9-2017

Comparative price and the design of effective product communications

Thomas ALLARD
Singapore Management University, thomasallard@smu.edu.sg

Dale GRIFFIN

Comparative Price and the Design of Effective Product Communications

Article *in* Journal of Marketing · May 2017

DOI: 10.1509/jm.16.0018

CITATIONS
13

READS
4,179

2 authors:

Thomas Allard
Singapore Management University
9 PUBLICATIONS **244** CITATIONS

SEE PROFILE

Dale Wesley Griffin
University of British Columbia - Vancouver
112 PUBLICATIONS **16,442** CITATIONS

SEE PROFILE

Thomas Allard & Dale Griffin

Comparative Price and the Design of Effective Product Communications

The authors propose a model relating a product's comparative price to the construal level of its associated communications and show how perceived expensiveness shapes consumers' response to the wording of marketing communications. A series of six studies shows that for both absolute low- and high-cost product categories, comparatively expensive (inexpensive) products are preferred when accompanied by high-construal (low-construal) messages, due to the conceptual fluency of the "match" between price-induced psychological distance and construal level. The model provides novel implications for designing effective marketing communications: comparatively expensive versions of objectively low-priced products (e.g., an expensive chocolate truffle) are best promoted through more abstract slogans, whereas comparatively affordable versions of objectively high-priced products (e.g., an inexpensive diamond pendant) are best promoted using more concrete slogans. By emphasizing the link between comparative price and the matching level of construal, the authors contribute to a richer view of the interplay between price and product communication in marketing.

Keywords: price, construal level, psychological distance, expensiveness, advertising

Online Supplement: http://dx.doi.org/10.1509/jm.16.0018

How do product prices and marketing communications interact in shaping consumer behavior? For example, does it matter for consumer responses whether the benefits of a comparatively inexpensive soap are described in a concrete way (e.g., "Softer, smoother skin") or an abstract way (e.g., "Give your skin some love")? And does it matter whether the benefits of a comparatively expensive laptop computer are described in a concrete way (e.g., "4 million pixels, under 3.6 pounds") or an abstract way (e.g., "A whole new vision for the notebook"; see Web Appendix A)? The current research examines how a product's comparative expensiveness—the focal product's price relative to the category reference price—influences a consumer's response to the concreteness or abstractness of a product-related communication.

We propose that the extent to which prices are perceived to be high or low within a reference context affects consumers' mindsets such that comparatively high prices lead consumers to adopt psychologically distant mental mindsets that are compatible with a high level of construal, a psychological representation characterized by a focus on abstract, goal-related, and desirability-related concerns (Trope and Liberman 2003). We explain this comparative price effect as a conceptual fit process such that matching the price-induced mindset (psychological distance: far vs. near) and the construal level of product communication (abstract vs. concrete descriptors) yields positive attitudes and purchase intentions because of the greater fluency or ease with which such mindset-matching communications are processed. Importantly, we show that this comparative price "matching" effect holds across a variety of absolute price levels.

With this research, we make two main contributions to the understanding of consumer purchasing decisions. First, we extend our knowledge of the mechanisms underlying the effects of price cues on consumer decision making by illustrating how *comparatively* low or high prices (regardless of the absolute price level) can induce a shift in psychological distance (Trope, Liberman, and Wakslak 2007). We also contribute to the literature on price framing and value perception in consumer behavior (e.g., Aydinli, Bertini, and Lambrecht 2014; Hsee 1998; Khan and Dhar 2010) by highlighting the power of comparative price cues across wide variations in absolute price values.

Second, we add to our understanding of how the relation between product features and construal-level framing can influence persuasion (e.g., Kim, Rao, and Lee 2009; Lee, Keller, and Sternthal 2010; White, MacDonnell, and Dahl 2011; Yan and Sengupta 2011; Yang et al. 2011) by bringing to light a novel and managerially important type of construal-level congruence effect relying on comparative price. We show the heuristic nature of this effect by demonstrating the moderating role of both product category involvement (e.g., Zaichkowsky 1985) and cognitive effort (as assessed by need for cognition [NFC]; Cacioppo and Petty 1982; Cacioppo, Petty, and Feng Kao 1984). Consistent with a heuristic processing model, the

Thomas Allard is Assistant Professor of Marketing and Fellow, Institute on Consumer Insight, Nanyang Technological University (e-mail: tallard@ntu.edu.sg). Dale Griffin is Professor of Marketing and Behavioural Science, University of British Columbia (e-mail: dale.griffin@sauder.ubc.ca). The authors thank Darren Dahl, David Hardisty, Joey Hoegg, and Kate White for helpful comments on this article. In addition, the authors are grateful to the *JM* review team for their insightful guidance and suggestions. Financial support in the form of a Social Sciences and Humanities Research Council of Canada (SSHRC) doctoral scholarship awarded to Allard and a SSHRC research grant awarded to Griffin is gratefully acknowledged. Dhruv Grewal served as area editor for this article.

ISSN: 0022-2429 (print)
1547-7185 (electronic)

Journal of Marketing
Ahead of Print
DOI: 10.1509/jm.16.0018

price–construal congruence effect on consumer preferences is stronger among consumers with either situational reasons (i.e., low category involvement) or dispositional tendencies (i.e., low NFC) for low-effort processing of product information.

Notably, our findings provide managers with clear recommendations previously unidentified in the literature: comparatively affordable versions of expensive products, such as diamonds, will generally be more favorably evaluated when paired with low-construal advertising slogans focusing on the product's concrete features (e.g., the "four 'C's" of diamond quality) rather than high-construal or abstract slogans (e.g., the symbolic values associated with the product category). In contrast, comparatively expensive versions of affordable products, such as energy drinks, will be evaluated more favorably when paired with high-construal advertising slogans focusing on the product's abstract benefits and associated goals (e.g., the gain in productivity it provides) rather than low-construal slogans focusing on concrete features (e.g., the active ingredients). Importantly, because these novel effects rely on *perceptions* of expensiveness, managers can position the same product as either expensive or inexpensive, keeping the absolute price constant, by changing the context in which the focal product is being compared. Given the ubiquitous and complex nature of price inferences in consumption, this research offers important implications for the practice of marketing communication. We next turn to our theoretical framework.

Theoretical Framework

A rich literature in consumer behavior attests that price, like brand name or country of origin, acts as a nonphysical product cue that consumers frequently use to make inferences about products (Biswas et al. 2002; Cordell 1991; Jacoby and Olson 1977; Zeithaml 1988). More recently, marketing research has examined the role of price cues on consumers' mental representation of products (e.g., Bornemann and Homburg 2011; Hansen, Kutzner, and Wänke 2013; Hansen and Wänke 2011). We build on these prior demonstrations linking price-related cues to psychological distance (Liberman and Trope 1998) to propose that comparative price can influence consumers' representations of product-related information by inducing a shift in consumers' mindsets—a temporary cognitive orientation that directs the analysis and interpretation of stimuli (Gollwitzer 1990)—leading to variations in the feeling of fluency associated with the processing of marketing communications.

Psychological Distance and Mental Representations

Construal-level theory (CLT; Trope et al. 2007) posits that objects, such as consumer products, are mentally represented at different levels of concreteness or practical detail depending on their psychological distance from the perceiver (e.g., temporal, geographical, social distances; Trope and Liberman 2003). According to CLT, greater psychological distance induces a high-level construal of a product, characterized by the use of abstract, core, or desirability-related type of descriptors, whereas closer psychological distance induces a low-level construal of a product, characterized by more concrete, peripheral, or feasibility-related features.

Several inquiries in the consumer domain have specifically focused on the potency of marketing cues to trigger the adoption of more abstract or concrete representations, and on how the level of the representation influences consumer judgments. For instance, the presence of a product image causes the adoption of a low-level, concrete representation (Meyvis, Goldsmith, and Dhar 2012). The adoption of concrete versus abstract representations also follows exposure to attribute- versus benefit-based product assortments (Lamberton and Diehl 2013) and gain- versus loss-framed promotional messages (White et al. 2011).

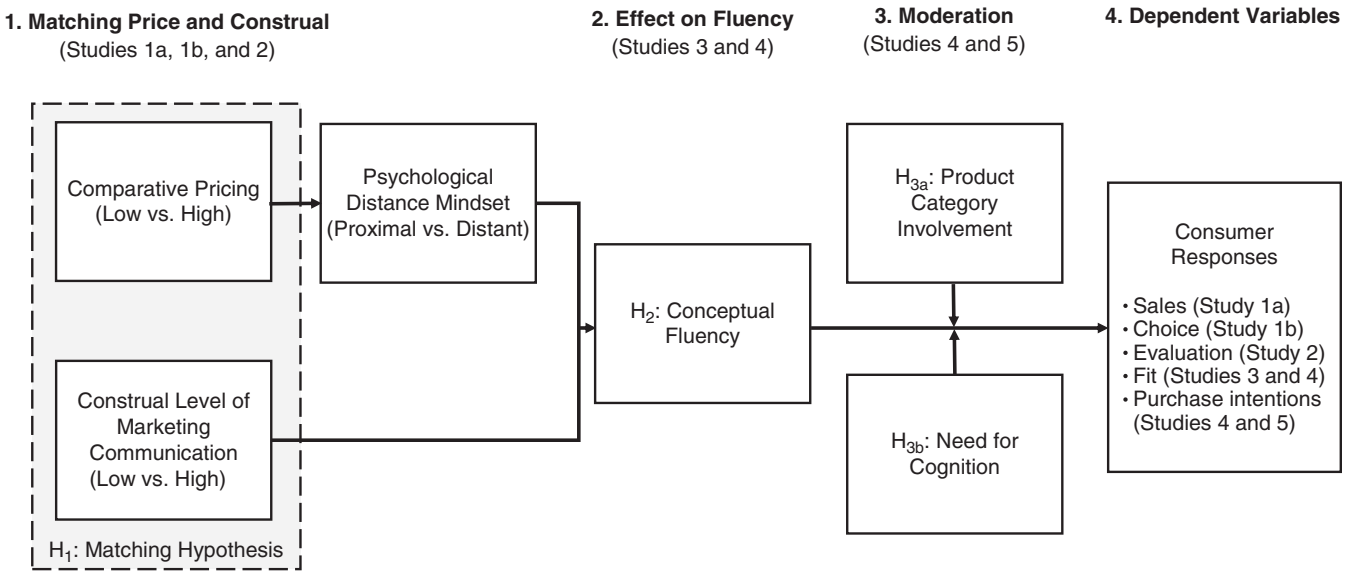
Price-Related Cues, Psychological Distance, and Construal Level

