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This research examines the impact of field dependency on the way people structure brand information in memory. The authors propose that a person's level of field dependency is an important determinant of the way information is stored in memory. Specifically, the authors argue that field independents are more likely to extract and integrate episodic information to form overall brand beliefs, while field dependents tend to store more detailed, episodic information in memory and are less likely to generalize information across product categories. The authors further propose that this effect is moderated by level of expertise and that such differences have important implications for how people evaluate marketing communications. The results from five studies support their propositions.

Keywords: cognitive structures, branding, field dependency, advertising, culture

Field Dependency and Brand Cognitive Structures

Understanding how consumers represent and organize brand information in memory has been a topic of enduring interest in the marketing literature. The way information is structured in a person's mind affects what information is retrieved, used, perceived, and stored (Cowley and Mitchell 2003; Wyer and Srull 1989). As new brand information is acquired and integrated with existing knowledge in memory, people form brand cognitive structures in memory (Christensen and Olson 2002). These cognitive structures represent the interpreted meanings of brands and have important implications for many consumer behavior issues, such as brand equity, brand extension evaluation, and brand personality (Keller 2003; Lawson 2002). Thus, it is important to gain an understanding of how information is stored and used.

Traditionally, it has been assumed that people structure information in memory hierarchically (Cowley and Mitchell 2003). However, recent studies have found that many factors (e.g., goals, expertise) may affect the way a person structures information in memory. For example,

Huffman and Houston (1993) show that consumers tend to organize information learned around the goals that drive experiences. Luna and Peracchio (2002) find that language affects the linkages among concepts in memory. Cowley and Mitchell (2003) further show that provision of usage occasion information at encoding affects how information is subsequently structured. Other research also shows that environmental variables (e.g., socialization process) and cognitive abilities (John and Whitney 1986; Wyer and Srull 1989) are important variables to consider. Collectively, this cited research suggests that the way information is stored in memory is influenced by several individual and situational factors.

However, despite extensive research on this topic, there has been minimal research on how processing styles may affect cognitive structures for brands. Because cognitive structures are a result of prior processing (Wyer and Srull 1989), we logically expect that cognitive structures are affected by the type of information to which a person attends and the way the information is encoded. The current research adds to this body of work by examining the impact of processing style on the way information is stored in memory. Specifically, we focus on whether variations in attention to contextual information affect the way information is structured in a person's mind. We argue that people who ignore contextual information (i.e., field independents) are more likely to generalize summary evaluations from personal experiences of one product to another. They focus more on brand-level beliefs, connecting many products by a

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single brand to the same set of beliefs (e.g., connecting many Sony products to the same “good-quality” belief). Conversely, people who pay greater attention to contextual information (i.e., field dependents) are more likely to focus on specific, episodic information derived from their experiences with the brand. They focus more on product-level beliefs and store different sets of beliefs for different products (e.g., having separate “quality” beliefs for different Sony products). We further propose that this relationship is moderated by level of expertise and has important implications for how consumers react to advertisements.

Findings from this research contribute to the literature both theoretically and managerially. Field dependency is a potentially useful factor that explains variations in consumers’ brand cognitive structures. By identifying another possible antecedent variable to brand cognitive structures, we provide a greater understanding of the formation of brand cognitive structures. Managerially, the findings provide some insight into appropriate branding and marketing communication strategies for different consumer groups, such as consumers in different cultures. Our studies show that the way information is stored in memory affects consumers’ responses to marketing communications (e.g., those aimed at building overall brand equity versus communicating specific product benefits).

We organize the remainder of the article as follows: We briefly review relevant literature from which we generate a set of predictions regarding differences in the way consumers structure brand information. We then report five studies designed to test the hypotheses and conclude with a discussion of the implications of the research.

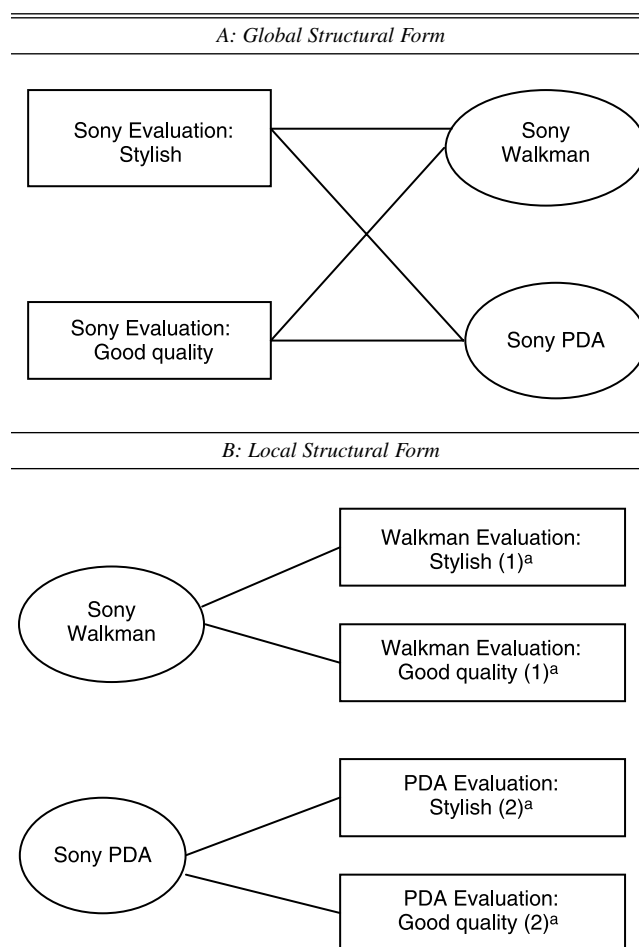
THEORETICAL FOUNDATIONS

Brand Cognitive Structures

Brand cognitive structures refer to the mental representations of brands in the minds of consumers (Christensen and Olson 2002; Keller 2003). They pertain to the way brand knowledge (e.g., usage situations, attitude) is represented and organized in memory (Ratneswhar and Shocker 1991). They result from prior processing of information and also determine the way a person will process information in the future (Wyer and Srull 1989). Information can be processed only if the perceiver has some type of internal knowledge structure to receive and organize it (Lawson 2002; Markus and Zajonc 1985). Subsequent retrieval reflects the way information is organized in memory (Christensen and Olson 2002; Mandler 1985). Thus, gaining a greater understanding of the factors that affect the nature of cognitive structures is important.

So, how is information structured in a person’s mind? In general, the two main ways people structure information in memory are globally and locally (Solomon and Barsalou 2001). The global form approach posits that information is abstracted from individual experiences and integrated to form an overall set of knowledge about an issue. For example, from prior experiences, people may possess an overall evaluation of how good Sony’s products are (e.g., quality). This evaluation is connected to the brand and may be ascribed to other Sony products. Thus, a single representation of “quality” is attached to the brand, Sony, as well as to many Sony products (e.g., Sony Walkman, Sony personal digital assistant [PDA], Sony digital camera) (see Figure 1).

Figure 1
ILLUSTRATION OF LOCAL VERSUS GLOBAL STRUCTURAL FORM



^a“Stylish (1)” is assumed to be different from “stylish (2).” Similarly, “good quality (1)” is meant to be different from “good quality (2).” The different notations are used to highlight the different quality and style perceptions consumers may store for each product.

Notes: It is not the purpose of this illustration to map out the entire cognitive map for Sony, which would be more complex than what is shown. This illustration shows only the difference between global and local structural forms (i.e., whether the same sets of beliefs are attached to the products or separate beliefs are attached to each product).

In this case, for each brand, consumers possess a common set of beliefs for several of the brand’s products. Because the same belief is ascribed to a varied list of products despite their differences, this approach implicitly assumes that concepts and representations are context independent and that situational factors play no role in affecting the representations retrieved (Solomon 1998; Solomon and Barsalou 2001).

