Psychological Distance and the Dual Role of Price

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When evaluating a product, consumers may interpret price information as either an indicator of quality or an indicator of monetary sacrifice. On the basis of construal level theory, we propose that psychological distance alters the weight consumers attach to these opposing roles of price. Four experiments show (1) that from both a temporally and a socially distant perspective, the price–perceived quality relationship is more pronounced; (2) that from a temporally proximal perspective, the price–perceived sacrifice relationship is more pronounced; (3) that these effects stem from differences in the way consumers mentally construe price information; and (4) that when people initially use price to judge a product for distant future consumption, it receives less attention as an indicator of sacrifice in a later evaluation for near future consumption. These findings have implications for prelaunch communication activities and preference elicitation methods such as conjoint analysis.

The role of price in consumers' product evaluations has attracted considerable research attention in the consumer behavior literature. This interest in the price cue stems from its ubiquity in the marketplace and its inherent ambiguity (Lichtenstein, Ridgway, and Netemeyer 1993). According to classical economic theory, price constitutes an indicator of the economic cost of making a purchase: a higher price increases perceptions of monetary sacrifice, resulting in a negative relationship between price level and purchase probability. At the same time, empirical evidence suggests that consumers may also rely on price information to infer product quality. In this case, a higher price increases perceptions of quality and thus positively affects purchase probability (Rao and Monroe 1988). As the relative salience of these conflicting roles of price may have a decisive impact on the shape of the demand curve (Ding, Ross, and Rao 2010), the question arises under which conditions the respective roles of price prevail.

Whereas previous pricing research has predominantly focused on context factors that constrain consumers' information processing, such as time pressure (Suri and Monroe 2003), we propose that psychological distance may systematically influence consumers' price perception. According to construal level theory (CLT), an event such as the purchase of a product is psychologically distant when it is not part of one's direct experience (Trope and Liberman 2003). For example, consumers may evaluate a preannounced new product long before it is available for purchase (temporal distance), or they may evaluate a product for someone else rather than for themselves (social distance). CLT proposes that people construe psychologically distant events more schematically and in terms of abstract features (high-level construals), whereas they construe psychologically near events on a more concrete level (low-level construals). We propose that this shift in mental construal alters the relative salience of the two opposing roles of price, leading to different product evaluations for psychologically distant and near purchases.

The remainder of this article is organized as follows. First, we provide an overview of the literature on the dual role of price and on the concept of psychological distance, from which we derive predictions. We then report four studies conducted to test our predictions. In study 1, we examine the effect of temporal distance on price perception and prod-

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uct evaluation. We show that the price–perceived quality relationship is more pronounced when a product is evaluated for distant rather than near future consumption, whereas the reverse holds true for the price–perceived sacrifice relationship. Consequently, consumers evaluate the same high-priced product more favorably from a distance than when a purchase is imminent. Study 2 examines the underlying cognitive processes in detail, and study 3 extends our analysis to social distance, demonstrating both similarities and differences in the underlying processes. Finally, study 4 examines implications for repeated product evaluations from different distance perspectives.

THEORETICAL BACKGROUND

The Dual Role of Price

The economic and behavioral paradigms used to study the role of price in consumers' product evaluations suggest that price may have two distinct functions (Erickson and Johansson 1985). Whereas economic theory traditionally assumes a unidimensional role of price as an indicator of sacrifice, observation of actual purchase behavior has led scholars to recognize very early that price may also convey information about a product's quality (Leavitt 1954).

Acknowledging the dual role of price, research in the behavioral sciences has focused on empirically verifying the link between price level and perceptions of quality. Although meta-analytic reviews of this research provide evidence for a moderately strong relationship between price level and perceived quality (Völckner and Hofmann 2007), some scholars question the universal validity of this link (Zeithaml 1988). Research therefore has turned to the examination of information-processing issues underlying price-quality inferences. Results of this research show that consumers are more likely to infer quality from price when they lack either the motivation (e.g., owing to low personal relevance) or the ability (e.g., owing to time pressure) to systematically process product-related information (Kardes et al. 2004; Suri and Monroe 2003). Apart from processing motivation and ability, however, consumers may also construe price information itself in different ways.

Behavioral research conceptualizes the price–perceived sacrifice relationship as a means-related perception. In this role, price is negatively valenced as it indicates what is given up to obtain the benefits associated with a product (Ahtola 1984). The price–perceived quality relationship, however, constitutes a positively valenced perception that indicates the excellence of a product (Zeithaml 1988). In what follows, we introduce the concept of psychological distance as a context factor influencing the relative salience of these two roles of price.

Psychological Distance and Level of Construal

Objects and actions such as the purchase of a product are psychologically distant when they are not part of one's direct experience. Various reasons may account for removal from direct experience (Trope, Liberman, and Wakslak 2007). Actions may take place in the distant versus near future (temporal distance), they may refer to other people versus oneself (social distance), they may occur at a remote versus close location (spatial distance), or their occurrence may be uncertain versus certain (hypothetical distance). CLT argues that people form more abstract representations (high-level construals) of psychologically distant actions and more concrete representations (low-level construals) of psychologically near actions.

Construing actions at a higher level increases people's attention to aspects with implications for the central meaning of the action (Trope and Liberman 2003). For example, desirability concerns that refer to ends-related considerations ("What am I getting?"—such as the topic of a lecture) are distinct from feasibility concerns regarding means-related aspects ("How am I getting it?"—such as the convenience of the lecture's timing). Because desirability considerations are superordinate to feasibility considerations, temporal distance increases the weight attached to desirability concerns relative to feasibility concerns (Liberman and Trope 1998). Moreover, thoughts about future actions can be based on arguments in favor of the action (*pro* arguments, such as interesting impressions of a jungle tour) and arguments against the action (*con* arguments, such as the danger of a snakebite). Temporal distance affects the valence of individuals' thoughts such that pros are relatively more salient than cons in evaluations of an action for the distant versus the near future (Eyal et al. 2004).

In a product evaluation context, high-level construals pertain to the core benefits of a product, whereas low-level construals relate to the costs associated with purchasing and using it (Trope et al. 2007). Owing to the different levels of mental construal, the weight attached to cost- and benefit-related aspects may thus differ considerably, depending on the time horizon of the purchase. Castaño et al. (2008), for example, show that from a temporally distant perspective, consumers are predominantly concerned about the likely performance of a product, whereas from a proximal perspective, concerns regarding learning costs associated with adopting the product become more salient (see also Kim, Park, and Wyer 2009). Although most studies focus on temporal distance, CLT proposes that the same representational mechanisms may also underlie the effects of other types of psychological distance (Trope and Liberman 2003).

Foundational Predictions

Combining research on the dual role of price and CLT, we propose that psychological distance may systematically alter consumers' interpretation of price information. As outlined above, the price–perceived quality relationship constitutes an ends-related perception that pertains to the core benefits of a product. The price–perceived sacrifice relationship, however, constitutes a means-related perception that pertains to what is given up to obtain these benefits (Lichtenstein et al. 1993; Zeithaml 1988). CLT suggests that considerations related to the core benefits of a product

should be prevalent from a psychologically distant perspective, whereas from a near perspective, cost-related considerations should come into play as well. Hence, we expect that when evaluating a product from a distance, consumers are more likely to use price as an indicator of quality than when evaluating the product from a near perspective. Conversely, when evaluating a product from a near perspective, consumers are more likely to use price as an indicator of monetary sacrifice than when evaluating the product from a distance.

