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JCP JOURNAL OF CONSUMER PSYCHOLOGY

Research Review

A dynamic view of cultural influence: A review☆

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Abstract

Static models of culture's influence have given way to a dynamic view, which identifies not only differences across cultures in people's judgments and decisions, but also the situations and conditions in which these differences do or do not appear. Theory and evidence developed from a cognitive psychological perspective underlie this dynamic approach, including research emerging from the "dynamic constructivist" and "situated cognition" models. In the present review, we focus on findings that confirm the utility of this cognitively oriented approach, and briefly discuss the advantages and complementary nature of the "social collective" and neuroscience approaches to understanding culture.
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Keywords: Culture; Dynamic constructivism; Situated cognition; Cultural syndromes; Social collective; Cultural neuroscience

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Cultural differences in the comprehension and communication of information, and in the judgments and decisions that result from it, have been a major focus of attention over the past three decades of research in both psychology and consumer behavior (for reviews, see Kitayama & Cohen, 2007; Wyer, Chiu, & Hong, 2009). There are at least two reasons for this. First, the increasing frequency of interaction among members of different cultures has made it particularly important to understand cultural differences in comprehending and communicating information, thereby avoiding misconceptions of one another's motives and minimizing interpersonal conflict (Brislin, 2009; Leung & Brew, 2009). The second reason is theoretical. As Markman, Grimm, and Kim (2009) note, "culture" is not an explanatory variable. However, cultural differences in judgment and behavior call attention to important determinants of behavior that might go undetected in a more homogeneous environment.

The increase in research on cultural differences in behavior during the past 30 years has been accompanied by a change in the conceptualization of culture itself. Traditional conceptions (e.g., Kluckhohn, 1954; for a historical review, see Triandis, 2007) viewed culture as a static entity that could be described by stable differences in values along a fixed set of dimensions that influence behavior independently of its situational context (Hofstede, 1980, 1991). This approach, however, has given way to a more dynamic view of culture in which its effects on behavior are contextually and situationally dependent. This view calls attention not only to characteristics that distinguish representatives of different cultures, but also the situational factors that lead these distinctions to be apparent.

Some of the most important advances in cultural psychology are being driven by this dynamic, cognitively oriented approach (Chiu & Hong, 2007; Oyserman & Sorensen, 2009). However, other models for understanding culture also stimulate vibrant inquiry and yield important insights (for examples of alternative approaches to cultural research, see Kitayama & Cohen, 2007). These different approaches make salient a fundamental question about the nature of culture itself: Is "culture" a characteristic of society at large, or does it exist primarily in the minds of individuals (Wan & Chiu, 2009)? Although research based on these alternative possibilities often has similar implications, the conceptual distinction is obviously important. One model views culture as a collective-level phenomenon composed of socially shared meanings and associated scripted behavioral patterns (Cohen, 1998; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Markus & Kitayama, 2004). The other assumes that culture-based meanings are represented in the mind of the individual and may or may not be activated and applied, depending on situational factors that affect their accessibility (Hong, Morris, Chiu, & Benet-Martínez, 2000; Oyserman & Lee, 2008). Along with these collectively- and cognitively-oriented conceptualizations, a third approach to understanding culture, which is stimulated by recent advances in cognitive neuroscience, examines how brain biology shapes and reinforces cultural patterns (Chiao & Ambady, 2007).

These three conceptual perspectives, which are summarized in Table 1, are discussed in the first section of this article. In the second section, we discuss the "syndromes" that appear responsible for many of the cultural differences in judgments and behavior that have implications for consumer behavior. The cultural syndrome construct provides a particularly useful tool for conceptualizing cultural differences in behavior and the situational factors that give rise to their occurrence. The research we review is largely restricted to a comparison of two general cultural groups: East Asians and Anglo Americans. This emphasis is due in part to the fact that these groups differ substantially in their social orientation, and in part to the increasing prominence of Asia in the world marketplace. However, the countries that compose these broad groups are obviously not the same. In fact, the few studies that have made comparisons within the groups (e.g., Nelson, Brunel, Supphellen, & Manchanda, 2006) have identified differences that do not appear when broader comparisons are made. Nonetheless, most of our discussion in this article will share the deficiency of previous research, focusing largely on East Asians and Anglo North American cultures without considering other, finer distinctions that may in fact be quite important.