The current research focuses on the impact of comparative price on perceived psychological distance and its downstream effects on the processing of high-construal versus low-construal product communications and the subsequent effect of this processing on consumer attitudes, intentions, and purchasing behavior. The conceptual model guiding this research is presented in Figure 1, which also illustrates the focus of each formal hypothesis. Research examining the role of psychological distance in consumer settings has found that price (vs. features) affects consumers' product-quality inferences more when buying for the self versus for others (social distance; Yan and Sengupta 2011) and that both temporal and social distance lead consumers to focus more on price–gain (quality) inferences than price–cost (sacrifice) inferences (Bornemann and Homburg 2011). Lee and Zhao (2014) demonstrate that the mere inclusion of price cues can lead consumers to focus on the desirability of product features (i.e., functionality) for short-term purchase decisions.

Most relevant to the present inquiry, Hansen and Wänke (2011) observe that both consumers and advertisers use more abstract language when describing luxury products than when describing ordinary goods and demonstrate that consumers mentally represent luxury goods more abstractly than ordinary goods. For example, they find that five-star hotels are typically described using more abstract language than are hostels. They explain this association by pointing out that the purchase of luxury products is "exclusive, limited, and often merely hypothetical" (p. 798) and therefore considering such a purchase leads to a perception of greater psychological distance to the object of desire. Research by the same authors finds that reminders of large amounts of money (e.g., the words "wealth," "expensive," and "rich" or pictures of bank notes; vs. nonmonetary reminders) are associated with high-level representations in consumers (Hansen et al. 2013). Taken together, these findings imply that luxury products are more naturally described by high-construal communications focusing on desirability and other broad qualities. (An overview of related prior literature and how the present research differs are found in Table 1; for a more detailed table, see Web Appendix B.)

We believe it is premature to translate the observed link between luxury and high-level construal into managerial recommendations, for at least two reasons. First, we suggest, the relevant match is between the *comparative* price, or perceived

FIGURE 1
Theoretical Framework



expensiveness, of the product and the construal level of the product communication, rather than the *absolute* price. That is, several models of perception applied to price research indicate that the classification of prices as "high" or "low" is intrinsically subjective because inferences about prices arise from the evaluation of a price within a comparative context (e.g., Monroe, Della Bitta, and Downey 1977; Slonim and Garbarino 1999). The notion that consumers' reactions to price information depend not on the absolute price of a product but on its comparison to the price of alternatives is described as the "psychophysics-of-price heuristic" by Grewal and Marmorstein (1994). Building on the Weber–Fechner law of psychophysics, which states that people respond to changes in a stimulus according the magnitude of the change *relative* to the total magnitude of the stimulus, Grewal and Marmorstein (1994) demonstrate that consumers' willingness to spend time shopping to save a fixed amount of money was driven by the relative amount saved (the ratio of the amount saved to the product price).

Second, thus far there has been no direct demonstration of the beneficial effect of price–construal matching on consumer attitudes or intentions toward the advertisement or the product. Up to this point, this is merely a hypothesis. As Hansen and Wänke (2011) note: "These considerations suggest that a lacking fit between advertisement language and level of luxury may be disadvantageous" (p. 795). Further complicating the determination of practical implications, the same authors suggest in Hansen et al. (2013) that a specific price cue might have the opposite effect of a general money prime and lead to low-level, concrete representation.

Thus, we expect that consumers' construal-related reactions to price will be driven by the comparison of a focal price with its alternatives and, thus, will be responsive to the comparative level of expensiveness (as illustrated in the first stage of our conceptual model). In other words, due to the intrinsically comparative nature of the perception of high versus low prices, the influence of price on psychological distance should depend on the extent to which an item is perceived to be expensive or affordable within a specific context of comparison, such as the price of the other products against which the item is being evaluated. Supporting this subjective price account, Hsee (1998) shows that the gift of a $45 scarf appears more generous than the gift of a $55 coat because the former is high priced *for a scarf*, whereas the latter is moderately priced *for a coat* (for similar reasoning, see also Monroe 1973).

Although previous research has analyzed the relationship between absolute monetary price level and construal level, we suggest that managers would do well by matching the construal level of their marketing communication to the comparative price of their product (also illustrated in the first stage of our conceptual model). Importantly, because we predict an effect of perceived expensiveness versus a comparison standard even when the focal price is held constant, we can rule out the driving role of a budget constraint as postulated in the case of luxury products (e.g., Hansen and Wänke 2011). This determining role of comparison prices provides practical implications for marketing effectiveness because the perceived expensiveness of a product at any given price can be varied through a shift in the assortment of products against which the product is evaluated. Specifically, we predict:

> H_1: Matching the comparative price level with the construal level of marketing messages (i.e., comparatively low prices with concrete, or low-level, construal; comparatively high prices with abstract, or high-level, construal) positively influences consumer preferences compared with situations of mismatch.

A Fluency-Based Account: The Fit Between Comparative Price and Construal

Considerable research attests that product evaluation can be influenced by the degree of fluency (perceptual or conceptual) experienced by consumers when they evaluate products (e.g., Novemsky et al. 2007; Tsai and McGill 2011). Informational

TABLE 1
Contribution Table

Source	Focus of Manipulation	Process	Dependent and Mediating Variables
Bornemann and Homburg (2011)	Psychological distance, temporal distance, social distance	Psychological distance leads to greater focus on desirability over feasibility.	Psychological distance leads to higher evaluations for high-priced versus low-priced products.
Hansen and Wänke (2011)	Construal level (high = luxury goods, low = ordinary necessities)	Luxury goods are rare and scarce and thus psychologically distant and represented abstractly.	Luxury goods are represented more abstractly than ordinary goods. Also, more abstract language leads to higher perceptions of luxury in products.
Hansen, Kutzner, and Wänke (2013)	Construal level (high = money primes, low = money-unrelated primes)	Reminders about substantial amounts of money lead to higher construal level.	Money primes lead to higher evaluations for central versus peripheral product features and higher quality ratings for high-quality brands.
Lee and Zhao (2014)	Presence vs. absence of price information	Price information increases value-seeking tendencies and beliefs that greater functionality equals greater value in products.	Price information reduces the inconsistent preferences over time between desirability (distant future) and feasibility (near future).
Yan and Sengupta (2011)	Psychological distance, social distance, temporal distance; "how vs. why" prime	Price is a more abstract cue than product features and receives more weight when construal level is high.	Psychological distance increases the influence of price versus feature-specific attributes (e.g., physical attractiveness of the product) for quality inferences.
This study	Match between psychological distance mindset (created by comparative product price) and construal level of advertisement slogan	High (low) price relative to a comparison context leads to a high (low) psychological distance mindset that fluently processes abstract (concrete) advertising messages, leading to enhanced product attitudes when price and construal level match.	Match (vs. nonmatch) of price and construal level of advertisements leads to increased product sales (Study 1a), choice (Study 1b), evaluation (Study 2), fit (Studies 3 and 4), and purchase intentions (Studies 4 and 5).

Notes: A detailed version of this contribution table is available in Web Appendix B.

cues can be processed in a more or less fluent manner depending on their conceptual congruence with the context (e.g., the activated goal or concept) in which they are presented (Alter and Oppenheimer 2009). Such matching effects have been shown to influence brand evaluation (Labroo and Lee 2006), product choices (Hong and Lee 2008), and persuasion and consumer evaluations (Kim and John 2008; Kim et al. 2009; White et al. 2011).

We predict that a positive experience of fluency from conceptual fit is created when the comparative price of the product is matched to the construal level of a marketing communication (as illustrated in the second stage of our conceptual model). The consumer then attributes such a fit experience to the quality of the marketing message, and it thus translates into a more positive evaluation of that message and the associated product itself (e.g., Avnet, Laufer, and Higgins 2012; Bornstein and D'Agostino 1994; Pham 1998). For example, we anticipate that marketing communications focusing on more concrete descriptors (i.e., function related) will be particularly well evaluated when paired with a comparatively affordable price, whereas communication focusing on more abstract descriptors (i.e., desirability related) will be particularly well evaluated when matched with a comparatively expensive price, due to the attribution of greater perceived fit between the message and the product. Thus, we predict:

H_2: Perceived fit mediates the effect of matching the comparative price level with the construal level of the message on consumer preferences.

