Improving the Effect of Guarantees: The Role of a Retailer’s Reputation

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Abstract
This research examines the interaction of two cues, retailer reputation and guarantees on evaluations. Extending Mandler’s (1982) incongruity framework, we illustrate across three studies how moderately incongruent signals can be combined to enhance evaluations. Unique to our application of moderate incongruity, however, is the fact that guarantee cues can be incongruent with the retailer’s reputation, in terms of domain (e.g., price matching guarantee (PMG) offered by provider whose reputation is based on service, not pricing) or valence (e.g., PMG offered by retailer known for carrying expensive merchandise). This dual perspective on the source of incongruity (domain or valence) is important and highlights when guarantees enhance evaluations.

Keywords: Guarantees; Retailer reputation; Congruity

Retailers spend millions of dollars every year to develop and maintain their overall reputations in the marketplace. Reputations often serve as cues in aiding consumers’ evaluations and can be based on many factors, so that two retailers with very different reputational domains can both enjoy an excellent overall reputation. For example, Nordstrom and Wal-Mart both have excellent reputations; the former is based on superior customer service, while the latter is based on everyday low prices. This description of reputation is more specific than has been used in earlier research describing reputations as a more generalized, Gestalt effect (e.g., Dodds, Monroe, and Grewal 1991). As noted from our description of the two stores, we follow more of a brand equity approach to reputations indicating that reputations are often based on more specific brand associations (e.g., Keller 2003). We examine reputations that are based on specific strategies, such as Nordstrom’s focus on service, or Wal-Mart’s focus on everyday low prices.

Having established a focused reputational strategy in the marketplace, retailers need to be careful about the tactics that they employ to maintain or enhance that position because these tactics are likely used by consumers as a second evaluation cue.}

Nordstrom’s employing service excellence tactics (e.g., delivery guarantees involving shipping and returns) is congruent with their overall service reputation, while Wal-Mart’s offering “price-matching guarantees” (PMG) is congruent with their overall low price reputation. In contrast, a consumer might find Nordstrom offering a PMG (which they actually do) or Wal-Mart offering an in-stock guarantee (which they recently employed during Black Friday) incongruent with her expectation of each store’s respective reputation.

We believe that both types of cues – the retailer’s reputation and the type of guarantee employed – are likely to interact to influence consumers’ evaluations. Understanding the nature of the interaction is likely of importance for retailers to understand, specifically when the combination of cues are moderately incongruent (e.g., Mandler 1982; Sprott and Shimp 2004). Employing Mandler’s (1982) terms regarding overall congruity, moderate incongruity can be defined at the simplest level as a cue that differs from an evoked schema on a single dimension (c.f. Mandler 1982; Meyers-Levy and Tybout 1989), such as a low-price retailer (Wal-Mart) offering in-stock guarantees or a service excellence retailer (Nordstrom) offering a PMG. Alternately, if two cues match in terms of domain, then there is overall congruity between them. Finally, if there is absolutely no match between the cues, there is extreme incongruity between them. The goal of this paper is to illustrate conceptually and empirically that the two information cues interact in predictable ways depending on their level of congruity.
We use the moderate incongruity framework to illustrate across three studies that moderately incongruent cues can be combined to influence evaluations. A central contribution of our research is to define two types of moderate incongruity: domain incongruity and valence incongruity. Domain incongruity pertains to the mismatch between the basis of the retailer’s reputation and the type of guarantee offered (e.g., an excellent service reputation retailer offering a PMG). Valence incongruity is the mismatch between the positive/negative reputation of the retailer and positive/negative assessment of the guarantee offered such that the valence of the two cues does not match (e.g., a retailer who has does not have a reputation for offering low prices (negative valence for price reputation) offers a PMG (positive valence for tactic)). This dual perspective on the source of incongruity is important and novel within the marketing domain.

Conceptual background

Information cues

In their seminal research, Purohit and Srivastava (2001) provide a classification scheme to differentiate between long-lasting and more transient cues. Long-lasting cues, such as a firm’s reputation, are classified as “high-scope” cues, meaning that the cue has evolved over time, is not easily changed, and thus is a strong signal of quality. More transient cues, such as guarantees, are classified as “low-scope” cues, meaning that they are fairly easy to change and that their diagnosticity as a stand-alone signal of quality is relatively lower than that of a high-scope cue (Purohit and Srivastava 2001). These authors, along with several others, examine how these types of cues are integrated to formulate evaluations (e.g., Biswas et al. 2002; Miyazaki, Grewal, and Goodstein 2005).

Interestingly, not all of this research agrees on when high-scope and low-scope cues might be used together. Some find that low-scope cues such as warranties enhance evaluations only when the valence of the high-scope cue is positive (e.g., Dodds, Monroe, and Grewal 1991; Purohit and Srivastava 2001). Conversely, others find that the low-scope cue affects evaluations only when the valence of the high-scope cue is negative (e.g., Biswas et al. 2002). Thus, although both sets of research address the valence of the high-scope cue, we believe that examining the domain of both cues may account for the differences. In the former studies, reputation is operationalized as a generalized attitude toward the company (e.g., good vs. bad), whereas the latter research instantiates reputation as relating to a specific association (e.g., expensive store vs. everyday low price store). Although not studied as such, Biswas’ et al. (2002) findings indicate that their effects are achieved only when the domain of the high and low-scope cue match (price reputation and PMG). Our conclusion is that both types of congruency matter, that is, congruency related to the valence of a cue and congruency related to the domain of a cue. Our goal is to develop and test a congruency-based model that reconciles these conflicting findings to better understand when the presence of a low-scope cue (in comparison to the absence of the cue) enhances evaluations, reduces evaluations, and/or does not affect evaluations.

