The Effects of a Different Category Context on Target Brand Evaluations

MYUNGWOO NAM
BRIAN STERNTHAL*

Four studies support the conclusion that the evaluation of a target brand is influenced by its presentation in the context of advertising for brands from a different category. The specific effect of context depends on the decision maker's expertise in the target category and the accessibility of contextual information. In a base condition, experts exhibited an assimilation effect and novices a comparison contrast. Increasing the accessibility of the contextual information prompted a correction contrast effect among experts and an assimilation effect among novices. A reduction in the resources available for processing the highly accessible contextual information resulted in experts engaging in assimilation and in novices exhibiting a comparison contrast. These findings are explained in terms of an interpretation and a comparison judgment process.

Suppose that you are browsing through the latest issue of *Time* magazine. After reading an article about some current event, you peruse an ad for Armani clothing and then look at one for a Honda Civic. Would the judgment of the Honda be affected by your exposure to the Armani ad? Would your Honda evaluation be any different had the clothing ad been for Old Navy rather than for Armani? And would the fact that you have substantial knowledge about cars make a difference in the impact of the advertising context on your judgment of the Honda?

We address these questions in the current research. Answering these questions is important because brands are invariably presented in a context that might influence how they are perceived. In some instances, contexts are actively sought to enhance a brand's image. Products as diverse as Bugles and Viagra have served as NASCAR sponsors. Venues such as AT&T Park link brands to sports franchises (San Francisco Giants) in the hope that the positive feelings associated with the context will become associated with the brand. Product placements in television, print, and movies present the target brand in the context of a host of other products and people with whom consumers have positive associations. In other cases, a target brand and other product categories just happen to be presented in close proximity to each other. For example, in some supermarkets pet food brands are shelved next to health and beauty products, and in some locales restaurants are located adjacent to clothing stores. Here the issue is what adverse or enhancing effect the context will have on the target brand.

Although many investigations have examined the effect of context on target evaluations, only a few studies have focused on the effect of context on a target from a different category. Raghunathan and Irwin (2001) reported that the evaluation of a target car was more favorable when attractive vacation destinations had been evaluated earlier than when less desirable vacation destinations had been presented as the context. This *assimilation effect* was also observed by Stapel, Koomen, and Velthuijsen (1998). They found that participants evaluated an ambiguous target restaurant more favorably after exposure to a luxurious clothing brand than after exposure to a casual, and presumably less favorable, clothing brand. Finally, using stimuli similar to those employed by Stapel et al. (1998), Meyers-Levy and Sternthal (1993) reported the presence of an assimilation effect. But they also documented the presence of a *contrast effect*: a more positive context induced a less favorable evaluation of the target. These outcomes suggest the conditions under which presenting a target in the context of another category results in assimilation and when it induces contrast warrant investigation.

*Myungwoo Nam is assistant professor of marketing at INSEAD, Asia Campus, 1 Ayer Rajah Avenue, Singapore 138676 (myungwoo.nam@insead.edu), and Brian Sternthal is the Kraft Professor of Marketing at the Kellogg School of Management, Northwestern University, Evanston IL 60208 (bst047@kellogg.northwestern.edu). The authors would like to thank Wendi Gardner, Angela Y. Lee, Prashant Malaviya, and Alice M. Tybout for their helpful comments. In addition, the authors would like to thank John Deighton, the associate editor, and three reviewers for insightful and constructive comments during the review process. Correspondence regarding this work should be addressed to Myungwoo Nam. This article is based on the first author's doctoral dissertation.

John Deighton served as editor and Mary Frances Luce served as associate editor for this article.

Electronically published August 19, 2008

In the current research, we suggest that consumers' expertise with the target category is an important determinant of the context effect observed. Our central premise is that experts and novices with regard to a target category differ in how they process target information and how they use contextual information to make a target judgment. Consumer expertise is also of interest from a practical perspective because it correlates with the level of category use, which is often employed in customer segmentation and target selection. To provide a basis for depicting how consumer expertise moderates the effect of context, we review theorizing about the processes underlying assimilation and contrast effects.

THE TWO-PROCESS EXPLANATION FOR CONTEXTUAL PRIMING EFFECTS

Models of impression formation share the view that contextual information influences target evaluation via one of two decision-making processes. One process involves encoding (Schwarz and Bless 1992), or interpretation (Stapel and Koomen 2001). We adopt the latter term. This process is important when the goal is to discern what a target brand or person is like and what features it possesses. We refer to this process as *interpretation*. If individuals use contextual information during interpretation, an assimilation effect will occur: the more positive the context, the more favorable the assessment of the target.

The other process is referred to as *judgment* (Schwarz and Bless 1992), or *comparison* (Stapel and Koomen 2001). Here, the goal is to determine whether a brand or some other target object is superior or inferior when compared to some standard. We refer to this process as comparison. A comparison contrast would be manifested by a more favorable evaluation of the target when the contextual information is negative than when it is positive.

In addition to assimilation and comparison contrast, one other context effect has been observed. If individuals become cognizant of the fact that their target assessments were influenced by contextual information, they may attempt to partial out the affect associated with the context that they believe was misattributed to the target (Martin 1986; Meyers-Levy and Tybout 1997; Moskowitz and Skurnik 1999; Schwarz and Bless 1992). In the process, they often overcorrect by attributing some of the target affect to the context. Thus, if the initial context effect is assimilation, the effect of correction is a contrast, which we refer to as a *correction contrast* (Martin 1986; Wegener and Petty 1995).

As a starting point in predicting when assimilation, comparison contrast, and correction contrast are likely to occur, we discuss these outcomes from the perspective of interpretation and comparison processes. This two-process view provides a theoretical basis for anticipating how expertise with regard to the target category moderates the occurrence of context effects.

Context Effects Based on Target Interpretation

Contextual information can activate associations that are used to interpret the meaning of a subsequently presented target. For example, suppose that a message recipient sees an ad for a BMW car in a magazine. It might activate associations to benefits such as luxurious and powerful. On the next page, the person is exposed to an ad for a JBL stereo system that has a 50 watts per channel amplifier. The JBL stereo system could be interpreted as powerful because this benefit was highly accessible when reading the ad for the stereo system. This interpretation of JBL by incorporating associations to the BMW context might be facilitated by the fact that JBL produces a wide range of audio systems, including ones for cars. Thus, the prediction is that an assimilation effect will occur during interpretation.

An ability to interpret the implications of a context for the evaluation of a target is a necessary condition for assimilation. This implies that expertise about the target category would be helpful in prompting assimilation. A study reported by Yi (1993) offers support for this prediction. Participants' task was to evaluate a large car, which served as the target in the context of either news about rising oil prices or an article about auto accidents. Participants who were knowledgeable about cars were able to infer that large cars were fuel inefficient, which implied that they were unattractive when the context was rising oil prices, and that large cars were safe, which suggested that they were attractive when the context was auto accidents. Those who were less familiar with cars did not exhibit this assimilation effect, presumably because they failed to interpret the impact of car size on fuel economy and safety.

