The Role of Selective Information Processing in Price-Quality Inference

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This research investigates the effects of the amount of information presented, information organization, and concern about closure on selective information processing and on the degree to which consumers use price as a basis for inferring quality. Consumers are found to be less likely to neglect belief-inconsistent information and their quality inferences less influenced by price when concern about closure is low (vs. high) and information is presented randomly (vs. ordered) or a small amount of information is presented. Results provide a picture of a resource constrained consumer decision maker who processes belief-inconsistent information only when there is motivation and opportunity.
Consumers frequently assume that price and quality are highly correlated, and that as the price of a product increases, its quality increases commensurately (“you get what you pay for”). This assumption exerts a powerful influence on the degree to which consumers use price to infer quality (Baumgartner 1995; Bettman, John, and Scott 1986; Broniarczyk and Alba 1994; Pechmann and Ratneshwar 1992; Rao and Monroe 1988, 1989). However, little is known about other variables that influence how heavily consumers rely on price when inferring quality. This research seeks to elucidate boundary conditions that govern price-based quality judgments; and, in so doing, helps to reconcile some conflicting findings concerning effects of information format and selective processing of belief-inconsistent information reported in previous research.

SELECTIVE INFORMATION PROCESSING THEORY

Judgment involves generating and testing tentatively held interpretations, expectations, evaluations, or possibilities (Hoch and Deighton 1989). Because the evidential bases for judgment are often scattered and complex, consumers often simplify the judgment formation and evaluation process by focusing on a single hypothesis or possibility at a time, and by focusing selectively on hypothesis-consistent evidence while neglecting hypothesis-inconsistent evidence (Sanbonmatsu, Posavac, Kardes, and Mantel 1998). When the evidence supporting a focal hypothesis meets a minimum confirmation threshold, the hypothesis is accepted and information processing ceases. A plausible hypothesis that is considered first is more likely to be accepted than a less focal but more viable alternative hypothesis, and this leads to judgments that are more extreme and that are held with greater confidence than is warranted by the available evidence.

The expectation that two variables are related encourages people to focus selectively on cases that support the hypothesis and to neglect non-supportive cases. For example, consumers
who believe that a strong positive relationship exists between price and quality are likely to focus on high price/high quality products and on low price/low quality products. Unexpected information (about high price/low or low price/high quality products) tends to be neglected, especially when processing is difficult. Variables that increase sensitivity to belief-inconsistent evidence should reduce the degree to which consumers rely on price to predict quality.

Moderators of Selective Information Processing

*Information Load.* Selective information processing is likely to be influenced by the amount of information available to serve as a basis for judgment. Belief-consistent information is easy to process and is often accepted at face value. By contrast, belief-inconsistent information is difficult to process because this information requires effortful inconsistency resolution (Wyer and Srull 1989). Consequently, people exhibit greater memory for belief-consistent information when information load is high and processing is difficult, and greater memory for belief-inconsistent information when information load is low and the processing resources needed for inconsistency resolution are available.

*Information Organization.* The manner in which information is presented has also been shown to be an important determinant of processing difficulty (Baumgartner 1995). Bettman, Creyer, John, and Scott (1988) and Broniarczyk and Alba (1994) hypothesized that covariation judgments should be more accurate when information is presented in an easy-to-process rank ordered list format (i.e., brands ranked by quality in descending order) as opposed to a random format, but no effects of format on judgment were found in these studies, presumably due to low
information load. Under conditions of high information load, however, strong effects of a rank
ordered presentation versus a random presentation of information on judgment should be
observed. When load is high, consumers should focus on easy-to-process belief-consistent
information, and this is more readily accomplished when information is presented in a rank
ordered list format.

Concern about Closure. Another important determinant of selective information
processing is the concern about closure – or the desire for a definite opinion, any opinion rather
than confusion, ambiguity, or inconsistency (Kruglanski and Webster 1996). This concern about
closure is influenced by variables that emphasize the benefits of attaining judgmental closure or
downplay the costs of reaching premature closure. When concern about closure is high, people
are motivated to reach a judgment or decision as quickly as possible (“seizing”), and are
motivated to hold this judgment for as long as possible (“freezing”).