Domain incongruity

Domain incongruity pertains to a mismatch between the basis of the retailer’s reputation (e.g., excellent service, everyday low-prices) and the type of guarantee offered (e.g., in-stock guarantee, PMG). Marketing research is replete with studies addressing “domain incongruity” (e.g., Goodstein 1993; Noseworthy and Trudel 2011; Noseworthy, Cotte, and Lee 2011). Research in this area has progressed from contrasting the effects of matches versus mismatches between stimuli and schemas (e.g., Goodstein 1993; Loken and John 1993); the effects of various degrees of incongruity (e.g., Meyers-Levy and Tybout 1989); to identifying factors that moderate these effects (e.g., Campbell and Goodstein 2001; Noseworthy and Trudel 2011). One commonality among these studies is that incongruity is determined by the degree of domain inconsistency between an evoked schema related to the stimulus and the current exemplar being explored (cf. Fiske and Neuberg 1990; Mandler 1982).

Initial research on domain incongruity contrasted the processing and evaluations associated with stimuli that are congruent, versus incongruent, with the evoked schema and found a positive relationship between congruity and preferences and a negative relationship in terms of processing (e.g., Goodstein 1993; Sujan 1985). More recent research notes that many stimuli fall somewhere between the domain congruity extremes, representing moderate incongruity with an evoked schema (e.g., Miller and Kahn 2005).

Work examining moderate incongruity is largely based on the theory of incongruity resolution proposed by Mandler (1982). He claims that the process of resolving a cognitive incongruity between a new stimulus and an evoked category in memory determines both processing and evaluations. When there is congruity, there is little motivation to process the new stimulus and the ease of resolution leads to a slightly positive evaluation. Conversely, extreme incongruity may lead consumers to process a stimulus in more detail, but the level of incongruity makes the discrepancy difficult to resolve, leading to frustration. In the case of moderate incongruity, the discrepancy again motivates processing and successfully resolving these differences is thought to be pleasing. The result is a more positive reaction than in the congruent condition (e.g., Meyers-Levy and Tybout 1989; Noseworthy and Trudel 2011). The moderate incongruity effect has been supported across a variety of marketing studies including those examining product evaluations (e.g., Meyers-Levy and Tybout 1989), brand extension reactions (e.g., Boush and Loken 1991), tastes (Stayman, Alden, and Smith 1992), naming recommendations (Miller and Kahn 2005), and information search (Ozanne, Brucks, and Grewal 1992).

Applied to cues, we propose that how consumers evaluate a low-scope cue may depend on its congruity with a schema evoked by an accompanying high-scope cue. Because high-scope cues evolve over time and tend to be enduring (e.g., reputation, Purohit and Srivastava 2001), consumers are likely to form more elaborate schemas around such cues (e.g., Fiske
and Taylor 1991). Thus, in a multiple cue environment, a low-
scope cue is likely to be cognitively categorized in relation to
the schema evoked by the high-scope cue. Moderate domain
incongruity would occur when the meaning of a low-scope cue is
somewhat inconsistent with the schema related to the high-scope
cue.

The preceding insights from congruity theory lead one to
expect that a low-scope cue that is moderately incongruent in
terms of domain with the high-scope cue will lead to greater
processing. For example, when a retailer with a reputation for
great service offers a price matching guarantee, we expect that
the somewhat incongruent guarantee will increase cognitive
elaboration in order to resolve the mismatch. As we will expand
on below we expect that the resulting evaluations will also be
determined by the valence incongruity.

Valence incongruity

Cues contain information not only about the domain (e.g.,
price reputation) but also have an associated valence (e.g., excel-
rent price reputation or poor price reputation; cf. Goodstein
1993). Thus, all cues have both domain meaning and valence
associated with them. We suggest that the equivocal findings
noted earlier as to when a low-scope cue will influence eval-
uations when paired with a high-scope cue might be resolved
by integrating the effects related to both domain and valence
incongruity into a single framework (see Fig. 1).

Our framework building from congruity theory leads one to
expect that a low-scope cue that is moderately incongruent (in
terms of valence) with the high-scope cue will lead to consumers
to process that cue. For example, when a retailer with a repu-
tation for poor service offers an in-stock guarantee, we expect
that the somewhat incongruent guarantee will increase cognitive
elaboration in order to resolve the mismatch in valence of the two
cues. While other research has included valence (i.e., whether
a reputation is positive or negative), it does not analyze what
happens when the valence is paired with a specific domain (e.g.,
Miyazaki, Grewal, and Goodstein 2005; Purohit and Srivastava
2001).

Integrating domain and valence incongruity

Using Mandler’s terms regarding overall congruity, if two
cues match in terms of both domain and valence congruity, then
there is overall congruity between them. If there is either domain
congruity and valence incongruity between two cues (e.g., poor
price reputation retailer offering a PMG), or domain incongruity
and valence congruity (e.g., good service price reputation retailer
offering a PMG), then the two cues are defined as moderately
incongruent. Finally, if there is both domain and valence incon-
gruity between the cues, there is extreme incongruity between
them (e.g., a poor service reputation retailer offering a PMG, this
scenario is incongruous both in terms of domain and valence).

This follows from prior research indicating that changing one
factor from an evoked schema is moderate incongruity whereas
changing more than a single factor appears to be extreme incon-
gruity (cf. Meyers-Levy and Tybout 1989). We propose that each
of these overall conditions will determine the manner in which
the low-scope cue impacts (or does not impact) evaluations. We
predict whether the addition of a low-scope cue will affect eval-
uations for retailers who have an established reputation. Our
hypotheses are discussed below, and highlighted in Table 1.

When there is overall congruity (both domain and valence
congruity) between the two cues, we expect the resulting eval-
uations to be similar to a scenario when there is no low-scope
cue present. We expect consumers to generate inferences based
on the high-scope cue. This is based on the fact that given a
schema label, people are able to generate attributes and links
between those attributes with respect to the categorized object
(e.g., Fiske and Taylor 1991, p. 139). If the valence of the cues
is consistent, consumers are likely to assume the low-scope cue
will perform in a way consistent with the schema associated with
the high-scope cue. For example, consumers are likely to expect
that a retailer with a reputation for low prices (i.e., high-scope
cue has a positive valence), will offer a PMG (low-scope cue),
even if such a guarantee is not explicitly specified. Therefore, the
absence of the low-scope cue is unlikely to impact evaluations.