However, not all cultural differences in behavior are likely to be governed by cultural syndromes, which pertain to conscious behavior dispositions. In the third section of this article, we turn to a discussion of communication-related phenomena that do not clearly fall within a situated cognition framework but are nevertheless of importance in conceptualizing cultural differences in consumer behavior. Features of the language one speaks, for example, may dispose one to comprehend and communicate in ways that are not tied to more general norms and values but are governed by automatic processes of which individuals are unaware (for a review, see Semin, 2013). Cultural differences in nonverbal behavior (eye contact, gestures, etc.) can also differ between cultures and can potentially lead to miscommunication (Wang, Toosi, & Ambady, 2009). These behaviors, unlike those that are governed by cultural syndromes, may not be a function of the accessibility of concepts and knowledge in memory, but rather, may occur spontaneously, without awareness.

In the final two sections, we discuss areas for future research and present some concluding remarks.

1. Different views of culture

1.1. Social collective perspective: Culture is in society

Early culture researchers defined culture at a macro level, suggesting that the essence of any cultural system is the set of

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Table 1
Approaches to understanding cultural influence.

	"Social collective" approach *Culture is socially constituted*	Biological approach *Culture is (or becomes) "hard wired"*	Cognitive approach *Culture is in the mind*	
Defining Principle	Cultural syndromes derived from social behavior patterns	Neurology	Situated cognition (of cultural syndromes)	Dynamic constructivism
Theoretical Underpinnings/ Rationale	Culture is a collective level phenomenon, comprising *shared social representations* that provide to members of a society shared understanding of the social world	Recurrent engagement in a cultural context – and embracing the ideas and practices therein – shapes *brain pathways* to facilitate culture-consistent behaviors	People have access to *multiple cultural syndromes* – networks of associated mental representations – which have influence when cued	Cultural influence occurs when *cultural knowledge* is accessible and thus brought to bear at the time attitudes, behaviors and judgments are formed
Representative articles	Cohen (1998), Markus and Kitayama (2004, 2010)	Kitayama and Uskul (2011), Chiao and Ambady (2007), Han et al. (2013)	Oyserman and Lee (2008), Oyserman and Sorensen (2009), Mourey, Oyserman, and Yoon (2013)	Hong et al. (2000), Hong (2009), Briley, Morris, and Simonson (2000), Wyer (in press), Briley and Wyer (2001)
Contributions	Reveals dimensions along which cultural groups differ and finds cognitive, motivational and behavioral phenomena that diverge across cultures as a result; facilitates measurement of cultural leanings at individual and group levels; useful for tying environmental factors (e.g., ecology, economic development, mobility) to cultural inclinations	Shows biological forces that both shape and are shaped by culturally-driven thoughts and actions; identifies areas of cultural influence where behavioral measures may not indicate differences	Shows cognitive mechanisms that mediate cultural influence, often using novel techniques such as "priming"; accounts well for the dynamic nature of cultural influence	

values and practices that are collectively distributed and shared (Kroeber & Kluckhohn, 1952; Schweder & Bourne, 1984). Culture, then, is conceptualized as a collective-level phenomenon, composed of shared meanings and associated behavioral patterns (Bruner, 1990; Cohen, 1998; Markus & Kitayama, 2010). Research conducted from this perspective has emphasized the importance of not only shared societal values but also the behavioral routines and scripted patterns that derive from these values (Kitayama & Park, 2010).

This view assumes that individuals' behavioral dispositions are not separable from the cultural systems in which they develop. For example, Kitayama et al. (1997) developed a "collective constructionist theory" of self to conceptualize the prevalence of self-enhancement and self-criticism in particular cultural contexts (the United States and Japan, respectively). They suggest that differences in these characteristics result from the way that social actions are collectively defined, mutually maintained and subjectively experienced in a particular culture. Thus, the particular situations that emerge and are then encountered by people in an American culture are conducive to self-enhancement, whereas those that emerge and are encountered in Japan are more conducive to self-criticism. A similar theoretical framing is used to suggest that in societies where "culture-of-honor" traditions are pervasive (the southern and southwestern United States), the level of violence increases with the degree of family and community cohesiveness (see Cohen, 1998; Cohen & Nisbett, 1997).