The global form approach is consistent with findings in the brand literature, which assumes that people construct and store abstract knowledge (e.g., affect, beliefs, attitude) from exemplars or episodic memories, which are then transferred to new, extended products (Broniarczyk and Alba 1994; Keller 1993, 2003). Many models in the categorization literature (e.g., prototype models, rule-based models) are also supportive of the global form approach

(Barsalou 1992; Cohen and Basu 1987). Thus, the global form approach is consistent with many theories in the branding and categorization literature. However, research shows that abstraction does not always occur. People store specific situational information from experiences, which leads to the local form approach.

The local form approach argues that people do not necessarily abstract information from experiences to form overall evaluations. Instead, product-specific information may be stored and used for future reference (Solomon and Barsalou 2001). According to this approach, the same property may take on different forms in different concepts. For example, this approach assumes that consumers notice the differences among various Sony products and store different representations of quality for each product (i.e., they store a separate quality node for Sony Walkman, Sony PDA, and Sony digital camera) (see Figure 1). This approach assumes that representations are context dependent (Solomon and Barsalou 2001) and posits that people store individuating information (e.g., usage occasion) of each product (Ratneswhar and Shocker 1991). Thus, in the local form approach, separate sets of beliefs are stored for each product of a brand. Several findings in the brand literature are supportive of this approach. For example, Loken, Joiner, and Peck (2002) show that people store specific information of exemplars and that this exerts an influence on their brand attitude. The local form approach is also consistent with the exemplar model in the categorization literature, which argues that people do not always abstract information from objects or experiences to form abstract category knowledge (Barsalou 1992; Cohen and Basu 1987).

Thus, theoretically, there are two ways information may be structured in memory. However, in reality, it is more likely that people adopt some degree of both structural forms; they may connect a group of products to the same sets of beliefs and store separate beliefs for another group of products. For example, products that are developed to be highly similar may be connected to the same sets of beliefs, while those that are developed to be different from the rest may be connected to their own sets of beliefs. However, in most cases, companies do not develop products that are extremely similar or extremely dissimilar. Typically, multiple products sold by a company are moderately similar to one another, leaving a certain degree of ambiguity in how a person may choose to view them. Within this latitude, we argue that a person's attention to contextual information affects how he or she stores information for these products in memory.

Thus, the research question at hand considers whether some types of consumers are chronically more inclined toward one structural form than others. Although many factors may affect which form of cognitive structure is more dominant, a key variable is the way people process information—more specifically, the extent to which a person is chronically inclined to take into account contextual information (i.e., the person's level of field dependency).

Field Dependency

Field dependency refers to a person's ability to overcome an embedding context and separate an item from an organized field (Witkin and Goodenough 1981). Field independents are better able to break up an organized field, zoom in on relevant material within its context, and distinguish sig-

nal from noise than field dependents (Berry 1991). They have an independent sense of self and rely on an internal frame of reference when processing information. Compared with field dependents, field independents also make less use of information from others in arriving at their own views; they function more autonomously and have an impersonal orientation (Witkin and Goodenough 1981). In addition, field independents are more capable of cognitive restructuring. They are better at "providing structure for an ambiguous stimulus complex ... and providing a different organization to a field than that which is suggested by the inherent structure of the stimulus complex" (Riding and Cheema 1991, p. 198). Coupled with the tendency to ignore contextual information, this results in field independents being more likely to focus on the attributes of objects (Berry 1991; Kühnen et al. 2001). Concepts are abstracted out of situations, and seemingly "irrelevant" situational information is ignored. In essence, field independents have a more context-independent conceptualization of categories.

Conversely, field dependents pay great attention to contextual information. They are sensitive to relationships between objects and the field (Berry 1991; Kühnen et al. 2001; Nisbett et al. 2001). Field dependents are more likely to rely on contextual cues in their behavior and cognition than field independents (Witkin, Goodenough, and Oltman 1979). They feel less differentiated from the environment. Their self-views are related to how others view them, and they tend to possess good interpersonal communication skills. Van Baaren and colleagues (2004) show that field dependents are more affected by the environment and are likely to mimic other people's behavior. This sensitivity to contextual information also leads to a more context-dependent conceptualization of categories.

Drawing on this literature, we argue that differential attention to contextual information on the part of field dependents and field independents should lead to differences in the abstractness of their cognitive structures. A field independent's tendency to ignore situational information and corresponding preference for abstraction should result in a greater tendency to generalize summary evaluations to other products of the brand and discard individuating information. Field independents are more likely to use global evaluations or beliefs to describe a brand. Thus, we propose that field independents are likely to structure information consistent with the global form approach. Conversely, because field dependents pay greater attention to contextual information, they possess a more situated view of concepts. In evaluating a category, attention to contextual information should lead them to focus on individuating information of each product (e.g., usage occasion) and store separate beliefs for each product.¹ Therefore, field dependents are more likely to encode situational-specific information about products and structure information more in line with the local form approach.

¹Note that we label these as beliefs and not attributes because beliefs place a brand on a level of an attribute. Quality is an attribute, but "good quality" implies a favorable evaluation on that attribute. Although both field dependents and field independents possess a quality attribute in memory, we argue that they differ in their evaluation of this attribute for the products. Field independents possess overall beliefs about a brand on a particular attribute, while field dependents possess different beliefs on that attribute for each product.

It is important to emphasize that we are not arguing that field independents always abstract information and that field dependents do not abstract any information at all. At issue, however, is how much abstraction takes place.² It is a question of tendency—that is, which is more likely to be adopted by different groups of people. We propose that field dependents engage in less abstraction than field independents.

H₁: Field independents are more likely to ascribe the same sets of beliefs to products of a brand, while field dependents are more likely to possess different sets of beliefs for each product.

H₁ argues that field independents focus more on similarities among products while field dependents focus more on the differences. However, even if a person is inclined to search for similarities or differences among products, this needs to be accompanied by the ability to do so. Prior research has shown that expertise affects cognitive structures (Alba and Hutchinson 1987; Mitchell and Dacin 1996). As a person's expertise grows, he or she becomes better able to organize information from that domain (Barsalou 1992). Compared with novices, experts are able to use unique attributes to differentiate between objects. However, at the same time, they can discern similarities among products (Mitchell and Dacin 1996; Scott, Osgood, and Peterson 1979). Drawing from this stream of literature, we argue that expertise may exacerbate the differences observed between field dependents and field independents. Specifically, because experts have the ability to detect similarities and differences among objects, field dependency affects the aspect on which they focus. Specifically, we argue that field-independent novices who are unable to discern similarities among objects are less likely to abstract information from varied product experiences and ascribe the same beliefs to them. Conversely, field-independent experts possess both the motivation and the ability to do so. Thus, greater expertise should magnify field independents' likelihood of ascribing the same sets of beliefs to products. Conversely, expertise should exacerbate field dependents' tendency to structure information locally because it enables them to differentiate products more finely. Thus, we propose that expertise magnifies the impact of field dependency on cognitive structures.

H₂: Expertise magnifies the impact of field dependency on cognitive structures.

Marketing Implications

The literature we referenced previously leads to hypotheses that suggest that the way people attend to information in the environment can result in different organizations of knowledge. We further propose that this difference filters down to influence their preference for the structure of information that is presented to them and affects how they evaluate various types of information. Specifically, we argue that

people should prefer advertisements that present information consistent with the way they organize it. Because field independents are more likely to store brand-level information, marketing communications should be at the brand level to appeal to them. Advertisements that focuses on influencing overall brand beliefs (e.g., Nike advertisements stressing the idea of women taking control of their own lives) should be viewed favorably by field independents. Conversely, given a greater likelihood of storing product-level information, field dependents should prefer advertisements that focus on product-level beliefs. Using attitude toward the ad as an indication of affect toward a message, we derive the following hypotheses:

H₃: Field independents exhibit more favorable attitudes toward advertisements that present information at the brand level than toward those that present information at the product level, while field dependents exhibit more favorable attitudes toward advertisements that present information at the product level than toward those that present information at the brand level.

