

Re-Inquiries

The Effect of Multiple Extrinsic Cues on Quality Perceptions: A Matter of Consistency

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Building on past research, this article illustrates when a price-quality relationship holds in the presence of multiple extrinsic cues. When intrinsic information is scarce, the relationship is more pronounced when a positive price cue is paired with a positive second cue (e.g., strong warranty, positive country of origin, or strong brand). When the two cues are inconsistent, consumers find the negative cue more salient and overweight it in their evaluations. This interaction is moderated by the presence of abundant levels of intrinsic attribute information. Our predictions are replicated across five studies, and the underlying process is supported.

Products constitute an array of intrinsic and extrinsic attributes that consumers use to determine product quality. Intrinsic attributes are an integral part of and inseparable from the physical product. Extrinsic attributes (e.g., price, warranty, country of origin, or brand name) are not physical components of the product, and changes have no material effects on the actual product, yet they often serve as cues that may affect consumers' quality perceptions (Kirmani and Rao 2000). Previous work (Nowlis 1995; Obermiller 1988; Richardson, Dick, and Jain 1994) has examined consumers' reactions to multiple quality signals but has had equivocal results.

We suggest that these findings can be reconciled by ex-

amining the consistency between the extrinsic cues (e.g., price and warranty) used to assess quality. We propose that a linear form of information integration accounts for evaluations when cues are consistent but that a negativity bias dominates evaluations when cues are inconsistent, with more weight accorded the negative cue (Anderson 1981, 1996). We present five studies and incorporate a broad range of manipulations and cue pairings to support our hypotheses and identify the process behind these results.

CONCEPTUAL BACKGROUND

Information integration, a generally accepted treatise of how consumers arrive at judgments, proposes that evaluations are based on combining intrinsic product features and extrinsic cues (Alba et al. 1999). Intrinsic attribute information generally dominates extrinsic cues for formulating evaluations because it is deemed more useful than extrinsic cues (Purohit and Srivastava 2001; Rao and Monroe 1988). However, when intrinsic information is scarce or not deemed useful, or there is no opportunity to process it, extrinsic cues are more likely to be used to assess product quality, resulting in an evaluation that is more heuristic in nature (Monroe 2003; Suri and Monroe 2003).

The most commonly studied extrinsic cue is the relationship between price and perceived quality; almost 100 studies

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have been published in the past 30 yr. (Brucks, Zeithaml, and Naylor 2000). Recent studies into the effects of extrinsic cues find that introducing additional cues to the price model has equivocal results. For example, Dodds, Monroe, and Grewal (1991) test the effects of three extrinsic cues—price, brand, and store name—on product quality assessments and predict that brand name should enhance the price-quality relationship. However, when other extrinsic cues are added to the equation, the price-quality relationship weakens. We suggest that the synergistic effects did not occur because the price manipulation used by Dodds et al. (1991) was not perceived as high enough to fit their high-prestige brand manipulation. Consequently, the brand cue swamped the price cue, though the brand name was enhanced when paired with other, similar cues.

In another study, Dawar and Parker (1994) observe that brand name and price together are most useful in quality determinations. In their survey, however, brand and price cues were assumed to change together and were not manipulated to offer potentially inconsistent information. Similarly, Brucks et al. (2000) find that when price is paired with a consistent brand cue, it is used significantly more often than when the brand cue is absent. Analogously for other extrinsic cues, Chao (1989) finds that the price-quality relationship is enhanced when paired with a positive country-of-origin brand, and Boulding and Kirmani (1993) find that warranty effects are stronger when paired with information indicating high-reputation warrantors.

The differences among the multiple cue studies reviewed may be parsimoniously accounted for by synthesizing insights from cue consistency theory (Maheswaran and Chaiken 1991) with traditional information integration approaches (Anderson 1981, 1996). Cue consistency theory proposes that multiple sources of information are more useful when they provide corroborating information than when they offer disparate conclusions. In such cases, attitudes are derived by a straightforward integration of their values. That is, when cues are consistent, they are more likely to be used jointly in evaluations that employ information integration models such as linear averaging (Anderson 1981; Maheswaran and Chaiken 1991).