Our model posits that consumers attribute their experience of conceptual fit to their preference for the associated product. Such evaluative inferences based on attributions of the experience of fluency imply a heuristic type of processing (Vessey 1991). We seek to test this process account by showing that the effect of the price–construal match on customers' evaluations is reduced for those whose level of motivation or processing style predisposes them to more systematic rather than heuristic processing (illustrated in the third stage of our conceptual model).

Previous research has demonstrated that information is systematically processed under high motivation but heuristically

processed under low motivation (e.g., Chaiken 1980; Darke et al. 1998). Therefore, we propose that high product category involvement will reduce or eliminate the effect of experienced fluency associated with a price–construal fit. Furthermore, prior research on consumer judgments has demonstrated that high-NFC individuals, who are characterized by both high cognitive effort and high interest in cognitive processing, are less susceptible to heuristic processing (Meyers-Levy and Tybout 1989). In the context of price–construal matching, we expect that high-NFC individuals will be less likely to attribute their experience of conceptual fluency to their liking for the message or the product. Overall, we expect that positive consumer preferences arising from the matching effect will be stronger for consumers whose situational or dispositional factors—respectively, low category involvement and low NFC—make them more likely to perform heuristic processing on the marketing communication. Thus, we predict:

H_{3a}: Category involvement moderates the effect of a match (vs. mismatch) between comparative price and construal level on consumer preferences such that the matching effect is stronger for those with lower levels of involvement and weaker for those with higher levels of involvement.

H_{3b}: NFC moderates the effect of a match (vs. mismatch) between comparative price and construal level on consumer preferences such that the matching effect is stronger for those lower in NFC and weaker for those higher in NFC.

Overview of the Studies

This research examines whether matching the construal level of marketing communication to the comparative expensiveness of products leads to more positive consumer evaluations. We test this conceptual model in a series of six studies, which are laid out in Figure 1. Testing the first stage of our conceptual model, Study 1a demonstrates the basic price–construal match effect on purchase behavior in a field setting using real choices and in an absolute low-price context. Study 1b replicates these findings in an absolute high-price context. Study 2 further tests the hypothesis that the effect is driven by comparative expensiveness, that is, the product price relative to a comparison level. Testing the second stage of our conceptual model, Study 3 provides a priming test for this matching effect by showing that activating the concept of expensiveness (or inexpensiveness) is sufficient to influence the perceived fit of unrelated marketing communication. Testing both the second and third stages of our conceptual model, Study 4 shows that the match between the psychological distance mindset induced by comparative price and the construal level of a marketing communication affects the experience of conceptual fluency and, thus, consumption choices; it also shows that this heuristic effect is strongest for consumers with low levels of category involvement. Finally, Study 5 generalizes the heuristic nature of this process linking price, psychological distance, and consumer judgment by showing that the process is strongest among participants low in NFC.

Study 1a

Study 1a offers an initial test of the hypothesis that comparative expensiveness—not absolute monetary cost—and the construal level of product descriptions interact to predict consumer choice in a meaningful choice context (see the first stage of the conceptual model in Figure 1). Using a field experiment methodology, we examine consumers' actual choices in a naturalistic setting by organizing a pop-up store on campus selling chocolates by the piece. Our core prediction was that consumers are more likely to choose a comparatively inexpensive chocolate when it is promoted by a marketing communication expressed in low-construal terms (e.g., a concrete description of the specific ingredients of the chocolate) rather than in high-construal terms (e.g., an abstract description of how the chocolate makes one feel). Conversely, we also expected that consumers are more likely to choose a comparatively expensive chocolate when it is promoted by a marketing communication expressed in a high- rather than low-construal manner. Importantly, we show that this effect occurs even when both the monetary price and the actual chocolates are held constant, and all variation is in the comparison context that makes the focal product appear comparatively inexpensive versus comparatively expensive (for a similar approach, see Jacoby and Olson 1977). Study 1 thus tests our core argument that the positive effect created by matching a product's price with the construal level of the associated marketing communication is driven by comparative expensiveness, not by budget constraints that make high-priced products seem "out of reach" to consumers (Hansen et al. 2013; Hansen and Wänke 2011).

Method

Participants and design. Participants were 126 on-campus shoppers who took part in a two-way mixed design, with a two-level between-participants factor (comparative price: inexpensive vs. expensive) and a two-level within-participant factor (construal level of the product description: low vs. high). The dependent variable was the choice between two chocolates, one paired with a low-construal advertising slogan and one paired with a high-construal advertising slogan.

Procedure. For three days, we operated a pop-up chocolate store on the main plaza on campus, with all proceeds donated to a local food bank. At any given time, two different chocolate options were featured and were available for purchase at the store, and one comparison chocolate was also presented but not featured. In both comparative price conditions, the two chocolates available to purchase were $1 milk chocolates that had been custom-made for this experiment. They were made from the same 38% milk chocolate, had the same weight, and were packaged in identical glassine envelopes, but one option was coin-shaped and the other was waffle-shaped (see photograph in Web Appendix C). The two focal chocolate options were presented side by side on a serving plate, with one described on an accompanying poster by a low-construal description focused on the chocolate's measurable content ("Rich milk chocolate") and the other one by a high-construal description focused on the abstract, symbolic experience of eating the chocolate ("Decadent dream"; e.g., Trope and Liberman 2003; for manipulation checks for all construal-level manipulations used in this and subsequent studies, see Web Appendix D).

We manipulated the perceived expensiveness of the two $1 chocolates by varying the third chocolate option present at the

store. In the low-price condition, the $1 chocolates were presented next to $10 slabs of artisanal dark chocolate, which made the $1 options appear comparatively inexpensive. In the high-price condition, the $1 chocolates were presented next to a set of $.25 Tootsie Rolls, which made the $1 options appear comparatively expensive. Following a script, a research assistant/salesperson gave the following promotional message to consumers as they arrived at the storefront: "Today, we are featuring our inexpensive [premium] $1-a-piece milk chocolate line. Our first inexpensive [premium] chocolate is described as 'Rich Milk Chocolate' and the second one is described as 'Decadent Dream.' Which one do you want?" The price conditions, the match of advertising slogan and chocolate shape, and the presentation orders of the chocolates were randomly counterbalanced on an hourly basis. Participants who inquired about the difference between the two $1 chocolate options were told that the two options were both made of milk chocolate but were marketed differently. A total of four participants purchased the comparison option over the featured $1 chocolates (one for the Tootsie Roll and three for the $10 bar); those observations were removed from our analysis.

Results

Product choice. In the comparatively expensive condition, a majority preferred the chocolate promoted with the high-construal advertising slogan (70% [49/70]), whereas in the comparatively inexpensive condition, a majority of consumers preferred the $1 chocolate promoted with a low-construal advertising slogan (56% [29/52]; $\chi^2 = 8.19$, $p < .01$; Cohen's d = .54), in support of our main hypothesis. Supplemental analysis found these proportions to be significantly higher (one-tailed test) in the comparatively expensive conditions ($t(121) = 4.51$, $p < .001$) and marginally higher in the comparatively inexpensive conditions ($t(121) = 1.35$, $p = .09$) compared with a purely random choice (50%). Effects involving the shape of the chocolates were not significant ($F < 1$).

Discussion

In a field setting using real purchases and real chocolate consumption, the results of Study 1a provide support for the prediction that consumer preference is enhanced by matching the construal level of a product communication with the comparative expensiveness of that product. These results also provide initial evidence that such a matching effect is not restricted to luxury goods but occurs even with low-priced goods and can be induced by manipulations of the comparison price with the focal price held constant. In the next study, we provide a conceptual replication for this effect at a luxury, or absolute high-price, level.

Study 1b

Whereas Study 1a tests our core hypothesis at an absolute low-price level (i.e., $1 chocolates), Study 1b tests the robustness of this effect at an absolute high-price level (>$1,000). Specifically, Study 1b tests our key prediction about the match between perceived expensiveness and the level of construal of a product description, using a classic high-priced luxury product: diamonds. This study demonstrates that even for an absolute high-priced product, variations in the perceived expensiveness of that product can shift consumer preferences toward a product or brand described at a high or low level of construal in the relevant marketing communication. As in the previous study, we keep the absolute monetary price of the focal product constant across conditions to rule out budget constraints as an alternative explanation.

Method

Participants and design. Participants were 280 community members who took part in a two-way mixed design, with a two-level between-participants factor (price relative to comparison: low vs. high) and a two-level within-participant factor (construal level of the description: low vs. high). The dependent variable was the choice between two diamonds, one paired with a low-construal slogan and the other paired with a high-construal slogan.

Procedure. We positioned two research assistants by the entrance of an on-campus museum, a major international tourist attraction. Research assistants offered museumgoers a chocolate in exchange for participating in a one-question marketing research survey. Participants were given a written survey questionnaire and were instructed to imagine that they were looking to purchase a diamond pendant as a gift for someone close to them. Participants were presented with a picture of a princess-cut white diamond pendant and told that this was the model of diamond pendant they were interested in purchasing (see Web Appendix C). Depending on the price condition, that model of diamond pendant was described as "the most inexpensive [expensive] model available in the store you visited. It is priced at $1,299." Price conditions were randomly counterbalanced across six 2.5-hour periods over three collection days, ranging approximately from 11 A.M. to 4 P.M. Participants were told, "This model is available from two different brands, each with the same quality features, and each is associated with a different brand slogan." Presented in a randomized order, one slogan featured a low-construal description emphasizing the objective characteristics of the diamond ("Flawless quality and pure color"), and the other featured a high-construal description emphasizing the symbolic meaning of the diamond ("Make it unforgettable") Using the two brand slogans as reference, participants were asked to choose their preferred diamond pendant. After making their choice, participants received a piece of chocolate as a token of gratitude for their participation.