In the following sections, we present two sets of studies conducted to test the hypotheses. The first set of studies (Studies 1–3) focuses on the theoretical issues proposed in H₁ and H₂. Specifically, using a between-subjects design, Study 1 tests the basic premise that field dependency affects a person's tendency to generalize brand beliefs across product categories (H₁). Study 2 aims to replicate the findings from Study 1 using a within-subjects design. Unlike Study 1, which uses a separate group of participants as the control group, in Study 2, each participant serves as his or her own control. Building on Studies 1 and 2, Study 3 examines whether the impact of field dependency on a person's structural tendency is moderated by expertise level (H₂). With support for the structural difference between field dependents and field independents, the second set of studies (Studies 4 and 5) investigates the implications of such differences on consumer responses to marketing communications (H₃).

TESTING THE THEORETICAL ISSUES

Study 1: Between-Subjects Approach

Purpose and methodology. H₁ proposes that field independents are more likely than field dependents to connect the same sets of beliefs to a varied list of products by a brand. Using an adaptation of the property verification task commonly used in the literature, we examine whether responding to a belief about a context product facilitates participants' responses to the same belief for a target product (Solomon and Barsalou 2001). This methodology is in line with the associative network theory typically used in the brand literature. In general, the literature has conceptualized brand as an associative network in which brand associations are represented by nodes in memory, and in turn, pathways link these nodes (Keller 1993). When a node is activated by either internal or external cues, excitatory forces generated at this node spread along the pathways to other nodes. If excitation at these other nodes rises above a threshold, they become more accessible as well (Barsalou 1992; Keller 1993; Wyer and Srull 1989).

According to this theory, if people link two products to the same belief (e.g., good quality), activating the belief for one product should spread the activation to the other prod-

²Note that we focus only on products that are moderately similar or dissimilar. It is not necessarily the case that field dependents would never connect same sets of beliefs to products by a brand. It is also unrealistic to expect field dependents to possess separate beliefs for a large variety of products because it would be too taxing cognitively. As we discussed previously, for products that are similar or dissimilar, there should be minimal differences in the way the information is treated across the two groups.

uct, thus facilitating its response. Conversely, minimal facilitation should be observed if the products are not linked to the same belief. Procedurally, in the experiment, participants were asked to indicate whether a descriptive term (e.g., “good quality”) accurately described a context product shown (e.g., Sony Walkman). After responding to the context-product trial, they completed some filler trials before responding to a target-product trial (e.g., Sony PDA–good quality). If the context product (e.g., Sony Walkman) is connected to the same belief (e.g., good quality) as that of the target product (e.g., Sony PDA) (see Figure 1, Panel A), responding to the context product should raise the activation level for the target product. Thus, when Sony PDA–good quality is encountered later, it will take less activation to pass the threshold, thus reducing reaction time. However, if individual beliefs are attached to the products (see Figure 1, Panel B), responding to Sony Walkman–good quality will not raise the activation level for Sony PDA. In this case, when participants respond to Sony PDA–good quality, we would not expect to observe any significant facilitation. To test whether facilitation occurs, we compared reaction times with those of a baseline condition. By examining the scope of facilitation in reaction time for the target products, we can assess whether the same beliefs are attached to different products of a brand.

Design and participants. To test H_1 , this study adopted a 2 (field dependency: field independents versus field dependents) \times 2 (context product: context product versus no context product) between-subjects design. Participants in the no-context-product condition served as the control group. To assess the degree of facilitation, we compared participants’ reaction times in the context-product condition with those in the no-context-product condition. Although we used a separate group of participants as the control, randomization should negate any systematic between-subjects differences across the conditions. Sixty students from a large midwestern university were recruited for this study. Participants were paid \$10 for their participation.

Pretest. We conducted extensive pretests before the study to identify brands that could be used in the experiment. Two criteria guided the selection of brands: (1) The chosen brands and products needed to be familiar to the respondents so that prior beliefs about the brands existed, and (2) the brands needed to have products in multiple product categories. This was necessary because two products for each brand were needed in the reaction time task: one as the target product and one as the context product. To identify brands with which people were generally familiar, we generated a list of 40 brands and their products (termed “brand sets”). Using seven-point rating scales, 20 pretest participants rated their familiarity with the brand (i.e., how familiar they were with the brand, how knowledgeable they were of the brand, and how often they encountered the brands in their daily lives) and the perceived similarity of the products (i.e., how similar the product pairs were and the extent to which respondents believed that the product pairs belonged to the same product category). On the basis of the ratings, we short-listed only brand sets with familiarity ratings significantly above four.³ This yielded approximately 25 brand sets. Among these short-listed brand sets,

we chose only those with two products perceived as being moderately similar to each other.⁴ Using this criterion, we deemed another 10 brand sets to be inappropriate, which left a final list of 15 brand sets.

Because the study aimed to test whether people connect the same sets of beliefs to different products of the same brand, it was also necessary to identify beliefs associated with each brand set. To do so, another 20 participants were given the chosen brand sets and were asked to write down five words (i.e., beliefs or evaluations) they would use to describe each brand set. They were told to write only beliefs that were applicable to both products of each brand. The beliefs were coded and ranked from the most frequently mentioned to the least frequently mentioned. For each brand set, we chose the most frequently mentioned belief. In the scenario in which the same belief was listed for more than one brand set, we used the next most frequently used belief for one of the brand sets. This was necessary to ensure that each brand set had a unique belief.

Stimulus materials. The stimulus materials reflected two critical conditions: context product shown and no context product shown. During the experiment, related pairs of verification trials were shown: a context-product trial followed by a target-product trial, separated by ten filler trials. For example, in the context-product trial, participants verified a belief (e.g., good quality) for a context product (e.g., Hewlett-Packard calculator). After ten filler trials, participants verified the same belief for a target product (e.g., Hewlett-Packard desktop). In the no-context-product condition, we used unrelated filler products in place of context products. This served as a baseline condition to check for facilitation. From the pretest, we used 15 brands in this study, each containing two products and one belief (see the Web Appendix at <http://www.marketingpower.com/jmrApril09>). We randomly assigned participants to each condition (i.e., context product or no context product) and counterbalanced the order in which the brand pairs were presented. Throughout the experiment, we included filler trials to mask the critical trials. Half the filler trials were true trials, and half were false trials. The false trials were necessary to ensure that participants did not get into the habit of choosing true for every word pair. No brand, product, or descriptive term used in the critical trials was duplicated in the filler trials.

Procedure. The cover story told participants that the purpose of the study was to assess their opinions of some brands currently in the marketplace. Next, detailed instructions about the task were given. Participants were informed that a product (e.g., Hyundai Elantra) would be shown on the top part of the screen briefly, after which a descriptive word (e.g., “stylish”) would be shown on the bottom part of the screen. Participants used their index fingers to press two preassigned keys (“z” and “l”); the task was to indicate whether the descriptive word accurately described the product shown. They were instructed to respond as quickly as possible but to avoid making errors. Participants’ dominant hand was used to make true responses. Each trial began

³The mean familiarity ratings for the 25 brands ranged from 3.2 to 5.6.