We predict, however, that the typical “parallelism” assumption in many averaging models, that is, that the values of the cues can be added together to determine the observed response, will not account for evaluations when cues are inconsistent (cf. Anderson 1981, 1996). Instead, when extrinsic cues present contradictory signals, consumers focus on the negative cue and anchor their perceptions of quality accordingly (Ahluwalia 2002; Anderson 1981; Campbell and Goodstein 2001; Herr, Kardes, and Kim 1991). This negativity bias explanation is consistent with data presented by Boulding and Kirmani (1993), who find that increasing warranty strength fails to improve (and may even decrease) evaluations of a low-reputation warrantor.

Anderson (1965) first reported on the negativity bias as a violation of parallelism in terms of person perceptions. He found that when confronted with negative information,

respondents weighted it more heavily in the averaging model than they did positive information. Anderson (1996) reports that weights used in information integration are determined by their usefulness and salience. He reports that negative information may be viewed as more useful than positive information but adds that the salience of any information can be manipulated as well (Anderson 1996). Cue consistency is one such way of manipulating salience, in that when two inputs are consistent both receive similar attention, but when they are inconsistent, salience of the information becomes heightened and the more negative piece of information tends to be more salient. In other words, we predict that when two cues are inconsistent, the overall quality assessment is not enhanced by the higher or stronger cue, and quality assessments are similar to those derived when both cues are low or weak. In this way, information integration accounts for both sets of (in)consistency propositions such that the equal weighting averaging model may be used when cues are consistent, but nonparallelism (unequal weighting) dominates when the cues are inconsistent.

H1: There will be an interaction effect of price and warranty on consumers’ perceptions of product quality, such that the effect of either cue will be stronger when paired with a consistent (i.e., High Price/Strong Warranty) versus inconsistent, alternate cue (Low Price/Weak Warranty or High Price/Weak Warranty). When price and warranty cues present inconsistent information, the more negative cue will be more salient and dominate evaluations (i.e., Low Price/Strong Warranty or High Price/Weak Warranty will not be different from Low Price/Weak Warranty).

Recall, however, that the consistency effects just described will be observed most readily when extrinsic cues dominate evaluations. When the information environment includes abundant and useful levels of intrinsic information and there is opportunity to process it (cf. Suri and Monroe 2003), we predict that it will dominate signaling effects. Extrinsic cues are not ignored when intrinsic attribute information is used. Rather, when there are abundant levels of usable intrinsic information and consumers are motivated to process it, extrinsic cues are less informative about quality. Following this logic, the interaction effect described for consistent and inconsistent cue pairs is unlikely to occur when extrinsic cues are accompanied by abundant levels of intrinsic attribute information. Thus, we predict a three-way interaction when consumers are motivated and have the opportunity to process this intrinsic attribute information (cf. Suri and Monroe 2003).

H2: There will be an interaction effect of intrinsic attribute information and extrinsic cues on consumers’ perceptions of product quality such that when intrinsic attribute information is scarce (abundant), price and warranty cues will (not) interact to affect consumers’ perceptions of quality.

METHODOLOGY

We examine the hypotheses in a series of studies that establish the predicted consistency effect using price and warranty cues, as well as the negation of that effect when intrinsic attribute information dominates evaluations. We generalize the effect by moving beyond price-warranty pairings, and we examine the applicability of the negativity bias for explaining the evaluation of inconsistent cues by analyzing process measures.