When there is moderate valence incongruity (domain con-
gruity, but valence incongruity) between the two cues, we expect
that evaluations will increase/decrease depending on the valence
of the low-scope cue compared to when there is no low-scope
cue present. The presence of the moderately valence incongru-
ent low-scope cue will lead to more elaboration, which in turn
will influence evaluations. This is based on the fact that con-
sumers will process the information in a more piecemeal manner
due to the inconsistency between the evaluative components (cf.
Sengupta and Johar 2002). The result is that the two pieces of
information will be integrated and thus the low-scope cue will
impact evaluations. Consider a retailer with a reputation for not
offering competitive prices (i.e., high-scope cue has a negative
valence), consumers may doubt or be uncertain that the retailer
will act in a way similar to what a PMG promises unless such a
guarantee is explicitly provided.

If there is moderate domain incongruity (domain incongruity,
but valence congruity) we again expect that evaluations will
increase/decrease depending on the valence of the low-scope
cue compared to when there is no low-scope cue present. This
is because the low-scope cue will lead to more elaboration, which
in turn will influence evaluations. For example, a retailer with a
reputation for excellent service (positive high-scope cue) might
sometimes offer a PMG (positive low-scope cue). The moder-
ate domain incongruity between the two cues should stimulate
processing leading to more piecemeal evaluations (e.g., Boush
and Loken 1991; Fiske and Neuberg 1990). More specifically,
the consumer resolves the moderate incongruity by viewing the
low-scope cue as another attribute by which the retailer
can positively differentiate themselves. Although a PMG is
domain incongruent with a service-based reputation, consumers
are likely to resolve this incongruity rather easily leading to
enhanced evaluations.

Finally, when there is extreme incongruity (both domain and
valence are incongruent), we expect no impact of the
low-scope cue relative to if no low-scope cue had been men-
tioned on evaluations. Consumers will not consider a domain
incongruent low-scope cue if the schema evoked by the high-scope cue is negative (cf. Tversky 1972). The incongruent low-scope cue is likely to be viewed as irrelevant and never fully processed (e.g., Miyazaki, Grewal, and Goodstein 2005).

These propositions are tested in a series of pretests and experiments. While there are many cues that could be employed to explore our hypotheses, our cues were selected because of their documented importance to retailing (e.g., Srivastava and Lurie 2001). Specifically, the high-scope cues we use in Studies 1 and 3 are based on a retailer’s reputation for price or service, and in Study 2 they are based on the retailer’s reputation for service or stock levels. The low-scope cue employed in Studies 1 and 3 was a PMG. To test the generalizability of our findings, the low-scope cue employed in Study 2 was an in-stock guarantee (ISG). An ISG is a promise made by a retailer that it will have a product available for purchase or else the retailer will compensate the consumer in some fashion for being out of stock (e.g., Su and Zhang 2009).

Table 1
Predictions and results.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Expectation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congruent</td>
<td>Evaluations will be similar to when there is no low-scope cue present.</td>
<td>Study 1 – supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 2 – supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 3 – supported</td>
</tr>
<tr>
<td>Moderately incongruent</td>
<td>Evaluations will increase/decrease depending on the valence of the low-scope</td>
<td>Study 1 – supported (only positive low-scope cue tested)</td>
</tr>
<tr>
<td>due to valence</td>
<td>cue (compared to when there is no low-scope cue present).</td>
<td>Study 2 – supported (only positive low-scope cue tested)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 3 – supported (positive and negative low-scope cue tested)</td>
</tr>
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</tr>
<tr>
<td></td>
<td></td>
<td>Study 3 – supported (positive and negative low-scope cue tested)</td>
</tr>
<tr>
<td>Incongruent</td>
<td>Evaluations will be similar to when there is no low-scope cue present.</td>
<td>Study 1 – supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 2 – supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 3 – supported for positive low-scope cue; not supported for negative low-scope cue</td>
</tr>
</tbody>
</table>

Pretest

The pretest is designed to determine whether moderate incongruity, driven by either domain or valence inconsistency, leads to greater processing relative to either congruent or extremely incongruent conditions. Finding such processing differences provides face validity that our instantiations of moderate incongruity fit the processing standards required by Mandler (1982). While some studies examine reputations as an overall brand halo (e.g., Grewal et al. 1998) or manipulate reputation by providing specific store names (e.g., Dodds, Monroe, and Grewal 1991), we follow the model that states that reputations are often defined by a specific association relating to the store (e.g., Keller 2003). Thus, in the pretest, we paired our cues to manipulate both domain and valence incongruity. Specifically, a PMG is domain congruent for a retailer whose reputation is based on price (cf. Srivastava and Lurie 2004), but moderately incongruent for a firm whose reputation is based on service. Similarly,
offering a PMG (a positive cue) is congruent in valence with a retailer known for offering competitive prices (excellent price reputation) or excellent service. Both competitive prices and excellent service signal positive information about the retailer. In contrast, a non-competitive price retailer (poor price reputation) or a poor-service retailer both represent negative valence, so offering a PMG is incongruent from a valence-based perspective.

Eight-six participants were recruited through ads posted in university staff facilities (76 percent female; mean age 43). We ran a 2 × 2 between subjects design in which the combinations of domain and valence incongruity created four conditions (see Table 2). The overall set-up of study involved participants reading a scenario describing the reputation of a home electronics retailer based on both type of reputation (service or price) and by its rankings (poor or excellent), as provided by an independent firm similar to Consumer Reports. Next, participants read “This store offers its customers a lowest price guarantee. Once you’ve purchased an item from them, if you find the same product at a lower price elsewhere, they will reimburse you for the difference in prices.”

After reading the scenario, participants were asked an open-ended question asking them to list the thoughts they had while reviewing the description of the retailer. Two independent judges coded the open-ended responses specifically noting both the number of thoughts and mentions of positive thoughts regarding the low-scope cue. Inter-judge reliability was high (agreement = 92 percent) and discrepancies were resolved by discussion.