⁴As we discussed, people usually connect products that are similar to the same beliefs and store different beliefs for dissimilar products. The important structural differences are more likely to occur when products are only moderately similar. Thus, our focus here is on products that are moderately similar.

with fixation crosses at the center of the screen. After 500 milliseconds, a product replaced the crosses. The product was shown at the top of the screen for 500 milliseconds, followed by a blank 500-millisecond interstimulus interval, after which a descriptive word appeared at the bottom of the screen. The product was presented in capital letters, and the descriptive word was presented in lowercase letters. Participants completed 30 practice trials before they started the critical trials to ensure that they were sufficiently familiar with the tasks and that their reaction times were stable before they proceeded to the critical trials (Fazio 1990; Solomon and Barsalou 2001). Participants also received five one-minute breaks in between trials to avoid fatigue. In total, participants completed 350 trials. At the end of the experiment, we assessed participants' familiarity with the brands and the extent to which they associated each belief with the products (e.g., "I think Sony Walkman is stylish" ["strongly agree/strongly disagree"]). We used the belief assessment to assess participants' error rates in the analysis (Fazio 1990).

Finally, participants completed the embedded figures test (EFT), a perceptual task that has been widely used in the past few decades to assess field dependency (Goodenough et al. 1991; Witkin and Goodenough 1981). To complete the EFT, participants were required to locate simple figures embedded within larger, more complex patterns. The EFT assumes that for field dependents, perception is strongly dominated by the overall organization of the surrounding field, making it more difficult for them to identify the embedded figures. However, because field independents view the field as being discrete from the organized ground, it should be easier for them to identify the embedded figures. Thus, the more figures a participant can identify, the better he or she is at separating the object from the field, and therefore the more field independent he or she is (Berry 1991; Witkin and Goodenough 1981).

Outliers. Before analyzing the data, we purged outliers. Outliers represent spurious processes generated by influences or interferences (e.g., inattention) other than those of theoretical interest (Fazio 1990). Including the outliers would distort the results. Consistent with previous studies, we deleted points greater than three standard deviations away from the mean (Miller 1991; Solomon and Barsalou 2001). Following this method, we deleted approximately 5% of data points across all conditions.

Next, we assessed error rates. Because there are no objectively defined answers for attitude measures, Fazio (1990) proposes that participants' responses during reaction time experiments should be compared with their judgments when time is not an issue. Here, an error "was defined as having responded 'like' during the latency task, but having rated the product more negatively than the neutral point on the questionnaire scale" (Fazio 1990, p. 81). Fazio proposes that data points with an error rate greater than 10% should be deleted. Following this method, we deleted data from two participants (approximately 3% of the entire data set). We also deleted data from another participant who did not follow the given instructions.⁵

Confounding check. We analyzed reaction times on the filler trials to check whether participants' positions on the speed-accuracy curve were consistent across conditions and whether the tasks affected their decision criteria (Fazio 1990). The results showed no significant difference in reaction times across conditions ($F(1, 50) = .17, p > .1$). Analysis also showed no significant difference in error rates across conditions ($F(1, 50) = .04, p > .1$). Finally, we examined participants' familiarity with the brand sets. Analyses of the data showed no significant difference in brand familiarity across conditions ($F(1, 50) = .25, p > .1$).

Facilitation. To assess whether facilitation differed for field dependents and field independents, we conducted a regression analysis with field dependency as a continuous variable and context product as a dummy variable.⁶ The results showed a significant simple effect of context product ($\beta = 383.94, SE = 219.22; F(1, 49) = 3.07, p < .05$) and a significant two-way interaction between field dependency and context product ($\beta = -24.95, SE = 10.30; F(1, 49) = 5.86, p < .05$) (see Figure 2). Consistent with Aiken and West's (1991) recommendation, to probe further into the significant interaction, we examined the simple regression of field dependency on participants' reaction times in each of the context-product conditions. The results showed that the slope of the regression line was not significant in the no-context-product condition (i.e., control condition) ($\beta = -3.41, SE = 4.77; t(49) = -.72, p > .1$) but was highly significant in the context-product condition ($\beta = -28.33, SE = 9.61; t(49) = -2.97, p < .01$). Thus, field dependency did not have a significant impact on reaction time when no context product was shown. However, when related context products were shown, field-independent participants exhibited significantly faster reaction times than field-dependent participants. This finding supports H_1 .

Study 1a: Follow-Up Study

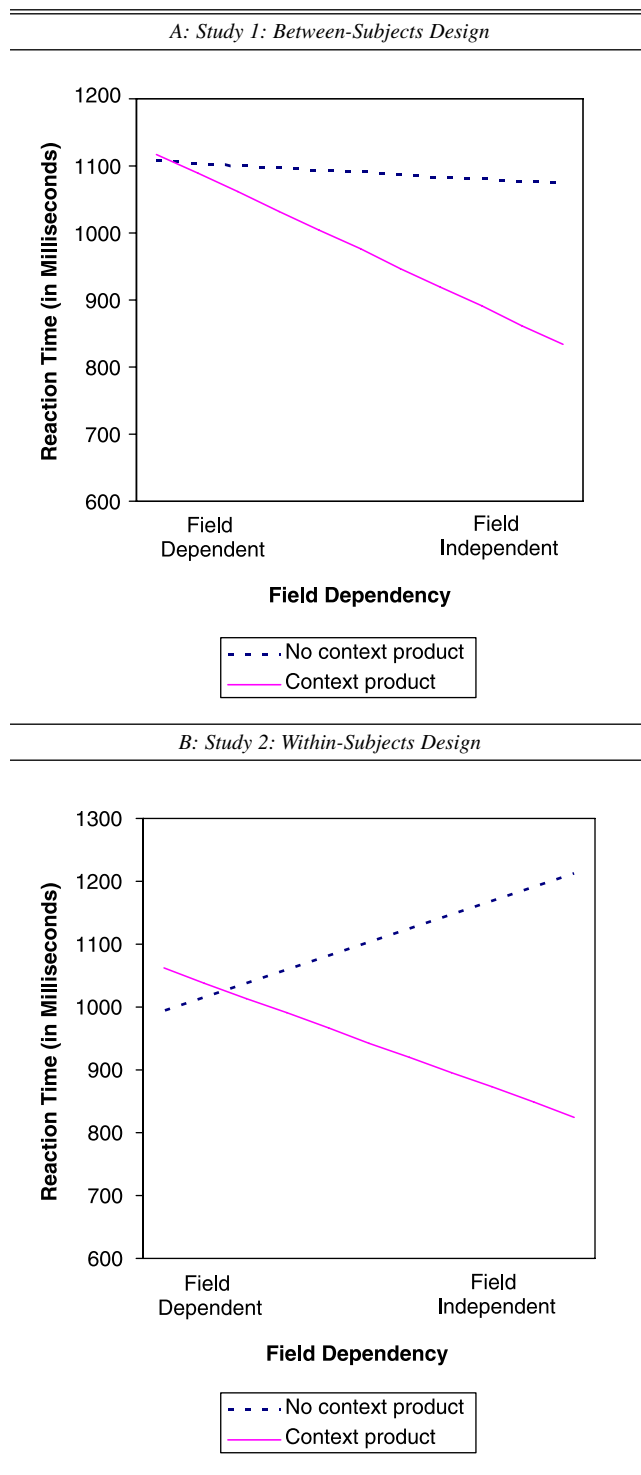
Procedure and results. Although Study 1's results were consistent with H_1 , there was a potential alternative explanation for the results. Recall that in the experiment, participants were shown pairs of brand sets (e.g., Nike shoe-stylish, Nike apparel-stylish). We argued that if both Nike shoe and Nike apparel are connected to the same "stylish" node, facilitation in reaction times should be observed. However, facilitation could also be obtained if Nike shoe is connected to Nike apparel, independent of their connection to being stylish. In this case, the connection occurs at the product level, not at the belief level. If this argument is valid, it should not matter if the same belief is given for each brand set in the experiment. That is, it should not matter if people are shown Nike shoe-stylish and Nike apparel-stylish or Nike shoe-good quality and Nike apparel-stylish; either way, the same facilitation should be observed. To rule out this alternative explanation, we conducted a follow-up study, in which beliefs given for the context products were different from those given for the target products (e.g., Nike shoe-good quality, Nike apparel-stylish).