As the need for closure increases, people consider less evidence; draw snap conclusions
that have obvious and immediate implications for action; and neglect complex, ambiguous, and
belief-inconsistent information. Each of these strategies increases the speed with which closure
is attained, but does so at the risk of decreasing judgmental accuracy due to streamlined search,
construal, and integration processes that increase the likelihood of neglecting important
alternatives, evidence, or implications of evidence. Similar effects on judgment are observed
regardless of whether concern about closure is manipulated (e.g., any variable that makes
information processing difficult or unpleasant heightens concern about closure) or measured as a
trait (Webster and Kruglanski 1994).
Concern about closure differs from involvement and the need for cognition (Cacioppo, Petty, Feinstein, and Jarvis 1996). More elaborative, effortful processing occurs as involvement or as the need for cognition increases. However, attaining closure can require either limited or extensive processing. When closure can be attained easily, processing effort decreases as the need for cognitive closure increases. However, when closure is difficult to attain because the initial evidence does not support any conclusion, processing effort increases as the need for cognitive closure increases. Webster and Kruglanski (1994) obtained a correlation of -.28 between the need for cognition and concern about closure.

THE PREDICTION TASK

Broniarczyk and Alba (1994) presented information about price (in dollars), quality (in ratings on a scale from 0 to 100), and amount of advertising (in thousands of dollars per month) for 25 brands of stereo speakers. Several different versions of this table were created. In each version, the correlation between price and quality was held constant at zero, the correlation between amount of advertising and quality was manipulated, and the format was manipulated. After studying the data, participants were asked to rate the quality of 10 test brands that were not included in the original set of 25 brands. For each of the 10 test brands, price and amount of advertising information was presented, but no information about quality was presented. Based on participants’ quality ratings (on a scale from 0 to 100) for the test brands, price-quality correlation coefficients and advertising-quality correlation coefficients were computed. The results revealed that participants overestimated the strength of the relationship between price and quality in all conditions, except for the condition in which amount of advertising and quality were perfectly correlated. Participants also underestimated the strength of the relationship
between amount of advertising and quality in all conditions, except for the condition in which amount of advertising and quality were uncorrelated.

Contrary to the implications of the selective information processing explanation of price-quality inference, no effect for information list format (rank ordered vs. random) was observed. Rather than rejecting the selective processing explanation, we suggest that the explanation should be tested in experiments that control for variables hypothesized to moderate the likelihood of selective information processing. Broniarczyk and Alba (1994) used a relatively small amount of information (i.e., information pertaining to 25 brands) in each of their five experiments. Providing information about a larger set of brands (e.g., 100 brands) may encourage selective processing to reduce processing difficulty. However, even when a large amount of information is available, selective processing should be less likely when information is presented in a random (vs. rank ordered) list format to consumers with a low (vs. high) concern about closure, because these factors should increase sensitivity to belief-inconsistent evidence, reducing the degree to which consumers rely on price to predict quality.

**EXPERIMENT 1**

Participants and Design

Participants were 118 undergraduates at a large Midwestern university. Participants were randomly assigned to conditions in a 2 (rank ordered vs. random list format) x 2 (high vs. low concern about closure) x 2 (Top 100 list or 100 Best Buys list) between-subjects design.

Procedure
Participants received a questionnaire booklet stating that the purpose of the study was to examine people’s perceptions of quality given specific information about a product. The instructions described the prediction task and the importance of prediction in everyday life (see Broniarczyk and Alba 1994, p. 137). In high concern about closure conditions, participants were told, “it is not necessary to spend a great deal of time pondering the questions. In fact, please answer the questions as quickly as possible (while still providing an accurate answer) without taking a lot of time to ponder each one – simply provide your initial, honest opinion.” In addition, participants were reminded that their responses were anonymous and confidential and would be combined with those of many others who participated in the study (Kruglanski and Webster 1996).