The number of thoughts produced in each condition varied significantly as a function of the domain and valence of the retailer’s reputation (F(1, 82) = 8.93, p < .01). When there was moderate incongruity due to valence, participants generated significantly more thoughts than when there was congruency (Mprice = 4.05 vs. Mservice = 2.82; F(1, 82) = 4.07, p < .05) or than when there was extreme incongruity (Mprice = 4.05 vs. Mservice = 2.64; F(1, 82) = 5.36, p < .05). Similarly, when there was moderate incongruity due to domain, consumers generated more thoughts than when there was congruency (Mprice = 3.96 vs. Mservice = 2.82; F(1, 82) = 3.64, p = .06) or than when there was extreme incongruity (Mprice = 3.96 vs. Mservice = 2.64; F(1, 82) = 4.89, p < .05).

In terms of the valence of the thoughts produced, we analyzed the proportion of people who had positive thoughts about the low-scope cue (PMG) across the different scenarios. As predicted the percentage of respondents reporting positive thoughts was significantly higher when there was moderate incongruity due to valence differences than when there was congruity (Mprice = 50 percent vs. Mservice = 23 percent, z = 1.82, p < .05) and when there was extreme incongruity (Mprice = 50 percent vs. Mservice = 18 percent, z = 2.18, p = .01). Similarly, when moderate incongruity was due to domain differences there were also more positive thoughts than when there was congruity (Mprice = 46 percent vs. Mservice = 23 percent; z = 1.60, p = .05) or extreme incongruity (Mprice = 46 percent vs. Mservice = 18 percent; z = 1.99, p < .05). Thus, the pretest confirmed that when consumers are exposed to moderate incongruity, whether due to domain or valence, they processed information more and because the PMG was a positive low-scope cue, the thoughts were in the positive direction.

This pretest also confirms that participants view a PMG as domain congruent with a retailer whose reputation is based on prices, and moderately incongruent with a retailer whose reputation is based on service. More specifically, participants were asked to assess the degree to which a retailer with a reputation for price/service offering a PMG was typical (extremely typical/extremely atypical), novel (not at all novel/ extremely novel), unusual (not at all unusual/very unusual), and matched (matches very well/does not match well at all). These measures of congruity were based on measures used in other research (Campbell and Goodstein 2001). A score of 1 indicated maximum congruity and a score of 7 represented maximum incongruity. These items were averaged to formulate the congruity measure for both types of retailers. There was high reliability for both measures (αprice = .86, αservice = .83). A paired sample t-test then revealed that participants found a PMG more domain congruent for a retailer with a reputation based on price competitiveness than for a retailer with a reputation based on service (Mprice = 2.31 vs. Mservice = 3.96; t(84) = 9.64, p < .001). Notice that the mean levels also represent congruity in the former case and moderate incongruity in the latter case.

Study 1

While our pretest demonstrates that moderate incongruity leads to greater processing, our first study is designed to determine whether moderate incongruity enhances consumers’ overall evaluations. This provides a test of our fundamental proposition.

Design and procedure

Study 1 utilized a 2 × 2 × 2 between-subjects design. We examined two types of high-scope cues to manipulate domain congruity (price reputation was congruent with PMG; service reputation was incongruent with PMG), two levels of valence associated with the high-scope cue (poor/excellent reputation), and exposure to the low-scope cue (PMG present/absent). The PMG absent conditions allows us to assess whether the presence of the PMG in the moderate incongruity conditions leads to enhanced evaluations. This design is described in Table 3.

Participants in Study 1 were 320 non-student subjects who participated as part of a national Internet panel. In terms of general descriptors, 52 percent of respondents were female, 58 percent were married or living with a partner, 13 percent were aged 18–25, 32 percent were 26–35, 30 percent were 36–45, 20 percent were 46–55, and 5 percent were 56 or older. Each participant was randomly assigned to one of the eight experimental conditions describing a home electronics retailer. The manipulations were identical to the pretest except for the inclusion of the PMG absent condition. After reading the scenario, participants rated their overall perception of the retailer on six measures designed to capture their evaluations. These measures were: this store offers value to its customers; the prices at this store are
Table 2  
Pretest how congruity conditions were created.  

<table>
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<tr>
<th>Reputation condition</th>
<th>Excellent reputation</th>
<th>Poor reputation</th>
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<td>PMG offered at a retailer whose reputation is based on price</td>
<td>LSC congruity (valence congruent, domain congruent)</td>
<td>LSC moderate incongruity (valence incongruent, domain congruent)</td>
</tr>
<tr>
<td>PMG offered at a retailer whose reputation is based on service</td>
<td>LSC moderate incongruity (valence congruent, domain incongruent)</td>
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LSC = low-scope cue; PMG = price-matching guarantee.

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<td>Retailer whose reputation is based on price (no mention of PMG)</td>
<td>LSC absent/excellent price reputation</td>
<td>LSC absent/poor price reputation</td>
</tr>
<tr>
<td>PMG offered at a retailer whose reputation is based on service</td>
<td>LSC moderate incongruity (valence congruent, domain incongruent)</td>
<td>LSC extreme incongruity (valence incongruent, domain incongruent)</td>
</tr>
<tr>
<td>Retailer whose reputation is based on service (no mention of PMG)</td>
<td>LSC absent/excellent service reputation</td>
<td>LSC absent/poor service reputation</td>
</tr>
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LSC = low-scope cue; PMG = price-matching guarantee.

very competitive; it’s very unlikely that I’ll find lower prices elsewhere; this store takes good care of its customers; the employees at this store are fair to customers; employees in this store have an objective of satisfying customers. All measures were captured on strongly disagree (1) to strongly agree (7) scales. The success of our manipulations was then assessed using two questions. The first related to the reputation of the retailer and had four options that combined the type of reputation (service/price) with its valence (positive/negative). The options were: low reputation in terms of service, high reputation in terms of service, low reputation in terms of price competitiveness, high reputation in terms of price competitiveness. The second question simply asked participants to indicate whether or not the retailer had an explicit “lowest price guarantee” policy (yes/no).