H1: Perceptions of quality for a relatively high product price compared to a relatively low product price will be higher when the purchase is psychologically distant than when it is psychologically near.

H2: Perceptions of monetary sacrifice for a relatively high product price compared to a relatively low product price will be higher when the purchase is psychologically near than when it is psychologically distant.

A relatively high product price may therefore indicate high benefits (via the price–perceived quality relationship) as well as high costs (via the price–perceived sacrifice relationship). Consequently, product evaluations for a relatively high product price compared to a relatively low product price should differ with the temporal perspective of the evaluation:

H3: Consumers' product evaluations for a relatively high product price compared to a relatively low product price will be more favorable when the purchase is psychologically distant than when it is psychologically near.

Studies 1–3 test these foundational predictions, whereas study 4 focuses on a derivative prediction. Study 1 examines the effect of psychological distance on consumers' price perception and product evaluations by manipulating the temporal perspective of the evaluation context. Study 2 analyzes the underlying cognitive processes to rule out alternative explanations, and study 3 examines the generalizability of these findings to social distance. The focus of study 4 is on implications for repeated product evaluations from different distance perspectives.

STUDY 1

Method

Design and Stimulus. Ninety-four undergraduate students (50% male; mean age = 20) participated in the study in exchange for a chance to win gift vouchers in a fair lottery. They were randomly assigned to one of four conditions of temporal perspective (proximal vs. distant) and price level (high vs. low). To provide a realistic scenario, we simulated the preannouncement (distant perspective) and launch (proximal perspective) of a new product. The stimulus was an e-book reader, a portable device that can store and display electronic books.

As we examine the varying role of price information for product evaluations from different temporal perspectives, participants had to perceive the product stimulus itself as equally favorable when they evaluated it for distant and proximal consumption. On the basis of a first pretest ($N = 64$), we developed a product description that led to equally favorable evaluations when participants considered the product for proximal ($M = 5.31$) and distant future consumption ($M = 5.37$; $t(62) = .22$, $p > .80$; the product evaluation measure and the temporal perspective manipulations were the same as in the main study). The product description consisted of a short text that introduced participants to the new product and the functionality of electronic reading devices. This text was followed by an advertisement for an e-book reader showing a picture of the product and providing a brief description of its features (without mentioning price information). To determine the high and low price levels, we conducted a second pretest. Participants ($N = 23$) read the product description and indicated the "most" and "least" they would be willing to pay for the product, with "least" referring to the price below which they would infer inferior quality (Monroe 2003). On the basis of the respective means of these price indications, we determined the high (€210) and low (€95) price levels.

Procedure. Participants in the main study were provided with the product description supplemented by the respective price information and the temporal perspective manipulation. We manipulated temporal perspective by varying the information regarding the alleged availability of the product—that is, that the product would be launched and hence be available for purchase in the university's bookstore either after 2 days (proximal condition) or after 6 months (distant condition). After reading the advertisement, participants received the instruction to imagine that it is now 2 days (6 months) before the launch of the product. Participants were then asked to consider all available information and to evaluate the product by indicating their attitude toward purchasing and using it either the day after tomorrow (proximal condition) or 6 months later (distant condition; two 7-point scales anchored by unattractive-attractive and negative-positive; $\alpha = .84$). Participants subsequently wrote down all thoughts and ideas they experienced while evaluating the product, no matter how seemingly simple, complex, or relevant. Afterward, they responded to a manipulation check (i.e., whether the launch was imminent) and to statements related to perceived quality (the product appears to be of good quality, the product appears to be reliable; $\alpha = .80$) and perceived monetary sacrifice (the advertised price is very high, the product is very expensive; $\alpha = .80$; all 7-point scales, where 1 = strongly disagree and 7 = strongly agree; Suri and Monroe 2003). Finally, participants completed questions relating to demographics.

Results and Discussion

As intended, participants in the proximal perspective condition indicated a higher agreement with the statement that the launch was imminent than did participants in the distant condition ($M_{prox} = 4.58$ vs. $M_{dist} = 3.20$; $t(92) = 3.78$, $p < .01$). Moreover, we used perceptions of sacrifice as a manipulation check for the price levels and found a significant difference between the two conditions ($M_{high} = 5.10$ vs. $M_{low} = 3.61$; $t(92) = 4.83$, $p < .01$).

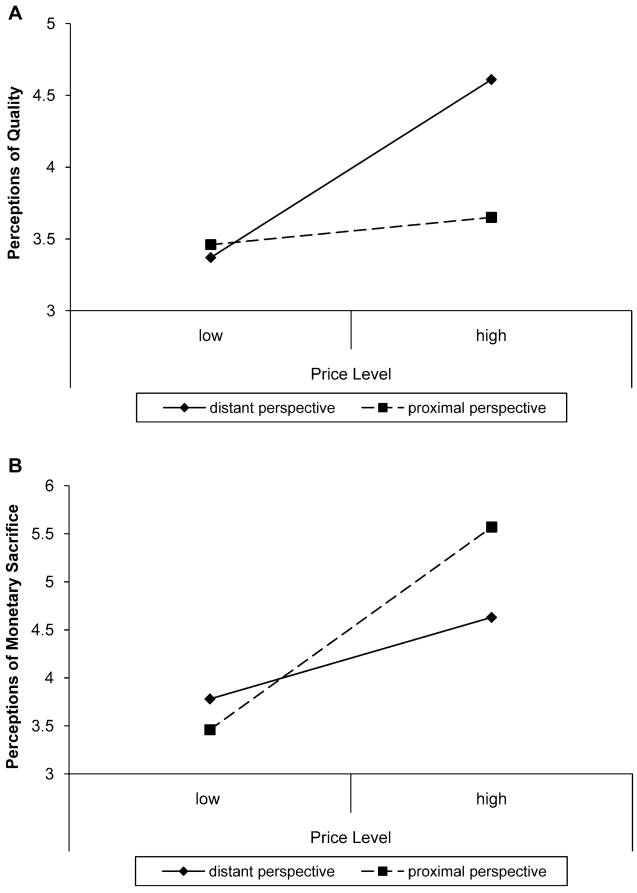
To examine the effect of temporal perspective on participants' interpretation of price information, we conducted 2 (temporal perspective) × 2 (price level) ANOVAs on the scales measuring perceptions of quality, perceptions of sacrifice, and product evaluations. Correlations among these variables are less than one by an amount greater than twice the respective standard error, providing evidence for discriminant validity (Bagozzi and Warshaw 1990).

Results for perceptions of quality show that the use of price as an indicator of quality is more pronounced when a product is considered for purchase in the distant than in the near future (hypothesis 1). The analysis reveals a significant temporal perspective × price level interaction ($F(1, 90) = 4.05$, $p < .05$) and a main effect of price level ($F(1, 90) = 7.58$, $p < .01$) on perceived quality. As figure 1*A* shows, the difference in quality perceptions between the high and low price level is more pronounced when the purchase is perceived to be in the distant future ($M_{high} = 4.61$ vs. $M_{low} = 3.37$; $F(1, 90) = 11.13$, $p < .01$) than when it is perceived to be imminent ($M_{high} = 3.65$ vs. $M_{low} = 3.46$; $F < 1$). As predicted, a reverse pattern occurs for perceptions of monetary sacrifice (hypothesis 2). A significant interaction ($F(1, 90) = 4.33$, $p < .05$) and a main effect of price level ($F(1, 90) = 23.91$, $p < .01$) emerge. The difference in sacrifice perceptions between the high and low price level is more pronounced when the purchase is perceived to be imminent ($M_{high} = 5.57$ vs. $M_{low} = 3.46$; $F(1, 90) = 24.80$, $p < .01$) than when it is perceived to be in the distant future ($M_{high} = 4.63$ vs. $M_{low} = 3.78$; $F(1, 90) = 3.86$, $p < .10$; see fig. 1*B*). On the basis of participants' cognitive response data, we also computed the proportion of sacrifice-related thoughts and quality concerns to total thoughts (Suri and Monroe 2003). A replication of the analyses with these dependent measures reveals an analogous pattern, thus providing evidence that the observed effects also hold for spontaneous price-quality inferences.