Study 1

Experimental Design. A 2 (Low/High Price) \times 2 (Weak/Strong Warranty) \times 2 (intrinsic attribute information Low/High) between-subjects design was used to test the hypotheses. Our price and warranty manipulations were based on a content analysis of tire advertisements in a local metropolitan area. Price was manipulated as low (\$19 per tire) or high (\$200 per tire); local advertised prices ranged from \$12.95 to more than \$300 per tire. The warranty was manipulated as weak ("limited" warranty: replacement only if the manufacturer determines that a defect is present, valid for 3,000 mi. or 90 days) or strong ("full" warranty: replacement or full refund for a malfunction or dissatisfaction of any kind, valid for the first 50,000 mi. of tire wear or 5 yr.). Finally, intrinsic attribute information was manipulated as scarce or abundant. The scarce condition included general information about the new innovation and the manufacturer, whereas the abundant condition also included information about five relatively favorable and important intrinsic attributes based on a review of ads and official government standards (e.g., rim width, speed, and safety ratings).

Procedure. Executive MBA participants ($N = 123$) were assigned randomly to pretested experimental conditions, which were presented as evaluations of a new plastic automobile tire (Shimp and Bearden 1982). Information regarding the product manufacturer implied a relatively high reputation (cf. Boulding and Kirmani 1993). After carefully reviewing the product description at their own pace, participants completed a perceived quality scale assessing their agreement with four quality-related statements ("high quality product," "quality is questionable" [reverse coded], "probable quality is good," and "appears to be quality"; $\alpha = .94$). They then assessed the relative usefulness of the intrinsic versus extrinsic attribute information provided by allocating 100 points across the attributes (Ahluwalia 2002; Kalra and Goodstein 1998; Pham and Avnet 2004). Price and warranty manipulation checks ("relative to similar products the price (warranty) is Low/High (Weak/Strong)"), demographics, and a measure assessing the respondents' opinions about the purpose of the study followed.

Results. Manipulation check results indicate that price (Low = 1.98, High = 5.68; $F(1, 114) = 306.25, p < .01$) and warranty (Weak = 2.50, Strong = 6.18; $F(1, 114) = 262.15, p < .01$) were viewed as intended. In terms of the hypothesized effects, our analysis reveals a significant