The notion that expertise facilitates the assimilation of contextual information in interpreting a target is also consistent with the results of the studies discussed earlier in which the target and context are members of different categories (Meyers-Levy and Sternthal 1993; Stapel et al. 1998). In these investigations, an assimilation effect was found for a target restaurant, which is a category that is likely to have been familiar to research participants.

In the current research, we examine the impact of the target category expertise in the processing of an ambiguous target. The message is preceded by either a positive or a negative context that is available at the time of target interpretation. The ambiguity of the target message is likely to prompt experts to be open to information that would help them interpret the target. The benefits associated with the context might be applicable in this regard. Experts could readily make use of these contextual associations because their knowledge about the target category enables them to consider such associations and the ambiguity of the stimulus motivates them to do so. If this analysis is correct, an assimilation effect would be observed.

A different scenario is hypothesized for describing novices' use of contextual information. Novices are likely to recognize the ambiguity in the target description, and they are no less able than experts to generate associations to the context. However, their impoverished knowledge of the tar-

get category is likely to prompt them to focus on the target information as a means of interpreting the target rather than to access associations to a context. As a result, novices are not expected to exhibit an assimilation effect without benefit of some device to enhance the accessibility of contextual information so that its applicability to a target judgment becomes evident (Roehm and Sternthal 2001). However, novices are likely to use the context when engaging in a comparison process, as we discuss in the next section.

Context Effects Based on Comparison

When the goal is to judge the superiority or inferiority of a target object, the object is compared to some standard (Lynch, Chakravarti, and Mitra 1991). The context in which the target is presented may serve this purpose (Sherif and Hovland 1961; Stapel and Koomen 2001). Furthermore, when a target and context are perceived as different, a contrast effect is expected (Herr 1989; Mussweiler 2003). For example, Herr (1989) found that, when very expensive car brands served as the context, the perceived price of hypothetical cars was lower than when the context was very inexpensive cars. Apparently, judgments of the target brand were contrasted away from the contextual information.

What happens when the context is from a different category than the target? To address this question, we adopt Mussweiler's (2003, 480) view that decision makers "may be forced to use a particular standard for comparison because it is highly accessible, particularly salient for the critical domain, or simply the only standard available." Along these lines, experts with regard to a target are likely to have their own same-category comparison standard against which to evaluate a target (Lynch et al. 1991). This idiosyncratic comparison standard would be used rather than a comparison standard from a different category, which is likely to be perceived as less salient and applicable. In evaluating the JBL stereo system, experts are more likely to use other stereos as a standard of comparison than a context from another category. As a result, no comparison contrast is predicted for experts.

Novices are unlikely to have a comparison standard in the target category, and thus they are expected to rely on whatever referent is accessible and applicable (Feldman and Lynch 1988; Lynch et al. 1991; Mussweiler 2003). In our studies, this is likely to be information provided by the context in which the target is presented. Support for this prediction is reported by Hutchinson (1983), who had experts and novices evaluate the cost of several modestly priced automobiles in the context of either expensive (e.g., Rolls Royce) or less expensive brands (e.g., Mercury Cougar). The findings indicated that context had no effect on experts' target judgments, whereas a contrast effect was found for novices. Apparently, experts retrieved their own idiosyncratic comparison standards from memory that overrode the standard of comparison provided by the context, whereas the context influenced novices' perceptions of the target cars.

Applying these observations to our investigation, we anticipated that novices would use the context to make a judgment. Novices' lack of an internal target category comparison standard would prompt them to use the different category context as a comparison standard if it were applicable. Because the context is a brand in a different category than the target, comparing the two would accentuate the differences between them (Herr 1989; Mussweiler 2003). For example, because there is little apparent overlap between, say, a target JBL stereo system and a BMW car, novices are likely to focus on how they are different rather than how they are similar. If this occurs, novices will exhibit a comparison contrast.

Correction for Context Effects

Using the context in which a target is presented as either an interpretation frame or a comparison standard is not the only means of prompting context effects. When individuals recognize that a context might have influenced their judgments, they often make an effort to subtract the feelings thought to be associated with the context from those associated with the target. This correction process frequently results in the misattribution of some of the feeling actually associated with the target to the context. The result is overcorrection (Martin 1986).

These observations are instructive in anticipating the nature of experts' correction. We predicted that experts would exhibit assimilation in response to a context from a different category. The bias in target evaluation introduced by contextual information is likely to go undetected given that the target and context are from disparate categories. However, if the presence of the context were made highly accessible, experts are likely to infer that it had influenced their initial evaluation, attempt to correct for the bias, and in the process overcorrect. If this were to occur, highly accessible contextual information would result in experts exhibiting a correction contrast.

Novices were not expected to exhibit a correction contrast. The correction process requires (*a*) making use of contextual information to interpret the target, (*b*) detecting that some of the affect associated with the target is attributable to the context, and (*c*) subtracting the impact of the context from the target (Martin 1986; Moskowitz and Skurnik 1999). Novices are unlikely to have the resources or ability to engage in such processing.

OVERVIEW OF THE RESEARCH

The two-process view suggests that experts and novices will differ in their responses to contextual information from another category. The prediction is that the ambiguity of the target will prompt experts to access contextual associations to help interpret the target and as a result exhibit an assimilation effect. However, when the contextual cues are highly accessible, experts will recognize that their evaluation might have been influenced by the context, make an effort to remove the effect of context, and as a result exhibit a correction contrast. Because experts have their own stan-

dards against which to compare the target, they do not exhibit a comparison contrast. On the other hand, novices are expected to focus on the message information rather than a context in interpreting the target and would not exhibit assimilation. When judging the target, their lack of knowledge will prompt novices to use the context as a standard of comparison, resulting in a comparison contrast. If contextual associations are made highly accessible, novices will apprehend their value in interpreting the target and an assimilation effect will be observed.

Four studies were conducted to test these predictions. Participants were asked to evaluate a fictitious brand on the basis of advertising for it. This target ad was presented in the context of one or more brands from another category that served as either the positive or the negative context. Study 1 tested the prediction that experts would exhibit assimilation and novices would engage in comparison contrast. We also examined our explanation for experts' responses by assessing whether providing novices with the processing strategy thought to be used by experts would result in novices exhibiting assimilation. Study 2 tested the distinction between comparison contrast and correction contrast by varying the resources available for target processing. Studies 3 and 4 assessed the robustness of our findings by using different stimuli, indicators of expertise, and measures of evaluation than those employed in our prior studies.

STUDY 1: THE MODERATING EFFECTS OF EXPERTISE

The purpose of study 1 was to test the hypothesis that the impact of a context from a different category on target evaluations is moderated by the message recipient's expertise and to investigate why these outcomes occur. For this purpose, research participants were exposed to two ads. The first was for a car that was evaluated either positively or negatively. This served as the manipulation of context valence. Next, the target ad for a fictitious stereo system was presented. Participants then evaluated the target brand.