Moreover, we hypothesized that participants' evaluations of the product at a high price level compared to a low price level would be more favorable from a psychologically distant perspective than from a psychologically near perspective (hypothesis 3). An ANOVA on participants' product evaluations shows a significant temporal perspective × price level interaction ($F(1, 90) = 8.12$, $p < .01$) and main effects of price level ($F(1, 90) = 4.70$, $p < .05$) and temporal perspective ($F(1, 90) = 8.99$, $p < .01$). Follow-up analyses reveal that when the purchase is in the distant future, the high price level leads to product evaluations that are similar to those at the low price level ($M_{high} = 5.56$ vs. $M_{low} = 5.41$; $F < 1$). Conversely, when the purchase is perceived to be imminent, the product is evaluated significantly less favorably at the high price level ($M_{high} = 4.26$ vs. $M_{low} = 5.38$; $F(1, 90) = 12.85$, $p < .01$; see fig. 2).

FIGURE 1

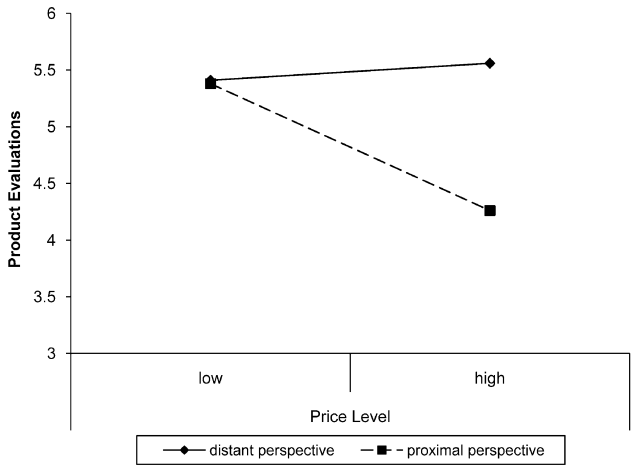
STUDY 1: EFFECTS OF TEMPORAL DISTANCE AND PRICE LEVEL ON PERCEPTIONS OF QUALITY (*A*) AND MONETARY SACRIFICE (*B*)



To further test our assumption that the observed differences in product evaluations stem from different interpretations of price, we examined multiple mediator models (Preacher and Hayes 2008). We expect that the effect of price level on product evaluations is mediated by consumers' perceptions of quality and sacrifice. Our reasoning suggests a positive indirect effect via quality perceptions from a distant perspective and a negative indirect effect via sacrifice perceptions from a proximal perspective. We thus examined the dual mediation by perceptions of quality and sacrifice for the different temporal perspective conditions. To determine the significance of the indirect effects, we use bootstrapping methods (10,000 resamples; Zhao, Lynch, and Chen 2010). Moreover, we report regression coefficients for the effects of price level on the two mediators (*a*), for the

FIGURE 2

STUDY 1: EFFECTS OF TEMPORAL DISTANCE AND PRICE LEVEL ON PRODUCT EVALUATIONS



effects of the two mediators on product evaluations (*b*), and for the direct effect of price level on product evaluations (*c*; see table 1).

A bootstrap analysis for the distant perspective condition reveals that the mean indirect effect via quality perceptions is positive and significant ($a_1 \times b_1 = .29$), with a 95% confidence interval excluding zero. The mean indirect effect via sacrifice perceptions ($a_2 \times b_2$), however, is not significant, as the 95% confidence interval includes zero. For the proximal perspective condition, a negative and significant mean indirect effect via sacrifice perceptions emerges ($a_2 \times b_2 = -.43$), whereas the mean indirect effect via quality perceptions is not significant.

In line with our theorizing, a high price enhanced quality perceptions when the product was evaluated from a distant perspective but not when it was evaluated from a proximal perspective. We expected this pattern to occur as a result of differences in consumers' mental construal of price information. However, temporal distance may also decrease the personal relevance of an event and hence consumers' motivation to process product-related information. Under such conditions of low motivation, individuals are most likely to rely on heuristics such as "experts know best," allowing them to form evaluations quickly and with little cognitive effort (Fujita et al. 2008). Pricing research argues that under exactly these conditions of low motivation, consumers are most likely to rely on price when judging product quality (Suri and Monroe 2003). In study 1, we chose a stimulus that was relevant for students in our pretest, and we instructed participants to base their judgment on all available information. Nonetheless, we cannot rule out that motivational differences caused by the temporal distance manipulation influenced participants' interpretation of price information. Study 2 therefore explicitly examines the cognitive processes underlying consumers' interpretation of price information.

STUDY 2

The objective of study 2 is to examine how far differences in mental construal mediate the effect of temporal distance on consumers' interpretation of price information. According to CLT, an increase in psychological distance should increase the abstractness of mental construal, the relative salience of ends- versus means-related reasons, and the relative salience of arguments in favor of versus arguments against an action (Eyal et al. 2004; Liberman and Trope 1998). Each of these manifestations of level of construal may increase the weight consumers attach to the price–perceived quality relationship relative to the price–perceived sacrifice relationship.

Method

Design and Stimulus. Sixty-four undergraduate students (48% male; mean age = 22) participated in the computer-based study in exchange for a chance to win gift vouchers in a fair lottery. They were randomly assigned to one of two conditions of temporal perspective (proximal vs. distant). We used the same stimulus as in study 1 and focused on the high price level (€210).

Procedure. Participants were first provided with the product description and the price information. We manipulated temporal perspective with scenarios analogous to study 1. Participants were then asked to consider all available information and to evaluate the product by indicating their attitude toward purchasing and using it either the day after tomorrow (proximal condition) or 6 months later (distant condition), using the same items as in study 1 ($\alpha = .95$). The computer recorded participants' processing time. Afterward, participants listed thoughts that came to mind as they rendered their evaluations and then responded to a manipulation check regarding the temporal perspective manipulation and to the scales measuring perceived quality ($\alpha = .87$) and perceived sacrifice ($\alpha = .97$). Finally, participants completed demographic questions.

Results and Discussion

As intended, participants' perception that the launch was imminent was stronger in the proximal perspective condition than in the distant condition ($M_{prox} = 5.33$ vs. $M_{dist} = 2.47$; $t(62) = 6.02, p < .01$). Moreover, both groups spent a similar amount of time on the product evaluation ($M_{prox} = 65.7$ seconds vs. $M_{dist} = 66.8$ seconds; $t(62) = .10, p > .91$).