In low concern about closure conditions, participants were told, “it is extremely important that you take your time and carefully consider your responses and answer the questions as accurately as possible. Make sure that your answers are correct and reflect your true opinion – accurate responses are very important.” In addition, participants were reminded that their responses were anonymous and confidential, but that because there was a small group of people responding to the survey, their responses would have a strong impact on the results of the study.

During the learning phase, participants received information about the brand name, the type of wine, the region where the wine is produced, the retail price, and the quality rating. Half of the participants received this information rank ordered by quality, and half received this information in random order. Half of the participants received the Top 100 Wines of 1999 (published by the *Wine Enthusiast*), and the objective price-quality correlation was $r = .27, p < .05$. Half received the 100 Best Buys of 1999 (published by the *Wine Enthusiast*), and the
objective price-quality correlation was $r = .22, p < .05$. No main effects or interactions were found for the type of list presented, so the data were collapsed across this replication factor.

During the test phase, participants were asked to provide quality inferences (on a scale from zero to 100) for ten hypothetical wines described in terms of price. Subjective price-quality correlation coefficients were computed on the basis of participants’ quality inferences (Broniarczyk and Alba 1994). Participants were not permitted to refer back to the product information. Finally, participants received questions pertaining to familiarity with the different varieties of wine, the different brands of wine, and wine consumption. No differences were found on quality inferences as a function of these familiarity variables.

Results and Discussion

Mean subjective price-quality correlations as a function of information load, organization, and motivation to process selectively for experiments 1, 2, and 3, are presented in table 1.

Prior to analysis, the price-quality correlations were converted to $z$ scores using Fisher’s $r$ to $z$ transformation. A 2 (rank order vs. random organization) x 2 (high vs. low concern about closure) analysis of variance performed on $z$ scores yielded a information organization x accuracy motivation interaction, $F(1,114) = 6.89, p < .01$. Follow-up tests showed that the effects of information organization on price-quality inference was more pronounced in low ($M = .71$ vs. .84, $t(114) = 2.79, p < .01$) than in high concern about closure conditions ($M = .92$ vs. .92, $ns$).

Insert table 1 about here
The results show that, although the price-quality relationship is typically overestimated, the degree to which consumers use price to infer quality decreases when a large amount of information is presented randomly to individuals with low concern about closure. This result suggests that the conclusion that information organization fails to influence price-quality inference was reached prematurely in prior research (Bettman et al. 1988; Broniarczyk and Alba 1994). Information organization has a strong impact on price-quality inference when cognitive load is high because high load encourages consumers to simplify a judgment task by processing information selectively.

EXPERIMENT 2

The results of experiment 1 suggest that information load has an important influence on selective processing and on price-quality inference. Experiment 2 provides a stronger test of these hypotheses by manipulating information load and by using multiple predictors.

Participants and Procedure

Fifty-six undergraduates were randomly assigned to high (100 brands) versus low (10 brands) information load conditions. The 100 brand list was the “100 Best Buys” list published by the Wine Enthusiast, and 10 brands were selected from this list to create the shorter list. (Brands on this short list were chosen randomly from the larger list until a representative short list of 10 brands was assembled. Specifically, the objective price-quality correlation was $r = .22$, $p < .05$, for both lists, the quality ratings ranged from 95 to 88 for both lists, and the same six
countries of origin were used in both lists.) The instructions and the procedure were the same as those used in experiment 1 except that measured concern about closure was used, rather than manipulated accuracy motivation, and three predictors were used.

During the prediction phase, participants were asked to infer quality for 10 hypothetical brands using three predictive cues: price, country of origin, and the number of cases produced per year for each brand. None of the predictors were correlated. Country of origin was unrelated to price, $\chi^2 = 4.00, ns$, to number of cases produced, $\chi^2 = 8.01, ns$, and to quality ratings, $\chi^2 = 4.00, ns$, (median-splits were performed on the predictors to relate to country of origin). The number of cases produced per year was unrelated to price ($r = -.29, ns$) and to quality ($r = -.07, ns$). When predictors are uncorrelated, “the correlation of each predictor with the quality response is equivalent to a standardized regression weight and therefore reflects participants’ reliance on each predictor when estimating quality” (Broniarczyk and Alba 1994, p. 121).