In accord with the two-process view, our prediction is that expertise would moderate the effect of context on target evaluations. Experts with regard to stereos would use the benefits inferred from the context to interpret the target and thus exhibit assimilation. Their evaluation would be unaffected by the comparison process because experts would use their own referent to judge the target. If this occurred, experts would be more favorable when the context valence was positive than when it was negative. Novices were not expected to utilize the context when interpreting the target because their lack of target category knowledge would prevent them from accessing the context associations. However, lacking an accessible and applicable comparison standard of their own on which to evaluate the target, they would employ the context as a referent in making their judgments. Because the context and target are brands from different categories, novices were likely to focus on differences between them, which would be manifested as a comparison contrast: target brand evaluations would be more favorable when the context was negatively valenced than when it was positively valenced.

If this account for why experts would exhibit assimilation and novices would exhibit contrast is correct, it should be possible to prompt novices to assimilate. We reasoned that, by making the benefits implied by the context accessible prior to target interpretation, novices might engage in the same processes that experts follow spontaneously and use these benefits to interpret the target. Such processing would be manifested as an assimilation effect.

Making the context accessible is expected to have a different effect on experts' evaluations. Enhancing the accessibility of the benefits implied by the context is likely to alert experts to the possibility that the context influenced their target assessment and caused them to assimilate the contextual information to the target. This realization is likely to result in correction to eliminate the effect of the context. If overcorrection occurs, as is often the case, experts would exhibit a correction contrast.

Method

Stimulus Materials. The choice of a stereo system as the target product was based on a pretest in which we observed substantial variance in research participants' knowledge about stereo systems. A persuasive message for the target stereo system was developed on the basis of stereo descriptions presented in print ads and magazine reviews. The ad described features of the audio system, including the amplifier, speaker, and CD changer (see the wording of the ad in the appendix). The description of these features was technical so that experts would be more likely to have facility in understanding them than novices. At the same time, the benefits implied by the features were presented so that the message would be comprehensible to novices (Maheswaran and Sternthal 1990). In addition, some features suggested that the target was attractive, whereas other features suggested that it was not. This depiction was intended to make the brand's quality seem ambiguous, which prior research indicates is a circumstance under which both assimilation and contrast can occur (Herr 1989; Moskowitz and Skurnik 1999). A fictitious brand name (Dolan) was used to prevent participants from evaluating the target product on the basis of a prior brand disposition.

The description of the target was preceded by the presentation of a brand from another category. It served to manipulate the valence of the context. Participants were exposed either to an ad for a BMW or an ad for a Hyundai. They were asked to examine the ad as they might normally when looking through a magazine and then respond to the questions posed about it. An automobile was selected as the context category because at an abstract level it shares features such as technology and power with the stereo category (horsepower of engines vs. power of amplifiers), and thus priming cars might influence participants' evaluations of the target stereo. BMW and Hyundai were selected as the con-

text brands because their evaluations were likely to differ, which would facilitate the detection of context effects.

Participants and Procedure. One hundred and seven research undergraduate students at Northwestern University were recruited to participate in an advertising evaluation study. Each participant received $8.00. A booklet containing the experimental materials was distributed in a manner that randomly assigned participants to the experimental treatments. First, participants were shown an ad for either a BMW (positive context) or a Hyundai (negative context). Then they responded to some questions about the car to ensure that they had paid attention to the context. In the context accessible condition, participants answered a list of questions after reading the context ad. These questions were intended to make benefits implied by the contextual ad highly accessible. Specifically, when the context was BMW, participants were asked to complete sentences such as: "BMW Z3 is ___," "BMW Z3's engine is ___." The same procedure was used for Hyundai. In the control condition, this manipulation was absent.

Next, all participants were exposed to the target ad for the Dolan stereo system, which was represented as a separate study. Participants evaluated this target brand on three 7-point bipolar adjective items that included "powerful amplifier," "crisp sound," and "hi-fi." Higher scores indicated more favorable evaluations. Because these items represent a reliable scale ($\alpha = .82$), each participant's responses were averaged on the three items to develop an evaluation score. Participants also evaluated the context (BMW or Hyundai) on a series of bipolar items (e.g., not good/good, poor quality/good quality), which formed a reliable scale ($\alpha = .97$), and then rated the perceived difficulty of evaluating the Dolan music system on a 7-point scale with end points "very easy" (scored 1) and "very difficult" (scored 7). Next, they reported the time they had spent researching stereos before buying one on a 7-point scale anchored by "very little" (scored 1) and "a lot" (scored 7).

The time participants had spent researching their stereo choice was used as an indicator of expertise on the logic that the amount of purchase deliberation is likely to reflect the amount of knowledge individuals have about a category (Alba and Hutchinson 1987). The more time individuals spent in researching stereos, the greater their knowledge is likely to be. We selected this measure of knowledge because it does not ask about the participant's ability directly and thus limits its susceptibility to individuals' evaluation apprehension.

A pilot study was conducted with undergraduate students at Northwestern University using a think-aloud protocol to assess whether the amount of time spent researching stereo choice was an indicator of expertise (Ericsson and Simon 1980). Thirty-four participants who owned stereo systems were exposed to the target ad featuring the Dolan music system. Their task was to talk aloud while evaluating Dolan. These verbal protocols were tape-recorded. Responses were analyzed by two independent judges who had only general knowledge about the purpose of the research. Experts and novices were categorized on the basis of a median split of the time they had spent researching stereos (median was 4). As expected, those classified as experts reported a greater number of thoughts about stereos ($M = 13.5$) than did those classified as novices ($M = 8.0$; $F(1, 32) = 8.12$, $p < .008$). The experts also exhibited a greater ability than the novices to infer benefits from attributes (Maheswaran and Sternthal 1990). These outcomes are congenial with the notion that time spent researching a category can serve as an indicator of expertise.

Results

Manipulation Checks. The 50 participants who scored above the median of 3 were classified as experts, and the 57 participants who scored at or below the median were categorized as novices. Experts spent more time researching stereos ($M = 5.20$) than did those categorized as novices ($M = 2.17$). Experts classified in this manner reported less difficulty in evaluating the target ($M = 3.86$) than did novices ($M = 4.53$; $F(1, 99) = 6.00$, $p < .01$), which is consistent with the notion that the time spent researching stereos is an indicator of expertise. Finally, we checked the adequacy of the contextual valence manipulation. As anticipated, participants rated BMW more favorably ($M = 6.29$) than they rated Hyundai ($M = 3.24$; $F(1, 99) = 351.93$, $p < .001$). In none of the above cases were the other effects significant (all p's $> .17$).