To examine how far temporal distance affected participants' mental representation of the purchase, two judges, who were blind to the hypotheses and who were not involved in the coding in study 1, independently coded each participant's thoughts according to three characteristics of mental construal: abstractness, focus on desirability (ends-related)

TABLE 1

STUDY 1: PROPOSED MEDIATION MODEL FOR THE INFLUENCE OF PRICE LEVEL ON PRODUCT EVALUATIONS THROUGH PERCEPTIONS OF QUALITY AND SACRIFICE

Regression analysis			Bootstrap analysis	
Effect	*b*	*p*	Indirect effect	95% CI
Temporally distant perspective results ($n = 46$):				
a_1	.83	.00	$a_1 \times b_1 = .29$	.0515, .8270
b_1	.35	.07		
a_2	.85	.08	$a_2 \times b_2 = -.03$	−.3037, .1477
b_2	−.04	.72		
c	−.10	.78		
Temporally proximal perspective results ($n = 48$):				
a_1	.30	.38	$a_1 \times b_1 = .10$	−.0954, .3907
b_1	.34	.01		
a_2	2.11	.00	$a_2 \times b_2 = -.43$	−.8963, −.0862
b_2	−.20	.08		
c	−.79	.04		

Illustration of the multiple mediator model

Price level →	a_1 →	Quality perceptions	b_1 →	Product evaluations
	a_2 →	Sacrifice perceptions	b_2 →	
		c →		

NOTE.—Bootstrap analyses are based on 10,000 resamples.

versus feasibility (means-related) reasons, and valence (focus on arguments in favor of vs. arguments against the purchase). The coding scheme for abstractness and valence was adapted from Magee, Milliken, and Lurie (2010) and is based on 5-point scales, with higher values reflecting higher levels of mental construal (e.g., 1 = very concrete, 2 = somewhat concrete, 3 = equally concrete/abstract, 4 = somewhat abstract, 5 = very abstract). For the focus on desirability versus feasibility reasons, we created an analogous measure. Intercoder reliabilities for abstractness, valence, and desirability versus feasibility are $\alpha = .91$, $\alpha = .97$, and $\alpha = .90$, respectively.

We then tested these different characteristics of mental construal as potential mediators of the effect of temporal distance on perceptions of quality and monetary sacrifice, using multiple mediator models (note that all measures, including the dependent variables, exhibit discriminant validity; cf. Bagozzi and Warshaw 1990). Table 2 shows results of the mediation analyses as well as regression coefficients for the effects of temporal perspective on the three mediators (*a*), for the effects of the three mediators on perceptions of quality/monetary sacrifice (*b*), and for the direct effect of temporal perspective on perceptions of quality/sacrifice (*c*).

In line with the assumptions of CLT, the direction and significance of the *a* paths reveal that temporal distance increases the abstractness of people's thoughts, the focus on desirability reasons relative to feasibility reasons, and the focus on arguments in favor of versus arguments against a focal action. The *b* paths reveal that this latter characteristic significantly influences participants' price perception: the higher salience of pros versus cons, induced by temporal distance, increased perceptions of quality and decreased perceptions of monetary sacrifice for the same high-priced product. Bootstrap analyses demonstrate that the mean indirect effect via valence is positive and significant for perceptions of quality ($a_3 \times b_3 = .30$) and negative and significant for perceptions of sacrifice ($a_3 \times b_3 = -.45$). The analyses also show a positive and significant indirect effect via the focus on desirability versus feasibility reasons for perceptions of quality ($a_2 \times b_2 = .39$) but not for perceptions of sacrifice.

These results indicate that temporal distance exerts an influence on consumers' interpretation of price information that is distinct from the motivational accounts that have been studied in the pricing literature (Suri and Monroe 2003). Whereas quality perceptions were influenced by both valence and a focus on the product's desirability, sacrifice perceptions were determined by the valence of people's thoughts. With increasing temporal distance, participants construed the purchase more in terms of pro arguments and less in terms of con arguments. This shift induced participants to focus more on the positive role of price as an indicator of quality and less on its negative role as an outlay of economic resources (Lichtenstein et al. 1993).

Although temporal distance is present in several consumption contexts, such as advance purchase orders or the evaluation of preannounced products, the question arises as to whether our findings generalize to other kinds of psychological distance. Many consumption situations, for example, involve social distance: buying presents, giving advice, or deciding for other people. In study 3, we therefore examine whether the pattern we observed also applies to social distance.

TABLE 2

STUDY 2: PROPOSED MEDIATION MODEL FOR THE INFLUENCE OF TEMPORAL DISTANCE ON PERCEPTIONS OF QUALITY AND SACRIFICE THROUGH LEVEL OF MENTAL CONSTRUAL

Regression analysis			Bootstrap analysis	
Effect	*b*	*p*	Indirect effect	95% CI
Dependent variable = quality perceptions:				
a_1	1.04	.00	$a_1 \times b_1 = -.06$	−.3453, .1958
b_1	−.06	.63		
a_2	.89	.00	$a_2 \times b_2 = .39$	.1069, .7649
b_2	.43	.00		
a_3	.'94	.00	$a_3 \times b_3 = .30$	.0765, .7764
b_3	.32	.00		
c	.06	.80		
Dependent variable = sacrifice perceptions:				
a_1	1.04	.00	$a_1 \times b_1 = .24$	−.1105, .6690
b_1	.23	.31		
a_2	.89	.00	$a_2 \times b_2 = -.23$	−.8232, .1139
b_2	−.26	.27		
a_3	.94	.00	$a_3 \times b_3 = -.45$	−.9093, −.1458
b_3	−.48	.01		
c	−.38	.35		

Illustration of the multiple mediator model

Temporal distance →	a_1 →	Abstractness	b_1 →	Perceptions of quality/sacrifice
	a_2 →	Desirability versus feasibility	b_2 →	
	a_3 →	Valence	b_3 →	
		c →		

NOTE.—Bootstrap analyses are based on 10,000 resamples.

STUDY 3

Method

Design and Stimulus. Ninety-nine undergraduate students (49% male; mean age = 22) participated in the computer-based study in exchange for a chance to win gift vouchers in a fair lottery. They were randomly assigned to one of four conditions of social distance (close vs. far) and price level (high vs. low). In a first pretest ($N = 24$), we selected a target product on the basis of its perceived relevance to students in general ($M = 5.75$, on a 7-point scale). The product, a digital pen, records and links audio to written text. In a second pretest ($N = 80$), we developed a product description that led to equally favorable evaluations when participants considered the product for themselves ($M = 4.61$) and for the average student ($M = 4.54$; $t(78) = .23$, $p > .80$). In a third pretest ($N = 32$), we determined the high (€115) and low (€45) price levels.

Procedure. We provided participants with the product description, supplemented by the respective price information. The social distance manipulation was adopted from previous research (Chandran and Menon 2004; Kim, Zhang, and Li 2008). Specifically, we told participants in the close social distance condition that their own evaluation of the product was of interest, whereas we told participants in the far social distance condition that their perception of the average undergraduate's evaluation was of interest. After reading the product description, participants were instructed to consider all information and to either report their own evaluation of the product (close social distance) or predict how the average undergraduate student would evaluate the product (far social distance), using the same items as in study 1 ($\alpha = .92$). The computer recorded participants' processing time. Afterward, participants listed thoughts that came to mind as they rendered their evaluations. In the close social distance condition, we then assessed participants' own perception of product quality and sacrifice, whereas in the far social distance condition, we assessed participants' prediction of the average undergraduate's perception of quality and sacrifice (for quality, $\alpha = .84$; for sacrifice, $\alpha = .97$). Finally, participants responded to a manipulation check, and they completed demographic questions.