Results

Manipulation checks. In order to assess the success of our manipulations, we conducted a Chi-square analysis on both the reputation/valence question based on the experimental conditions. The manipulation worked as intended. For the reputation type/valence question, there was a significant effect of reputation/valence (86 percent correct in poor service condition; 86 percent correct in excellent service condition; 79 percent correct in poor price condition; 81 percent correct in excellent price condition; $\chi^2(9) = 584.42, p < .001$). For the guarantee question, there was also a significant effect of whether a PMG was offered (91 percent correct in PMG condition; 84 percent correct in no PMG condition: $\chi^2(1) = 181.12, p < .001$).

Analyses. To analyze our basic predictions, we conducted an ANOVA which indicated, as expected, a three-way interaction for evaluation depending on the experimental condition ($F(1, 312) = 42.97, p < .001$, see Fig. 2). Planned contrasts then revealed that under moderate incongruity conditions, evaluations were enhanced relative to the PMG absent condition. This was true both when moderate incongruity was driven by valence ($M_{ESR} = 3.68, M_{PMG absent/EPR} = 2.53; F(1, 312) = 41.32, p < .001$) and when moderate incongruity was driven by domain ($M_{ESR} = 5.77, M_{PMG absent/ESR} = 4.71; F(1, 312) = 41.32, p < .001$). In all other conditions, the PMG (low-scope cue) did not change evaluations ($M_{PMG absent/EPR} = 5.28, n.s.; M_{PMG absent/PSR} = 2.00, n.s.$).

Together, our results indicate support for the Mandler (1982) hypothesis regarding moderate incongruity. Consistent with past research, moderate incongruity appears to enhance evaluations (relative to the relevant PMG absent condition) when the domain between the two cues is incongruent, but their valences are

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1 We ran comparative tests with the full sample versus only those that answered the manipulation checks consistent with our expectations. The results were identical in all cases and our analyses are reported using the full sample. Additionally, including demographic variables as covariates made no difference in the analyses and analyses of variance were used to test our hypotheses.

2 A factor analysis of our six item overall reputation measure resulted in a one factor solution (Eigen value = 5.59 and it explained 77 percent of the variance). We also ran analysis for the three items related to price and the three items related to service. Both of these analyses were identical to the results depicted by the overall scale. Thus we pooled the items and used the more generalizable evaluation measure in our later studies.
congruent. Importantly, this research also provides evidence that when the cues are domain congruent but valence is incongruent, there is also an enhancement to evaluations relative to the relevant PMG absent condition. While this study is encouraging, we need to question whether there is something unique about our instantiation of the low-scope cue versus whether the phenomenon we explore appears more generalizable. That is the goal of Study 2.

Study 2

Study 2 followed the same general format as Study 1, with two major exceptions. First, the retailer in this study was a movie rental business. Second, the instantiations of our cues were changed in order to test the generalizability of our predictions. In this study, the high-scope cue was related to the retailer’s history concerning inventory availability. Recent consumer research indicates that stock-outs lead to lost revenue on the sale of that particular item, an increased probability of canceling other items in an order (e.g., Anderson, Fitzsimons, and Simester 2006), and damage to a retailer’s patronage (e.g., Fitzsimons 2000). Following the logic that guided Study 1, the low-scope cue was an in-stock guarantee (ISG).

Design and procedure

Study 2 utilized a $2 \times 2 \times 2$ between-subjects design. We again examined two types of high-scope cues to manipulate domain congruity (availability reputation was congruent with an ISG; service reputation was incongruent with an ISG), two levels of valence associated with the high-scope cue (poor/excellent reputation), and exposure to the low-scope cue (ISG present/absent).

One hundred and seventy-three undergraduate and graduate student participants were randomly assigned to one of the eight experimental conditions by distributing booklets to them which contained the scenarios and measures. Each scenario provided a description of the movie rental retailer as assessed by an independent organization similar to Consumer Reports. That assessment described the type and valence of the retailer’s reputation and either informed them about the retailer’s ISG or contained no information about an ISG. The ISG was enacted by stating that, “This store offers its customers an In Stock Guarantee. If the movie you want is not in stock, they provide you a coupon so that you can rent the movie for free when it becomes available.” (This type of guarantee was common of video stores in the test area.)

After reading the scenarios, participants then evaluated the retailer. The attitude toward the retailer was measured by asking their opinion of the store using three, seven-point scales anchored by very bad/very good, poor/excellent, and unfavorable/favorable, with higher numbers indicating a more positive assessment ($\alpha = .99$). Our manipulations were then assessed using a series of questions pertaining to participants’ recollection of whether the retailer offered an ISG, the basis of the store’s reputation, and the valence of that reputation.

Results

Manipulation checks. Chi-square tests were used to test the success of our reputation manipulations and illustrated that they were successful. The results indicated a significant effect of reputation domain on how participants responded to the question concerning the basis for the reputation (94 percent correct for stock availability reputation, 78 percent correct for service reputation; $\chi^2(1) = 98.24, p < .001$), as well as the one assessing its valence (97 percent correct for positive valence, 93 percent correct for negative valence; $\chi^2(1) = 143.91, p < .001$). There was also a significant effect of the ISG on the guarantee manipulation check (93 percent correct for ISG present, 82 percent correct for ISG absent; $\chi^2(1) = 102.96, p < .001$).