Another group of 20 students was recruited. The students were short listed from a group of approximately 40 students according to their scores on the EFT. We chose only field-

⁵The participant used just one hand to press the keys when he was specifically told to use both hands.

⁶We coded the no-context-product condition as 0 and the context-product condition as 1.

Figure 2
SIMPLE REGRESSION LINES FOR IMPACT OF FIELD
DEPENDENCY ON FACILITATION



independent participants for this follow-up study because the previous results showed significant facilitation only for field independents. Thus, of the 40 participants, only those who scored high on the EFT (i.e., those who identified more figures based on a median split) were told to proceed to the reaction time task. This experiment used the same sets of product pairs as that in Study 1. However, in this

study, we changed the beliefs given for the context products so that they were different from those given for the target products (e.g., if the target trial showed Nike shoe–good quality, the context trial showed Nike apparel–stylish). We compared reaction times with those obtained previously in the context-product condition. Analysis showed that participants reacted significantly faster when the beliefs shown in the context-product trials were similar to those in the target trials ($\beta = -218.46$, $SE = 41.60$; $t(34) = -5.25$, $p < .01$). When we compared the reaction times with those obtained previously in the control condition, we observed no significant differences ($\beta = -14.69$, $SE = 38.89$; $t(32) = -.38$, $p > .1$). Thus, findings from this follow-up study showed that connections at the product level could not have explained the previous results.

Discussion. The results from Study 1 provide preliminary evidence that field independents and field dependents structure brand information differently in memory. Consistent with the argument that field independents are more likely to link the same sets of beliefs to products of a brand (H_1), we find that priming field independents with another product by the same brand leads to greater degrees of facilitation for field independents than for field dependents.

Study 2: Within-Subjects Control

Purpose. Study 2 aims to replicate the findings from Study 1, with two changes to the experimental procedures. First, in this study, we use a different baseline to ascertain the degree of facilitation. In Study 1, we compared participants' reaction times for the focal product trials with those of an independent group of participants who were not exposed to the context-product trials. A possible issue with the use of a different group of participants for the baseline condition is that it does not control for between-subjects differences. Although randomization should control for systematic between-subjects differences and such comparisons have been used in previous research (Solomon 1998; Solomon and Barsalou 2001), in Study 2 the interest lies in whether we can replicate the findings using individual participants as their own control. Thus, in Study 2, participants came to the lab twice: once to get their baseline reaction times and once to obtain their reaction times when they were primed with the context products.

Second, previous studies have shown that when a judgment has been made, it facilitates the speed with which the judgment could be made a second time (e.g., having responded to “good quality” may make responding to the second “good quality” faster, independent of what product was shown; Stewart et al. 1998). Although this effect could not have accounted for the results, because participants in both the context-product and no-context-product conditions saw the same belief twice, to minimize the possibility that the facilitations observed might be attributed to a match in the cognitive processes engaged in during context trials and critical trials, Study 2 reduced the time between the onset of the product and the belief.⁷ In Study 1, products were shown on the screen for 500 milliseconds, followed by a

⁷Participants in both conditions saw the belief once in the context-product trial (or baseline trial) and once in the target trial. Therefore, if the results obtained were due to people processing the same information faster, we should observe facilitation in all conditions, not only in the context-product trial condition.

500-millisecond interstimulus interval. The 1000 milliseconds between the onset of the product and the belief might have allowed participants to engage in some processing. In Study 2, the time for which the product was shown on the screen was reduced to 350 milliseconds, followed by a 150-millisecond interstimulus interval. The reduction in time (from 1000 milliseconds to 500 milliseconds) reduced the possibility that participants were engaging in extensive processing during the trials.

Design and participants. This study adopted a 2 (field dependency: field dependent versus field independent) \times 2 (context product: context product versus no context product) mixed design. Field dependency was a between-subjects variable, and context product was a within-subjects variable. Sixty students from a large university in Singapore were recruited for this study and were paid \$15 for their participation.

Pretest. To test whether the stimuli used in Study 1 could be used in Singapore, we conducted a pretest. Twenty participants were shown the brand sets used in Study 1 and were asked to rate how familiar they were with the brand sets and how strongly they associated the beliefs with the brand sets. We analyzed participants' ratings for each brand set. Analysis showed that most people were familiar with the brands shown and associated each brand set fairly strongly with the respective belief used in the stimuli. Thus, we deemed the stimuli to be suitable for use in Singapore.

Procedure and stimuli. Procedures for Study 2 were similar to Study 1, except for the two changes discussed previously: (1) the reduction in the times in which the stimuli were shown on the screen and the interstimulus intervals and (2) the use of participants as their own control. Participants came to the lab to complete the control condition trials. For this condition, no context products were shown. Participants responded to a list of filler trials and the target-product trials (as in Study 1, there were 15 target-product trials). Their reaction times for the target-product trials were recorded to check subsequently for facilitation. A week later, the same group of participants returned to the lab to do the same experiment. However, this time, before the target-product trial, they were shown the context-product trial, separated by ten filler trials. After completing the trials, they were asked to complete the EFT and to answer questions on their familiarity with the brand. In each session, participants completed 350 trials.

Outliers and confounding check. We deleted data points greater than three standard deviations from the mean as well as data from participants with error rates in excess of 10% and those who did not follow the instructions, all of which led to the deletion of six participants from the data. Analysis of the reaction times on filler trials showed no significant difference in reaction times across conditions ($F(1, 51) = .32, p > .1$). There were also no significant differences in the error rates ($F(1, 51) = 1.01, p > .1$) and familiarity ($F(1, 51) = 1.11, p > .1$) across conditions.

Facilitation. Because this study adopted a within-subjects design, we ran a repeated measures analysis. We included participants' reaction times in the control condition and context-product condition as a within-subjects factor, and we included field dependency as a continuous variable. Analysis revealed a significant interaction between field dependency and context-product condition ($F(1, 52) = 4.93, p < .05$). Specifically, analysis showed that field

dependency did not have a significant effect on participants' reaction times in the control condition ($\beta = 21.91, SE = 19.65; t(52) = 1.12, p > .1$). However, when primed with a context product by the same brand, field independents responded significantly faster than field dependents ($\beta = -23.59, SE = 4.34; t(52) = -5.44, p < .01$). These results replicated the findings in Study 1.

Discussion. Study 2 shows again that field independents exhibit significantly greater degrees of facilitation when primed with a context product by the same brand than field dependents. The convergence of results using two baselines in the studies provides evidence to support our contention that field independents are more likely to connect the same belief to multiple products of a brand than field dependents and also suggests that both baseline measures are valid in the assessment of facilitation. Building on these findings, Study 3 examines whether these differences are affected by level of expertise (H_2).

Study 3: Moderating Role of Expertise

Design and participants. H_2 proposes that expertise magnifies the impact of field dependency on cognitive structures. To test this hypothesis, 160 students from a large midwestern university participated in this study. We adopted a 2 (field dependency: field dependent versus field independent) \times 2 (expertise: expert versus novice) \times 2 (context product: context product versus no context product) between-subjects design. We measured the first two factors.

Pretest and stimuli. To examine the impact of expertise, we chose the automobile category. It is a product category with broad familiarity, but there are substantial differences in how much people know about cars. At one end, there are people who believe that all cars are the same. At the other end, there are people who delve into specific details (e.g., transmission efficiency) of cars. Moreover, there are multiple brands of automobiles in the market with which people are familiar, thus providing the brands necessary for multiple trials in the experiment.