Results and Discussion

As intended, participants in the close social distance condition indicated a stronger agreement with the statement that the study was about their own opinion regarding the product than did participants in the far social distance condition ($M_{close} = 5.44$ vs. $M_{far} = 1.49$; $t(97) = 39.05$, $p < .01$). Moreover, perceptions of sacrifice vary significantly between the two price level conditions ($M_{high} = 4.67$ vs. $M_{low} = 2.34$; $t(97) = 7.90$, $p < .01$).

To test how far social distance influenced participants' interpretation and use of price information, we conducted 2

(social distance) × 2 (price level) ANOVAs on the scales measuring perceptions of quality, perceptions of monetary sacrifice, and product evaluations. For perceptions of quality, results reveal a significant social distance × price level interaction ($F(1, 95) = 4.08$, $p < .05$), a marginally significant main effect of price level ($F(1, 95) = 3.13$, $p < .10$), and a significant main effect of social distance ($F(1, 95) = 5.74$, $p < .05$). As figure 3*A* shows, quality perceptions differ between the high and the low price level when participants predicted the average undergraduate's quality perception ($M_{high} = 4.79$ vs. $M_{low} = 3.99$; $F(1, 95) = 7.10$, $p < .01$) but not when they reported their own judgment ($M_{high} = 3.85$ vs. $M_{low} = 3.90$; $F < 1$). For perceptions of sacrifice, however, no social distance × price level interaction emerges ($F(1, 95) = .88$, $p > .35$). Results show only the above-described main effect of price level. Thus, social distance does not seem to affect the degree to which price is perceived as a monetary sacrifice.

An ANOVA on participants' product evaluations shows a marginally significant social distance × price level interaction ($F(1, 95) = 3.37$, $p < .07$) and a main effect of price level ($F(1, 95) = 17.61$, $p < .01$). Product evaluations are less favorable in the high price condition than in the low price condition, and this effect is stronger for participants' own evaluations ($M_{high} = 3.12$ vs. $M_{low} = 4.96$; $F(1, 95) = 18.39$, $p < .01$) than for their prediction of the average undergraduate's judgment ($M_{high} = 4.00$ vs. $M_{low} = 4.72$; $F(1, 95) = 2.76$, $p = .10$; see fig. 3*B*).

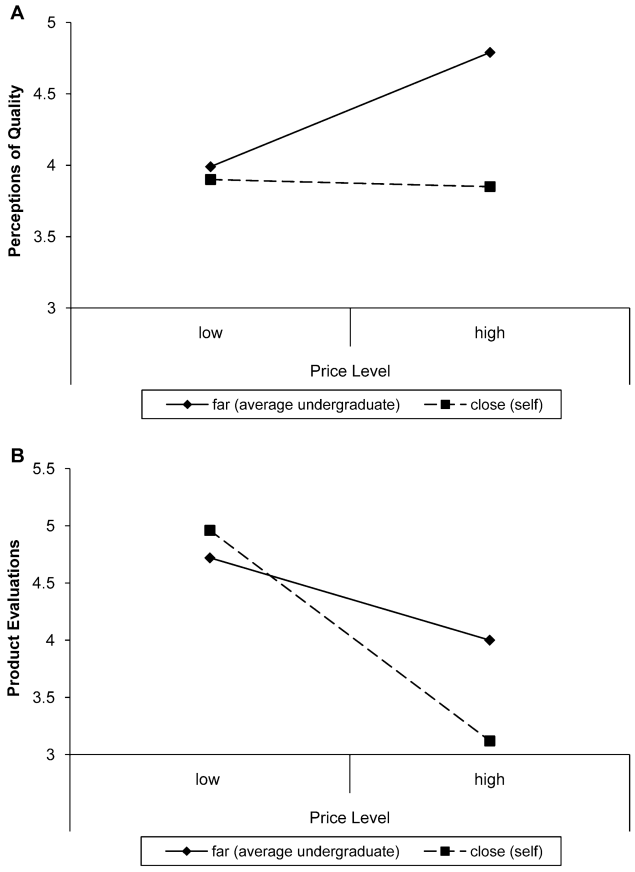
A dual mediation analysis with price level as the independent variable, product evaluations as the dependent variable, and quality and sacrifice perceptions as mediators reveals results similar to those for temporal distance (see study 1). A positive and significant indirect effect via quality perceptions emerges for the socially distant condition ($a_1 \times b_1 = .37$) but not for the socially close condition. For sacrifice perceptions, a negative and significant indirect effect emerges for the socially close condition ($a_2 \times b_2 = -1.09$) but not for the socially distant condition. Although social distance does not influence the price-perceived sacrifice relationship, the b_2 paths of the regression analyses show that the effect of sacrifice perceptions on product evaluations varies with social distance (see table 3). In line with CLT, consumers are more likely to consider feasibility-related information when evaluating a psychologically near (vs. distant) purchase.

To examine why social distance led to different perceptions of the same high price with regard to quality but not with regard to sacrifice, we now turn to the underlying cognitive processes. The following analyses focus on the high price condition ($n = 49$).

First, participants in the close social distance condition spent more time on the product evaluation ($M_{close} = 119.2$ seconds) than did participants in the far social distance condition ($M_{far} = 76.6$ seconds), although this difference is not statistically significant ($t(47) = 1.56$, $p > .10$). Nonetheless, we included this measure for cognitive effort as a covariate in the following analyses. Analogous to study 2, we coded

FIGURE 3

STUDY 3: EFFECTS OF SOCIAL DISTANCE AND PRICE LEVEL ON PERCEPTIONS OF QUALITY (*A*) AND PRODUCT EVALUATIONS (*B*)



participants' thoughts according to their abstractness ($\alpha = .86$), valence ($\alpha = .95$), and desirability versus feasibility focus ($\alpha = .86$) and tested for discriminant validity. These different characteristics of mental construal were then included as mediators of the effect of social distance on perceptions of quality. The same regression analyses were also conducted for perceptions of monetary sacrifice as the dependent variable. Table 4 shows results of the mediation analyses as well as the corresponding regression coefficients.

In line with our findings for temporal distance in study 2, the *a* paths reveal that social distance increases the abstractness of people's thoughts and leads to a stronger focus on desirability reasons compared to feasibility reasons. In contrast to temporal distance, however, social distance has no impact on the valence of thoughts, which emerged as the only construal characteristic influencing sacrifice perceptions in study 2. This finding thus provides an explanation of why social distance has no impact on sacrifice perceptions. For quality perceptions, study 2 revealed in-

TABLE 3

STUDY 3: PROPOSED MEDIATION MODEL FOR THE INFLUENCE OF PRICE LEVEL ON PRODUCT EVALUATIONS THROUGH PERCEPTIONS OF QUALITY AND SACRIFICE

Regression analysis			Bootstrap analysis	
Effect	*b*	*p*	Indirect effect	95% CI
Socially distant perspective results ($n = 49$):				
a_1	.81	.01	$a_1 \times b_1 = .37$	.1018, .8746
b_1	.45	.02		
a_2	2.62	.00	$a_2 \times b_2 = -.45$	−1.1724, .2139
b_2	−.18	.19		
c	−.60	.23		
Socially proximal perspective results ($n = 50$):				
a_1	.05	.86	$a_1 \times b_1 = .01$	−.3545, .2395
b_1	.45	.03		
a_2	2.06	.00	$a_2 \times b_2 = -1.09$	−1.9938, −.5062
b_2	−.53	.00		
c	−.72	.15		

Illustration of the multiple mediator model

	$a_1 \rightarrow$	Quality perceptions	$b_1 \rightarrow$	
Price level →	$a_2 \rightarrow$	Sacrifice perceptions	$b_2 \rightarrow$	Product evaluations
		$c \rightarrow$		

NOTE.—Bootstrap analyses are based on 10,000 resamples.

direct effects of temporal distance via valence and via a stronger focus on desirability versus feasibility reasons. However, as social distance is unrelated to valence, it only exerts a significant indirect effect on quality perceptions via a stronger focus on desirability versus feasibility reasons ($a_2 \times b_2 = .52$).

