80, p = .029, \eta^2 = .012$). Consistent with our predictions, when the price discount was absent, partitioned (vs. combined) pricing reliably reduced the anticipated guilt associated with purchasing the chocolate ($M_{\text{partitioned}} = 4.91, M_{\text{combined}} = 5.79; F(1, 385) = 5.60, p = .018, \eta^2 = .014$), but not with purchasing the wireless mouse ($M_{\text{partitioned}} = 3.77, M_{\text{combined}} = 3.51; F(1, 385) < 1$). However, when the price discount was present, the effect of pricing on the anticipated guilt did not depend on the purchase motive (two-way interaction: $F(1, 385) < 1, p > .43$).

Moderated moderated mediation. Finally, we tested whether the positive impact of partitioned pricing (vs. combined pricing) on purchase intention for the hedonic (vs. utilitarian) product was mediated by reduced feelings of anticipated guilt when the price discount was absent (H3a), but anticipated guilt did not mediate the relationship between pricing type and purchase motive when the price discount was present (H3b). We conducted a moderated moderated mediation analysis that examined the effect of pricing on purchase intention with
anticipated guilt as a mediator and purchase motive and price discount as two moderators (Hayes 2013, model 11; 5,000 bootstrapped samples). Consistent with H3a, in the price discount absent condition, anticipated guilt mediated the effect of pricing type on participants’ purchase intention for the chocolate ($b = .416$, Boot SE = .156, 95% CIs: [.125 to .740]), but not for the wireless mouse ($b = -.122$, Boot SE = .186, 95% CIs: [-.503 to .235]). The index of moderated mediation in the discount absent condition was significant ($b = .519$, Boot SE = .236, 95% CIs: [.075 to .994]), indicating that the two indirect effects estimated at different levels of purchase motive differed significantly from each other. In contrast, when the discount was present, anticipated guilt did not mediate the effect of pricing type on participants’ purchase intention for the chocolate ($b = .118$, Boot SE = .169, 95% CIs: [-.217 to .451]) or for the wireless mouse ($b = .298$, Boot SE = .162, 95% CIs: [-.021 to .626]). The index of moderated mediation in the discount present condition was not significant ($b = -.183$, Boot SE = .240, 95% CIs: [-.654 to .289]), indicating that the two indirect effects estimated at different levels of purchase motive were not reliably different. Finally, the index of moderated moderated mediation was significant ($b = -.702$, Boot SE = .337, 95% CIs: [-1.374 to -.036]), confirming that the two moderated mediation effects estimated at two different levels of price discount were reliably different (see Table 1).

<< Insert Table 1 about here >>

These results support our proposed mechanism that partitioned pricing serves as a guilt-mitigating justification for hedonic purchases and as a result increases related purchase intention, but only when the price discount was absent. When a price discount was present, the role of partitioned pricing as a guilt-mitigating justification was lost. Accordingly, pricing type did not
affect the anticipated guilt and the purchase intention even when participants were considering a hedonic purchase.

**Study 4: Moderating Effect of Dispositional Guilt**

While study 3 provided process evidence through the mediating effect of guilt, study 4 provides additional process evidence by demonstrating the moderating effect of guilt. Specifically, if partitioned pricing serves as a guilt-mitigating justification for hedonic purchases and thereby increases purchase intention for hedonic products, the effect of partitioned pricing (vs. combined pricing) on purchase intention for hedonic products should be greater among consumers who have a high (vs. low) disposition to feel guilt. This is because when considering a hedonic purchase, consumers who are high (vs. low) in chronic guilt will experience greater anticipated guilt and thus will be more motivated to underprocess the surcharge and use partitioned (vs. combined) pricing as their guilt-reducing justification. In sum, study 4 tests whether the individual differences in chronic guilt magnify the positive effect of partitioned (vs. combined) pricing on the intention to make a hedonic purchase (H4).

In addition to this main objective, study 4 also explored whether the format of a surcharge affects the extent to which consumers underprocess the surcharge of a hedonic product. Past research documents that a surcharge expressed in a percentage (vs. dollar) format requires more cognitive effort to accurately process it and, thus, is more likely to get underprocessed. We test whether a hedonic motive leads to greater underprocessing of a surcharge and thus greater effectiveness of partitioned pricing when the surcharge is expressed in percentage than in dollars.