Results

Product choice. In the comparatively expensive condition, a majority of consumers preferred the $1,299 diamond promoted with the high-level construal slogan (57% [92/160]). In the comparatively inexpensive condition, a majority of consumers preferred the $1,299 diamond promoted with a low-construal slogan (55% [66/120]; $\chi^2 = 4.29$, $p < .05$; Cohen's d = .25), in support of our main hypothesis. Results from supplemental analysis identified these proportions as significant in both the comparatively expensive ($t(279) = 2.51$, $p < .01$) and comparatively inexpensive ($t(279) = 1.67$, $p < .05$) conditions (one-tailed tests).

Discussion

Using a community sample and a nonlaboratory setting, Study 1b provides a conceptual replication of our field study at an absolute high-price level. This study provides additional support for the notion that perceived product expensiveness, not the absolute amount of money charged, drives the price–construal matching effect, even though the absolute price ratio across studies is larger than 1,000 : 1. In our subsequent studies, we utilize more controlled experimental settings to investigate the mechanism and boundary conditions of this effect.

Study 2

Study 2 is designed to further test our hypothesis that expensiveness relative to a comparison standard, not absolute price, drives the matching effect on product communication construal level. To do this, we replicate our effect of interest using both a manipulation of the price of a focal product and a manipulation of the price of its comparison products.

Method

Participants and design. The experiment is a 2 (price: low vs. high) × 2 (source of variation: target price vs. comparison price) × 2 (construal level of advertisement slogan: low vs. high) between-participants factorial design. We recruited 325 participants through Amazon Mechanical Turk (MTurk) to take part in this experiment (39% female; M_{age} = 32.2 years). The dependent variable of interest was product evaluation.

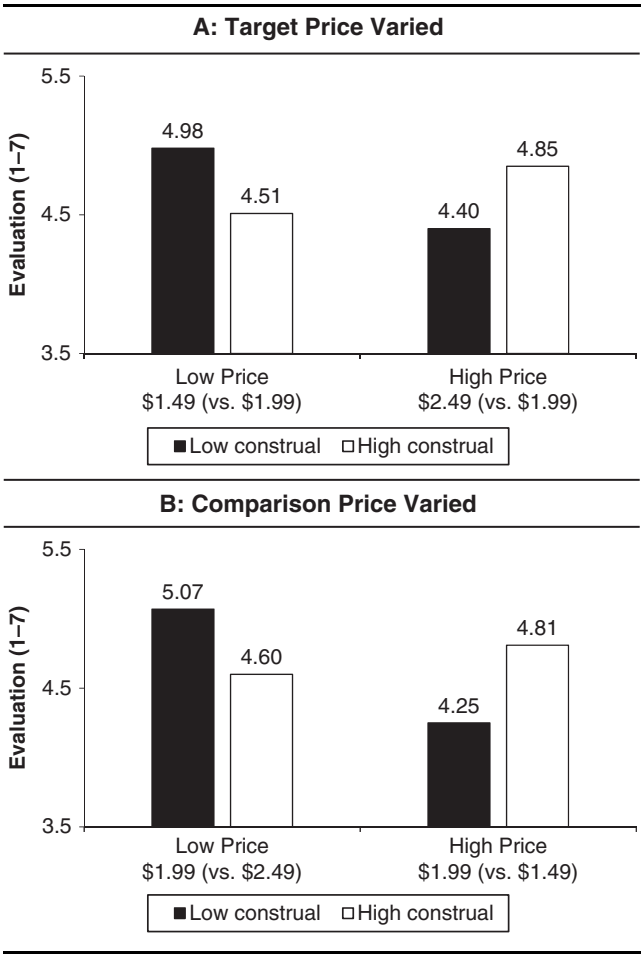
Procedure. Participants were first instructed to imagine that they wanted to purchase a snack and were presented with a description of an energy bar (for stimuli, see Web Appendix C). They were then randomly assigned to either a target-price variation condition or a comparison-price variation condition, crossed with either a comparatively expensive or a comparatively inexpensive price condition. In the target-price variation condition, participants were told that most of the energy bars available were selling for $1.99 but that the one they were considering was selling for either less than average, at $1.49 (low-price condition), or more than average, at $2.49 (high-price condition). In the comparison-price variation condition, participants were told that most of the energy bars available were selling for $1.49, less than the $1.99 bar they were considering (high-price condition) or $2.49, more than the $1.99 bar they were considering (low-price condition). Crossed with both of these manipulations, participants saw an advertisement for an energy bar that used either the advertising slogan "A balanced source of carbs and proteins" (low-construal condition; focusing on concrete product description) or "For stable and long-lasting endurance" (high-construal condition; focusing on abstract product benefit or goal). After viewing the advertisement slogan, participants evaluated the energy bar on three bipolar items on a ten-point scale: "This bar looks unattractive/attractive," "…tasteless/tasty," and "…unsatisfying/satisfying" (α = .90; food evaluation measure adapted from Godin et al. [2010]).

Results and Discussion

A 2 × 2 × 2 factorial analysis of variance (ANOVA) on the product evaluation index revealed a significant two-way interaction between comparative price and construal level ($F(1,317) = 9.65$, $p < .01$; Cohen's d = .35), in support of our main hypothesis. Importantly, this two-way interaction was not moderated by the source of the price variation (three-way interaction, $F < 1$; for details, see Figure 2), suggesting no difference in the magnitude of the effect between the conditions in which the target price varied (Figure 2, Panel A) and the conditions in which the target price was kept constant and the comparison price varied (Figure 2, Panel B). Simple effects revealed that regardless of the source of price variation, the comparatively inexpensive energy bar was evaluated more positively when described with a low-construal slogan (M = 5.02, SD = 1.44) than with a high-construal slogan (M = 4.55, SD = 1.53; $F(1,317) = 4.36$, $p < .05$). This effect was reversed for the comparatively expensive bar, which was evaluated more positively when described with a high-construal slogan (M = 4.83, SD = 1.21) than with a low-construal slogan (M = 4.33, SD = 1.41; $F(1,317) = 5.31$, $p < .05$).

Results from Study 2 provide further support for our core price–construal matching effect postulating that a product is more positively evaluated when its comparative price matches

FIGURE 2
Study 3: Product Evaluation as a Function of Price, Source of Price Variation, and Construal Level of Advertising Slogans



the construal level of its product communication. They also provide further evidence that this effect is driven by the contrast between the product price and the reference price—not the absolute price of the product itself—by showing again that the matching effect also occurs when the target price is kept constant and only the reference price changes.

Our results differ in two important ways from previous findings linking luxury goods (vs. ordinary necessities) to greater psychological distance. First, our results do not reflect a main effect of price—that is, the high price ($2.49) does not lead to more positive product evaluations than the low price ($1.49)—suggesting that the high price does not act as a proxy for high quality, leading to overall more persuasion by higher-level attributes. Second, as we have previously argued, because we observe such a matching effect between price and construal level on consumer responses while keeping the focal price constant and changing the reference price, our results are also inconsistent with an explanation relying on a shift in perceived product accessibility induced by a budget constraint (e.g., Hansen and Wänke 2011). Study 3 provides an indirect, and thus more conservative, test for our matching hypothesis.

Study 3

Study 3 tests our conceptual framework relying on fluency (see the second stage of our conceptual model in Figure 1) by showing how the activation of the concept of comparatively low (high) price in one context leads consumers to subsequently perceive advertising slogans framed at a matching low (high) construal level to "fit" products better, even though the subsequent product and its communication has no connection to the original comparative price. That is, Study 3 provides an indirect and thus more conservative test for our matching effect by showing that initial exposure to a comparatively high or low price creates a cognitive set, or mindset, that shapes reactions to a subsequent (and unrelated) product communication using either a high or low construal-level framing, and that this matching effect results in enhanced fit or fluency.

Method

Participants and design. Study 3 used a 2 (price: low vs. high) × 2 (construal level of advertising slogan: low vs. high) between-participants design. Participants were 195 people from a university subject pool (67% female; M_{age} = 20.3). The dependent variable was the perceived fit of the advertising slogan to the product.

Procedure. The study consisted of two ostensibly unrelated tasks, one for introducing the comparatively (in)expensive price and the other measuring slogan and product evaluation. First, all participants were randomly assigned to either a low or a high comparison-price priming manipulation, in which they were presented with the same moderately luxurious car, an Acura TSX, with its manufacturer's suggested retail price (MSRP) given as $34,050. In the comparatively inexpensive condition, the Acura TSX was presented as a target model and compared with five highly expensive cars (e.g., Bugatti Veyron, Ferrari 458 Spider, Lamborghini Gallardo; all MSRPs above $172,500). In the comparatively expensive condition, the Acura TSX was compared with five moderately inexpensive cars (e.g., Ford Fiesta, Hyundai Accent, Kia Rio; all MSRPs under $15,600; for details, see Web Appendix E). In both versions of the questionnaire, participants were asked to rate the expensiveness of the Acura TSX using two seven-point bipolar scales, anchored at "inexpensive" versus "expensive" and "low-priced" versus "high-priced" (α = .85).