After calls to examine the cognitive processes underlying psychological distance effects (Kim et al. 2008), results of studies 2 and 3 reveal that both temporal distance and social distance increase abstractness and the prevalence of desirability-related over feasibility-related thoughts. With regard to valence, however, our findings are in line with Liberman, Trope, and Wakslak (2007), who state that although ample evidence suggests a positive relationship between temporal distance and positivity, this does not necessarily hold for social distance.

The foregoing studies demonstrate that despite differences depending on the type of psychological distance, a high price is more likely to elicit price-quality inferences when the purchase is not directly related to one's own experiences —because it either refers to the distant future or to another person. These interpretative differences are also apparent in the corresponding product evaluations and lead to more favorable evaluations of the same high-priced product when the purchase is psychologically distant than when it is near.

Whereas studies 1–3 varied psychological distance between subjects, temporal distance may also be subject to within-person variation: events that are initially distant inevitably become proximal as time passes (Liberman et al. 2007). Thus, a consumer may evaluate the same high-priced product first from a temporally distant perspective (e.g., on the basis of a product preannouncement) and later from a proximal perspective (e.g., when the product is launched and available for purchase). Study 4 therefore examines the degree to which later evaluations of a high-priced product from a proximal perspective differ from initial evaluations of the same product from a distant perspective.

STUDY 4

Temporal construal research has mainly examined how people evaluate actions that occur in either the distant or the near future and has given less attention to how initial judgments influence later ones (Lynch and Zauberman 2007). Such later evaluations may be made in either the presence (stimulus based) or the absence (memory based) of the initially available information. Moreover, focal information items can have clear high-level implications (e.g., with regard to desirability), clear low-level implications (e.g., with regard to feasibility), or implications for both aspects, depending on whether the context implies a proximal or distant perspective. Studies 1–3 have shown that price belongs to this latter kind of information.

The question that arises is whether price, once it has served as an indicator of quality from a distance, will be reevaluated according to its implications for sacrifice when a purchase becomes imminent. A study by Kim et al. (2009) examined such within-person shifts in temporal perspective and the implications for product evaluations. Table 5 summarizes the key findings.

The authors find that when the initially available information was not present during later judgments from a near perspective, these later judgments were based on the initial judgment. This finding suggests that an initial interpretation

TABLE 4

STUDY 3: PROPOSED MEDIATION MODEL FOR THE INFLUENCE OF SOCIAL DISTANCE ON PERCEPTIONS OF QUALITY AND SACRIFICE THROUGH LEVEL OF MENTAL CONSTRUAL

Regression analysis			Bootstrap analysis	
Effect	*b*	*p*	Indirect effect	95% CI
Dependent variable = quality perceptions:				
a_1	.55	.06	$a_1 \times b_1 = -.09$	−.3515, .1355
b_1	−.16	.30		
a_2	1.07	.00	$a_2 \times b_2 = .52$	.1214, 1.1353
b_2	.48	.00		
a_3	.25	.42	$a_3 \times b_3 = .06$	−.0465, .3995
b_3	.26	.08		
c	.48	.12		
Dependent variable = sacrifice perceptions:				
a_1	.55	.06	$a_1 \times b_1 = -.08$	−.6069, .1905
b_1	−.15	.56		
a_2	1.07	.00	$a_2 \times b_2 = .23$	−.2679, .8879
b_2	.21	.37		
a_3	.25	.42	$a_3 \times b_3 = -.14$	−.6327, .1776
b_3	−.54	.03		
c	.27	.59		

Illustration of the multiple mediator model

Social distance →	a_1 →	Abstractness	b_1 →	Perceptions of quality/sacrifice
	a_2 →	Desirability versus feasibility	b_2 →	
	a_3 →	Valence	b_3 →	
		c →		

NOTE.—Bootstrap analyses are based on 10,000 resamples.

of price as an indicator of quality may carry over to later judgments for immediate consumption, leading to equally favorable evaluations.

In many situations, however, focal information is also present during later judgments. Information about a new product, for example, may initially be communicated in advance of the product launch and later restated when the product is available for purchase. The accessibility-diagnosticity framework argues that the likelihood that an object-related cognition will be used as an input in subsequent judgments is a function of (1) the accessibility of the input in memory, (2) the accessibility of alternative inputs, and (3) the diagnosticities of the input and alternative inputs, where diagnosticity refers to the degree to which information is perceived as relevant and useful in a given context (Lynch, Marmorstein, and Weigold 1988). When a prior overall judgment and focal information are both accessible, the perceived diagnosticity of the initial judgment determines whether the consumer will use this judgment as a basis for the later judgment or use the externally available information to form a new judgment.

When the focal information comprises a mix of information items with clear high- or low-level implications, the initial judgment from a distant perspective does not incorporate all focal information but only those items with high-level implications (Kim et al. 2009). This lack of encoding of focal information items with low-level implications decreases the perceived diagnosticity of the initial judgment for later evaluations of the product (Peterman 1997). Hence, consumers may form a new judgment based on the accessible stimulus information (Lynch et al. 1988). In support of this reasoning, Kim et al. (2009) found that consumers used the previously unconsidered information items with low-level implications to form their new judgment from a proximal perspective as these were now perceived as diagnostic. Consumers thus considered different information items, depending on the respective temporal context. However, no conclusion can be drawn with regard to price information, as the study did not examine this case for information with context-dependent implications (see table 5).

We suggest that when price is the focal information, consumers will not revise their initial judgment even when this information is present during later judgments. During initial judgments from a distance, consumers interpret price according to its high-level implications for quality (see study 1). When consumers later reencounter the same price from a proximal perspective, they have already incorporated this information into their overall judgment, which should therefore be perceived as diagnostic (Peterman 1997). Thus, we expect that consumers will use the initial judgment as a basis for their later judgment from a proximal perspective. As a consequence, the quality-related implications of price may become "immortalized," and no reinterpretation of price according to its sacrifice-related implications will take place:

TABLE 5

STUDY 4: KEY FINDINGS FROM KIM ET AL. (2009) ON CONSTRUAL CARRYOVER EFFECTS

Implications of focal information item(s)	Presence of focal information item(s) during later judgment	
	No	Yes
Context independent	Carryover of initial evaluations (study 2)	Reevaluation (study 3)
Context dependent	Carryover of initial evaluations (study 4)	Not considered

NOTE.—Only results for later judgments from a proximal perspective that were preceded by an initial judgment from a distant perspective are reported.

H4: When consumers initially use price information to evaluate a product from a distant perspective, a later evaluation for proximal consumption in the presence of the same information will be similar to the initial judgment.