**Method**

We recruited 279 participants (\(M_{\text{age}} = 35.13\) years, 139 males and 140 females) from MTurk and randomly assigned them to one of three pricing conditions: combined, partitioned-
dollar, or partitioned-percentage. At the start of the study, participants reported their demographic information and then responded to a three-item chronic guilt measure that asked whether they regretted making purchases that they were unable to justify logically, felt guilty when they made impulse purchases, and felt guilty when considering luxurious products and services that were pleasurable but not necessary (1 = never, 7 = always; α = .91; Mishra and Mishra 2011).

Next, participants imagined that while browsing several news websites, they found an online ad for flowers that drew their attention. They viewed a web page linked to the ad, which provided additional information on the flowers, including their price (see Web Appendix). In the combined pricing condition, participants saw a price of $63.94 along with the message that handling and delivery fees were included. In the partitioned-dollar pricing condition, participants saw $55.60 + $8.34 (handling and delivery fees). In the partitioned-percentage pricing condition, participants saw $55.60 + 15% handling and delivery fees. After browsing the web page, participants reported their purchase intention for the flowers on the two items used in study 1 (α = .95).

**Results and Discussion**

First, we tested whether chronic guilt magnified the positive impact of each of the two partitioned pricing, compared to combined pricing, on the intention to purchase the flowers. We dummy coded the two partitioned pricing conditions. We then regressed the purchase intention on partitioned-dollar, partitioned-percentage, chronic guilt, and their interaction terms. A significant interaction between partitioned-dollar and chronic guilt was observed (b = .41, SE = .15, t(273) = 2.77, p = .006), indicating that chronic guilt magnified the difference between the combined pricing and the partitioned-dollar pricing. To decompose this interaction, we used the
Johnson-Neyman technique to identify the range of chronic guilt for which the two pricing conditions differed significantly. This analysis revealed that partitioned-dollar pricing reliably increased the intention to buy the flowers compared to combined pricing for participants with a chronic guilt score greater than 5.83 ($b_{JN} = .58, \ SE = .30, t(179) = 1.97, p = .050$). Unexpectedly, for participants with a chronic guilt score less than 2.45, partitioned-dollar pricing reduced the purchase intention compared to combined pricing ($b_{JN} = -.81, \ SE = .41, t(179) = -1.97, p = .050$).

Similar results were observed between partitioned-percentage pricing and combined pricing. A marginally significant interaction between partitioned-percentage and chronic guilt was observed ($b = .28, \ SE = .15, t(273) = 1.90, p = .059$), indicating that chronic guilt marginally magnified the difference between partitioned-percentage pricing and combined pricing. The Johnson-Neyman technique revealed that, for any participants with a chronic guilt score greater than 5.60, partitioned-percentage pricing significantly increased the purchase intention compared to combined pricing ($b_{JN} = .57, \ SE = .29, t(185) = 1.97, p = .050$)(Figure 4).

Second, to test whether chronic guilt magnified the effectiveness of partitioned-percentage pricing more than partitioned-dollar pricing, we dummy coded the combined pricing condition and then performed another regression analysis using combined, partitioned-percentage, chronic guilt, and their interaction terms as independent variables and the flower purchase intention as dependent variable. The interaction between chronic guilt and partitioned-percentage was not significant ($b = -.13, \ SE = .15, t(273) = -.87, p > .387$), indicating that chronic guilt did not differentially affect the two partitioned pricing conditions (Figure 4).

<< Insert Figure 4 about here >>

The results confirmed H4 that individual differences in the disposition to feel guilt magnify the effectiveness of partitioned (vs. combined) pricing on intention to purchase a
hedonic product. The results suggest that partitioned pricing is a useful vehicle for alleviating guilt associated with hedonic products, particularly among participants who are predisposed to feel guilt. We did not find the effectiveness of partitioned pricing to depend on the surcharge format, unlike in past research (Morwitz et al. 1998). This could be due to the specific level of percentage that we used (i.e., 15%), which may be easier to process than the level that past research used (e.g., 18.5%, Morwitz et al. 1998). However, it is also possible that hedonic motive led participants to underprocess any format of the surcharge, making both type of partitioned pricing effective in increasing the intention to purchase the flowers.