In the subsequent section of the questionnaire, participants were presented with an image of a gel ink pen (see Web Appendix C), accompanied by an advertising slogan: either "For smooth and easy writing" (low-construal level, focusing on concrete actions) or "For free-flowing ideas" (high-construal level, focusing on abstract outcomes). We measured perceived fluency by asking participants to evaluate the slogan's fit with the product, rating the items "This slogan feels right for this product" and "This slogan fits this product very well" on a ten-point scale (1 = "strongly disagree," and 10 = "strongly agree"; $\alpha_{low\text{-}construal}$ = .90, $\alpha_{high\text{-}construal}$ = .89).

Results and Discussion

Expensiveness. Results revealed that participants rated the Acura TSX as more expensive in the condition where lower-priced cars predominated (creating a comparatively high price; M = 4.90, SD = 1.34) compared with the condition where extremely high-priced cars predominated (creating a comparatively low price; M = 2.75, SD = 1.40; t(193) = 10.89, $p < .001$). These results confirm the effectiveness of the price manipulation.

Perceived fluency. A factorial ANOVA indicated a significant interaction between the automobile price condition and construal level of the pen's advertising slogan (F(1, 191) = 10.99, $p < .001$; Cohen's d = .48). As predicted, participants judged the low-construal advertising slogan to fit the product better in the comparatively inexpensive condition (M = 7.27, SD = 1.91) than in the comparatively expensive condition (M = 6.25, SD = 1.82; F(1.191) = 5.33, $p < .05$). In contrast, the high-construal advertising slogan was judged to fit the product better in the comparatively expensive condition (M = 6.81, SD = 1.87) than in the comparatively inexpensive condition (M = 5.82, SD = 2.70; F(1.191) = 5.67, $p < .05$).

By showing that activating the concept of low or high comparison price in one setting can influence the subsequent "fit" of an advertising slogan for another product in a different setting, the results of this study support the notion that (comparative) price of one product can serve to prime or activate a mindset that, in turn, makes a slogan for a different product seem to fit the product better when its construal level is a better match.

In our next study, we provide evidence for our mediational claim that the matching effect occurs because of a price-induced shift in the psychological distance mindset and that it relies on an experience of fluency when evaluating marketing communication. We also test for the moderating role of category involvement, a managerially important segmentation variable.

Study 4

Study 4 extends our previous findings by measuring the underlying process through which the match between the

perceived expensiveness of a product and the construal level of marketing communication provides its benefit on consumer responses. First, as in Study 3, we measure the subjective experience of fit, or conceptual fluency, that we believe underlies the matching effect itself, and we measure its influence on attitude (e.g., Labroo and Lee 2006). Second, we generalize the perceived price manipulation from providing focal and reference prices to using a verbal descriptor for the focal price (expensive vs. inexpensive). Finally, as illustrated in the third stage of our conceptual model, we test the role of product category involvement as an important managerial moderator for the transfer of positive evaluation from experienced fluency or fit to product choice (Lee and Aaker 2004; Schwarz and Clore 1983). Specifically, although we predict that all consumers will, on average, experience more conceptual fluency when evaluating a marketing communication whose construal level matches the comparative expensiveness of the product, we expect that product attitudes will be influenced by this fluency transfer primarily among those with low and medium levels of category involvement (see Avnet et al. 2012). In contrast, those with high levels of product involvement are more likely to be influenced by product attributes rather than heuristic cues such as fluency (e.g., Petty, Cacioppo, and Schumann 1983).

Method

Participants and design. This experiment used a 2 (expensiveness: low vs. high) × 2 (construal level of slogan: low vs. high) × continuous (category involvement) between-participants design. We recruited 241 participants through MTurk (46% female, M_{age} = 37.2 years). The dependent variables of interest were purchase intentions for the product and the perceived fit of the advertising slogan for that product.

Procedure. Participants were presented with a picture of an electric toothbrush and were instructed to consider the purchase of such a toothbrush (see Web Appendix C). The electric toothbrush was selected because it is a moderately priced product (absolute price level) available in a wide price range with a very similar appearance throughout that range. Keeping the product's visual representation constant, we presented the electric toothbrush without an explicit numerical price cue. Instead, the description designated the product as being either an "inexpensive" (low-expensiveness condition) or an "expensive" (high-expensiveness condition) electric toothbrush. As a manipulation check, participants rated on a subsequent screen the extent to which they perceived the electric toothbrush to be expensive, using the same items as in Study 3 (α = .94).

Participants were then presented with the product and advertising slogans for the electric toothbrush. In the low-construal condition, the advertising slogan read, "To gently clean your gums and teeth" (concrete product description), whereas in the high-construal condition, it read, "For optimal oral health" (abstract product benefit). We asked participants to report the perceived conceptual fluency, or feeling of "fit," associated with the slogan using the same items as Study 3 (α = .92). On a separate page, participants rated their purchase intentions for the product, using three seven-point bipolar scales anchored at "unlikely" versus "likely," "improbable" versus "probable" and "impossible" versus "possible" (α = .95; Chattopadhyay and Basu 1990; Sundar and Noseworthy 2016). In a separate section of the questionnaire, participants rated their involvement with the product category using the ten-item, seven-point Revised Personal Involvement Inventory (α = .91; Zaichkowsky 1994; e.g., "To me, electric toothbrushes are [important/unimportant]" [reverse-scored]).

Pretest: Psychological Distance

The expensiveness manipulation used in this study was pretested on a separate sample drawn from the same MTurk population to assess the extent to which participants' mindsets—a cognitive inclination that guides the way consumers evaluate product information (see Gollwitzer 1990)—were characterized by psychologically close or distant perspectives. Participants were presented with 12 pairs of descriptors, one at a time, that encompassed the four major dimensions of psychological distance (physical, social, time, and certainty; for a related approach, see Bar-Anan, Liberman, and Trope 2006; for a methodological suggestion, see Hansen and Wänke 2011, p. 794). For each pair, participants were asked to select "the word that best fits my frame of mind right now." The pairs were "near"/"far," "tomorrow"/"a year," "friend"/"enemy," "we"/"they," "sure"/"unsure," "certainly"/"possibly," "real"/"abstract," "close"/"distant," "self"/"others," "likely"/"unlikely," "here"/"there," and "now"/"future" (coded as 0 = psychologically close, and 1 = psychologically distant). Responses to the twelve items were averaged to create an index (KR-20 = .86). Psychological distance scores were higher for participants exposed to the expensive product label (M = .40, SD = .30) than for those exposed to the inexpensive product label (M = .29, SD = .26; t(135) = 2.45, $p < .05$), suggesting that a more psychologically distant mindset had been triggered by the expensiveness manipulation.

Results and Discussion

Manipulation check. As expected, participants perceived the product as being significantly more expensive in the expensive condition (M = 6.43, SD = .85) than the inexpensive condition (M = 1.71, SD = 1.14; t(154) = 29.50, $p < .001$).

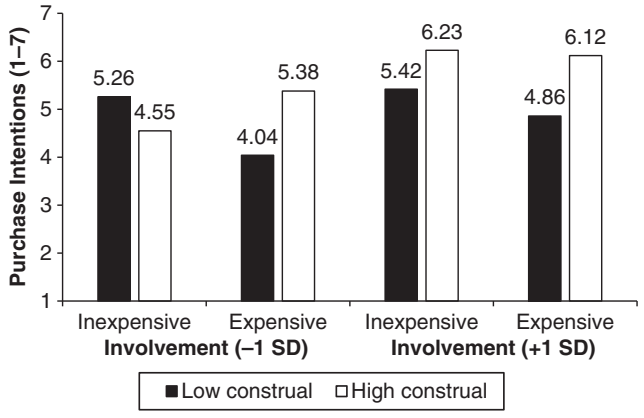
Moderation by involvement. Using a regression approach to the combination of dichotomous and continuous independent variables, we regressed the product's purchase intentions score on the construal level of the slogan, expensiveness condition, and category involvement (centered), as well as their interactions, using a 5,000-sample bootstrap method (Model 3 from Hayes 2013; Zhao, Lynch, and Chen 2010). Results revealed a significant three-way interaction between expensiveness, construal level, and involvement (B = –.71, SE = .30; t(233) = 2.38, $p < .05$; 95% confidence interval [CI_{95}] = [–1.30, –.12]). Results also showed the predicted significant two-way interaction between expensiveness and construal level, in support of our main hypothesis (B = 1.26, SE = .33; t(233) = 3.85, $p < .001$; CI_{95} = [.61, 1.89]; Cohen's d = .75), a significant two-way interaction between construal level and involvement (B = .68, SE = .22; t(233) = 3.05, $p < .01$; CI_{95} = [.24, 1.11]), and a main effect of expensiveness condition (B = –.90, SE = .23; t(233) = 3.93, $p < .001$; CI_{95} = [–1.35, –.44]). Next, we used the

Johnson–Neyman technique to identify the range of involvement for which the interaction between expensiveness and construal level is significant. This analysis revealed that for participants who scored below 5.44 on the product involvement scale (.6 SD above the mean), the interaction between expensiveness and construal level on advertising slogan evaluation was significant.

To better illustrate this interaction, we report the results for participants who scored one standard deviation below and above the mean on involvement (for details, see Figure 3). For consumers low on product involvement ($M_{-1\ SD} = 3.62$), results support our model and replicate our prior results: purchase intentions for the inexpensive product were higher when the product was paired with the low-construal slogan (M = 5.26) than with the high-construal slogan (M = 4.55; t(233) = 1.97, p = .05; CI_{95} = [−1.40, .00]) whereas purchase intentions for the expensive product were higher when the product was paired with the high-construal slogan (M = 5.38) than with the low-construal slogan (M = 4.02; t(233) = 4.38; $p < .001$; CI_{95} = [.74, 1.96]). Consumers high in product involvement ($M_{+1SD} = 5.86$), however, did not show the matching effect. Instead, there was only a simple main effect of construal level of the slogan on purchase intentions, for both the inexpensive (B = .82, SE = .33; t(233) = 2.51, p = .01; CI_{95} = [.18, 1.46]) and expensive conditions (B = 1.27, SE = .33; t(233) = 3.83, $p < .001$; CI_{95} = [.62, 1.92]).