Analyses. Our propositions were tested using an ANOVA and indicated, as expected, a three-way interaction of our factors on evaluation of the retailer ($F(1, 165) = 8.93, p < .01$; see Fig. 3). Planned contrasts then revealed that under moderate incongruity conditions, evaluations were enhanced. This was true both when the moderate incongruity was driven by valence ($M_{ISG absent/PSAR} = 4.79$; $F(1, 165) = 4.79, p < .01$) and when the moderate incongruity was driven by domain ($M_{ISG absent/ESR} = 6.09$; $F(1, 165) = 6.09, p < .01$). In all other conditions, the ISG cue did not change retailer
evaluations ($M_c = 5.96$, $M_{\text{ISG abs.}}/\text{ESAR} = 5.91$, n.s.; $M_{c1} = 2.69$, $M_{\text{ISG abs./PSR}} = 2.46$, n.s.).

The results validate the findings from Study 1. The results support that moderate incongruity enhances consumers’ evaluations relative to the respective ISG absent condition. This happens both when cues are valence congruent but domain incongruent, as well as when the cues are domain congruent but valence incongruent. Thus, we are able to generalize our results across multiple instantiations of our manipulations. Yet both Studies 1 and 2 tested the case of a positive low-scope cue compared to when there is no low-scope cue. A stronger test of our theory is to also explore when valence incongruity is created via negative low-scope cues.

In today’s environment customers are constantly posting comments and reviews online. These reviews are posted at the website of the retailer as well as on a number of social networking sites. For example, a given customer may post on Staples.com or Zappos.com comments pertaining to the wonderful customer service that they experience. Similarly, customers also frequently post comments on how poorly they were treated in a store or how they felt the prices were too expensive. Additionally, it is quite common for a sales person in a store to highlight the positive features of the products they are carrying and at the same time reference the fact that their competitors either do not carry these items or having items that have less premium features. Thus, the next study is designed to explore what occurs when valence incongruity is created by a negative low-scope cue; for example, explicitly being told that a retailer does not offer a guarantee.

**Study 3**

Studies 1 and 2 demonstrate that a low-scope guarantee cue enhances evaluations when it is moderately incongruent with the high-scope cue either in domain or valence. Study 3 extends this assessment to scenarios in which the low-scope cue can be either positive or negative in terms of the guarantee offered. The study followed the basic scenario employed in Study 1 using a PMG. Consistent with our earlier studies, we expect that moderate incongruity (regardless of whether it is caused by valence or domain) will lead to enhanced processing which will lead to enhanced evaluations in the case of a positive low-scope cue and to decreased evaluations in the case of a negative low-scope cue. This is similar to the predictions made in Goodstein’s earlier work (e.g., 1993; Campbell and Goodstein 2001) in that the incongruity between domains or valence would enhance processing but the evaluations resulting from that processing would determine the outcome.

**Design and procedure**

Study 3 utilized a $2 \times 2 \times 3$ between-subjects design. We again examined two types of high-scope cues to manipulate domain congruity (price reputation was congruent with a PMG; service reputation was incongruent with a PMG), two levels of valence associated with the reputation (poor/excellent), and exposure to the low-scope cue. New to this study was the addition of a negative level of PMG resulting in three levels of the low-scope cue (absent/positive/negative). This design is described in Table 4.

Four-hundred and sixty-six participants from a Qualtrics panel were randomly assigned to one of the twelve experimental conditions. The participants ranged in age from 17 to 79 with a mean age of 34. Sixty percent of the respondents were female. All were asked to read a brief scenario describing the reputation of a retailer selling home electronics. The scenarios were the same as used in our pretest and Study 1 except for the addition of the negatively-valenced PMG. In the negative PMG condition, the store was described as follows, “This store, unlike other competitors, does not offer customers a lowest price guarantee. Once you’ve purchased an item from them, if you find the same product at a lower price elsewhere, they will not reimburse you for the difference in prices.” This scenario is not at all unusual in today’s environment where competitors and on-line review

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3 To rule out a possible confound that our results are due to the additional wording “unlike other competitors”, we ran an additional condition which did not include that wording and found no significant differences between the two conditions ($M_{\text{with text}} = 4.20, M_{\text{without text}} = 4.23, t(38) = .08, p > .9$).
sites commonly point out what a store offers, and what it does not offer.

After reading the scenario, participants were asked to list the thoughts that they had while reviewing the description of the retailer. Two independent judges coded the open-ended responses specifically noting both the total number of thoughts and the number of price related thoughts. Inter-judge reliability was high (agreement = 92 percent) and discrepancies were resolved by discussion. After listing their thoughts, participants provided their evaluations of the retailer on the same three, seven-point semantic differential scales described earlier (α = .97). Finally, participants were asked to assess the degree to which that type of retailer offering a PMG was consistent (not at all/very), expected (not at all/completely), and surprising (not at all/completely; cf. Campbell and Goodstein 2001).

The three measures were averaged to formulate our congruity measure (α = .87).

**Results**

**Manipulation checks.** The manipulation worked as intended. Subjects responded to a 7-point scale pertaining to price competitiveness of the retailer (1 = not price competitive, 7 = very price competitive) and a 7-point scale pertaining to service of the retailer (1 = poor service, 7 = excellent service). For subjects where retailer reputation was based on price, they viewed the retailer to be less price competitive in the poor reputation condition and more price competitive in the excellent reputation condition (Mpoor = 2.99, Mexcellent = 5.31, t(229) = 10.5, p < .001). For subjects where retailer reputation was based on service, they viewed the retailer to offer poor service in the poor service condition and excellent service in the excellent service condition (Mpoor = 2.67, Mexcellent = 5.34, t(227) = 12.55, p < .001). Finally, participants accurately recalled the PMG (85 percent correct PMG present, 74 percent correct PMG absent, 73 percent correct PMG explicitly not offered; χ²(4) = 406.15, p < .001).

**Analyses.** To test our propositions, we conducted a 2 × 2 × 3 ANOVA which indicated, as expected, a three-way interaction of our factors on the retailer’s evaluations (F(2, 454) = 2.96, p = .05, see Fig. 4). Consistent with Studies 1 and 2, when the low-scope cue was positive, planned contrasts revealed that under moderate incongruity conditions, evaluations were enhanced. This was true whether the moderate incongruity was driven by valence (Mmi = 4.05 vs. MPMG absent/PPR = 2.95, p < .01) or by domain (Mmi = 5.68, MPMG absent/ESR = 4.91, p < .05). In all other conditions, the low-scope cue did not change evaluations (Mc = 5.10 vs. MPMG absent/PPR = 4.99, n.s.; Mc = 3.21 vs. MPMG absent/ESR = 2.97, n.s.).