Note that, although flowers are hedonic products, the main effect of partitioned (vs. combined) pricing (i.e., a planned contrast that we hypothesized in H1) was directional but not significant (combined vs. partitioned-dollar: $b = .08, t(276) = .32, p = .747$; combined vs. partitioned-percentage: $b = .25, t(276) = 1.06, p = .289$). We speculate this is due to the phrasing found in the flower advertisement (e.g., “You don’t always need a holiday to have it. This fresh flower arrangement is brought together just for you to help you make your everyday special.”; see Web Appendix) that may have helped participants justify their flower purchase and lowered the guilt they felt for purchasing flowers. Despite the message, participants with a high disposition to feel guilt still seemed to have experienced guilt to a level that was sufficient to motivate them to use partitioned pricing as a guilt-mitigating vehicle.

**General Discussion**

The present research investigated how purchase motives (hedonic vs. utilitarian) influence the effectiveness of partitioned versus combined pricing. We proposed and tested that, compared to combined pricing, partitioned pricing increases hedonic purchases, but not utilitarian purchases. We expected this happens because consumers tend to feel guilty about their
hedonic purchases and thus use partitioned pricing as a guilt-mitigating justification for their hedonic spending. Specifically, consumers considering a hedonic purchase underprocess the surcharge to form a price perception that is lower than the combined price, and this lower price perception justifies their hedonic purchase as an act of saving money.

Our expectations were supported in a pilot study and four main studies. The pilot study showed that consumers recalled surcharge price less accurately under a hedonic purchase motive than under a utilitarian motive, indicating that hedonic motive indeed leads to underprocessing of surcharge information. Study 1 confirmed our main proposition that compared to combined pricing, partitioned pricing increases hedonic purchases, but not utilitarian purchases. The mechanism underlying this primary effect was tested in studies 2-4. Specifically, in study 2, the moderating role of price discount confirmed that consumers with a hedonic purchase motive use partitioned pricing as a guilt-reducing justification, similar to a price discount. Study 3 provided mediation-based process support, showing that the increase in hedonic purchases involving partitioned pricing was driven by the reduced feelings of anticipated guilt. Study 4 further showed that partitioned pricing serves as particularly effective guilt-mitigating justification among consumers who are prone to feel guilt than those who are not.

Across our studies, we adopted different methods to manipulate purchase motive to increase the robustness of our effects. In the pilot study and study 1, we used purchase scenarios to prime the motivation for purchasing a product that included both hedonic and utilitarian attributes (i.e., laptop computer and headphones). On the other hand, studies 2 and 3 used two different products highly associated with either a hedonic or a utilitarian purchase motive: flowers versus all-season floor mats, and chocolate versus wireless mouse.

**Contributions to Theory and Practice**
We contribute to the pricing literature by uncovering a motivational influence on the effectiveness of partitioned versus combined pricing. Despite two decades of research on partitioned pricing, motivation has been neglected as a potential moderating influence. In fact, the pioneering work by Morwitz et al. (1998) proposes that whether consumers accurately process or underprocess a surcharge depends on a cost-benefit analysis that compares the perceived benefit drawn from the accurate processing and the costs (e.g., cognitive effort) required for it. In other words, the cost-benefit analysis generates one of the two motivational patterns that guide information processing—a motivation to arrive at an accurate conclusion or a motivation to reach a particular, directional conclusion (Baumeister and Newman 1994; Kruglanski 1989; Kunda 1999). At the same time, these motivations can affect the cost-benefit analysis by changing the level of cognitive effort consumers exert when processing information. Despite these implications of the cost-benefit analysis, neither Morwitz et al. (1998) nor most follow-up works tested the direct impact of motivation on consumers’ response toward partitioned pricing. To the best of our knowledge, Lee et al. (2014) was the only past research which has taken this focus explicitly. Our research adds to this new, less taken approach and shows that purchase motive directs processing of surcharge information in a way that justifies hedonic spending.

In a review of past research on partitioned pricing, Greenleaf et al. (2016) call for future investigations focused on different products and emotion related variables. We respond to this call by unveiling how hedonic products and associated guilt affect consumers’ reaction to partitioned versus combined pricing. We find that an interplay of motivation (hedonic motive), emotion (anticipated guilt), and cognition (processing of surcharge) altogether determines the effectiveness of partitioned pricing compared to combined pricing. We believe this research
opens a promising pathway toward an integrative approach in studying the effectiveness of various pricing strategies and the underlying processes.