To choose the brands and models for the experiment, we adopted pretest procedures similar to those in the previous studies. We began by generating a list of all car brands in the market. Next, 20 students rated the extent to which they were familiar with the brands (e.g., Ford) and a specific make (e.g., Ford Focus) on a seven-point scale (1 = "not at all familiar," and 7 = "very familiar"). Using the same scale, they also rated the extent to which the various types of cars (e.g., sedan, sport-utility vehicle, truck) were similar to one another. On the basis of the familiarity ratings, we identified 12 brand sets and two models within each brand perceived as moderately dissimilar to each other.⁸ Pretests showed that, in general, sedans were rated as moderately dissimilar to sport-utility vehicles and trucks ($M = 3.6$ and 3.2 , respectively). For this reason, we chose one sedan and one sport-utility vehicle (or truck) from the 12 previously short-listed brand sets. We used sedans as context products and sport-utility vehicles or trucks as target products. As in prior experiments, we asked a second group of participants to write down five words they would use to describe both

⁸As in Studies 1 and 2, we were more interested in the situation in which products are moderately dissimilar. Moreover, research has shown that the impact of expertise is greatest when things are moderately different (Spence and Brucks 1997).

cars from each brand. We used the most frequently mentioned beliefs in the experiment. In the event of duplication of beliefs, we used the next most frequently mentioned term for one of the brands (for stimuli, see the Web Appendix at <http://www.marketingpower.com/jmrapril09>).

Procedure. Procedures for this study were similar to those in the previous studies. There were 12 critical trials for this study. Across the two conditions (context product and no context product), brand sets occurred in the same absolute position as in the trials. We divided the brands into three groups and randomized and counterbalanced the order in which they were presented. We also included non-car-related filler trials in the experiment to mask the critical trials. Again, 10 filler trials separated the context trial and the target trial. In total, each participant responded to 284 trials. At the end of the study, participants indicated their car-related expertise on a five-item (e.g., familiarity with cars, knowledge about cars, attention to detailed specifications of cars), seven-point scale adapted from the work of Mitchell and Dacin (1996).

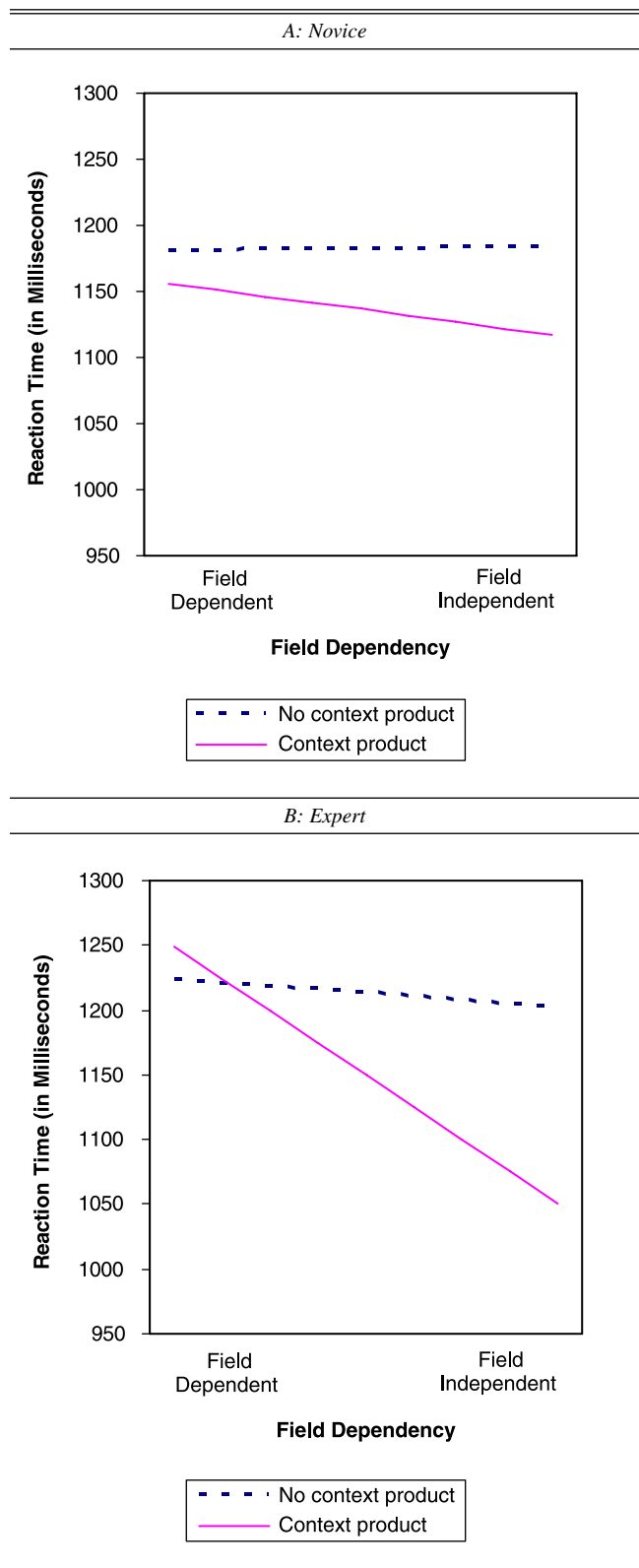
Outliers and confounding check. Eliminating data points greater than three standard deviations from the mean removed 3% of the data points. We also identified respondents with error rates in excess of 10% and those who obviously did not follow the instructions, leading to the deletion of data from another six participants. Analysis of the reaction times in filler trials showed no significant differences across conditions ($F(1, 141) = 1.03, p > .1$).

Facilitation. We ran a regression with field dependency and expertise as continuous variables and context product as a dummy variable. The two-way interaction between expertise and context product was significant ($\beta = 133.90$, $SE = 76.34$; $F(1, 140) = 3.08, p < .05$). More important, the three-way interaction among field dependency, expertise, and context product was significant ($\beta = -6.72$, $SE = 3.54$; $F(1, 140) = 3.60, p < .05$). All other effects were not significant. To analyze the interaction further, we conducted simple regressions of field dependency on participants' reaction times at different levels of expertise and across the two context-product conditions. Because expertise was a continuous variable, we ran the simple regressions at expertise levels one standard deviation above and below the mean (Aiken and West 1991), which resulted in regressions at each of the four combinations of expertise level and context-product conditions.

Analysis showed that for novices, increasing levels of field dependency did not have a significant effect on their reaction times in the control condition ($\beta = .36$, $SE = 3.92$; $t(140) = .01, p > .1$). In the context-product condition, increasing levels of field dependency had only a marginally significant effect on their reaction times ($\beta = -4.85$, $SE = 3.79$; $t(140) = 1.28, p < .1$). Conversely, for experts, although increasing levels of field dependency did not have a significant effect on participants' reaction time in the control condition ($\beta = -2.72$, $SE = 5.96$; $t(140) = .62, p > .1$), it led to significantly greater levels of facilitation in the context-product condition ($\beta = -24.78$, $SE = 3.22$; $t(140) = 7.70, p < .01$). This pattern of results supports H_2 (see Figure 3).

Discussion. The results from this study are consistent with the argument that field dependency and expertise interact to affect the way people structure information. The findings show that greater expertise exacerbates the impact

Figure 3
STUDY 3: SIMPLE REGRESSION LINES FOR IMPACT OF FIELD
DEPENDENCY ON FACILITATION



of field dependency on the way people structure information. Specifically, field-independent experts demonstrated significantly greater facilitation than field-dependent

experts. However, we did not observe such differences for novices.

Thus, overall, findings from Studies 1–3 provide evidence that field dependents and field independents store information differently in memory. Our interest now lies in the effects of such differences on consumer attitudes toward marketing communications (H_3). Studies 4 and 5 address this question by examining whether the way field dependents and field independents store information affects how they respond to various types of advertisements.

CONSEQUENCES FOR MARKETING COMMUNICATIONS

Study 4: Attitude Toward the Ad

Objective. Study 4 examines whether differences in the way people store information affect how they evaluate various types of advertisements (H_3). Specifically, because field independents are more likely to store brand-level information, marketing communications should be done more at the brand level to appeal to field independents. Conversely, because field dependents are more likely to store product-level information, they should prefer advertisements that focus on product-level beliefs.