1.2. Neuroscience perspective: Culture is in our biology

The relative extent to which "nature" (biology) and "nurture" (context) shape human behavior and attitudes has been a long-standing debate that has extended to consumer research (Simonson & Sela, 2011). Although cultural psychologists have been primarily interested in the "nurture" side of this equation, neuroscience and social science in combination can advance our understanding of cultural differences beyond that which one or the other field could in isolation (cf. Chiao & Ambady, 2007; Kitayama & Uskul, 2011). Specifically, because the human brain can change both structurally and functionally based on a person's experiences (Anderson, 2010), brain pathways can be shaped by culturally-rooted patterns of thought and action. As people learn and adopt the beliefs and practices of their society, supportive activation patterns in the brain are induced (Kitayama & Park, 2010). Thus, when people engage in cultural practices, neurons in the brain are continually "fired together," and over time become "wired together" (Kitayama & Uskul, 2011). This cultural conditioning is adaptive, as these culturally determined activation patterns support actors when they engage in the normative behaviors of their culture.

East–west differences in neural activation patterns are consistent with documented behavioral differences, including those patterns occurring during perceptions of objects that appear in an incongruent context (Jenkins, Yang, Goh, Hong, & Park, 2010) and of lines judged in a context-dependent versus -independent setting (Hedden, Ketay, Aron, Markus, & Gabrieli, 2008); judgments of traits describing one's mother

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(Zhu, Zhang, Fan, & Han, 2007) and oneself (Chiao et al., 2009); empathy with anger emotions (de Greck et al., 2012); and choices made in public versus private settings (Park, Gehring, & Kitayama, 2009). In addition, some studies show significant correlations between specific brain responses and participants' self-reported independence and interdependence scores (e.g., Ray, McRae, Ochsner, & Gross, 2010).

By revealing cross-cultural differences in the neural substrates of psychological processes related to cognition, emotion and motivation, neuroscientific studies in the culture realm establish that the human brain is sensitive to and shaped by socio-cultural contexts (Han et al., 2013; Kitayama & Uskul, 2011). More interestingly, research in this stream could ultimately reveal which neural processes are culturally unique and which are culture independent, potentially directing researchers toward yet-to-be discovered cultural differences and universals.

1.3. Cognitive perspective: Culture is in the mind

The collective level approach is useful for identifying dimensions of culture that drive differences across societies, and the biological approach provides an understanding of neurological functions that facilitate culture-consistent psychological processes. The cognitive perspective, on the other hand, seeks to reveal the underlying cognitive processes and mechanisms through which cultural inclinations operate. In our review, we will focus largely on research conducted from this perspective.

Within this framework, two alternative conceptual and methodological approaches predominate. One is exemplified by the conception of situated cognition proposed by Oyserman and Sorensen (2009). Like the collective-oriented view, it assumes that cultural differences are characterized in terms of the relative dominance of a set of cultural syndromes or "patterned beliefs, attitudes and mindsets that go together in a loosely defined network" (Oyserman & Sorensen, 2009, p. 27; see also Triandis, 1996). These syndromes are likely to exist to varying degrees in all cultures, but vary in their chronic accessibility in memory and, therefore, in the likelihood that they come into play. At the same time, situational or contextual factors can influence their accessibility in ways implied by research on knowledge accessibility more generally (Higgins, 1996; Wyer, 2008). Consequently, situational factors can have a transitory influence on the likelihood that they are applied independently of the culture to which individuals belong. This situated cognition approach potentially incorporates the broad cultural dimensions embraced by the collective-level view, but applies social cognitive principles in conceptualizing the conditions in which differences along these dimensions have an impact.

A second cognitively oriented approach is exemplified by Chiu and Hong's (2007; Hong, 2009) "dynamic-constructivist" conceptualization. This conceptualization assumes that culture-related norms, values and behavioral dispositions are interconnected, being stored in memory in an associative network. Consequently, calling individuals' attention to their cultural identity or other aspects of the culture they represent is sufficient to increase the accessibility of this network in memory and correspondingly to increase the influence of the cognitions contained in it. The particular components of the network that come into play are then determined by their applicability to the situation at hand. Therefore, different manifestations of one's culture may be invoked at different times.