Next, the 42-item Need for Cognitive Closure Scale (alpha = .82) was administered to measure concern about closure, and participants were blocked into high versus low conditions based on a median-split performed on their scores (Webster and Kruglanski 1994). A multiple regression analysis treating need for cognitive closure scores as a continuous variable showed a replication of the analysis of variance results, with a significant influence of load, $t(52) = 3.11, p < .01$, and concern about closure, $t(52) = 2.51, p < .05$. The load by concern about closure interaction was non-significant.

Results and Discussion
A 2 (high or low load) x 2 (high or low concern about closure) analysis of variance performed on z scores showed that subjective price-quality correlations were higher in high load than in low load conditions ($M = .72$ vs. .53), $F(1,52) = 9.34$, $p < .01$, and were higher in high than in low concern about closure conditions ($M = .69$ vs. .54), $F(1,52) = 4.02$, $p < .05$. Planned contrasts showed that the effects of load on price-quality inference was more pronounced in low ($M = .46$ vs. .66, $t(52) = 2.00$, $p < .05$) than in high concern about closure conditions ($M = .63$ vs. .72, $ns$). The results show that the degree to which consumers use price as a basis for inferring quality decreases as information load decreases, and as concern about closure decreases. The results indicate that consumers rely heavily on price as a predictor of quality even when multiple predictors are available.

**EXPERIMENT 3**

Experiment 3 investigates the effects of information organization and accuracy motivation on selective processing and on price-quality inference for a different product category. Multiple predictors were used, and a brand name recognition task was employed to assess selective processing.

**Participants and Procedure**

Participants were 161 undergraduates from two Midwestern universities. No significant main effects or interactions were found for the source of the data set so the data were collapsed across this factor. Participants were randomly assigned to conditions in a 2 (rank ordered vs. random list format) x 2 (high vs. low concern about closure) between-subjects design.
Instructions and procedures were similar to the previous experiments except that a different manipulation of concern about closure was used, the product category was different, and manipulation checks and a brand name recognition task were administered after the prediction task. For low concern about closure conditions, additional instructions telling participants that people sometimes over- or under-estimate the relationship between price and quality, and therefore, to be careful when making their predictions, and to carefully consider the list in order form an accurate prediction. Participants received information about 50 brands of digital cameras. The brand name, the power zoom capacity, the retail price, and quality ratings were provided for each brand. For the camera list, the objective price-quality correlation was $r = .20 \ (ns)$. There were no other significant relationships between quality and zoom power ($r = .07, \ ns$) and price and zoom power ($r = .09, \ ns$).

During the prediction phase, participants were asked to infer quality for 10 hypothetical digital camera brands using price and zoom power as predictors (these predictors were uncorrelated, $r = .04, \ ns$).

Next, manipulation checks for concern about closure, involvement, and need for cognition were administered. Six-point scales ranging from one (strongly disagree) to six (strongly agree) were used. Five items assessed concern about closure (alpha = .80): “I was worried about making mistakes on the prediction task” (Reverse scored); “I continued to think about the prediction task, even after I provided my answers” (R); “I struggled with the prediction task” (R); “The answers to the prediction task came to me quickly; I disliked the prediction task because it was confusing” (R). Two items assessed involvement (alpha = .77): “The prediction task was relevant to me personally; The prediction task was important to me personally.” Two items assessed the need for cognition (alpha = .78): “I don’t like to have to do a lot of thinking”
“I try to avoid situations that require thinking in depth about something” (R). As predicted, the concern about closure manipulation had a stronger effect on the concern about closure, \( F(1,159) = 5.68, p < .02 \), than on involvement, \( F(1,159) = 1.44, ns \), or need for cognition, \( F(1,159) < 1, ns \).

Finally, participants were shown a list of digital camera brand names and were told that some of the brands were presented earlier and some were not. Recognition confidence was measured on scales ranging from one (definitely was not presented) to 10 (definitely was presented). A total of 24 brand names were presented, with six “belief consistent” brands (i.e., high quality/high price or low quality/low price), six “belief inconsistent” brands (i.e., high quality/low price or low quality/high price), and 12 filler brands.