Design and participants. To test our proposition, we designed a 2 (field dependency: field independent versus field dependent) \times 2 (type of advertisement: brand level versus product level) between-subjects experiment. As in the previous studies, we measured field dependency using EFT. We manipulated type of advertisement. Eighty students from a large university in Singapore were recruited for this study and were paid \$5 for their participation.

Stimuli and procedure. The cover story told participants that the purpose of the study was to assess opinions of certain brands currently in the marketplace. Participants were then shown an advertisement about Nike, a brand with which most people are familiar. Recently, there had been a shift in Nike's advertising strategy, with greater emphasis on building overall brand beliefs (e.g., woman power) and less focus on specific products. Thus, at the time of the study, it was appropriate.

Two versions of the advertisement were developed, each of which focused on the technology going into producing Nike products. However, the brand-level advertisement focused on Nike representing good technology, while the product-level advertisement focused on the good technology that went into producing Nike running shoes. The brand-level advertisement showed a picture of a couple jogging. The text on the advertisement read "Empower yourself with good technology. Just do it." The product-level advertisement also showed a picture of a couple jogging. In addition, the picture included a zoom-in image of the Nike running shoe one of the runners was wearing. The text read "Running shoes with good technology. Just do it" (see the stimuli in the Appendix). After seeing the advertisement, participants completed questions on their attitudes toward the ad and some demographic questions. Finally, participants were asked to complete the EFT before they were debriefed.

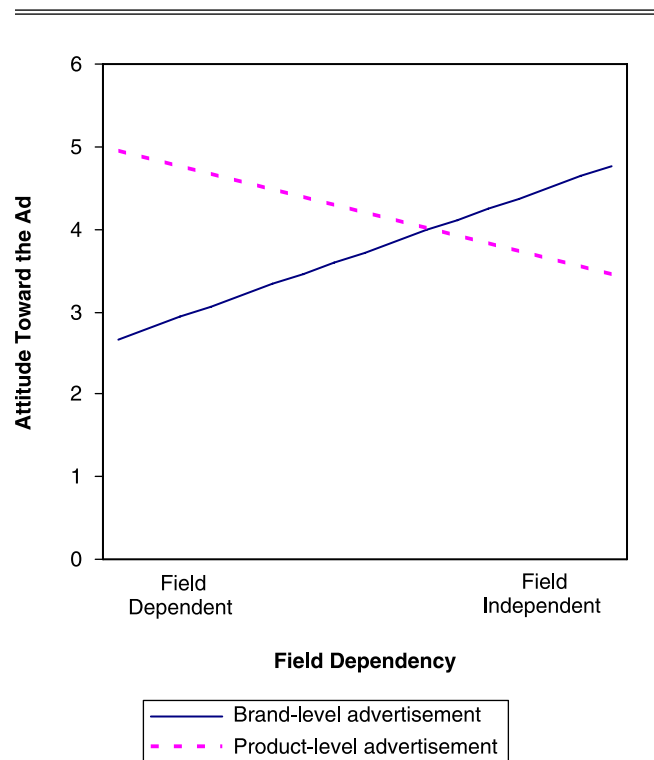
Attitude toward the ad. We measured attitude toward the ad using a three-item scale ("favorable/unfavorable," "like/do not like," and "positive/negative") that demonstrated good reliability ($\alpha = .90$). We conducted our analy-

sis on the mean of the three items. Regression with field dependency as a continuous variable and type of advertisement as a dummy variable showed significant simple effects for field dependency ($\beta_1 = .13$, $SE = .03$; $F(1, 76) = 17.87$, $p < .01$) and type of advertisement ($\beta_2 = 4.29$, $SE = .77$; $F(1, 76) = 31.27$, $p < .01$). More important, it also showed a significant two-way interaction ($\beta_3 = -.22$, $SE = .04$; $F(1, 76) = 28.44$, $p < .01$) (see Figure 4). To probe further into the two-way interaction, we regressed attitude toward the ad on field dependency for each of the two types of advertisements (i.e., the brand-level advertisement and the product-level advertisement). The t-tests on the two slopes showed that both slopes were significant, but the slopes were in different directions (product-level advertisement: $\beta = -.09$, $SE = .03$; $t(76) = -3.27$, $p < .01$; brand-level advertisement: $\beta = .13$, $SE = .03$; $t(76) = 4.43$, $p < .01$). Consistent with expectations, the more field independent a person is, the more he or she prefers the brand-level advertisement than the product-level advertisement. Conversely, the more field dependent a person is, the more he or she prefers the product-level advertisement than the brand-level advertisement.

Study 5: Attitude Toward Umbrella Branding Communications

Objective. Study 5 changes the advertising context and examines whether field dependents and field independents respond differently to brand-level versus product-level advertisements. In many instances, companies that produce varied products inform consumers that they are the parent

Figure 4
STUDY 4: SIMPLE REGRESSION LINES FOR IMPACT OF FIELD DEPENDENCY ON ATTITUDE TOWARD THE AD



brand for their different subbrands or products. One way they do this is to put all the products in a single advertisement, with the parent brands printed boldly across the advertisement to inform people that they own these products. Such advertisements are frequently used by Procter & Gamble and Johnson & Johnson. An intended effect of such advertisements is to build overall brand equity for the parent brand. Our interest lies in how field dependents and field independents react to such advertisements. Because these advertisements typically are not product specific and focus on building overall brand beliefs, field independents should view such advertisements more favorably than field dependents.

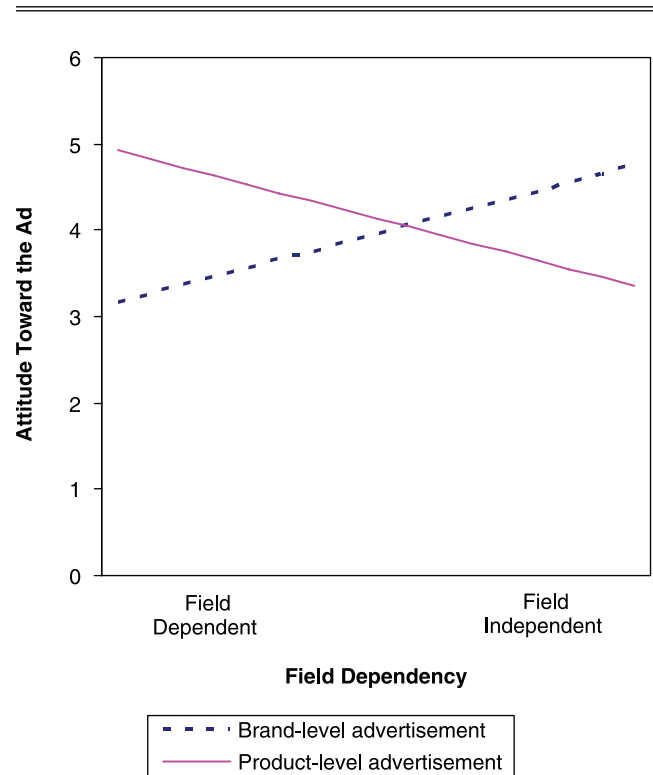
Design and participants. This study adopted a 2 (field dependency: field independent versus field dependent) \times 2 (type of advertisement: brand level versus product level) between-subjects design. As in Study 4, we measured field dependency and manipulated type of advertisement. Eighty students from a large university in Singapore were paid \$5 to participate in this study.