Research from the dynamic constructivist literature shows that culture-related concepts may be activated (or "primed") by exposing individuals to stimuli that call their cultural identity to their attention. Several techniques accomplish this, including exposing individuals to pictures of cultural symbols (e.g., Great Wall of China, Statue of Liberty; Briley & Wyer, 2001; Hong et al., 2000; Chen, Ng, & Rao, 2005) or, in the case of bi-culturals (e.g., Hong Kong Chinese), conducting an experiment in a culture-related language (Briley, 2008; Briley, Morris, & Simonson, 2005; Ross, Xun, & Wilson, 2002). Other techniques can increase people's tendencies to engage in culture-consistent judgments and decisions without exposure to culture-related "primes" (see Briley, 2009a). For example, people who provide a justification for their decisions may activate criteria that are dominant in their culture and, as a result, may use these criteria as a basis for their decisions rather than other equally viable criteria (Briley et al., 2000). The need to justify choices stimulates a search of memory for a relevant decision criterion, triggering the application of culture-based knowledge.

1.3.1. Advantages and drawbacks

The aforementioned conceptualizations differ in terms of their assumptions concerning the representation of cultural knowledge in memory. As noted earlier, the dynamic constructivist conceptualization implicitly assumes that cultural knowledge is represented in a single, albeit complex, configuration of cognitions and that activating a general concept of one's culture can increase the accessibility of the configuration as a whole. In contrast, the cultural syndromes assumed by the situated cognition conceptualization can be independently activated, and their relative accessibility, like that of knowledge in general, depends on the frequency and recency with which they have been employed in the past.

Considered in isolation, the dynamic constructivist and situated cognition approaches both have limitations. However, the limitations of each approach are the strengths of the other. The assumption that simply calling individuals' attention to a subset of culture-related symbols can activate cultural knowledge is of heuristic value in stimulating the identification of cultural differences in a wide variety of behaviors and judgments. Research conducted within a dynamic constructivist framework has identified a remarkable number of such differences, ranging from causal attributions (Hong et al., 2000) to the importance attached to rights and obligations (Hong, Ip, Chiu, Morris, & Menon, 2001) and relational versus categorical thinking (Ji, Peng, & Nisbett, 2000; Ji, Zhang, & Nisbett, 2004,). Indeed, many of the phenomena reviewed in this article can be conceptualized within a dynamic constructivist framework. However, without an a priori conceptual or empirical understanding of the antecedents of these phenomena, the particular aspects of a culture that give rise to them can remain unclear.

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That is, as mentioned above, "culture" is not an explanatory variable (Markman et al., 2009). A focus on cultural syndromes allows the antecedents of a specific syndrome to be investigated experimentally and in doing so, can lead to insights into the characteristics of cultures in which the syndrome predominates. And if cultural syndromes exist in representatives of all cultures, systematic investigations of their implications within a cultural group can potentially provide insight into more general culture-related differences in behavior under conditions in which these syndromes are likely to predominate.

To date, most research performed within a situated cognition paradigm has focused on only two cultural syndromes, individualism–collectivism and independence–interdependence (Kühnen & Oyserman, 2002; Oyserman & Sorensen, 2009) and has not identified other syndromes that may be equally influential. (We propose additional candidates for cultural syndromes presently.) On a priori grounds, *any* situational or individual difference variable that has been identified in social psychological research might be a candidate for a cultural syndrome. For a variable to qualify as a cultural syndrome, however, (a) the variable must distinguish between typical representatives of at least two different cultural groups, (b) its effect must be similar in these cultural contexts, and (c) its impact can be investigated independently of the particular culture in which the syndrome is activated. These criteria, however, have not been consistently applied.