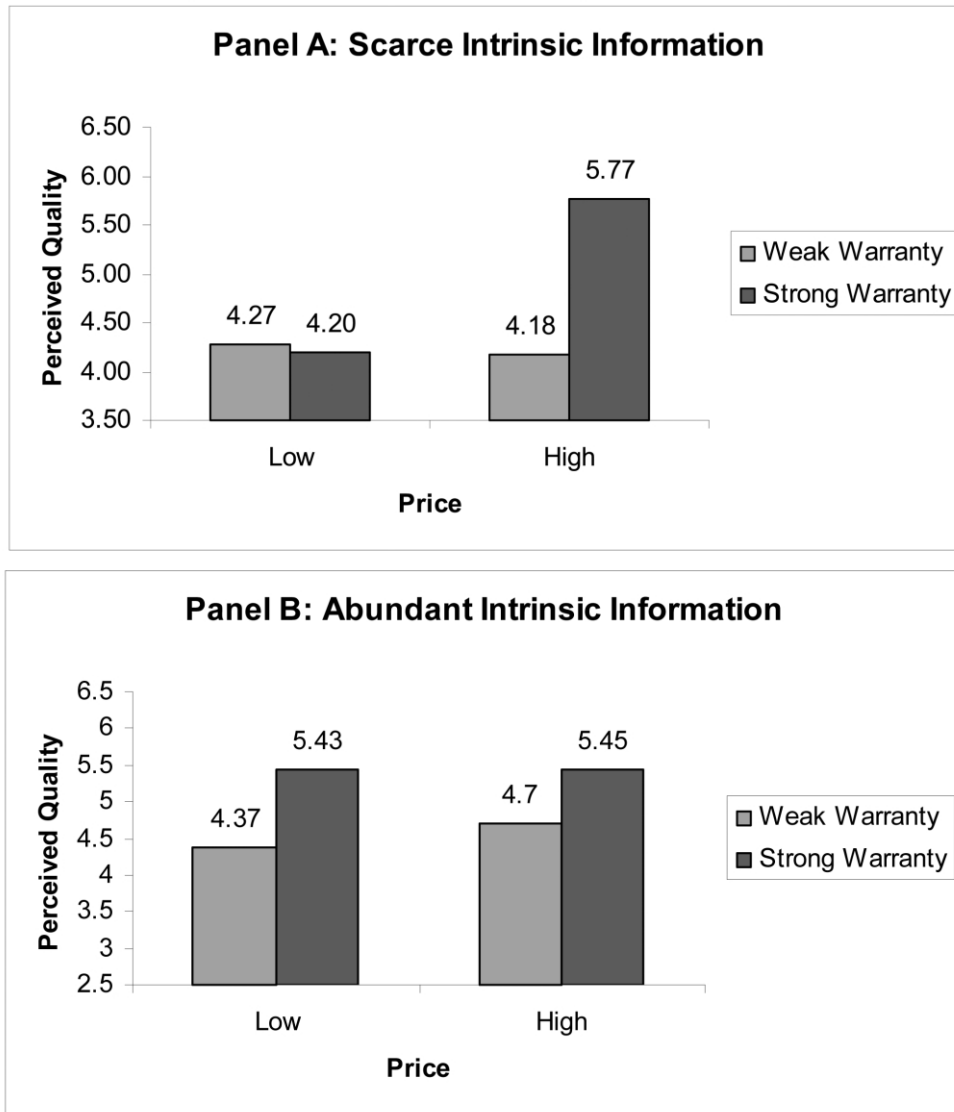
price \times warranty \times intrinsic information interaction on perceived quality ($F(1, 114) = 4.51, p < .05$, see fig. 1). By analyzing the nature of the interaction using planned contrasts, we find that when intrinsic information is scarce, price has a positive effect on perceived quality in the presence of a strong warranty (Low = 4.20, High = 5.77; $F(1, 114) = 11.20, p < .01$) but no effect in the presence of a weak warranty (Low = 4.27, High = 4.18; $F < 1$, NS). These contrasts also indicate that, when intrinsic information is scarce, the warranty has a positive effect on perceived quality in the presence of a high price (Weak = 4.18, Strong = 5.77; $F(1, 114) = 12.26, p < .01$) but no effect in the presence of a low price (Weak = 4.27, Strong = 4.20; $F < 1$, NS). Furthermore, we find no mean differences for the inconsistent conditions relative to the low price/weak warranty pairing (all F 's < 1 , NS). These results provide strong support for hypothesis 1, and the means indicate that when cues are inconsistent, evaluations are equivalent to those provided in the low price/weak warranty condition. In the abundant intrinsic attribute information condition, although there was a main effect of warranty ($F(1, 114) = 7.53, p < .01$), the significance of the interactive relationship between price and warranty disappears (all F 's < 1 , NS), which supports hypothesis 2. Additional planned contrasts with the usefulness measure as the dependent variable indicate that the intrinsic attribute information is significantly more useful in determining quality ($M = 53.43$) than is the price ($M = 15.59$; $t(59) = 9.20, p < .01$) or warranty cue ($M = 23.14$; $t(59) = 6.64, p < .01$).

Discussion. Study 1 provides strong support for our consistency hypotheses, as well as for the dominance of intrinsic attribute information over extrinsic cues in quality determination. Specifically, we show that a target cue is a stronger predictor of perceived quality when paired with a consistent versus an inconsistent alternate cue. Furthermore, inconsistent cue evaluations are equally negative when both cues are weak. Finally, study 1 confirms that the interactive effects of the extrinsic cues are reduced in the presence of readily abundant and usable intrinsic attribute information. Replicating the dominance of intrinsic attribute information adds face validity to our research. The following studies do not manipulate this factor so that we can delve deeper into our consistency and negativity predictions.