Our findings provide useful guidelines for product managers. We demonstrate that the type of product (hedonic vs. utilitarian) directly affects consumers’ reactions to pricing strategies because a product category is often closely associated with purchase motivation. The product-pricing fit we discovered offers insight on the favorable pricing strategy depending on product categories. Specifically, hedonic products will benefit significantly from adopting partitioned pricing, which can function as a demand-attracting tool as powerful as price discounts, without any actual financial sacrifice made by the seller.

It is important to note that our findings do not imply that partitioned pricing would never work for utilitarian products. Extant research finds that partitioned pricing can increase demand for both hedonic and utilitarian products. For instance, although several past studies used products that were primarily perceived as hedonic as their stimuli (e.g., Lee et al.’s (2014) used flowers; Sheng et al. (2007) used CD Walkman; and Volckner, Ruhle, and Spann (2012) used wine bottles), other studies have used products that are considered utilitarian in the aggregate perception (e.g., Sheng et al. (2007) used laptop; and Xia and Monroe (2004) used desktop PC). These latter studies may have observed the effectiveness of partitioned pricing for utilitarian products due to factors other than purchase motive that moderated the pricing effectiveness (e.g., magnitude or format of the surcharge). On the other hand, it is also possible that those products were perceived as hedonic due to temporarily activated purchase motive (as shown in our pilot study and study 1). In fact, many stimuli used in past research are unclear as to whether the products were perceived as hedonic or utilitarian (e.g., whether flight tickets were purchased for vacation or business trips, or whether a piece of furniture was purchased to decorate the house or
for its certain functionality (Lee et al. 2014)). In addition, a utilitarian product can be perceived as discretionary or luxurious due to its high price, its luxurious brand image, or one’s budget constraint. In these cases, even a utilitarian product may trigger anticipated guilt and thus require justification. Because no extent research has examined whether the effect of partitioned pricing on increased product demand was due to the products being perceived as hedonic or due to other influences alone (e.g., decreased salience of surcharge or consumer characteristics), our research specifically tested the impact of purchase motive on the effectiveness of partitioned pricing (while controlling for other moderating influences) and show that partitioned pricing can be used as a justification for hedonic products (studies 2-4) and for utilitarian product perceived as hedonic due to temporarily induced purchase motives (pilot study and study 1).

**Alternative Explanations**

It may be possible to interpret that our results were driven by combined pricing that decreased hedonic purchases, rather than by partitioned pricing that increased hedonic purchases. To interpret the results properly, it should be noted that significant or marginal main effect of purchase motives was observed in our studies 1-3 in which the two motives were compared, indicating that consumers are less inclined in general to make a hedonic purchase than a utilitarian purchase, presumably due to the guilt associated with hedonic consumption. Considering this generally lower purchase intention for hedonic (vs. utilitarian) purchases, our results indicate that, when partitioned pricing was adopted, it increased hedonic purchases to a level similar to utilitarian purchases; in contrast, when combined pricing was adopted, the general avoidance of hedonic purchases compared to utilitarian purchases did not change. This interpretation is also validated by the reduced level of anticipated guilt reported for hedonic
purchases when partitioned (vs. combined) pricing was adopted, indicating that the effect was driven by partitioned pricing rather than combined pricing.

Alternatively, it is possible that consumers engaged in a more in-depth processing under a utilitarian purchase motive, rather than engaging in underprocessing under a hedonic motive. If utilitarian motive triggers in-depth processing, a surcharge is more likely to be fully incorporated in the overall price perception. In this case, it is possible that hedonic motive did not increase the effectiveness of partitioned pricing, but utilitarian motive nullified its effectiveness. Nevertheless, this alternative account cannot explain why anticipated guilt was reduced for hedonic purchases when they used partitioned (vs. combined) pricing. Also, it cannot explain why the effectiveness of partitioned pricing was attenuated for hedonic purchases when a price discount was offered, or why the effectiveness was greater among consumers prone to feel guilt.