2. Dimensions of cultural variation

Many dimensions along which cultures vary may be candidates for cultural syndromes of the sort conceptualized by Oyserman and Sorensen (2009). Hofstede (1980, 1991) and Triandis (1995, 1996) postulated several such dimensions, including individualism vs. collectivism, power distance, temporal orientation, masculinity–femininity, and tightness–looseness. A sophisticated analysis of cultural orientations by Schwartz (2009) identified factors that distinguish cultures (egalitarianism, harmony, autonomy, etc.), several of which are similar although not identical to the characteristics suggested by Hofstede and Triandis. However, individualism and collectivism are multifaceted (Ho & Chiu, 1994). Triandis and Gelfand (1998) proposed a two-dimensional structure, one of which concerns individualism and collectivism and the other of which characterizes status differences within each orientation. Briley and Wyer (2001) identified five independent factors, including individualism, emotional connectedness, self-sacrifice, competitiveness, and the motivation not to be outperformed by others.

Further analyses by Briley and Wyer were somewhat provocative, as they suggest that priming Chinese with symbols of their own culture increased not only their reported disposition to sacrifice their own goals for the benefit of others, but also their competitiveness and desire not to be outperformed by others. In contrast, priming North Americans with symbols of their culture increased their individualism but decreased the importance they attached to competitiveness and not being outperformed. These apparent differences may be attributable to the nature of individuals' self-construals (Markus & Kitayama, 1991). East Asians, who have interdependent self-construals, may be more inclined to define themselves in relation to others. Therefore, they may be more inclined to help other persons but, at the same time, more inclined to compete with others and to evaluate their outcome in relation to these persons. Westerners, however, may be more inclined to define themselves independently of others in these respects.

The preceding analyses suggest that the dimensionality of culture is complex and that the dimensions along which cultures vary are likely to be interrelated. Research and theory has nevertheless converged on a relatively small number of factors, each of which may constitute a culture syndrome of the sort postulated by Triandis (1995) and Oyserman and Sorensen (2009). We review these factors and, in some cases, the conditions that give rise to them.

2.1. Cultural determinants

An understanding of the cultural syndromes that are likely to underlie cultural differences in behavior will ultimately require an identification of the factors that give rise to them. In fact, three of the syndromes we consider in this article may all be traceable to a difference in early child-rearing practices, the effects of which persist into adulthood. Research by Peggy Miller and her colleagues (Miller, Wiley, Fung, & Liang, 1997; for a review, see Miller, Fung, & Koven, 2007) provides evidence of this difference. Based on a cross-cultural observational study of parent–child interactions, Miller et al. concluded that East Asian (Taiwanese) children are taught to see misdeeds as character deficiencies, to be attentive to parents' and others' evaluations and, consequently, to behave in ways that will avoid others' disapproval. On the other hand, Western children are taught to see misdeeds as errors rather than as indications of their own intrinsic self worth, to evaluate themselves independently of others' evaluations and, consequently, to attach more importance to positive rather than negative consequences of their behavior.

As Wyer and Hong (2010) suggest, these socialization practices could give rise to three different cultural syndromes. First, whereas Westerners may be inclined to think of themselves as independent of other persons, East Asians may be disposed to think of themselves in relation to others. These different dispositions may vary along a dimension of *independence–interdependence* similar to that postulated by Markus and Kitayama (1991) in their theory of self-construals. Second, Westerners may perceive themselves as unique individuals whereas East Asians may acquire a tendency to think of themselves as a member of a larger group—a difference that Triandis (1995) and Hofstede (1980) conceptualized as *individualism–collectivism*. Finally, because Westerners do not regard negative consequences of their behavior to have enduring effects on their personality or well-being, they are likely to focus their attention on positive outcomes of their behavior and to adopt a *promotion* focus as conceptualized by Higgins (1997). East Asians, however, who have become conditioned to regard negative behavioral consequences as a reflection of their

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self-worth and anticipate it to avoid disapproval from others, are likely to adopt a *prevention* focus.

Because these three syndromes have similar antecedents, they are likely to be interrelated. Nevertheless, they have different implications for both social and nonsocial behavior. The focus of research on the impact of these syndromes has been stimulated by two factors. First, as noted earlier, the cultural syndromes may be chronically accessible but may also be primed by situational factors that temporally increase their accessibility and likelihood of being applied. Moreover, the effects of chronically and situationally induced syndromes, like other types of cognitions, are similar (Bargh, Bond, Lombardi, & Tota, 1986). This means that the effects of cultural syndromes on behavior and judgments, and the factors that give rise to them, can be investigated in the laboratory without requiring actual cross-cultural comparisons.