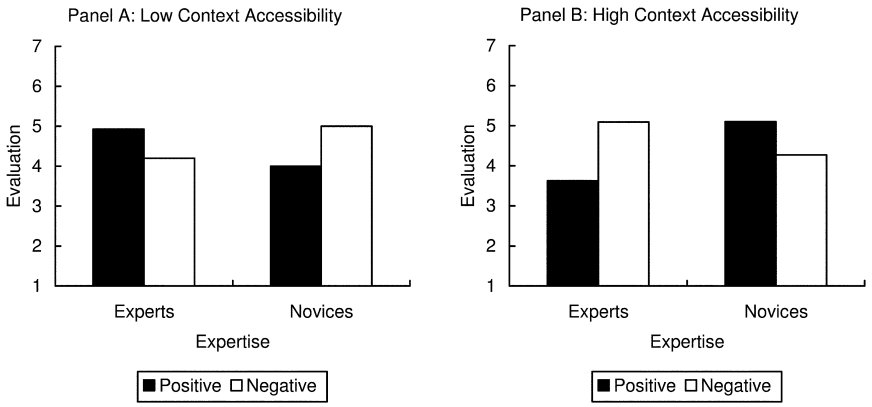
Target Evaluations. A 2 (expertise: expert vs. novice) × 2 (context accessibility: high vs. low) × 2 (context valence: positive vs. negative) ANOVA indicated that the three-way interaction on target evaluations shown in figure 1 was significant ($F(1, 97) = 24.43$, $p < .001$). In the low context accessibility condition, the interaction between expertise and the context was significant ($F(1, 97) = 8.95$, $p < .004$). Follow-up contrasts indicated that experts exposed to the positive BMW context were marginally more favorable toward Dolan ($M = 4.92$) than were experts exposed to the less positive Hyundai ($M = 4.20$; $F(1, 97) = 3.49$, $p < .06$). Thus, experts exhibited an assimilation effect. Novices' evaluations of Dolan indicated the presence of a contrast effect: novices exposed to the positive BMW evaluated Dolan less favorably ($M = 4.00$) than those exposed to the less positive Hyundai ($M = 5.00$; $F(1, 97) = 5.50$, $p < .02$).

The interaction between expertise and context valence was also significant for the high context benefit accessibility condition ($F(1, 97) = 16.02$, $p < .001$). Experts who were shown the BMW context evaluated Dolan less favorably ($M = 3.63$) than experts who were exposed to the Hyundai context ($M = 5.09$; $F(1, 97) = 10.66$, $p < .001$), indicating the presence of a contrast effect. However, novices in the high context benefit accessibility condition exhibited an assimilation effect. They evaluated Dolan more favorably when the context was BMW ($M = 5.10$) than when it was Hyundai ($M = 4.27$; $F(1, 97) = 5.41$, $p < .02$). Apparently, novices were able to associate highly accessible contextual information to the target while interpreting it.

An additional analysis was conducted to enrich our un-

FIGURE 1

TARGET BRAND EVALUATION FOR STUDY 1



derstanding of the process by which the context influenced target evaluations. We hypothesized that the context activates attributes that influence either the interpretation or the comparison process. However, it is also plausible that the context activates general affect that influences target evaluations. To test this alternative explanation, a regression analysis was conducted in which overall evaluation of the context (calculated by averaging "good," "good quality," and "satisfying"; $\alpha = .95$) and the average evaluation of three contextual attributes ("stylish," "fancy," and "high tech"; $\alpha = .96$) served as the independent variables and target evaluations served as the dependent variable. Target evaluations in the contrast conditions were reverse coded. The results indicated the presence of a significant effect of the context attribute evaluation on target evaluation ($\beta = .34$; $t(102) = 2.98$, $p < .004$), whereas the effect of the overall context evaluation was not significant ($\beta = -.18$; $t(102) = -1.26$, $p > .21$). These results provide evidence that context attribute evaluations influenced target evaluations.

Discussion

The results of study 1 offer convergent evidence for the two-process view that experts' assimilation entails a process by which they spontaneously access benefits implied by the context and associate them with the target. Novices who were prompted to engage in such processing by making context benefits highly accessible demonstrated the same assimilation effect as that exhibited by experts. In the absence of such context benefit activation, novices used the context as a comparison standard and contrast was observed. Experts exhibited the ability to use context associations to interpret the target without the benefit of special procedures to make these associations accessible. In fact, making the context benefits highly accessible alerted experts to the possible inclusion of context associations in their evaluations and triggered a correction contrast rather than the assimilation that they had exhibited in the absence of high context benefit accessibility.

Study 1 also provided some insight about how the context affects target evaluations. Our results suggest that the context activated associations to specific features. This inference was supported by the observation that specific attributes related to context were correlated with target evaluations.

The findings of study 1 also leave several issues unresolved. One concern is related to the precise nature of the prompt required to induce novices' assimilation. We found that making the benefits associated with the context highly accessible by activating associations to the context induced novices to engage in assimilation. However, it is possible that simply making the context salient would be sufficient to trigger processes among novices that would result in assimilation.

A follow-up study was conducted to address this issue by varying the salience of the context. Participants were undergraduate students at Northwestern University. Context valence was again varied through ads for BMW or Hyundai. Context salience was varied by manipulating whether these brands were presented alone or along with two other brands with the same valence. Seventy participants evaluated Dolan on the same dependent measures and indicator of expertise as those used in the main study.

An ANOVA indicated that expertise, context valence, and context salience produced a significant three-way interaction on the index developed by averaging participants' responses on the three evaluative items ($F(1, 62) = 12.86$, $p < .007$). In the low salience context condition, the interaction between expertise and the context was significant ($F(1, 62) = 13.11$, $p < .001$). Experts' evaluations of Dolan were more favorable when the context was positive ($M = 5.0$) than when it was negative ($M = 3.58$; $F(1, 62) = 7.55$, $p < .008$), indicating the presence of an assimilation effect. Novices' evaluations were less favorable when the context was positive ($M = 4.33$) than when it was negative ($M = 5.3$; $F(1, 62) = 5.59$, $p < .02$), indicating a contrast effect. These

findings replicate the results we reported earlier. In contrast, in the high salience context conditions, only the main effect of valence was significant ($F(1, 62) = 8.82, p < .004$). Dolan was evaluated less favorably when the context was positive ($M = 4.46$) than when it was negative ($M = 5.44$). The presence of a three brand context prompted experts to engage in correction, which was manifested in a correction contrast. Novices exhibited contrast regardless of context salience. Apparently, for novices context accessibility involves more than simply making the context salient; the applicability of the context must be made evident for novices to exhibit assimilation.

Although our findings confirm our predictions, one might question why novices in our study were unaffected during interpretation by making the context salient, whereas a similar manipulation resulted in assimilation for Stapel, Koomen, and van der Pligt (1997). In the latter study, people were asked to evaluate a person. Although they did not know the person described, they were familiar with the person category and characteristics that describe people. Thus, when primed with a hostile animal, it was apparent to participants that hostility would be applicable to the evaluation of a person. In contrast, our novices did not have such knowledge. Only when they were prompted to activate features of the context did its applicability become apparent in interpreting the target.