Mediation by fluency. Next, we tested whether perceived fluency mediated the effect of matching the product expensiveness with the construal level of advertising slogans on purchase intentions, while controlling for category involvement (Model 4 from Hayes 2013). Results showed a significant indirect effect through perceived fluency (B = .60, SE = .12, CI_{95} = [.38, .86]), consistent with the notion that matching the construal level of advertising slogan to the expensiveness of the product (a-path; B = 1.51, SE = .27; t(237) = 5.69, $p < .001$; CI_{95} = [.99, 2.03]) increases the perceived fluency of the advertising slogans (vs. nonmatch). In turn, perceptions of more fluent advertising slogans lead to higher purchase intentions (b-path; B = .40, SE = .03; t(237) = 12.09, $p < .001$; CI_{95} = [.33, .46]).

FIGURE 3
Study 4: Purchase Intentions as a Function of Construal Level, Expensiveness, and Involvement



Moderated mediation. Next, we tested whether perceived fluency mediated the effect of matching the product expensiveness with the construal level of advertising slogans on purchase intentions and whether this mediation varied across product category involvement (Model 7 from Hayes 2013). Results showed a significant index of moderated mediation (B = −.37, SE = .09, CI_{95} = [−.56, −.21]), consistent with the notion that differences in perceived fluency between the match and mismatch between expensiveness and construal level explains purchase intentions for most participants (1 SD below the mean on involvement: B = 1.06, SE = .17, CI_{95} = [.75, 1.37]; at the mean on involvement: B = .65, SE = .13, CI_{95} = [.38, .91]), but not for those highly involved with the product category (1 SD above the mean on involvement: B = .24, SE = .18, CI_{95} = [−.11, .56]).

Overall, these results support the complete the hypothesized chain of processes illustrated in Figure 1: describing a product as comparatively expensive (inexpensive) influences evaluations of marketing communications using high (low) levels of construal by affecting the conceptual fluency experienced by consumers. Importantly, this managerially relevant effect influences consumption choices for all consumers except those with the highest levels of product category involvement, for whom we observed a preference for high-construal slogans. While we did not hypothesize this result, we conjecture that because the Revised Personal Involvement Inventory (Zaichkowsky 1994) contains items associated with enthusiasm toward the product (e.g., product is "exciting," is "fascinating," "means a lot"), it is likely that those who rated high on the scale were less concerned with low-construal considerations (e.g., feasibility, how, cons; see Trope and Liberman 2010) surrounding the product itself. In the next study, we replicate this affect with another moderator that correlates with processing tendencies but not product interest: NFC.

Study 5

Study 5 again uses a moderation approach to test the robustness of our account of the effect of a price–construal match on product evaluation. This time, we expect the effect of the price–construal match on product and advertisement evaluation to be attenuated for consumers high in NFC, who are less influenced by heuristic cues.

Participants were asked to evaluate an advertisement for an energy drink that was presented as inexpensive or expensive compared with similar energy drinks. We expect participants in general to provide more positive responses to the advertisement when there is a match between the price and the construal level of the advertisement (low price/low construal level or high price/high construal level) versus when there is a mismatch (low price/high construal level or high price/low construal level). However, we expect this matching effect on evaluation to be attenuated or eliminated for people high in NFC.

Method

Participants and design. The experiment is a 2 (price: low vs. high) × 2 (construal level of advertisement: low vs. high) ×

continuous (NFC) between-participants design. The dependent variable is purchase intention. We recruited 210 participants through MTurk to take part in this experiment (40% female; M_{age} = 34.8).

Procedure. Participants were randomly assigned to one of the four versions of the advertisement, each using the same energy drink visual stimulus (see Web Appendix C). The can of energy drink was priced at either $2.00 (low price) or $4.00 (high price), compared with a category average of $3.00, and the advertising slogan was either "Get your caffeine boost" (low construal; focusing on concrete product attribute) or "Be more productive" (high construal; focusing on abstract product benefit). Participants were instructed to imagine themselves looking to purchase this product in this price range. As a manipulation check, participants rated the extent to which they perceived the energy drink to be expensive, using the same items as in previous studies (α = .97). On a different page, participants were asked to rate their purchase intentions using the same scales as in Study 4 (α = .95). Participants then proceeded to respond to the 18-item NFC scale (1 = "completely false," and 5 = "completely true"; α = .90; Cacioppo et al. 1984).

Results and Discussion

Manipulation check. Participants perceived the product as being significantly more expensive in the expensive (M = 5.79, SD = .92) compared with the inexpensive condition (M = 2.65, SD = .80; t(208) = 26.37, $p < .001$).

Purchase intentions. Using a regression approach to the combination of dichotomous and continuous independent variables, we regressed advertisement evaluations on the price and construal-level conditions, NFC (centered), and their interactions, using a 5,000-sample bootstrap method (Model 3 from Hayes 2013; Zhao et al. 2010). Results revealed a significant three-way interaction between price, construal level, and NFC (B = −1.32, SE = .65; t(202) = 2.06, $p < .05$; CI_{95} = [−2.60, −.04]). Results showed the predicted significant two-way interaction between price and construal level (B = 1.22, SE = .45; t(202) = 2.69, $p < .01$; CI_{95} = [.33, 2.11]; Cohen's d = 1.02), in support of our main hypothesis; they also showed a main effect of the price condition (B = −2.13, SE = .32; t(202) = 6.62, $p < .001$; CI_{95} = [−2.76, −1.50]). Next, we used the Johnson–Neyman technique to identify the range of NFC for which the interaction between price and construal level was significant. This analysis revealed that for participants who scored below 3.62 on the scale (.3 SD above the mean), the interaction between price and construal level on advertising slogan evaluation was significant.

To better illustrate this interaction, we report the results for participants who scored 1 SD below and above the mean on NFC (for details, see Figure 4). For consumers low on NFC ($M_{-1\ SD}$ = 2.71), results support our model and replicate our prior results: purchase intentions for the low-priced product were higher when the product was presented with the low-construal slogan (M = 4.91) compared with the high-construal slogan (M = 3.90; t(202) = 2.23, $p < .05$; CI_{95} = [−1.91, −.12]), whereas purchase intentions for the high-priced product were higher when the product was presented with the high-construal slogan (M = 3.45) compared with the low-construal slogan (M = 2.32; t(202) = 2.50, $p = .01$; CI_{95} = [.24, 2.03]). Consumers high in NFC ($M_{+1\ SD}$ = 4.11) did not show the matching effect. Instead, there was only a nonsignificant difference in purchase intentions between the construal-level conditions for both the low-priced (t < 1; CI_{95} [−1.01, .73]) and the high-priced products (t < 1; CI_{95} [−.77, 1.06]).

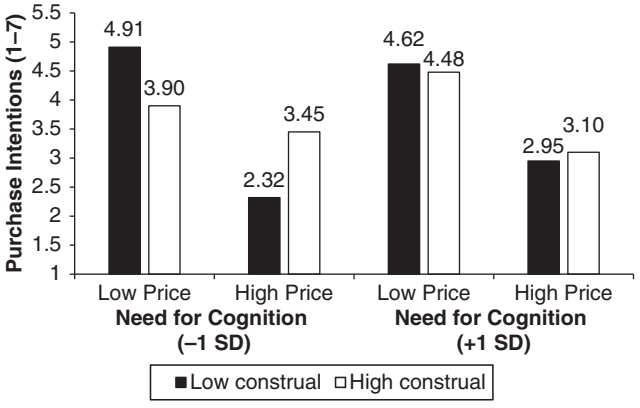
Results from this experiment provide support for our hypothesis that the match between price and the construal level of the marketing message enhances responses to marketing communications through a heuristic process as it does not occur for systematic processors, that is, those who are high in NFC. We next turn to our general discussion.

General Discussion

Our set of six studies using a variety of price levels and types of outcome variables provides converging evidence in support of our general contention that a match between comparative price and the construal level of a marketing communication leads to more favorable consumer responses. Specifically, we show that matching the construal level of marketing communication to the perceived level of expensiveness of the product—with comparatively expensive products promoted by high-construal communications and comparatively inexpensive ones by low-construal communications—leads to more positive consumer attitudes. Consistent with the first stage of our conceptual model (Figure 1), we show that this effect is responsive to the product's comparative price, irrespective of its absolute price (Studies 1–3). Consistent with the second stage of our conceptual model, we identify the mechanism underlying this matching effect on consumer preferences as the mediating role of conceptual fluency. We then test this heuristic explanation through the moderating role (Stage 3 of our model) of product category involvement (Study 4) and NFC (Study 5).

These studies highlight the rich and complex influence of product price on consumer judgment and behavior and contribute to several research streams. They extend the CLT literature by showing that comparative price can prime psychological distance (see Study 3). We believe that comparative price is a

FIGURE 4
Study 5: Purchase Intentions as a Function of Construal Level, Price, and Need for Cognition



learned cue (see Saini and Thota 2010), whereas the four basic dimensions of psychological distance (e.g., space, time) are fundamental to the way people think. This raises interesting questions about such learned or derived cues to psychological distance, for instance, the role of wealth versus poverty in the perception of "distant" prices, and whether these cues are culturally specific.