Second, although the syndromes are the result of social learning and experience, the processes they govern are likely to generalize to situations that are unrelated to those that gave rise to their activation. Research and theory on behavioral mindsets (Wyer & Xu, 2010; Wyer, Xu, & Shen, 2012) indicate that performing goal-directed activity in one situation activates behavior-related concepts that provide the basis for behavioral decisions in pursuit of quite different goals in an unrelated situation. Thus, for example, elaborating or counterarguing the implications of a message in one situation can affect responses to an ad that individuals consider later (Xu & Wyer, 2008). Similarly, generating the same or different answers to a series of questions about animals can affect the variety of participants' selections in a later product choice task (Shen & Wyer, 2008). Analogous phenomena are evident in the research we will summarize in this article. That is, chronic and situationally induced cultural syndromes can influence behavior in both social and nonsocial situations that differ considerably from those that gave rise to their formation and activation. This is of particular relevance in understanding cultural differences in consumer behavior, as will be seen.

As Wyer and Hong (2010) point out, a distinction should be made between *holistic* processing, the disposition to construe stimuli as a whole rather than in terms of its individual parts, and *relational* processing, a disposition to think about stimuli in relation to one another. In much culture-related research, however, this distinction is not clearly made, as Westerners and East Asians differ in both respects. Nevertheless, holistic processes are more likely to be governed by an individualism–collectivism syndrome whereas relational processing is more likely to reflect the effect of an independence–interdependence syndrome. The discussion to follow is based on this assumption.

2.2. Individualism–collectivism

2.2.1. Social influences

If East Asians are disposed to think of themselves as part of a collective, they may be more likely to be influenced by the opinions of others than Westerners are. Moreover, they may be more influenced than Westerners are by appeals that refer to them as part of a group. Studies in both social psychology and consumer behavior confirm this difference. For example, East Asians are more likely than Westerners to describe themselves in terms of the social roles they occupy rather than individuating attributes and motives (Triandis, 1989; Wang, 2001), and to endorse advertising appeals that emphasize harmony and group benefits (Han & Shavitt, 1994; Lin, 2001) or "other-focused" rather than "self-focused" appeals (Aaker & Williams, 1998).

As East Asians become increasingly exposed to Western values, however, this difference may decrease. In fact, individualist themes are becoming more common in Asian ads that target youth (Zhang & Shavitt, 2003). Consequently, bicultural Chinese are equally influenced by appeals that emphasize individuality and appeals that emphasize interpersonal relations when each set of values is emphasized in isolation (Lau-Gesk, 2003).

2.2.1.1. Non-social influences. To the extent that an individualism–collectivism syndrome generalizes to nonsocial situations, it is likely to dispose people to use more or less global, holistic criteria in interpreting and responding to information. Evidence of this possibility was obtained by McKone et al. (2010), who asked East Asians and Westerners to perform the Navon (1977) letter-identification task. Participants were presented with stimuli consisting of a large letter composed of small ones (e.g., a large "H" composed of small "v"s) and asked either to identify the large letter or the small one. East Asians, as compared to Westerners, were faster to identify the large letter in each stimulus, but slower to identify the small one.

Situationally activating individualism and collectivism has an identical effect. In a study by Kühnen and Oyserman (2002), participants used either first-person singular pronouns (I, my, etc.) or first-person plural pronouns (we, our, etc.) in a semantic priming task, thereby activating dispositions to think of themselves individually or as part of a group. Individuals responded more quickly to large letters (and more slowly to small ones) in the plural than singular pronoun condition. Other research has similar implications (Lin & Han, 2009).

Another test of local versus global attention and processing is the embedded figures task, which examines participants' ability to identify simple geometric figures that are embedded in more complex geometrical patterns. Whereas the Navon task measures participants' tendencies to identify a particular stimulus that is represented at either a local or global level, the embedded figures task assesses the ability to detach local shapes from their surroundings. Using this task, Kühnen et al. (2001) found that participants from collectivist cultures (Russia and Malaysia) were slower than those from individualist cultures (the United States and Germany) in identifying the embedded figures. Thus, the relative tendency of people in collectivist cultures to take in the whole "forest," rather than focusing on individual "trees," apparently limits their performance on tasks that require more focused, local processing.