Results and Discussion

A 2 (rank order vs. random organization) x 2 (high vs. low concern about closure) analysis of variance performed on z scores yielded an organization x accuracy motivation interaction, \( F(1,157) = 4.78, p < .03 \). Follow-up tests showed that the effect of information organization on price-quality inference was more pronounced for high accuracy motivation (\( M = .22 \) vs. \( .48, t(157) = 2.31, p < .02 \)) than in low accuracy motivation conditions (\( M = .53 \) vs. \( .57, ns \)).

A 2 (rank order vs. random organization) x 2 (high vs. low accuracy motivation) x 2 (belief consistent brands vs. belief inconsistent brands (within-subject factor)) analysis of variance performed on brand name recognition scores yielded a main effect for belief consistency (\( M = 6.61 \) vs. \( 5.86 \), \( F(1, 157) = 26.69, p < .001 \). More importantly, results showed a
significant organization x belief consistency interaction, $F(1,157) = 6.17, p < .02$. Recognition confidence was higher for belief-inconsistent cases in random (vs. rank ordered) list format conditions, ($M = 6.14$ vs. 5.60), $t(157) = 2.56, p < .01$. Recognition confidence for belief-consistent cases did not differ as a function of format, ($M = 6.54$ vs. 6.57, $ns$).

There was also a significant concern about closure x belief consistency interaction, $F(1, 157) = 4.17, p < .02$. Recognition confidence tended to be higher for belief-inconsistent cases in low (vs. high) concern about closure conditions, ($M = 6.04$ vs. 5.67) $t(157) = 1.71, p < .08$. Recognition confidence for belief-consistent cases did not differ as a function of the concern about closure, ($M = 6.52$ vs. 6.69, $ns$).

The results support the selective processing hypothesis account using a different manipulation of concern about closure, a different product category, and a recognition confidence measure of the degree to which participants processed information selectively. Recognition confidence was greater for belief-consistent information when information was presented in a rank ordered list format because such a format increases the ease with which consumers can focus on belief-consistent cases. When information was presented in a random format, more balanced processing occurs because consumers are more likely to encounter belief-inconsistent cases unintentionally.

**EXPERIMENT 4**

The goal of experiment 4 was to examine the extent to which the effects of concern about closure on price-quality inference generalize across products (interior house paint and boxed chocolates) and across data sets having high ($r = .80$) versus low ($r = .20$) objective price-quality correlations. High information load (i.e., 50 brands) and a random format were held constant,
and concern about closure was measured as a trait (Webster and Kruglanski 1994). In addition to measuring price-quality inferences, price-quality covariation judgments were assessed.

Participants and Design

One hundred and sixty two undergraduates were randomly assigned to conditions in a 2 (high or low concern about closure) x 2 (high or low objective price-quality correlations) x 2 (product category: interior house paint or boxed chocolates) mixed design with two between-subject factors and one within-subject factor (product category).

Procedure

Participants received information about 50 brands of interior house paint. The brand name, the type of paint (flat, low-luster, or semi-gloss), the price per gallon, and quality ratings were provided for each brand. The objective price-quality correlation was high ($r = .80$) for half of the participants, and low ($r = .20$) for the remaining participants. After the learning phase, participants were asked to infer the quality of 10 hypothetical brands based on type of paint and price. During the learning phase, the type of paint was unrelated to both quality and price in high, $\chi^2 = 1.40, ns$, and $\chi^2 = 4.51, ns$, respectively, and in low objective price-quality correlation conditions, $\chi^2 = .72, ns$, and $\chi^2 = 4.51, ns$, respectively. During the prediction phase, paint type was unrelated to price, and $\chi^2 = .28, ns$. Subjective price-quality correlations were computed using participants’ quality inferences.
Next, covariation judgments were assessed. The instructions stated, “a positive relationship exists when one variable increases as another increases. A negative relationship exists when one variable decreases as another variable increases.” Participants were asked to indicate the direction and the strength of the relationship between price and quality, type of paint and quality, and price and type of paint, on scales ranging from -10 (perfect negative relationship) to +10 (perfect positive relationship). The midpoint of each scale was labeled 0 (no relationship).