A final issue raised by the results of study 1 pertains to the contrast exhibited by experts. We interpreted this outcome as a correction contrast, which is problematic because the correction contrast is represented by the same effect as the comparison contrast that was attributed to novices. Study 2 seeks additional evidence to distinguish between these two contrast effects.

STUDY 2: ASSESSING THE NATURE OF EXPERTS' AND NOVICES' CONTRAST

In study 2, we examined the distinction between comparison and correction contrast by reducing the resources available for processing the target. Because correction has been shown to be a more resource-demanding activity than comparison (Moskowitz and Skurnik 1999), there should be a level of resource allocation that eliminates a correction contrast but not a comparison contrast. To test this prediction, we examined the effects of participants' expertise, context accessibility, and context valence in the same manner as in study 1. The one procedural change introduced in study 2 was to increase participants' cognitive load during the interpretation and judgment of the target, thus reducing the resources that might be used to access contextual information.

Two predictions were made on the basis of the two-process view. In the low context accessibility conditions, we expected that the reduction in resources would make the processing of target information difficult, thus limiting the resources likely to be allocated to accessing the context. As a result, we did not anticipate finding a context effect for either novices or experts. Of greater interest are the outcomes in the high context accessibility conditions. If the contrast experts had exhibited in the high context accessibility condition in study 1 was a correction contrast, increasing the cognitive load should reduce their ability to engage in correction. Instead, experts should exhibit a less cognitively demanding assimilation effect. For novices, the reduction in resources resulting from the increase in cognitive load was expected to prompt a contrast rather than the assimilation we had observed in study 1 under the high context accessibility conditions. If novices exhibited contrast under cognitive load, it would imply that the contrast involved comparison rather than the more resource demanding correction (Moskowitz and Skurnik 1999).

Method

Sixty-five undergraudate students at Northwestern University were recruited to participate in an advertising study. The procedure involved the same variations in expertise, context accessibility, and context valence (BMW and Hyundai) as those used in study 1. We also employed the evaluation measures used in study 1 ($\alpha = .84$). The cognitive load imposed on research participants was introduced after exposure to the context by asking them to memorize an eight-digit number, which is a procedure that has been used successfully in prior research to reduce resource availability (Gilbert and Hixon 1991).

Results and Discussion

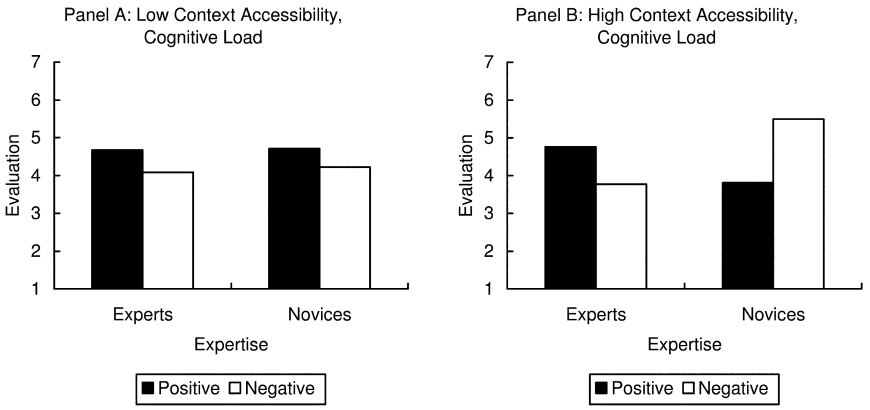
Manipulation Checks. A median split on the time participants reported spending on researching the stereo they purchased was used to classify participants as experts or novices. The median time spent was 3 on a 7-point scale. The 31 people classified as experts spent greater time ($M = 5.16$) than did the 34 classified as novices ($M = 2.30$). An assessment of the context valence manipulation indicated that BMW was evaluated more favorably ($M = 6.33$) than Hyundai ($M = 3.19$; $F(1, 57) = 150.35$, $p < .001$). No other effects were significant (p's $> .28$).

Target Evaluations. A 2 (expertise: expert vs. novice) × 2 (context benefit accessibility: high vs. low) × 2 (context valence: positive vs. negative) ANOVA indicated the presence of the significant three-way interaction shown in figure 2 ($F(1, 57) = 5.68, p < .02$). As expected, in the low context accessibility condition, imposing a cognitive load resulted in a null effect. Experts' evaluations of Dolan did not differ whether BMW ($M = 4.67$) or Hyundai ($M = 4.08$) served as the context ($F(1, 57) = .24$, $p > .63$). Similarly, novices evaluations did not differ whether BMW ($M = 4.71$) or Hyundai ($M = 4.22$) was the context ($F(1, 57) = 1.15$, $p > .29$).

A different pattern of outcomes emerged under high context accessibility. Here, there was a significant interaction between expertise and context valence ($F(1, 57) = 10.60$, $p < .001$). Experts were more favorable toward Dolan when the context was BMW ($M = 4.76$) than when it was Hyun-

FIGURE 2

TARGET BRAND EVALUATION FOR STUDY 2



dai ($M = 3.77$; $F(1, 57) = 3.73$, $p < .05$), replicating the assimilation effect found previously for experts in the low context accessibility condition (study 1). Imposing a cognitive load also influenced novices' evaluations. They were more favorable toward the target when the context was Hyundai ($M = 5.50$) than when it was the more positively valenced BMW ($M = 3.81$; $F(1, 57) = 7.09$, $p < .01$), indicating the presence of a contrast effect.

These findings provide evidence for distinguishing the type of contrast exhibited by experts and novices. Under cognitive load, experts engaged in assimilation rather than the contrast found previously when the context benefit was highly accessible. This observation is consistent with the view that the contrast exhibited by experts was a resource-demanding correction contrast. Novices, however, engaged in contrast under cognitive load and assimilation in the absence of a cognitive load. Because correction contrast is more resource demanding than assimilation (Martin, Seta and Crelia 1990), the contrast exhibited by novices was likely to have involved comparison.

Thus, imposing a cognitive load resulted in experts assimilating contextual information rather than engaging in the correction contrast they exhibited in the absence of a cognitive load and in novices engaging in comparison contrast rather than assimilation that was manifested in the absence of cognitive load. These outcomes do not imply that correction contrast and assimilation require the same level of resources. Rather they show that the same reduction in resources resulted in experts engaging in assimilation rather than correction and novices engaging in comparison contrast rather than assimilation. Experts had the substantial resources necessary for correction contrast in the absence of a cognitive load but not enough resources for correction in its presence. Novices who had more limited resources than experts were able to assimilate in the absence of a cognitive load but resorted to comparison contrast in its presence.