Study 2

To examine the price ambiguity that often accompanies new product introductions, price manipulations were presented as ranges and matched those presented in local advertisements (cf. Petrosius and Monroe 1987). The low price range was \$20–\$40, and the high price range was \$140–\$160. The success of the price range manipulation was measured using three scales (Under/Overpriced, Unreasonable/Reasonable, and Low/High; cf. Shimp and Bearden 1982; $\alpha = .83$). Perceived warranty was assessed using three items as well (Unsatisfactory/Satisfactory, Excellent [Strongly Disagree/Strongly Agree], and Bad/Good;

FIGURE 1
PRICE WARRANTY INTERACTION



$\alpha = .88$). Pretest ($N = 41$) results indicated that these were appropriate for both price (Low = 2.89, High = 4.46; $F(1, 37) = 24.90, p < .01$) and warranty (Weak = 3.29, Strong = 4.75; $F(1, 37) = 27.25, p < .01$). Thus, study 2 used a 2 (Low [\$20–\$40]/High [\$140–\$160] price range) \times 2 (Weak/Strong Warranty) between-subjects research design ($N = 67$) using the quality measures from study 1 ($\alpha = .98$).

The ANOVA reveals that participants correctly perceived both the price range (Low = 2.76, High = 4.45; $F(1, 62) = 44.70, p < .01$) and warranty manipulations (Weak = 3.10, Strong = 5.39; $F(1, 63) = 56.73, p < .01$). In terms of the hypothesis, ANOVA reveals a significant

price \times warranty interaction ($F(1, 63) = 4.14, p < .05$), and planned contrasts support the hypothesized effects. In the strong warranty condition, the higher price range cue results in a higher quality rating than does the lower price range cue (Low = 3.72, High = 4.56; $F(1, 63) = 4.97, p < .05$). In the weak warranty condition, the price range manipulation has no effect on perceived quality (Low = 3.99, High = 3.77; $F < 1, NS$). We find similar results for warranty; in the high price range condition, a stronger warranty cue results in a higher quality rating than does the weak warranty cue (Weak = 3.77, Strong = 4.56; $F(1, 63) = 4.58, p < .05$). In the low price range condition, the warranty cue manipulation has no effect on qual-

ity ratings (Weak = 3.99, Strong = 3.72, $F < 1$, NS). In both cases, the mean ratings in the inconsistent conditions are not different from those in the low price/weak warranty condition (all F 's < 1 , NS). Thus, hypothesis 1 was strongly supported (see fig. 2).

Study 2 extends the generalizability of our results and provides a more rigorous test of our hypothesis by including price range manipulations. The results resoundingly support the hypothesized effects; however, we are left wondering if our results pertain only to price and warranty per se rather than to extrinsic cue consistency in general. Studies 3 (and 4) examine the role of country of origin (and brand) in place of warranty.

Studies 3 and 4

Study 3. We used a 2 (Low [\$19]/High [\$200] Price) \times 2 (Weak [Mexico]/Strong [Germany] country of origin [COO]) between-subjects design experiment ($N = 83$) with quality as the dependent measure ($\alpha = .84$). In a pretest of six countries, Germany had been rated significantly higher than Mexico ($t(22) = 35.97$, $p < .001$) in terms of general manufacturing capabilities, a factor that serves as a surrogate for country strength (Chao 1989). The ANOVA reveals that in the study, respondents correctly perceived both the price (Low = 1.42, High = 6.34; $F(1, 79) = 1,216.33$, $p < .01$) and country of origin manipulations (Weak = 2.30, Strong = 6.03; $F(1, 79) = 316.79$, $p < .01$).

As predicted, we find a significant price \times COO interaction ($F(1, 79) = 48.47$, $p < .05$), and planned contrasts support that in the strong COO condition, the higher price cue results in a significantly higher quality rating than does the lower price cue (Low = 3.04, High = 6.05; $F(1, 79) = 112.13$, $p < .05$). In the weak COO condition, the price manipulation has no effect (Low = 2.69, High = 2.98; $F < 1$, NS). We find similar results for COO, where in the high price condition, a stronger COO cue re-