When the low-scope cue was negative, as expected, planned contrasts revealed that under moderate incongruity conditions, evaluations were decreased. This was supported both when the moderate incongruity was driven by valence (Mmi = 4.06 vs. MPMG absent/PPR = 4.99, p < .01) or by domain (Mmi = 2.32 vs. MPMG absent/ESR = 2.97, p < .05). As expected, when the cues were congruent, the low-scope cue did not change evaluations (Mc = 2.78 vs. MPMG absent/PPR = 2.95, n.s.).

Our a priori expectation was that in the extreme incongruity condition, the presence of a low-scope cue would not impact evaluations. This result was found in Studies 1 and 2, but those studies used a positive low-scope cue. In this study, where we used a negative low-scope cue, we found a significant effect for the negative low-scope cue when the retailer has an excellent service reputation (Mc = 3.90 vs. MPMG absent/ESR = 4.91, p < .01). In this case the low-scope cue was domain incongruent and valence incongruent, but the negative valence of the low-scope cue (explicit information that this retailer does not provide a PMG) clearly shifted evaluations downward.

**Process analyses.** We also analyzed participants’ thoughts using the same model. Here we calculated the ratio of price-related thoughts to total thoughts for each participant. The ratio of price-related thoughts varied as a function of the congruity condition. Compared to the low-scope cue absent condition, participants had significantly more price-related thoughts in the moderate incongruity conditions (mi due to valence (no PMG)
that when the low-scope cue was negative, moderate incongruity continued to enhance processing, but led to more negative evaluations.

**Generalizability meta-analysis**

The pretest and Study 3 confirm that moderate incongruity – driven either by domain or by valence – leads to greater processing. The experiments then examine the effects of moderate incongruity on evaluations. Study 1 demonstrates that moderate incongruity – driven either by domain or by valence – enhances evaluations. Study 2 replicates this result using a different instantiation of the cues. Finally, Study 3 explores the impact of a negative low-scope cue.

To test the robustness of our results, we ran a file drawer calculation to determine how many null studies would be required to reduce our significance level to .05. More specifically, we calculated the effect sizes associated with the planned contrasts pertaining to moderate incongruity due to valence and moderate incongruity due to domain (valence: Study 1 $\eta^2 = .34$, Study 2 $\eta^2 = .32$, Study 3 $\eta^2 = .15$; domain: Study 1 $\eta^2 = .32$, Study 2 $\eta^2 = .19$, Study 3 $\eta^2 = .11$). For consistency across the studies we only examined the conditions when the low-scope cue was positive versus absent. The average weighted $\eta^2$ is .26 when incongruity was due to valence and .20 when incongruity was due to domain, both medium size effects. Next, we test the significance of the overall relationship using Rosenthal and Rosnow’s (2008) combining p-value technique. The results indicate that the overall relationship is significant at .0001 for both types of incongruity. Finally, we calculated the file drawer n and found that it would take more than 68 (38) null studies to reduce the significance level to .05 in the incongruity due to valence (incongruity due to domain) condition. These results provide considerable confidence that our results are not due to chance.

**General discussion**

**Implications for theory**

By examining the joint role of domain and valence-based incongruity, our framework provides a more comprehensive understanding of the impact of multiple cues on consumers’ evaluations. Our framework is supportive of the moderate incongruity effects proposed by Mandler (1982) and supported in other marketplace domains (e.g., Campbell and Goodstein 2001). Furthermore, the framework takes into account the graded structure of incongruity used in earlier papers. In the current research, moderate incongruity was instantiated by varying one of the two important dimensions of commonality between the cues. These were either the domain of the cues or the valence of the cues. Moderate incongruity was based on either employing domain congruent, but valence incongruent, cues, or by using incongruent domain cues that matched in terms of valence.

The studies presented here provide strong support for the fact that moderately incongruent cues improve evaluations when the valence of the low-scope cue is positive. This is true...
regardless of whether moderate incongruity is driven by domain or valence. When the valence of the low-scope cue is negative, however, moderate incongruity between the cues detracts from evaluations. Identifying a new boundary condition that limits when the moderate incongruity effect occurs provides a deeper understanding of this theory as it relates to consumer behavior.

More specifically, our findings demonstrate that when the cues are congruent in domain and valence, neither a positive nor a negative low-scope cue impacts evaluations (relative to the pertinent low-scope cue absent condition). In contrast, when there is moderate incongruity due to the cues having domain incongruity, a positive low-scope cue has a positive effect on evaluations; a negative low-scope cue has a negative effect. Similarly, when there is moderate incongruity due to the cues having valence incongruity, a positive low-scope cue has a positive effect on evaluations; a negative low-scope cue has a negative effect. The enhancement (or detraction) that the low-scope cue causes in moderate incongruity conditions results from enhanced processing in those conditions.

Our results provide strong support for the dual congruity model that we are proposing which is an extension of Mandler’s (1982) work. This work can also be viewed from Anderson (1981) information integration theory perspective. Anderson proposes that cues can be integrated based on their weight and scale value. In our studies, this would equate to understanding the weights associated with the reputations and the guarantee, and the scale values (i.e., the valence of the particular reputation or guarantee). Since we did not measure the weights, we can infer the weights of price versus service reputation by looking at the PMG absent condition for both reputation types. This demonstrates that price is weighted heavier than service. The integration of the reputation with the PMG is not consistent with information integration theory when the price reputation is high, though we do see the lift in the service reputation case. Thus, the dual congruity explanation seems more consistent with our entire set of results. Additional research is clearly needed to tease apart these two possible explanations in a more focused manner.