STUDY 3: ROBUSTNESS OF CONTEXT EFFECTS

Study 3 examined the robustness of the context effects predicted by the two-process view in three ways. One was to determine whether the effects we had observed previously would be replicated for a different context and a different target than the one used in our previous studies. Robustness was also assessed by using overall evaluations and behavioral intentions as measures of judgments rather than the brand attributes measures used previously. Finally, we developed a stimulus that was intended to approximate consumers' exposure to advertising in the context of reading a magazine. Actual ads were used for both the context and the target. As in our previous experiments, we expected experts to exhibit assimilation and novices to exhibit contrast.

Method

Participants and Procedures. Sixty-seven undergraduate students at Northwestern University were recruited to participate in a magazine evaluation study. Participants were presented with an abbreviated version of *Time* magazine and asked to read through it as they would normally. The cover page was followed by an ad for a clothing brand, a short article, an ad for a watch brand, and an ad for Honda Civic on consecutive pages. All these materials had appeared in magazines. The clothing and watch brands served as the context. Two ads were used to ensure that the context would be processed but still would not be sufficiently salient to induce correction among experts.

Participants were shown Armani and Rolex ads in the positive context conditions and Old Navy and Timex ads in the negative conditions. The Honda Civic ad served as the target brand.

Once participants had examined the magazine, they eval-

uated the Honda Civic target on seven 7-point bipolar adjective items. These items were good/bad, like/dislike, favorable/unfavorable, expensive/cheap, luxurious/not luxurious, satisfying/unsatisfying, and impressive/not impressive. In addition, participants were asked to rate how likely they were to purchase a Honda Civic if they needed to purchase a car using a 7-point scale anchored by likely/unlikely. This was followed by a rating of the context ads on the same evaluative items as the target Honda Civic. Finally, to determine participants' expertise, they indicated their knowledge about automobiles using a scale ranging from poor (scored 1) to good (scored 7).

Results and Discussion

Manipulation Checks. The 30 participants who scored above the median of 4 were classified as experts, and the 37 participants who scored at or below the median were classified as novices. Experts perceived that they had greater knowledge of the car category ($M = 5.7$) than did novices ($M = 2.91$). A check for the adequacy of our context manipulation indicated that the Rolex watch was evaluated more favorably ($M = 5.23$) than the Timex watch ($M = 4.23$; $F(1, 63) = 10.18$, $p < .002$), and the Armani brand was more favorably evaluated ($M = 5.86$) than the Old Navy brand ($M = 3.84$; $F(1, 63) = 56.82$, $p < .0001$).

Target Evaluations. The seven evaluative items loaded on a single factor that formed a reliable scale ($\alpha = .88$). Each participant's response on these items was averaged to create an evaluation index. A 2 (expertise: expert, novice) × 2 (context valence: positive, negative) ANOVA indicated that this interaction on participants' evaluations of the target Honda Civic was significant ($F(1, 63) = 19.18$, $p < .0001$). As predicted, an analysis of simple effects indicated that experts evaluated the Honda Civic target more favorably when they were exposed to a positive context ($M = 4.61$) than a negative context ($M = 3.58$; $F(1, 63) = 8.79$, $p < .004$), replicating the previously observed assimilation effect. Also as predicted, novices exhibited a contrast effect: the Honda Civic target was evaluated less favorably when the context was positive ($M = 3.65$) than when it was negative ($M = 4.67$; $F(1, 63) = 10.68$, $p < .002$).

A similar pattern of outcomes was obtained for participants' intentions to purchase the Honda Civic target. An ANOVA indicated the presence of a significant interaction between expertise and context valence on purchase intentions ($F(1, 63) = 10.80$, $p < .002$). Experts exposed to a positive context reported a greater intention to purchase a Civic ($M = 4.87$) than those exposed to a negative context ($M = 3.87$; $F(1, 63) = 3.76$, $p < .05$), providing evidence for assimilation. Novices exposed to a negative context ($M = 3.12$) reported lower purchase intentions than those exposed to positive context ($M = 4.40$; $F(1, 63) = 7.58$, $p < .008$), which is evidence for contrast.

The results of study 3 document the robustness of our prior observation that experts have a proclivity toward assimilation and novices have a tendency to exhibit contrast. We replicated these outcomes using a magazine format with actual ads serving as the context and the target. In addition, study 3 shows that the context effects previously observed on target attributes are again found when the judgment measures were brand evaluations and purchase intentions.

STUDY 4: AN ADDITIONAL TEST OF ROBUSTNESS

The primary goal of study 4 was to assess the robustness of our previous findings on one additional dimension. It was to determine whether the context effects reported when we used a self-reported measure of expertise would be replicated when objective knowledge of the target category served as the indicator of expertise. In addition, we examined the impact of participants' expertise in the context category on their target evaluations to assess whether differences in context category knowledge influenced target evaluations.

Method

Participants and Procedures. Forty-eight undergraduate students at Northwestern University were recruited to participate in an advertising evaluation study. Participants were presented with context and target ads and were asked to evaluate the target. In the positive context condition, we developed an ad for Colgate Total toothpaste, whereas in the negative context condition, an ad for Pepsodent black toothpaste was developed. The target brand was an ad for Fresh Start, a fictitious detergent. The target ad described a number of Fresh Start's features. These features included extracting dirt, killing germs, removing odor, and preserving fabric color.

The Fresh Start target was evaluated on two items, "revolutionary" and "ordinary," using a 7-point scale ranging from not at all (scored 1) to extremely (scored 7). These items loaded on a single factor that formed a reliable scale ($\alpha = .72$). Next, participants were administered an objective measure of their expertise about the detergent category. This involved answering 12 true or false items (e.g., "It is necessary to separate the dark colors from light when doing laundry"). Finally, participants were asked to rate their knowledge of the toothpaste category in relation to the average person on a 7-point scale ranging from one of the least knowledgeable (scored 1) to one of the most knowledgeable (scored 7). This measure, which has been used successfully as an indicator of expertise (Brucks 1985), enabled us to assess whether expertise in the context category would have an impact on target evaluations.

Results and Discussion

Manipulation Checks. The analysis of context valence manipulation revealed that it had a main effect on the evaluation of the context ($F(1, 44) = 42.0$, $p < .001$): Colgate was evaluated more favorably ($M = 5.42$) than Pepsodent

($M = 3.28$). None of the other effects was significant (p's $> .67$).

The expertise variable was based on the 12-item true/false test. One point was awarded for each correct answer. A median split (median = 7) on this aggregate score was used to classify participants as experts or novices. The 28 individuals classified as experts scored higher on the expertise test ($M = 7.66$) than did the 20 classified as novices ($M = 5.00$).