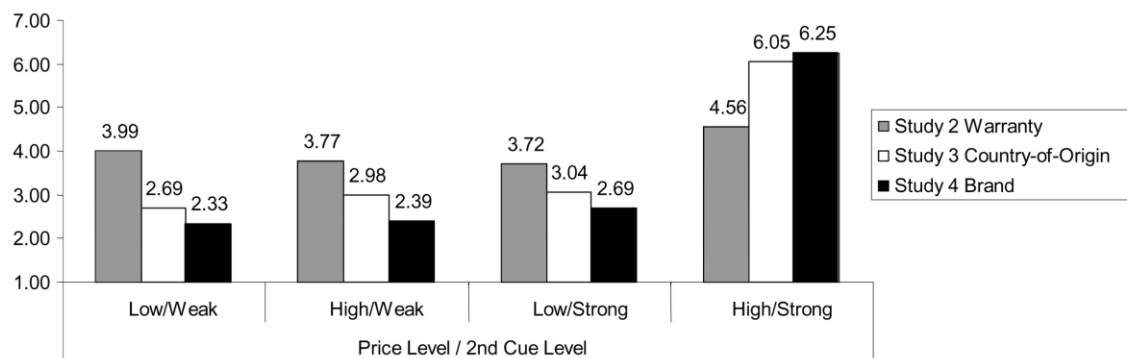
sults in a higher quality rating than does the weak COO cue (Weak = 2.98, Strong = 6.05; $F(1, 79) = 124.48$, $p < .05$). In the low price conditions, the COO manipulation has no effect (Weak = 2.69, Strong = 3.04, $F < 2$, NS). Furthermore, the inconsistent conditions do not differ from the low price/weak COO ratings of quality (all F 's < 1 , NS). This set of results supports the hypothesized effect and is depicted in figure 2.

Study 4. In this experiment ($N = 87$), we employ a 2 (Low [\$19]/High [\$200] Price) \times 2 (Weak [Walchfield]/Strong [Goodyear] Brand Name) between-subjects design on quality ($\alpha = .94$). In a pretest, Goodyear was rated higher than Walchfield ($t(20) = 52.02$, $p < .001$) in terms of brand knowledge, which is a measure of brand strength (Keller 1993). The ANOVA indicates that respondents in the study correctly perceived both the price (Low = 1.24, High = 6.48; $F(1, 83) = 1,516.48$, $p < .01$) and brand-name manipulations (Weak = 1.26, Strong = 6.93, $F(1, 83) = 2,435.99$, $p < .01$). The analysis reveals a significant price \times brand name interaction ($F(1, 83) = 69.45$, $p < .05$), and planned contrasts support that when the brand is strong, the higher price cue results in a significantly higher quality rating than does the lower price cue (Low = 2.69, High = 6.25; $F(1, 83) = 136.85$, $p < .05$). When the brand is weak, the price manipulation has no effect (Low = 2.33, High = 2.39; $F < 1$, NS). Similar results are found for brand name; when price is high, a stronger brand cue results in a higher quality rating than does a weak brand (Weak = 2.39, Strong = 6.25; $F(1, 83) = 164.43$, $p < .05$). When price is low, the brand cue has no effect (Weak = 2.33, Strong = 2.69, $F < 2$, NS). Again, none of the inconsistent condition ratings differ from the low price/weak brand condition (all F 's < 1 , NS). Together, these results again provide strong support for the hypothesis and are depicted in figure 2.

Discussion. Studies 3 and 4 extend our results by using COO and brand cues in place of warranty. The consistency

FIGURE 2

GRAPHICAL DEPICTION OF INTERACTION RESULTS (STUDIES 2–4)



NOTE.—In study 2, low warranty refers to weak warranty condition and high warranty refers to strong warranty.

hypothesis is supported as is the negativity bias in the case of inconsistent cues. Thus, our results are not limited to the warranty cue. It remains unclear, however, whether the consistency effects may result from our extreme price differentials or if they are valid at more moderate price levels. If the effects hold for moderately priced offers, the consistency effects are both theoretically and ecologically valid. Furthermore, we propose a negativity bias in the case of inconsistent cues but need to include process measures to show this to be the case.