Most centrally, by demonstrating that comparative expensiveness can affect experienced psychological distance and thus consumer favorability toward a given slogan or advertisement, our results contribute to a growing stream of research on the interplay between price, construal level, and consumer decisions. For the most part, those inquiries have focused on how consumption cues—for example, how far off in time a purchase is, or whether the purchase is for the self versus others—influence consumers' price–quality and price–expensiveness inferences (e.g., Bornemann and Homburg 2011; Yan and Sengupta 2011). As noted, Hansen and Wänke (2011) find luxury products to be mentally represented more abstractly than ordinary products. Our perspective suggests a different and, we think, a more general account: we believe that even luxury products can be portrayed as comparatively expensive or inexpensive within their category, and can be described very concretely (e.g., focusing on the "4 'C's" for diamonds) or very abstractly (e.g., focusing on the symbolic meaning of wearing a diamond; see Study 1b). Our results show that even when we keep the object and its price constant, making it seem expensive or affordable by varying the comparative context in which it is evaluated is sufficient to change its representation in consumers' minds. Notably, this matching effect is unchanged by the specific absolute price, even when this varies by a ratio of 1,000, but it is very sensitive to changes in comparison level or perceived expensiveness.

While we provide direct evidence that our effect of interest is driven by perceptions of expensiveness, our results should nevertheless be considered in light of the role of quality expectations by consumers, mainly because of the well-established link between price and quality expectations. We argue that there are two main reasons to believe that our results cannot be explained parsimoniously by quality expectations induced by prices. First, we do not observe a main effect of price on our product evaluation dependent variables (except in Studies 4 and 5 when the dependent variable is purchase intention; this measure is tied directly to budget constraints). Although more expensive products, due to higher quality expectations, are more desirable when evaluated in isolation from their prices, this relationship does not always hold—and can even be reversed due to price–quality trade-offs—when a product is evaluated in conjunction with its price. For instance, it is easy to imagine that some consumers would prefer a low-quality and low-priced product over a high-quality and high-priced product if the low price were low enough (see "value-conscious consumers"; Ailawadi, Neslin, and Gedenk 2001). Second, to rule out the alternative explanation that our high-construal manipulations of marketing slogans also connoted higher quality, we conducted a series of manipulation checks on our set of stimuli. Specifically, we measured consumers' expected product quality for each construal-level condition, without providing any price-related information. Using an expected-quality measure adapted from Kirmani and Wright (1989), we find no support for the alternative explanation that marketing communications worded at a high construal level triggered higher-quality expectations (see Web Appendix F). For these reasons, quality expectations do not appear to explain our effects parsimoniously.

Similarly, because desirability is one component of high construal level (Trope and Liberman 2003), our results must also be considered in terms of the role of hedonic product features. To rule out the alternative explanation that our high-construal marketing slogans were also of a more hedonic nature, we measured consumers' perceived focus on utilitarian or hedonic features for each construal-level condition, without providing any price-related information (using a check adapted from Khan and Dhar 2006). Again, our results were inconsistent with the alternative explanation that our high-construal slogans were, overall, perceived to be more hedonic (see Web Appendix G). For this reason, we believe that hedonic focus is unlikely to explain our effect of interest.

This research also contributes to the literature on fluency effects in consumer judgments (e.g., Thompson and Ince 2013) by suggesting that high-NFC individuals may be less likely to rely on attributions about their experience of fluency when evaluating promotional material. While more empirical work is necessary to examine this issue in greater depth, our results suggest that effortful thinking could reduce the effectiveness of marketing communications that rely on fit or fluency effects. Prior research has often examined processing styles as stable consumer orientations (e.g., intuitive–experiential vs. analytical–relational thinking; Epstein et al. 1996). Future work should also seek to identify factors in consumption contexts driving the adoption of automatic versus analytical processing styles (e.g., Bhargave and Montgomery 2013; Sujan, Bettman, and Sujan 1986) with the objective of assessing the generalizability of fit approaches to promotional efforts.

Our results on the interplay between comparative price and the construal level of marketing communications have substantive implications for managers, offering insights into best practices for influencing consumer judgments and decisions, especially in contexts in which price perceptions have not been clearly defined in consumers' minds, such as new products. We extend previous work on construal-level congruency effects in consumer decision making (e.g., Lamberton and Diehl 2013; Lee et al. 2010; White et al. 2011; Yang et al. 2011) that highlights the importance of framing promotional messages at a construal level that maximizes their effectiveness. More specifically, our results suggest that firms should vary their promotional efforts according to the comparative expensiveness of their products, no matter the absolute price. For example, firms should promote the more affordable products in their lineups by focusing on their more concrete, low-level features (e.g., miles per gallon and reliability ratings for an affordable sedan) while focusing on more abstract, high-level features for their more expensive products (e.g., feelings of freedom and power for a high-end sports car) within a given absolute price range.

Importantly, our results also suggest that even when keeping the price of a product constant, managers could increase demand for their products by matching their marketing communication to the comparative expensiveness of

the product, such as by changing the assortment of products against which the focal product is presented. For instance, managers can make a product appear inexpensive by contrasting it with premium versions of that product in their communications (e.g., through in-store displays, online shopping interfaces, advertisements; for framing examples of how to achieve such a goal, see Studies 1–3). Imagine, for instance, a dealership where the same BMW 5 Series sedan may appear expensive when displayed next to a 3 Series vehicle but affordable when displayed next to a 6 Series vehicle.

Insights gained from this research suggest that whether a product is affordable or expensive relative to its comparison context, promoting it with a focus on its concrete or abstract benefits, respectively, would be the most persuasive—unless, as we have also found, consumers are highly invested in the processing of such marketing communication (e.g., product category involvement in Study 4; NFC in Study 5). This finding would suggest that our recommendations are most suitable for mass communication channels (e.g., general-interest television programming, magazines, billboards) but that their effectiveness would be less for targeted media (e.g., specialized publications, interest-specific websites, industry conventions).

This research also opens avenues for future studies. Future inquiries should investigate whether findings from the current research could be implemented using alternative manipulations of concreteness or abstractness. For example, one could manipulate the perceived abstractness of product communications by modifying their visual representations (e.g., showing only the outline of the product) or the fonts used to better match the relevant price category. Despite the large quantity of research already sparked by the twin concepts of absolute and perceived price, we believe that there is still much more to be learned about this powerful economic and psychological cue that influences consumers in many ways.

REFERENCES

Ailawadi, Kusum L., Scott A. Neslin, and Karen Gedenk (2001), "Pursuing the Value-Conscious Consumer: Store Brands Versus National Brand Promotions," *Journal of Marketing*, 65 (January), 71–89.

Alter, Adam L., and Daniel M. Oppenheimer (2009), "Uniting the Tribes of Fluency to Form a Metacognitive Nation," *Personality and Social Psychology Review*, 13 (3), 219–35.

Avnet, Tamar, Daniel Laufer, and E. Tory Higgins (2012), "Are All Experiences of Fit Created Equal? Two Paths to Persuasion," *Journal of Consumer Psychology*, 23 (3), 301–16.

Aydinli, Aylin, Marco Bertini, and Anja Lambrecht (2014), "Price Promotion for Emotional Impact," *Journal of Marketing*, 78 (July), 80–96.

Bar-Anan, Yoav, Nira Liberman, and Yaacov Trope (2006), "The Association Between Psychological Distance and Construal Level: Evidence from an Implicit Association Test," *Journal of Experimental Psychology. General*, 135 (4), 609–22.

Bhargave, Rajesh, and Nicole Votolato Montgomery (2013), "The Social Context of Temporal Sequences: Why First Impressions Shape Shared Experiences," *Journal of Consumer Research*, 40 (3), 501–17.

Biswas, Abhijit, Chris Pullig, Mehmet I. Yagci, and Dwane H. Dean (2002), "Consumer Evaluation of Low Price Guarantees: The Moderating Role of Reference Price and Store Image," *Journal of Consumer Psychology*, 12 (2), 107–18.

Bornemann, Torsten, and Christian Homburg (2011), "Psychological Distance and the Dual Role of Price," *Journal of Consumer Research*, 38 (3), 490–504.

Bornstein, Robert F., and Paul R. D'Agostino (1994), "The Attribution and Discounting of Perceptual Fluency: Preliminary Tests of a Perceptual Fluency/Attributional Model of the Mere Exposure Effect," *Social Cognition*, 12 (2), 103–28.

Cacioppo, John T., and Richard E. Petty (1982), "The Need for Cognition," *Journal of Personality and Social Psychology*, 42 (1), 116–31.

Cacioppo, John T., Richard E. Petty, and Feng Kao Chuan (1984), "The Efficient Assessment of Need for Cognition," *Journal of Personality Assessment*, 48 (3), 306–07.

Chaiken, Shelly (1980), "Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion," *Journal of Personality and Social Psychology*, 39 (5), 752–66.

Chattopadhyay, Amitava, and Kunal Basu (1990), "Humor in Advertising: The Moderating Role of Prior Brand Evaluation," *Journal of Marketing Research*, 27 (November), 466–76.

Cordell, Victor V. (1991), "Competitive Context and Price as Moderators of Country of Origin Preferences," *Journal of the Academy of Marketing Science*, 19 (2), 123–28.