After completing the judgment tasks for paint, participants were asked to perform the same judgment tasks for a different product category, receiving information about 50 brands of boxed chocolates. The brand name, the country of origin, the price per ounce, and quality ratings were provided. The objective price-quality correlation was high ($r = .80$) for half of the participants, and low ($r = .20$) for the remaining participants. During the learning phase, the country of origin was unrelated to both quality and price in high, $\chi^2 = 9.64$, ns, and $\chi^2 = 8.54$, ns, respectively, and in low objective price-quality correlation conditions, $\chi^2 = 8.98$, ns, and $\chi^2 = 8.54$, ns, respectively. During the prediction phase, country of origin was unrelated to price, and $\chi^2 = 3.33$, ns. After the learning phase, participants were asked to infer the quality of 10 hypothetical brands based on country of origin and price. Again, subjective price-quality correlations were computed and covariation judgments were assessed for price-quality, country-quality, and price-country relationships.

Finally, the 42-item Need for Cognitive Closure Scale (alpha = .86) was administered to measure concern about closure, and participants were blocked into high versus low conditions based on a median-split performed on their scores (Webster and Kruglanski 1994). A multiple regression treating measured need for cognitive closure scores as a continuous variable showed a
replication of the analysis of variance results, with a significant objective correlation by concern about closure interaction, \( t(158) = 2.28, p < .05 \).

Results and Discussion

A 2 (high or low concern about closure) x 2 (high or low objective correlation) x 2 (product category) analysis of variance performed on z scores yielded main effects for concern about closure (\( M = .78 \) vs. .67), \( F(1, 158) = 20.05, p < .001 \), objective price-quality correlation (\( M = .79 \) vs. .66), \( F(1, 158) = 23.63, p < .001 \), and for product category, (\( M = .75 \) vs. .69), \( F(1, 158) = 5.63, p < .02 \). Subjective price-quality correlations were greater in high concern about closure, high objective price-quality correlation, and paint conditions.

These effects were qualified by a significant concern about closure x objective price-quality correlation interaction, \( F(1,158) = 7.00, p < .01 \). Follow-up tests show that the effects of high versus low objective price-quality correlations on subjective price-quality correlations were more pronounced under low concern about closure conditions (\( M = .56 \) vs. .77, \( t(158) = 5.34, p < .001 \)), than under high concern about closure conditions (\( M = .74 \) vs. .81, \( n.s. \)). Hence, individuals with low concern about closure were sensitive to objective price-quality correlations, but individuals with high concern about closure were not.

A 2 (concern about closure) x 2 (objective price-quality correlation) X 2 (product category) analysis of variance performed on price-quality covariation judgments revealed main effects for concern about closure (\( M = 5.52 \) vs. 4.68), \( F(1,158) = 5.20, p < .02 \), and for objective price-quality correlation, (\( M = 5.97 \) vs. 4.23), \( F(1,158) = 23.75, p < .001 \). Covariation judgments
were greater in high concern about closure and in high objective price-quality correlation conditions.

Analyses of variance performed on the non-focal covariation judgments for paint and for chocolate yielded a marginally significant concern about closure by objective correlation interaction for type of paint-price covariation judgments, $F(1,158) = 3.71, p < .06$. Participants tended to form lower covariation judgments under low concern about closure than under high concern about closure for low objective correlation conditions ($M = 2.31$ vs. $3.86$), $t(158) = 1.83, p < .07$. No other effects were observed.

The results show that objective price-quality correlations influence subjective price-quality correlations when the concern about closure is low, but not when the concern about closure is high. Individuals with high concern about closure often neglect belief-inconsistent information because inconsistency resolution delays closure. Individuals with low concern about closure, on the other hand, are more sensitive to belief-inconsistent information and this sensitivity often results in less extreme inferences. This pattern was observed across product categories (interior house paint and boxed chocolates).