Study 5

In this study ($N = 123$), we employ a 3 (Low [\$19]/Moderate [\$69]/High [\$119] Price) \times 2 (Weak/Strong Warranty) between-subjects experimental design. The warranty manipulation, experimental procedure, and quality scales ($\alpha = .96$) are the same as in study 1. Additionally, respondents were asked to list all the thoughts and feelings they had while formulating their opinions of the tire. Half of the respondents were asked for these thoughts prior to the perceived quality measure and half afterward. Order of the thought listing task had no effects and is not discussed further. We also added measures on the salience (not/very relevant, not/very useful, or not at all/very important) of price ($\alpha = .96$) and warranty ($\alpha = .90$). Participants believed that the product was one they would expect to find on the market (mean = 7.80 on a nine-point scale), that the price offer was believable (mean = 8.20 on a nine-point scale), and that they had an average knowledge (mean = 3.10 on a five-point scale) and expertise (mean = 4.85 on a nine-point scale). Manipulation checks in the study indicated that price (Low = 1.08, Moderate = 4.70, High = 8.29; $F(2, 117) = 906.37, p < .001$) and warranty (Weak = 1.47, Strong = 8.46; $F(1, 117) = 1,819.23, p < .001$) were viewed as intended.

The analysis reveals a significant price \times warranty interaction on quality ratings ($F(2, 117) = 26.57, p < .001$), and planned contrasts indicate that when the warranty is strong, price has a significant effect on quality (Low = 2.26, Moderate = 5.23, High = 6.39; $F(2, 117) = 57.54, p < .001$; all pairwise contrasts significant at $p < .01$). When the warranty is weak, however, price has no effect (Low = 1.96, Moderate = 1.93, High = 2.37; $F < 1, NS$). There are significant warranty effects when price is high (Weak = 2.37, Strong = 6.39; $F(1, 117) = 104.26, p < .001$) and moderate (Weak = 1.93, Strong = 5.23; $F(1, 17) = 72.72, p < .001$) but not when price is low (Weak = 1.96, Strong = 2.26, $F < 1, NS$). We again find that the evaluations do not differ between the inconsistent scenarios and the low price/weak warranty condition (all F 's $< 1, NS$). These results indicate that our hypothesis replicates and extends to the moderate price condition.

To test the underlying process, we used our measures of cue salience and the thought listings, which were coded by two judges according to their valence (positive, negative, or neutral) and focus (price, warranty, both, or neither). Interjudge reliability was greater than 95%, and disagreements

were resolved through discussion. We also calculated the differences between positive and negative thoughts to assess the negativity bias, as well as the difference between price and warranty thoughts, to assess respondents' relative focus on the negative cue (see table 1).

We find a significant price \times warranty interaction for both saliency measures, and all planned contrasts were significant at the $p < .05$ level. Consistent with our process explanations, the results indicate that price is more salient when it is low and warranty is strong compared with when price is moderate or high and warranty is weak. Similarly, the results indicate that warranty is more salient when it is weak and price is high, compared with when the strong warranty is paired with the low or moderate price. We also find that more negative thoughts occur when the price condition is low compared with moderate or high, and when the warranty is weak compared with strong. In addition, the means suggest that respondents had more positive thoughts when price was moderate or high and warranty was strong than in any other condition. This same pattern appears for the negative minus positive thought difference variable and the focus differences.

Discussion. Study 5 expands the ecological validity of the consistency effects by incorporating a moderate price condition, for which the effect is supported. Furthermore, the study both finds and explains the negativity bias using thought listings. It appears that the negative cue is more salient when paired with a positive alternate cue.

GENERAL DISCUSSION

Within the pricing domain, studies examining the effect of multiple extrinsic cues on the price-quality relationship have been equivocal (Chao 1989; Dodds et al. 1991). We suggest that these disparate results may occur because researchers did not consider cue consistency in their studies. In our first study, we find that two extrinsic cues are significantly more predictive of quality when they are consistent than when they present inconsistent information. This interaction, however, disappears in the presence of abundant levels of intrinsic attribute information. Study 2 expands the boundaries of the consistency effect by investigating more broadly defined warranties and price ranges. Studies 3 and 4 test the robustness of this effect on other extrinsic cues, and study 5 provides more realism by including a moderate price and data to support our implied process.