Target Evaluations. A 2 (expertise: expert vs. novice) × 2 (context valence: positive vs. negative) ANOVA indicated the presence of a significant two-way interaction on target evaluations ($F(1, 44) = 15.28$, $p < .001$). Experts' evaluations of Fresh Start were more favorable when the context was positive ($M = 3.90$) than when it was negative ($M = 2.58$; $F(1, 44) = 10.34$, $p < .002$), indicating the presence of an assimilation effect. Novices' evaluations were less favorable when the context was positive ($M = 2.67$) than when it was negative ($M = 3.90$; $F(1, 44) = 5.88$, $p < .02$), thus providing evidence for a contrast effect.

We also examined the possibility that individuals' knowledge of the toothpaste category influenced their target evaluations. This entailed conducting a regression analysis in which objective knowledge of detergent, context valence, the interaction between objective knowledge of detergent and context valence, and knowledge of toothpaste were used to predict the evaluation of Fresh Start. The findings indicated the presence of a significant main effect of objective detergent knowledge ($\beta = 1.137$; $t(43) = -3.77$, $p < .001$) and context valence ($\beta = 5.11$; $t(43) = 3.57$, $p < .001$) and a significant interaction between objective detergent knowledge and context valence on target evaluations ($\beta = -.83$; $t(43) = -3.87$, $p < .001$). However, neither the main effect of toothpaste knowledge ($\beta = -.018$; $t(43) = -.10$, $p > .92$) nor the interaction between the level of toothpaste knowledge and context valence was significant ($\beta = .155$; $t(43) = .43$, $p > .67$).

These outcomes replicate our previous findings that experts engage in assimilation and novices engage in comparison contrast using different contexts and product categories than in our prior studies and using an objective knowledge as an indicator of expertise. Study 4 also ruled out the possibility that expertise in the context category influenced target evaluations.

GENERAL DISCUSSION

Our findings demonstrate that context can influence the evaluation of a target from another category. Whether this influence takes the form of an assimilation effect, a comparison contrast, or a correction contrast is influenced by message recipients' expertise in the target category and the accessibility of the contextual information. Experts exhibited an assimilation effect in the base condition in all of our experiments. This outcome is consistent with the two-process view that assimilation occurs during interpretation when accessible and applicable contextual information is used to interpret a target.

Left to their own devices, novices appear to focus on the target information during the interpretation process. Contextual information does not influence their interpretation of the target. However, the context is used as a standard of comparison in judging the target, perhaps because novices do not have a same-category standard accessible in memory. As we described in our discussion of study 1, simply making the context salient did not affect novices' judgments. But prompting novices to access associations to the context did foster their use of these cues in interpreting the target, resulting in an assimilation effect (study 1). This finding offers insight about the process underlying experts' assimilation responses. It suggests that experts spontaneously access and use associations to the context to interpret the target.

One issue raised by this analysis is why experts exhibited assimilation but not comparison contrast. Our view is that a different category context influences experts' interpretation process because the benefit associated with the context is applicable in understanding the target information. Because experts are knowledgeable about the target category, they use their own standards rather than one implied by a brand from another category when engaged in comparison.

The current research also documents conditions under which a correction contrast is likely to occur. Experts in our studies typically exhibited an assimilation effect rather than a correction contrast effect. This outcome was likely to have occurred because experts perceived that a brand from a different category than the target was not likely to influence their target judgments and therefore was not in need of correction. However, enhancing the accessibility of the context by requiring elaboration of context-related associations (study 1) alerted experts to the biasing influence of the context and prompted them to correct for this perceived bias. In the process, they overcorrected, and a contrast was observed. The view that the contrast exhibited by experts involved correction is supported by the demonstration that imposing a cognitive load during target processing resulted in an assimilation effect (study 2).

Several of our findings warrant further discussion because they appear to be inconsistent with or are unanticipated by prior theorizing and data. Along these lines, our repeated finding that novices used a brand from a different category as a referent would seem to run afoul of Stapel and Koomen's (2001) assertion that "animal exemplars like Shark and Tiger are not likely to be used as a comparison standard when judging the hostility or friendliness of a person named Donald. These exemplars are not similar, do not belong to the target category (persons), and thus lack comparison relevance that makes contrast unlikely to emerge" (Stapel and Koomen 2001, 241). Viewed from this perspective, the contention is that a different category context might be considered distinct because it has clear and objective boundaries. However, it would not seem to be a relevant standard because it belongs to a different category than the target.

Our view is that, whether or not a different category can

serve as a comparison standard depends on participants' knowledge of the target category. When participants are familiar with the target category, as they were likely to have been in prior studies where the target is a person (Stapel et al. 1997) or a restaurant (Meyers-Levy and Sternthal 1993; Stapel et al. 1998), they use the target category exemplar as a comparison standard. However, when people have little knowledge about the target category, as was the case for our novices, they may rely on a recently activated benefit from a different category as a basis for comparison, if only because it is the most accessible point of reference. This is not to imply that any accessible context will serve as a comparison standard. In a study we conducted using procedures similar to the ones described here, neither experts nor novices used the car context (BMW, Hyundai) when evaluating Fresh Start detergent. These findings converge with Stapel and Winkielman's (1998) observation that context-target similarity is a determinant of whether a different category can be used as a comparison standard.

Our findings are also related to Moskowitz and Skurnik's (1999) analysis of comparison and correction contrasts. Consistent with their demonstrations, our data imply that a correction contrast imposes greater resource demands than a comparison contrast. Our findings extend this result by showing that the resources required for assimilation tend to be greater than those required for comparison contrast and less than those required for correction contrast. Along these lines, we found that making the context highly accessible prompted correction contrast among experts (study 1) and imposing a cognitive load resulted in experts exhibiting assimilation (study 2). And when the context benefit was accessible, novices exhibited assimilation (study 1), but when a cognitive load was imposed they engaged in comparison contrast (study 2). Although these data suggest that comparison contrast is less resource demanding than assimilation, the specific process by which comparison contrast occurs requires investigation.

Moskowitz and Skurnik (1999) also suggest that the nature of contextual information affects the context effect observed. Their view is that traits (or benefits) prompt correction contrast and exemplars induce comparison contrast. Our finding that a brand from a different category (i.e., an exemplar) can prompt both types of contrast would seem to be at odds with this view. We can reconcile these different expectations by noting that Moskowitz and Skurnik's predictions apply when an exemplar context is from the same category as the target. However, when a context is from a different category than the target, message recipients must infer the traits implied by the exemplar if this information is to inform target evaluations. Whether comparison or correction occurs depends on when contextual information becomes accessible. If this information is accessible during target interpretation, the result is correction; if it is accessible at judgment, the result is comparison. Our research indicates that target expertise is one factor that determines when contextual information is likely to be accessible.

Our finding that experts are likely to engage in correction contrast rather than comparison contrast appears to be inconsistent with Herr's (1989) observation of a comparison contrast effect for experts. An important difference between his studies and the ones reported here is that the contexts used by Herr were in the same category as the target. In this circumstance, contextual information influences the standard of comparison rather than the interpretation of the target. However, because our contexts were in different categories than the target, experts were likely to use their own comparison standards that are from the same category as the target brand rather than a referent from a seemingly unrelated category.