When both domain and valence are incongruent, a positive low-scope cue has no impact on evaluations (relative to the pertinent low-scope cue absent condition). Yet a negative low-scope cue decreases evaluations (cf. Ahluwalia 2002). Similar to the effects just described above, more research is needed to determine whether this finding is due to information averaging versus a negativity bias. Further research is needed to better understand the impact of negative low-scope cues under extreme incongruity conditions and to tease apart these different rationales.

Our findings hold interesting implications for schema researchers. Schemas have been conceptualized to contain both domain information as well as valence (e.g., Fiske 1982; Mandler 1982). Most research into schema effects proposes that domain congruity drives processing and evaluations. A few papers, however, suggest that more attention needs to be paid to the effect that valence has on processing (e.g., Goodstein 1993). We introduce the construct of valence congruity and find that it has significant relevance to moderate incongruity tests. While others in the cue processing domain have looked at generalized affect associated with a high-scope cue and its fit with a low-scope cue (e.g., Grewal et al. 1998), we find that associating the valence with a specific domain results in findings that differ from these earlier studies. One possible fruitful extension of the idea that affect may drive schema effects beyond previously hypothesized levels is to look at other instantiations of affect congruity such as aesthetics (Patrick and Hagstedt 2011) or scents (Haberland et al. 2010) to examine if they operate in a similar manner as cue valence.

Implications for retailers

By reducing pre-purchase search and increasing the likelihood of store choice (e.g., Biswas et al. 2002; Srivastava and Lurie 2001), guarantees help motivate consumer purchases. Our research examined how the fit between a retailer’s reputation (i.e., high-scope cue) and various types of guarantees (e.g., PMG, ISG) influences consumers’ evaluations. The fit between the reputation of the provider and the guarantee is critical to understanding how consumers will evaluate the retailer. This research demonstrated that if the fit is weak due to the domain, offering a PMG enhances evaluations of the retailer only if the retailer has a strong service reputation. If the retailer’s service reputation is poor, offering a PMG is not beneficial to the retailer. Hence, the retailer should focus on other tactics which might help improve consumers’ evaluations.

In contrast, if the fit between the retailer’s reputation and the guarantee is strong, offering a guarantee has a positive impact on consumers’ evaluations of the retailer – but only if the retailer has a poor reputation. The guarantee acts as a signal that the retailer is actually competitive in prices (Study 1 and 3) and in-stock levels (Study 2) even if their reputations indicate otherwise. For retailers that already have a strong reputation, there was no beneficial impact to offering the respective guarantees. Thus, managers must carefully determine whether offering a guarantee (or at least investing a lot of resource in communicating it) fits with their reputation. We demonstrate that these results hold for two different forms of guarantees. We speculate that these results are likely to hold for all low-scope cues that fundamentally operate like a PMG or an ISG, such as performance and service guarantees.

The results of these three studies reinforce the managerial importance of carefully managing negative cues. We see how difficult it is for a retailer to overcome a negative reputation even if offering appropriate guarantees. These results may help explain recent events such as news concerning the failure of Sears, Inc. Despite the efforts of Sears to offer greater quality cues, including PMGs, Kidvantage (their product quality guarantee), and Craftsmen performance warranties, the negative reputation of their stores (Sears and Kmart) may have doomed these efforts. The result is that the firm recently announced plans to close over 120 stores. The news is equally bad for Best Buy as their reputation for “pushing” sales of higher margin items has not been overcome by any of their various guarantees. Like Sears, the company is being forced to close many of its locations due to poor performance.
Limitations and future research

While our research incorporated three different types of reputations as high-scope cues, all instantiations still involved reputation-based schemas. Similarly, we examined two very different types of guarantees as our low-scope cues, yet both are still guarantees. A re-examination of the cue literature reveals that there are other forms of high-scope cues (e.g., brand names; general halo effects) and low-scope cues (e.g., warranties; cf. Purohit and Srivastava 2001) that could have been used. So, while using multiple instantiations of each type of cue begins to address the generalizability of our findings, extending our research approach to these different forms of cues is one idea for a re-inquiry into this domain.

Further, the effects of moderate incongruity have been supported in many areas of consumer research and we add to that set. The issue of what happens when cues are extremely incongruent is an issue that was briefly examined here, but is worthy of a much deeper investigation. Our results indicate that extreme incongruity leads consumers to anchor on the high-scope cue and results in a significant adjustment only when the low-scope cue is negative. Some research, however, suggests that when there is extreme incongruity, processing may actually be increased while evaluations are diminished (e.g., Meyers-Levy and Tybout 1989). Other research suggests that whenever processing is increased, piecemeal evaluations follow and subsequent evaluations are as likely to be more positive as they are to be more negative (e.g., Goodstein 1993). Thus, the amount of processing and impact on evaluations which occur under conditions of extreme incongruity are worthy of further examination.

Cue consistency seems like a ripe arena for studying this debate as the three levels of cue congruity are rather common in the “real world.” Further, the impact of a low-scope cue in the presence of multiple high-scope cues might provide a useful way to instantiate the degrees of incongruity. If the effects are additive, then inconsistency with one high-scope cue may define moderate incongruity and inconsistency with two high-scope cues could instantiate extreme incongruity. For example, a PMG pants could fit both a retailer’s and brand’s reputation; it could fit the retailer’s reputation even if it violated the norms for a particular brand, or it could be inconsistent with both. Thus, the study of all three levels of congruity would be possible and applicable to both researchers and practitioners.

One limitation common to most experimental research is the issue of external validity. Although across studies our participants included student and non-student populations, as well as different types of products, it was the case that neither population actually shopped for these products; they were instead given scenarios to which they provided evaluations. The use of such scenarios is common in this area of inquiry (e.g., Miller and Kahn 2005; Purohit and Srivastava 2001). Despite these limitations, the set of studies presented here attests to the importance of cues in determining retail evaluations, as well as the importance of both domain and valence-based incongruity. The research suggests that low-scope cues are integrated with high-scope cues based upon a combination of domain and valence congruity and that both need to be considered going forward.

References