**GENERAL DISCUSSION**

The results of four experiments show that, although consumers typically assume that price and quality are correlated, the degree to which price is used as a basis for inferring quality is reduced when concern about closure is low (vs. high), provided that information load is high (vs. low) and information is presented randomly. This pattern of results generalizes across stimuli, single and multiple predictor judgment tasks, manipulated or measured concern about
closure, and across product categories. Considered together, the results are consistent with a selective information processing theoretical analysis of the system of variables that moderate the extent to which consumers use price as a predictor of quality. The results paint a profile of a resource constrained consumer decision maker who processes belief-inconsistent information only when motivation encourages and opportunity permits.

When manipulated or measured concern about closure is high, consumers focus selectively on belief-consistent information and neglect belief-inconsistent information that could delay closure (Kruglanski and Webster 1996). When concern about closure is low, consumers are more likely to consider the judgmental implications of belief-inconsistent evidence. As the amount of belief-inconsistent evidence considered increases, consumers form less extreme inferences based on price. The beneficial effects of the low concern about closure on inference are particularly evident when a large amount of information is presented in a random format. Consumers are more likely to encounter unexpected cases and, consequently, are less likely to process information selectively when information is presented in a random format. By contrast, a rank ordered format facilitates selective information processing by increasing the ease and the speed with which belief-consistent cases can be located and focused upon in an otherwise unwieldy and overwhelming data set.

Previous studies on memory for belief-consistent versus belief-inconsistent information have yielded mixed findings: Some studies show better memory performance for belief-consistent information (e.g., Rothbart, Evans, and Fulero 1979), and others show better memory for belief-inconsistent information (e.g., Srull 1981). The present research resolves these mixed findings: Belief-consistent information has a memory advantage when information load is high, and belief-inconsistent information has a memory advantage when information load is low.
Attention to belief-consistent information is likely to occur at an earlier and more basic stage of information processing that does not require abundant cognitive resources. By contrast, inconsistency resolution requires effortful elaborative processing that is likely to occur at a later stage of information processing (Sengupta and Johar 2002; Wyer and Srull 1989). Effortful processes occurring at a relatively late stage of the judgment process are disrupted more heavily by cognitive load manipulations, relative to less effortful processes occurring at earlier stages (Johar and Simmons 2000; Meyers-Levy and Sternthal 1993).

Prior research on the effects of information format on price-quality inference has obtained mixed results: Some studies have found that easy-to-process formats (i.e., graphs) improve inference (Baumgartner 1985) and some have found null effects (Bettman et al. 1988; Broniarczyk and Alba 1994). Our research helps to reconcile these apparently disparate findings. Easy-to-process formats have no effect on price-quality inference when information load is low because selective information processing is unlikely under these conditions. A different pattern of results emerges under conditions of high information load because high load encourages consumers to simplify a judgment task by focusing selectively on belief-consistent information. Selective information processing is particularly likely when information load is high, information is presented in a rank ordered list format (rather than a random format or perhaps a graphical format), and concern about closure is high.

Prior research on sensitivity to objective degrees of correlation is mixed, with some studies showing insensitivity (Crocker 1981) and some showing sensitivity (Bettman et al. 1986). The present research suggests a resolution to these mixed findings: Insensitivity to objective degrees of correlation is more likely when selective processing is likely (vs. unlikely). The likelihood of
selective processing depends on the amount of information that is presented, the manner in which this information is presented, and on the concern about closure.
REFERENCES


**TABLE 1**

**MEAN SUBJECTIVE PRICE-QUALITY CORRELATIONS AS A FUNCTION OF INFORMATION LOAD, INFORMATION ORGANIZATION, AND CONCERN ABOUT CLOSURE (EXPERIMENTS 1, 2, AND 3)**

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The objective price-quality correlations are $r = .25$ (experiment 1), $r = .22$ (experiment 2), and $r = .20$ (experiment 3).
Headings List

1) SELECTIVE INFORMATION PROCESSING THEORY

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1) EXPERIMENT 3

2) Participants and Procedure

2) Results and Discussion

1) EXPERIMENT 4

2) Participants and Design

2) Procedure

2) Results and Discussion

1) GENERAL DISCUSSION