Stimuli and procedure. The cover story indicated that the purpose of the study was to examine people's attitudes toward an ad. We chose Johnson & Johnson as the focal brand in this study because it has several products under its brand, many of which are familiar to consumers. For the brand-level advertisement, various products under Johnson & Johnson were featured in the same advertisement. These products covered many different product categories (e.g., baby shampoo, Band-Aid, Acuvue contact lenses, Carefree pantliners, Tylenol, Neutrogena Deep Clean). All the products were placed together in a cluster, and the text on the advertisement read "Johnson & Johnson: You can always trust us." The product-level advertisement featured only the baby products (baby soap, baby shampoo, baby powder, baby oil, baby wash, and baby washcloth) with the same text (see the Web Appendix at <http://www.marketingpower.com/jmrapril09>). Pretests showed that there was no difference in people's attitudes toward the list of products shown in the advertisement ($p > .1$). After seeing the advertisement, participants completed questions about their attitudes toward the ad, attitudes toward the products featured in the advertisement, and some demographic questions. Finally, they completed the EFT.

Attitude toward the ad. As in Study 4, we measured attitude toward the ad using a three-item, seven-point scale ($\alpha = .85$). Regression on the mean of this scale with field dependency as a continuous variable and type of advertisement as a dummy variable revealed significant simple effects for field dependency ($\beta_1 = .10$, $SE = .03$; $F(1, 77) = 12.50$, $p < .01$) and type of advertisement ($\beta_2 = 3.53$, $SE = .69$; $F(1, 76) = 26.11$, $p < .01$). The two-way interaction between field dependency and ad type was also significant ($\beta_3 = -.20$, $SE = .04$; $F(1, 76) = 28.35$, $p < .01$) (see Figure 5). Simple regressions of attitude on field dependency in the two ad conditions showed that both slopes were significant (brand-level advertisement: $\beta = .10$, $SE = .03$; $t(76) = 3.51$, $p < .01$; product-level advertisement: $\beta = -.10$, $SE = .02$; $t(76) = -4.02$, $p < .01$). Mirroring the findings in Study 4, the results showed that the more field independent a person is, the more positive he or she feels about the brand-level advertisement. Conversely, the more field dependent a person is, the more positive he or she feels about the product-level advertisement.

Figure 5

STUDY 5: SIMPLE REGRESSION LINES FOR IMPACT OF FIELD DEPENDENCY ON ATTITUDE TOWARD THE AD



Discussion. These findings are consistent with those we observed in Study 4, showing that field independents respond more positively to advertisements that focus on building overall brand beliefs. Such advertisements are congruent with field independents' tendency to abstract and generalize information across products and, in general, are preferred.

GENERAL DISCUSSION

Summary

The results from five studies document systematic differences in the way field dependents and field independents structure brand information in memory and in the types of advertisements they prefer. By showing differential degrees of facilitation when field dependents and field independents were primed with products of the same brand, the findings provide evidence that field independents are more likely to abstract information from episodic experiences and connect the same brand-level beliefs to varied products by the brand. Conversely, field dependents focus more on individuating information of each experience and are more likely to store product-specific beliefs. Expertise level exacerbates the impact of field dependency on cognitive structures, and such differences have important implications on the way field dependents and field independents respond to marketing communications.

Implications

We can assess the contributions from this research on a few fronts. Our findings shed light on the important role of

field dependency in affecting which structural form dominates in consumers' minds. Although this research focuses primarily on the way people store brand information, broader implications exist for cognitive structures of categories in general because the underlying theory is applicable to most categories. The results also highlight field dependency as an important antecedent variable of cognitive structures, complementing existing variables, such as environmental variables (e.g., socialization process) and cognitive abilities (John and Whitney 1986; Wyer and Srull 1989).

Conceptually, this research also helps reconcile the global and local structural frameworks proposed in the literature. Researchers have traditionally assumed that people abstract information from experiences to form knowledge. However, recent research has argued that this is not necessarily true (Solomon and Barsalou 2001). This research helps reconcile the two conflicting perspectives by showing that both views could be valid. For field independents, the global structural form is more dominant; for field dependents, the local structural form is more dominant.

It is important to reiterate that we are not arguing that field dependents always store information consistent with the local form approach, nor do field independents always store information consistent with the global form approach. Rather, it is a matter of tendency. Processing style affects the type of information focused on and the importance placed on different information, logically affecting the way information is stored and structured in memory. However, there are many situations in which such tendencies would be violated (e.g., when products are very similar or dissimilar). In this research, we examined only moderately dissimilar products because these are the products for which more ambiguities are present, allowing different processing styles to exert a greater influence.

In the area of expertise, existing literature is unclear on how the cognitive structures of experts differ from those of novices. Conflicting findings have been reported in the literature; some research suggests that experts possess more abstract cognitive structures (Alba and Hutchinson 1987; Scott, Osgood, and Peterson 1979); other research suggests that experts possess more concrete cognitive structures (Mitchell and Dacin 1996). The findings here may help reconcile this conflict by showing that whether experts possess more abstract or concrete cognitive structures is affected by their field dependency.

Managerially, the tendencies for field independents to store brand-level beliefs and field dependents to store product-level beliefs have important implications for how each would react to various branding strategies. Because brand equity is a function of the content and structure of the brand knowledge consumers possess (Christensen and Olson 2002), knowing how brand associations are connected can help companies make better branding decisions (Aaker and Keller 1990; Keller 2003). For example, an implication of the structural differences we discuss here is that different types of information may be differentially accessible to consumers. Ng and Houston (2006) show that in a free recall task, participants with an interdependent self were more likely to retrieve exemplars of a brand, while

those with an independent self were more likely to retrieve overall brand beliefs. The findings here suggest that one reason independents and interdependents may retrieve different information is due to the way such information is structured in their minds. In turn, such differences point to implications for how companies should communicate to consumers in different cultures. Research in the cross-cultural literature has shown that, in general, Easterners, whose chronic self tends to be interdependent, are more field dependent than Westerners, whose chronic self tends to be independent (Nisbett et al. 2001). Findings from our research suggest that brand-level advertising would be more appropriate for consumers in Western cultures, but this might not be the case in Eastern cultures. Companies should consider adopting more product-specific advertisements when targeting Easterners. Recent advertisements seem to be moving toward a trend of developing abstract concepts about brands, without promoting specific products (e.g., Nike advertisements focus on the idea of women taking control of their own lives and the slogan "Just do it"). Findings from this research indicate that such advertisements might not be suitable in Eastern cultures.

Limitations and Further Research

The findings reported here may have indirect implications for the complexity of cognitive structures. The two key components of cognitive structure complexity are the number of constructs a person has in the domain and the degree of discrimination among the constructs (Durand and Lambert 1983; Kanwar, Olson, and Sims 1981; Zinkhan and Biswas 1988). The more constructs a person has and the more differentiated the constructs are, the more complex is the cognitive structure. Because field dependents tend to store individuating information for each product, it may be argued that they possess more complex and concrete cognitive structures than field independents. Further research should examine this proposition in greater detail.


The stimuli we used here tested only the degree of facilitation for pairs of products that are moderately dissimilar. However, many brands have products that vary in their similarity or differences. We cannot definitively report how people structure information for all products of a particular brand. Further research might examine what happens if products are more similar or different from each other.

Finally, the studies test only the extent to which people connect cognitive representations (e.g., beliefs) to products. However, consumer brand knowledge comprises both cognitive and noncognitive representations (Christensen and Olson 2002; Keller 2003). Further research might examine whether the findings are also applicable to the way people structure noncognitive representations. Moreover, this research focuses only on how associations of a brand are linked. It would be fruitful to examine how associations of different brands are linked. Further research should also examine how other variables (e.g., brand loyalty) affect cognitive structures. For example, people who are very loyal to a brand might be more likely to possess a common set of beliefs connected to all products of the brand than those who are less loyal.

Appendix
STIMULI FOR STUDY 4


A: Brand-Level Advertisement



Empower yourself with Good Technology. JUST DO IT 

B: Product-Level Advertisement



Running shoes with Good Technology. JUST DO IT 

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