CONCLUSION

A two-process view provides a coherent account of our findings as well as outcomes reported in the literature. According to this view, message information is encoded during an initial interpretation process to ascertain the properties of the target and a judgment is made at a comparison stage by assessing the target in relation to some standard.

In the current context, the two-process view suggests that consumers' knowledge of the category in which the target brand holds membership is an important determinant of how to manage the brand environment. Assuming that there is ambiguity about the quality of a brand, when consumers are highly knowledgeable about the category, it is important that the context be composed of positively evaluated brands so as to take advantage of the anticipated assimilation effect. At the same time, efforts should be made to ensure that the context in which the brand is presented is not blatantly related to the brand so as to prompt correction contrast. When consumers are less knowledgeable, the preferred context is one in which the target brand's quality is likely to stand out as superior as this would take advantage of the anticipated comparison contrast.

APPENDIX

DOLAN MUSIC SYSTEM

Introducing the new Dolan music system. Dolan is suitable for both pop and classical music listeners.

With Dolan, you get an amplifier with 30 watts per channel to drive the 2-way speakers and 5-inch woofers so you get great clarity of sound.

Dolan has a cassette deck, a 3-disc CD Changer, and a digital tuner for hours of uninterrupted listening pleasure.

The Dolan music system is housed in metal cabinets with walnut trim to look smart whatever your decor.

It doesn't stop there. You also get a full-function remote, and great sound at an affordable price.

REFERENCES

Alba, Joseph W. and J. Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13 (March), 411–54.

Brucks, Merrie (1985), "The Effects of Product Class Knowledge on Information Search Behavior," *Journal of Consumer Research*, 12 (June), 1–16.

Ericsson, K. Anders and Herbert A. Simon (1980), "Verbal Reports as Data," *Psychological Review*, 87 (May), 215–51.

Feldman, Jack M. and John G. Lynch Jr. (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitudes, Intention, and Behavior," *Journal of Applied Psychology*, 73 (August), 421–35.

Gilbert, Daniel T. and Gregory J. Hixon (1991), "The Trouble of Thinking: Activation and Application of Stereotypic Beliefs," *Journal of Personality and Social Psychology*, 60 (April), 509–17.

Herr, Paul M. (1989), "Priming Price: Prior Knowledge and Context Effects," *Journal of Consumer Research*, 16 (June), 67–75.

Hutchinson, J. Wesley (1983), "On the Locus of Range Effects in Judgment and Choice," in *Advances in Consumer Research*, Vol. 10, ed. Richard Bagozzi and Alice Tybout, Ann Arbor, MI: Association for Consumer Research, 305–8.

Lynch, John G., Jr., Dipankar Chakravarti, and Anusree Mitra (1991), "Contrast Effects in Consumer Judgments: Changes in Mental Representation or in the Anchoring of Rating Scales?" *Journal of Consumer Research*, 18 (December), 284–97.

Maheswaran, Durairaj and Brian Sternthal (1990), "The Effects of Knowledge, Motivation, and Type of Message on Ad Processing and Product Judgments," *Journal of Consumer Research*, 17 (June), 66–73.

Martin, Leonard L. (1986), "Set/Reset: Use and Disuse of Concepts in Impression Formation," *Journal of Personality and Social Psychology*, 51 (September), 493–504.

Martin, Leonard L., John J. Seta, and Rick A. Crelia (1990), "Assimilation and Contrast as a Function of People's Willingness and Ability to Expend Effort in Forming an Impression," *Journal of Personality and Social Psychology*, 59 (July), 27–37.

Meyers-Levy, Joan and Brian Sternthal (1993), "A Two-Factor Explanation of Assimilation and Contrast Effects," *Journal of Marketing Research*, 30 (August), 359–68.

Meyers-Levy, Joan and Alice M. Tybout (1997), "Context Effects at Encoding and Judgment in Consumption Settings: The Role of Cognitive Resources," *Journal of Consumer Research*, 24 (September), 1–13.

Moskowitz, Gordon B. and Ian W. Skurnik (1999), "Contrast Effects as Determined by the Type of Prime: Trait versus Exemplar Primes Initiate Processing Strategies that Differ in How Accessible Constructs Are Used," *Journal of Personality and Social Psychology*, 76 (June), 911–27.

Mussweiler, Thomas (2003), "Comparison Process in Social Judgment: Mechanisms and Consequences," *Psychological Review*, 110 (July), 472–89.

Raghunathan, Rajagopal and Julie R. Irwin (2001), "Walking the Hedonic Product Treadmill: Default Contrast and Mood-Based Assimilation in Judgments of Predicted Happiness with a Target Product," *Journal of Consumer Research*, 28 (December), 355–68.

Roehm, Michelle L. and Brian Sternthal (2001), "The Moderating Effect of Knowledge and Resources on the Persuasive Impact of Analogies," *Journal of Consumer Research*, 28 (September), 257–72.

Schwarz, Norbert and Herbert Bless (1992), "Constructing Reality and Its Alternatives: An Inclusion/Exclusion Model of Assimilation and Contrast Effects in Social Judgment," in *The Construction of Social Judgments*, ed. Leonard L. Martin and Abraham Tesser, Hillsdale, NJ: Erlbaum, 217–45.

Sherif, Muzafer and Carl I. Hovland (1961), *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*, New Haven, CT: Yale University Press.

Stapel, Diederik A. and Willem Koomen (2001), "Let's Not Forget the Past When We Go to the Future: On Our Knowledge of Knowledge Accessibility Effects," in *Cognitive Social Psychology: On the Tenure and Future of Social Cognition*, ed. Gordon B. Moskowitz, Mahwah, NJ: Erlbaum.

Stapel, Diederik A., Willem Koomen, and Joop van der Pligt (1997), "Categories of Category Accessibility: The Impact of Trait Concept versus Exemplar Priming on Person Judgments," *Journal of Experimental Social Psychology*, 33 (January), 47–76.

Stapel, Diederik A., Willem Koomen, and Aart S. Velthuijsen (1998), "Assimilation or Contrast? Comparison Relevance, Distinctness, and the Impact of Accessible Information on Consumer Judgments," *Journal of Consumer Psychology*, 7 (January), 1–24.

Stapel, Diederik A. and Piotr Winkielman (1998), "Assimilation and Contrast as a Function of Context-Target Similarity, Distinctness, and Dimensional Relevance," *Personality and Social Psychology Bulletin*, 24 (June), 634–46.

Wegener, Duane T. and Richard E. Petty (1995), "Flexible Correction Processes in Social Judgment: The Role of Naïve Theories in Corrections for Perceived Bias," *Journal of Personality and Social Psychology*, 68 (January), 36–51.

Yi, Youjae (1993), "Contextual Priming Effects in Print Advertisements: The Moderating Role of Prior Knowledge," *Journal of Advertising*, 22 (March), 1–10.