Method

Design and Stimulus. Study 4 examines the influence of exposure to price information during an initial product evaluation from a distant perspective on a subsequent judgment of the same product from a proximal perspective. To tease apart the effect of an initial exposure to price information on a subsequent stimulus-based judgment from a proximal perspective, we (*a*) varied the presence of price information during the initial judgment and (*b*) included a control group where only an evaluation from a proximal perspective takes place. We also controlled for the actual delay between initial and subsequent judgments (Kardes 1986).

One hundred and fifty-nine undergraduate students (66% male; mean age = 21) participated in the study in exchange for a chance to win gift vouchers in a fair lottery. They were randomly assigned to one of four conditions of presence of price information during initial judgments (present vs. absent) and delay between subsequent judgments (short vs. long). Temporal perspective (distant vs. proximal) was varied within subjects. In addition, we included a proximal perspective control condition without an initial evaluation from a distant perspective (see fig. 4 for an overview). We used the same stimulus and price level (€210) as in study 1.

Procedure. At time 1, participants were provided with the product description, which included price information in the price-present condition. We manipulated temporal perspective with the same preannouncement scenario used in study 1 for the distant condition. Participants were asked to consider all available information and to evaluate the product for distant future consumption on the basis of the same items administered in the previous experiments ($\alpha = .82$).

In the short-delay condition, participants received the time 2 information after performing an unrelated filler task that took 10 minutes to complete. In the long-delay condition, participants engaged in a second session of the experiment 2 weeks later and then received the time 2 information. The product description was restated, supplemented by price information in all conditions. To increase the realism of the scenario, participants were told that the e-book reader had just been launched in another country and that the company has decided to begin selling the product in selected bookstores in the student's country, including the university's bookstore, starting the day after tomorrow. Temporal perspective was manipulated with the same instruction used in study 1 for the proximal condition. Participants were then asked to consider all information and to evaluate the product, this time for proximal consumption ($\alpha = .91$). After this evaluation, participants indicated their attention to price information when evaluating the product, and they responded to demographic questions and to manipulation checks.

Results and Discussion

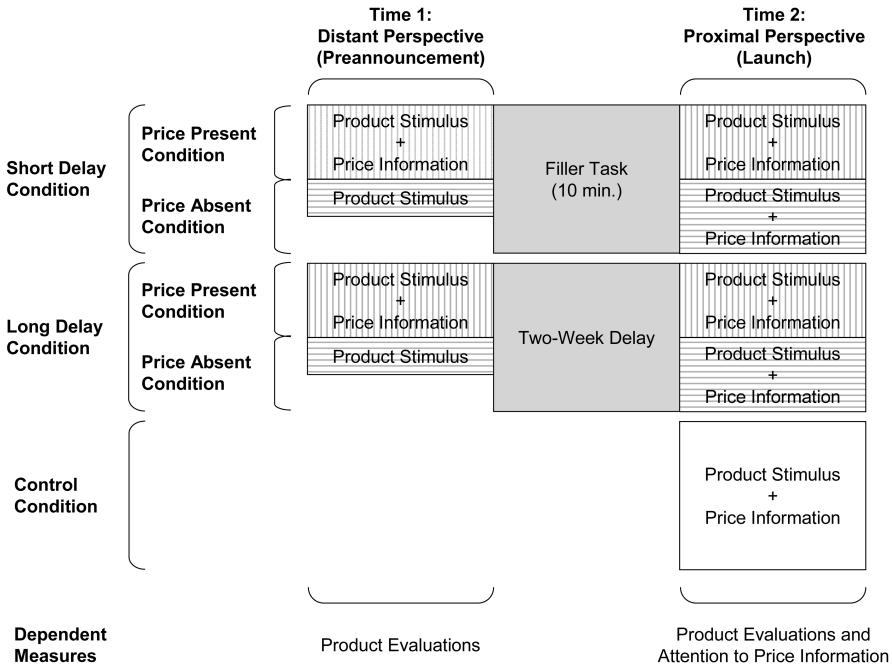
Participants indicated a lower agreement with the statement that the launch was imminent at time 1 compared to time 2 ($M_{dist} = 3.60$ vs. $M_{prox} = 5.00$; $t(129) = 4.91$, $p < .01$), providing evidence for a successful within-subjects manipulation of temporal perspective. Also, a greater proportion of respondents in the price-present condition (92%) than in the price-absent condition (3%) indicated that price was available during their initial judgment ($\chi^2 = 103.73$, $p < .01$).

A repeated-measures ANOVA was conducted on participants' product evaluations. Presence of price information during initial judgments at time 1 (present vs. absent) and delay between subsequent judgments (short vs. long) were between-subjects factors, and temporal perspective (time 1, distant, vs. time 2, proximal) was a within-subjects factor. Results reveal a significant within-subjects main effect of temporal perspective ($F(1, 126) = 74.22$, $p < .01$). Participants evaluated the product more favorably from a distance at time 1 ($M_{dist} = 5.55$) than when considering it for proximal consumption at time 2 ($M_{prox} = 4.76$). In line with Kardes (1986), delay had no moderating effect ($F(1, 126) = .35$, $p > .55$; see fig. 5), whereas the main effect of temporal perspective is conditioned by a significant interaction with presence of price information during initial judgments from a distant perspective ($F(1, 126) = 56.62$, $p < .01$).

Follow-up examinations of the different presence of price conditions show that when participants considered price information during their initial judgment, their later evaluation from a proximal perspective was similar to this initial judgment ($M_{dist} = 5.54$ vs. $M_{prox} = 5.44$; $F(1, 64) = 1.97$, $p > .16$; hypothesis 4). However, when no price information was

FIGURE 4

STUDY 4: OVERVIEW OF EXPERIMENTAL CONDITIONS



present during initial judgments but was first encountered at time 2, product evaluations declined from time 1 to time 2 ($M_{dist} = 5.56$ vs. $M_{prox} = 4.08$; $F(1, 64) = 77.42$, $p < .01$) and were similar to the proximal perspective control condition without a preceding judgment ($M_{cont} = 4.22$; $t(92) = .51$, $p > .60$).

Our rationale for expecting these effects was that when consumers had already considered price as an indicator of quality from a distance, they should be less likely to reinterpret the same price according to its sacrifice-related implications from a proximal perspective. In line with this reasoning, we find that the degree to which participants focused on price in evaluations for proximal consumption was lower when price information was present in a previous judgment ($M_{pres} = 4.83$) compared to the condition where price was absent during initial judgments and the control condition ($M_{abs} = 5.66$, and $M_{cont} = 5.52$; $F(2, 156) = 5.66$, $p < .01$).