On the basis of our findings, we suggest that cueing norms should be reexamined after the consistency between the cues used is considered. For example, Dawar and Parker (1994) suggest that the use of price, brand, and other cues are universal phenomena but do not examine how global consumers combine multiple cues to arrive at quality judgments. Unless cues are presented separately, it is hard to ignore the relationship among them. Although these authors suggest which cues are used most frequently, we believe that cue combinations may be used in different ways depending on the valence of the information each provides. Thus, the

TABLE 1
STUDY 5: PROCESS-ORIENTED MEASURES

Variable	Price salience	Warranty salience	Negative thoughts (%) ^a	Positive thoughts (%)	Negative (%) minus positive (%)	Price thoughts (%) ^b	Warranty thoughts (%) ^c	Price (%) – warranty thoughts (%) ^d
Means:								
Low price:								
Weak warranty	5.68	5.88	.74	.08	-.66	.24	.27	-.03
Strong warranty	5.61	4.07	.47	.15	-.32	.34	.00	.34
Moderate price:								
Weak warranty	2.61	6.13	.51	.22	-.28	.09	.44	-.34
Strong warranty	4.42	4.80	.10	.58	.48	.09	.17	-.08
High price:								
Weak warranty	2.83	5.80	.62	.16	-.46	.15	.21	-.07
Strong warranty	4.74	5.38	.04	.81	.78	.18	.15	.03
df error	117	117	105	105	105	105	105	105
Price <i>F</i> -value <i>df</i> = 2	29.23**	4.80**	7.95**	11.47**	12.86**	5.68**	4.16*	8.74**
Warranty <i>F</i> -value <i>df</i> = 1	23.46**	46.36**	37.18**	29.87**	45.90**	.76	15.39**	10.65**
Price × warranty <i>F</i> -value <i>df</i> = 2	6.68**	5.48**	1.54	6.37**	4.75**	.41	1.70	1.12

^aThe means for the three levels of price are .60 (Low), .31 (Moderate), and .33 (High). The means for the two warranty levels are .62 (Weak) and .20 (Strong).

^bThe means for the three levels of price are .29 (Low), .09 (Moderate), and .16 (High).

^cThe means for the three levels of price are .13 (Low), .30 (Moderate), and .18 (High). The means for the two warranty levels are .31 (Weak) and .11 (Strong).

^dThe means for the three levels of price are .16 (Low), -.21 (Moderate), and -.02 (High). The means for the two warranty levels are -.15 (Weak) and .09 (Strong).

**p* < .05.

***p* < .01.

weighting scheme of cue usage depends on their agreement rather than just the ordering, as suggested by Dawar and Parker (1994).

The reason that the weighting may be different draws us back to the reason cues are used. Extrinsic cues are often used to reduce the risk associated with product evaluation and choice. When cues are in agreement, they can be averaged or linearly combined to arrive at product evaluations (Anderson 1981), but the weighting of each piece of information changes when the valence of the cues disagree. Here, it appears that more negative cues dominate evaluations, as evidenced by both ratings and thought processes. The idea that negative information receives more weight in evaluations is not new (Ahluwalia 2002), but it has not been used to examine the effect of multiple cues. Furthermore, this finding is consistent with the failure of more negative cues to reduce the risk that cues were meant to address originally (Campbell and Goodstein 2001).

In conclusion, this article raises the possibility that research examining the effects of multiple extrinsic cues on evaluations may have been equivocal because cue pairs differed in the strength of each cue. Instead of concluding that disparate results result from the type of cues used (e.g., price, brand, and COO), we suggest that the results may result from the agreement between the signal that each cue provides. Across five studies, we find that evaluations are enhanced when both cues present positive quality inferences. However, when either cue in a pair provides a weak quality signal, overall evaluations are reduced regardless of the valence and extremity of the positive cue. In contrast to the current set of multiple explanations for the inconsistent re-

sults, our cue consistency perspective offers a more parsimonious explanation for the set of findings that we reinvestigate in this research.

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