Darke, Peter R., Shelly Chaiken, Gerd Bohner, Sabine Einwiller, Hans-Peter Erb, and J. Douglas Hazlewood (1998), "Accuracy Motivation, Consensus Information, and the Law of Large Numbers: Effects on Attitude Judgment in the Absence of Argumentation," *Personality and Social Psychology Bulletin*, 24 (11), 1205–15.

Epstein, Seymour, Rosemary Pacini, Veronika Denes-Raj, and Harriet Heier (1996), "Individual Differences in Intuitive–Experiential and Analytical–Rational Thinking Styles," *Journal of Personality and Social Psychology*, 71 (2), 390–405.

Godin, Gaston, Steve Amireault, Ariane Bélanger-Gravel, Marie-Claude Vohl, Louis Pérusse, and Laurence Guillaumie (2010), "Prediction of Daily Fruit and Vegetable Consumption Among Overweight and Obese Individuals," *Appetite*, 54 (3), 480–84.

Gollwitzer, Peter M. (1990), "Action Phases and Mind-Sets," in *Handbook of Motivation and Cognition: Foundations of Social Behavior*, Vol. 2, E. Tory Higgins and R.M. Sorrentino, eds. New York: Guilford Press, 53–92.

Grewal, Dhruv, and Howard Marmorstein (1994), "Market Price Variation, Perceived Price Variation, and Consumers' Price Search Decisions for Durable Goods," *Journal of Consumer Research*, 21 (3), 453–60.

Hansen, Jochim, Florian Kutzner, and Michaela Wänke (2013), "Money and Thinking: Reminders of Money Trigger Abstract Construal and Shape Consumer Judgments," *Journal of Consumer Research*, 39 (6), 1154–66.

Hansen, Jochim, and Michaela Wänke (2011), "The Abstractness of Luxury," *Journal of Economic Psychology*, 32 (5), 789–96.

Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.

Hong, Jiewen, and Angela Y. Lee (2008), "Be Fit and Be Strong: Mastering Self-Regulation Through Regulatory Fit," *Journal of Consumer Research*, 34 (5), 682–95.

Hsee, Christopher K. (1998), "Less Is Better: When Low-Value Options Are Valued More Highly Than High-Value Options," *Journal of Behavioral Decision Making*, 11 (2), 107–21.

Jacoby, Jacob, and Jerry C. Olson (1977), "Consumer Response to Price: An Attitudinal, Information Processing Perspective," in *Moving Ahead with Attitude Research*, Y. Wind and P. Greenberg, eds., Chicago: American Marketing Association, 73–86.

Khan, Uzma, and Ravi Dhar (2006), "Licensing Effect in Consumer Choice," *Journal of Marketing Research*, 43 (May), 259–66.

Khan, Uzma, and Ravi Dhar (2010), "Price-Framing Effects on the Purchase of Hedonic and Utilitarian Bundles," *Journal of Marketing Research*, 47 (December), 1090–99.

Kim, Hakkyun, and Deborah Roedder John (2008), "Consumer Response to Brand Extensions: Construal Level as a Moderator of the Importance of Perceived Fit," *Journal of Consumer Psychology*, 18 (2), 116–26.

Kim, Hakkyun, Akshay R. Rao, and Angela Y. Lee (2009), "It's Time to Vote: The Effect of Matching Message Orientation and Temporal Frame on Political Persuasion," *Journal of Consumer Research*, 35 (6), 877–89.

Kirmani, Amna, and Peter Wright (1989), "Money Talks: Perceived Advertising Expense and Expected Product Quality," *Journal of Consumer Research*, 16 (3), 344–53.

Labroo, Aparna A., and Angela Y. Lee (2006), "Between Two Brands: A Goal Fluency Account of Brand Evaluation," *Journal of Marketing Research*, 43 (August), 374–85.

Lamberton, Cait Poynor, and Kristin Diehl (2013), "Retail Choice Architecture: The Effects of Benefit- and Attribute-Based Assortment Organization on Consumer Perceptions and Choice," *Journal of Consumer Research*, 40 (3), 393–411.

Lee, Angela Y., and Jennifer L. Aaker (2004), "Bringing the Frame into Focus: The Influence of Regulatory Fit on Processing Fluency and Persuasion," *Journal of Personality and Social Psychology*, 86 (2), 205.

Lee, Angela Y., Punam Anand Keller, and Brian Sternthal (2010), "Value from Regulatory Construal Fit: The Persuasive Impact of Fit Between Consumer Goals and Message Concreteness," *Journal of Consumer Research*, 36 (5), 735–47.

Lee, Kelly Kiyeon, and Min Zhao (2014), "The Effect of Price on Preference Consistency over Time," *Journal of Consumer Research*, 41 (1), 109–18.

Liberman, Nira, and Yaacov Trope (1998), "The Role of Feasibility and Desirability Considerations in Near and Distant Future Decisions: A Test of Temporal Construal Theory," *Journal of Personality and Social Psychology*, 75 (1), 5–18.

Meyers-Levy, Joan, and Alice M. Tybout (1989), "Schema Congruity as a Basis for Product Evaluation," *Journal of Consumer Research*, 16 (1), 39–54.

Meyvis, Tom, Kelly Goldsmith, and Ravi Dhar (2012), "The Importance of the Context in Brand Extension: How Pictures and Comparisons Shift Consumers' Focus from Fit to Quality," *Journal of Marketing Research*, 49 (April), 206–17.

Monroe, Kent B. (1973), "Buyers' Subjective Perceptions of Price," *Journal of Marketing Research*, 10 (February), 70–80.

Monroe, Kent B., Albert J. Della Bitta, and Susan L. Downey (1977), "Contextual Influences on Subjective Price Perceptions," *Journal of Business Research*, 5 (4), 277–91.

Novemsky, Nathan, Ravi Dhar, Norbert Schwarz, and Itamar Simonson (2007), "Preference Fluency in Choice," *Journal of Marketing Research*, 44 (August), 347–56.

Petty, Richard E., John T. Cacioppo, and David Schumann (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 10 (2), 135–46.

Pham, Michel Tuan (1998), "Representativeness, Relevance, and the Use of Feelings in Decision Making," *Journal of Consumer Research*, 25 (2), 144–59.

Saini, Ritesh, and Sweta C. Thota (2010), "The Psychological Underpinnings of Relative Thinking in Price Comparisons," *Journal of Consumer Psychology*, 20 (2), 185–92.

Schwarz, Norbert, and Gerald L. Clore (1983), "Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States," *Journal of Personality and Social Psychology*, 45 (3), 513.

Slonim, Robert, and Ellen Garbarino (1999), "The Effect of Price History on Demand as Mediated by Perceived Price Expensiveness," *Journal of Business Research*, 45 (1), 1–14.

Sujan, Mita, James R. Bettman, and Harish Sujan (1986), "Effects of Consumer Expectations on Information Processing in Selling Encounters," *Journal of Marketing Research*, 23 (November), 346–53.

Sundar, Aparna, and Theodore J. Noseworthy (2016), "Too Exciting to Fail, Too Sincere to Succeed: The Effects of Brand Personality on Sensory Disconfirmation," *Journal of Consumer Research*, 43 (1), 44–67.

Thompson, Debora V., and Elise Chandon Ince (2013), "When Disfluency Signals Competence: The Effect of Processing Difficulty on Perceptions of Service Agents," *Journal of Marketing Research*, 50 (April), 228–40.

Trope, Yaacov, and Nira Liberman (2003), "Temporal Construal," *Psychological Review*, 110 (3), 403–21.

Trope, Yaacov, and Nira Liberman (2010), "Construal-Level Theory of Psychological Distance," *Psychological Review*, 117 (2), 440–63.

Trope, Yaacov, Nira Liberman, and Cheryl Wakslak (2007), "Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior," *Journal of Consumer Psychology*, 17 (2), 83–95.

Tsai, Claire I., and Ann L. McGill (2011), "No Pain, No Gain? How Fluency and Construal Level Affect Consumer Confidence," *Journal of Consumer Research*, 37 (5), 807–21.

Vessey, Iris (1991), "Cognitive Fit: A Theory-Based Analysis of the Graphs Versus Tables Literature," *Decision Sciences*, 22 (2), 219–40.

White, Katherine, Rhiannon MacDonnell, and Darren W. Dahl (2011), "It's the Mind-Set That Matters: The Role of Construal Level and Message Framing in Influencing Consumer Efficacy and Conservation Behaviors," *Journal of Marketing Research*, 48 (June), 472–85.

Yan, Dengfeng, and Jaideep Sengupta (2011), "Effects of Construal Level on the Price–Quality Relationship," *Journal of Consumer Research*, 38 (2), 376–89.

Yang, Xiaojing, Torsten Ringberg, Huifang Mao, and Laura A. Peracchio (2011), "The Construal (in) Compatibility Effect: The Moderating Role of a Creative Mind-Set," *Journal of Consumer Research*, 38 (4), 681–96.

Zaichkowsky, Judith Lynne (1985), "Measuring the Involvement Construct," *Journal of Consumer Research*, 12 (3), 341–52.

Zaichkowsky, Judith Lynne (1994), "The Personal Involvement Inventory: Reduction, Revision, and Application to Advertising," *Journal of Advertising*, 23 (4), 59–70.

Zeithaml, Valarie A. (1988), "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, 52 (July), 2–22.

Zhao, Xinshu, John G. Lynch, and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths About Mediation Analysis," *Journal of Consumer Research*, 37 (2), 197–206.