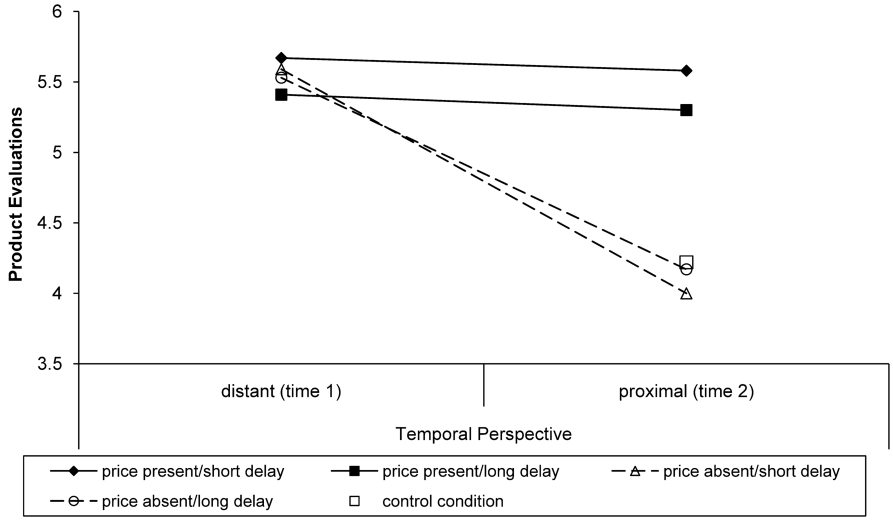
The findings from study 4 show how individuals use information that has both high- and low-level implications when they evaluate the same product repeatedly from different temporal perspectives. When individuals use such information as an input for product evaluation for the first time, they interpret it according to its evaluative implications in the respective temporal context. However, when they evaluate the same product again on the basis of the same information in a different temporal context, they give this information less attention and may therefore not reinterpret it according to its implications for the new temporal context.

An important question is how far the carryover of the quality-related implications of price has an impact on demand—that is, how far consumers who have already incorporated price information into a previous evaluation from a distant perspective indicate a higher willingness to pay and purchase intention when facing an immediate purchase. Such an effect is reasonable as pricing research assumes that "varying levels of sacrifice and informational components connect to variations in consumers' willingness to pay" (Völckner 2008, 373).

We thus conducted a follow-up study where we replicated the short delay condition (see fig. 4) with willingness to pay and purchase intention as the focal dependent variables at time 2. Forty-nine undergraduate students (60% male; mean age = 20) participated in this follow-up. They were randomly assigned to one of two conditions of presence of price information during initial judgments (present vs. absent). Results reveal that participants who had already incorporated price information into their initial judgment indicate a higher willingness to pay when evaluating the product for immediate consumption ($M_{pres} = €181.96$) compared to the condition in which price information was absent during initial judgments ($M_{abs} = €131.25$; $F(1, 47) = 5.89$, $p < .05$). A similar result arises for purchase intentions ($M_{pres} = 4.78$ vs. $M_{abs} = 3.02$; $F(1, 47) = 16.01$, $p < .01$). These

FIGURE 5

STUDY 4: PRODUCT EVALUATIONS ACROSS TIME



findings provide initial evidence that psychological distance effects may also have a bearing on the slope of the demand curve.

GENERAL DISCUSSION

We examine whether a purchase that is perceived as psychologically distant elicits other reactions to price than does a purchase that is perceived as psychologically near. Psychological distance may arise when people evaluate products that are not yet available for purchase or when they predict how other people would evaluate a certain product. We show that with increasing psychological distance, people are more likely to construe price according to its high-level implications for quality and less likely to focus on its role as monetary sacrifice. Also, when price is initially used to judge a product from a temporally distant perspective, it receives less attention as an indicator of sacrifice in a later evaluation from a proximal perspective.

These findings have important research implications. Every context factor that leads people to focus more on the quality-related implications of price and less on its role as monetary sacrifice may affect the demand curve (Ding et al. 2010). Previous pricing research has shown that consumers may infer quality from price when they lack the ability or motivation to process product-related information (Suri and Monroe 2003). We extend this research by showing that people are also more likely to interpret price according to its quality-related implications when a purchase is psychologically distant than when it is psychologically near. In particular, psychological distance affects price perception through differences in the valence of people's thoughts and through differences in their focus on ends- versus means-related aspects, thus providing support for the conceptualization of the price–perceived quality relationship as a positively valenced, ends-related cognition (Lichtenstein et al. 1993; Zeithaml 1988).

The result that psychological distance affects price perception also has important methodological implications. First, research examining effects of processing motivation on price perception using temporal distance scenarios (Suri and Monroe 2003) might also assess level of mental construal to unconfound motivation effects from construal level effects. Second, pricing research relying on scenarios that may implicitly affect psychological distance, for example, by using concept test scenarios (Miyazaki, Grewal, and Goodstein 2005) or scenarios that give participants the freedom to evaluate a purchase for themselves or for someone else (Rao and Monroe 1988), might also control for construal level effects. Third, many preference elicitation methods induce psychological distance. For example, it is a long-standing phenomenon that conjoint measurement results tend to underestimate the importance of price compared to marketplace reality (Heeler, Okechuku, and Reid 1979). Against this background, a recent study by Ding, Grewal, and Liechty (2005) empirically shows that participants in conventional conjoint tasks exhibit lower price sensitivity than do participants in a conjoint task with incentive structures that align with actual purchase behavior. The authors argue that this result may stem from the hypothetical research setting of conventional conjoint studies, where the product is not immediately available for purchase. Our research provides a theoretical explanation for this phenomenon and shows that psychologically distant settings may decrease the emphasis consumers put on the sacrifice-related implications of price.

This research also complements CLT. Early studies examining effects of temporal distance argue that distance may operate analogously to involvement by influencing people's motivation to process information (Meyers-Levy and Maheswaran 1992). CLT, however, proposes that "psychological distance may exert an effect on persuasion independently through changes in mental construal as well as through changes in personal relevance" (Fujita et al. 2008, 571). Our results reveal that increases in temporal and social distance increase the abstractness of thoughts and lead to a stronger focus on ends- versus means-related considerations. However, whereas temporal distance also induces positivity, no such effect emerges for social distance (see also Liberman et al. 2007). Future research might therefore assess effects of other kinds of psychological distance to uncover similarities as well as differences in the underlying processes.

Results of study 4 help to answer the question of when the mental construal of a particular piece of information from a psychologically distant perspective carries over to subsequent evaluations from a proximal perspective (Lynch and Zauberman 2007). In our research, we characterize the evaluative implications of the focal information as either context independent or context dependent, and we differentiate whether this information is present or absent during subsequent evaluations (see table 5). Extending existing research on construal carryover effects (Kim et al. 2009), we focus on information with context-dependent implications (i.e., price) that is present during subsequent evaluations from a proximal perspective. Relying on the accessibility-diagnosticity framework (Lynch et al. 1988), we show that once price has been interpreted according to its quality-related implications from a distance, the resulting overall judgment serves as a diagnostic basis for later judgments from a proximal perspective, leading to an "immortalization" of the quality-related implications of price.

However, our study is also subject to limitations that provide potential avenues for future research. First, the focus of our study is on the effects of psychological distance on price perception. In line with previous work on the dual role of price (Suri and Monroe 2003), we therefore held all other product-related information constant. Future research might examine the degree to which psychological distance influences potential interactive effects of price with other extrinsic cues, such as warranties, on consumers' quality perceptions (Miyazaki et al. 2005).

Second, following previous research (Chandran and Menon 2004; Kim et al. 2008), we used the self-other distinction to manipulate social distance. Future research might examine the robustness of our results for other operationalizations of social distance (e.g., friend vs. stranger).

Apart from being theoretically relevant, our research has important implications for the design of prelaunch communication activities. Previous research proposes that consumers often delay the adoption of a newly introduced product because they believe its price is too high (Greenleaf and Lehmann 1995). Our findings suggest that consumers' reluctance owing to sacrifice-related concerns at the time of launch may be attenuated by announcing the product's price well in advance of the actual product launch. This early price announcement enables consumers to integrate price information as a quality-related aspect into an initial overall product evaluation. Such an initial evaluation may then be used as a basis for a later reevaluation of the product when it is launched and available for purchase.

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