**Limitations and Future Research**

One possible boundary condition for our effects is the perceived reasonableness of the surcharge. Specifically, consumers with hedonic purchases may underprocess a surcharge only when it is reasonable. Our pilot study provided preliminary evidence that participants under a hedonic motive noticed the surcharge but did not pay further attention to fully process the information. But such selective attention and underprocessing may take place only when the surcharge is reasonable. When it is unreasonable, the surcharge may attract attention and activate in-depth processing even when consumers have a hedonic motive. Still, the threshold for an unreasonable surcharge may be lower under a hedonic (vs. utilitarian) motive as consumers would underweight the surcharge amount as much as they can in order to justify their hedonic spending. Likewise, hedonic motive may decrease sensitivity to the other factors affecting surcharge salience (e.g., increased surcharge font size or number of surcharges). Therefore,
future research can investigate how purchase motive influences the effectiveness of partitioned pricing by interacting with factors that past research has examined (e.g., surcharge salience).

Future research can also examine consumer characteristics that potentially moderate the effectiveness of partitioned pricing for hedonic and utilitarian goods. For instance, Sengupta and Zhou (2007) find that exposure to hedonic products triggers promotion focus among highly impulsive consumers, and this promotion focus reduces health concerns associated with consuming hedonic food, resulting in increased hedonic food consumption. This finding suggests that consumer impulsivity may serve as a moderator for our effects. For instance, for highly impulsive consumers, partitioned pricing may be used as a particularly effective guilt-mitigation tool due to the activated promotion focus that decreases the concerns related to hedonic consumption (Sengupta and Zhou 2007) and/or increases attention to the base price rather than to the surcharge (Lee et al. 2014). Alternatively, partitioned pricing may lose its effectiveness as a guilt-mitigating justification for hedonic purchases because promotion focus has already alleviated the concerns associated with hedonic spending and related guilt (similar to when a price discount is offered). Hence, future research can investigate how consumer impulsivity and their regulatory orientation interact with the pricing type and purchase motives.

Given the evolution in the marketplace in terms of emerging developments in e-commerce, m-commerce (mobile commerce), and s-commerce (social commerce), pricing strategies are constantly evolving. For instance, many firms have started to offer “free shipping” based on membership or order size (e.g., > $50). According to our findings, the impact of free shipping would be greater for hedonic goods that require justification than for utilitarian goods. In addition, if “free shipping” becomes a norm in e-commerce in the future, consumer may confuse between “shipping included” and “free shipping,” which might attenuate the partitioned
pricing effect. Thus, it is worthwhile to continue and build on this research in the context of emerging trends in free shipping policy and examine the associated impact on the effectiveness of partitioned versus combined pricing. Overall, emerging developments in the marketplace—along with marketing managers’ quest to find appropriate pricing strategies based on consumers’ motives—demand continued exploration into the underlying mechanisms and boundary conditions that can ensure the effectiveness of combined and partitioned pricing.
References


Table 1. Ordinary least squares regression coefficients from a moderated moderated mediation model (Study 3)

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<tr>
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<th>Outcome</th>
<th>M: Anticipated guilt</th>
<th>Y: Purchase intention</th>
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<td>Constant</td>
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<td>3.511 (0.263)</td>
<td>5.618 (0.203)</td>
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<td>X: Pricing type</td>
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<td>W: Motivation (Mot.)</td>
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<td>Z: Price discount (Disc.)</td>
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<tr>
<td>XW: Pricing × Mot.</td>
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</tr>
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<td>XZ: Pricing × Disc.</td>
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<tr>
<td>WZ: Mot. × Disc.</td>
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<td>XWZ: Pricing × Mot. × Disc.</td>
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<td>1.538 (0.728)</td>
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<td>M: Anticipated guilt</td>
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<tr>
<td>R</td>
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<td>0.518</td>
</tr>
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Moderated moderated mediation

Conditional moderated mediation by Mot. (W) among

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<thead>
<tr>
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</tr>
<tr>
<td>Discount absent (Z = 0)</td>
<td></td>
<td>0.519 to 0.075</td>
</tr>
</tbody>
</table>

*Percentile bootstrap CI based on 5,000 bootstrap samples.
Figure 1. 3-way interaction between pricing type, purchase motive, and price discount on purchase intention (Study 2)

Figure 2. 3-way interaction between pricing type, purchase motive, and price discount on purchase intention (Study 3)
Figure 3. 3-way interaction between pricing type, purchase motive, and price discount on anticipated guilt (Study 3)

Figure 4. Interaction between pricing type and chronic guilt on purchase intention (Study 4)