2.3. Independence vs. interdependence

2.3.1. Social influences

As we have noted, research on cultural differences in information processing has not distinguished clearly between the effects of collectivism and the effects of interdependence, as

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East Asians relative to Westerners are characterized by higher levels of both. Several findings are nonetheless more consistent with the latter cultural syndrome. For example, Hong, Levy, and Chiu (2001) found that Asians whose cultural identity was made salient were more inclined than North Americans to place a value on duty and obligations to others, whereas North Americans were more inclined to emphasize individual rights. Furthermore, Chinese are more inclined to consider situational factors when judging the motives that underlie a person's behavior (Choi, Dalal, Kim-Pietro, & Park, 2003). This suggests that Chinese think more relationally and take contextual factors into account to a greater extent than Westerners do.

A behavioral indication of the difference between East Asians' and Westerners' feelings of interdependence with others was reported by Shen, Wan, and Wyer (2009). In a series of experiments, they found that East Asians were more likely to refuse a small gift when they were unlikely to be able to reciprocate at a later point in time, whereas Canadians were quite willing to do so. Thus, East Asians' decisions were more likely to be governed by a reciprocity norm, whereas Westerners typically based their decisions on their feelings of appreciation without thinking of their obligation to reciprocate. In a similar vein, when Chinese participants had agreed to help someone on a task that required either a lot or little time, they later took a number of candies as a reward that was proportional to the amount of help they had agreed to provide. In contrast, Canadians helped themselves to the same number of candies regardless of the help they indicated they would give.

2.3.1.1. Non-social influences. The disposition to think of oneself in relation to others appears to induce a behavioral mindset (Wyer & Xu, 2010; see also Briley and Aaker, 2013) that influences a person's disposition to think relationally in other, quite unrelated situations. Evidence of this was obtained in several studies by Nisbett (2003) and his colleagues (Ji et al., 2004; Nisbett, Peng, Choi, & Norenzayan, 2001). For example, East Asians were more likely than Westerners to group objects on the basis of their functional relationships rather than their common membership in a semantic category. (For example, given a carrot, eggplant and a rabbit, Chinese typically grouped the carrot with the rabbit whereas Westerners grouped it with the eggplant.)

A particularly provocative finding was reported by Park, Nisbett, and Hedden (1999). Participants were asked to remember a series of words, each presented on a separate card. In some cases, the word on each card was surrounded by pictures of objects. The context pictures were irrelevant to the words they surrounded and might be expected to be distracting. Nevertheless, Asians recalled the words better when the context pictures were provided than when they were not. This was not true of North Americans. Other studies confirm that Asians not only rely on the context in which a focal object appears to later recognize the object (Masuda & Nisbett, 2001), but also take into account the context in which a focal person appears when making an evaluative judgment of that person (Masuda et al., 2008). North Americans, on the other hand, were not affected in this way.

When making judgments, Asians' attention to contextual features can be helpful or detrimental, depending on whether these features are compatible with the implications of the focal stimuli. Participants in a study by Krishna, Zhou, and Zhang (2008) were asked to make judgments of physical stimuli in which the use of contextual features was likely either to facilitate or interfere with judgmental accuracy. Chinese participants, who presumably thought about the stimuli in relation to their context, were more accurate than North Americans in performing the first task, but were less accurate than North Americans in performing the second.

These chronic differences in relational thinking are paralleled by situationally-induced difference. In an experiment by Kühnen and Oyserman (2002) participants, who were primed with either first-person singular or first-person plural pronouns, were asked to remember the objects presented in an array of 24 pictures. Although participants were equally able to remember the objects in both conditions, participants who had been primed with first-person plural pronouns were better able to remember the location of the objects in the array.

Recently, cultural differences in relational thinking have been examined in the context of consumers' evaluative judgments as well. Mourey et al. (2013) asked Latino (interdependent) and Anglo (independent) participants to choose a set of related items (e.g., cell phone, earphone, charger and case), then later told them that not all of the items in the set were available. Latinos were less willing than Anglos to accept a partial set of items and were more willing to pay to have the missing items delivered at a later point in time. Evaluative judgments of a single object can also be affected by relational processing, due to assumptions about relationships across its attributes (e.g., price and quality, Lalwani & Shavitt, 2013).

Some speculations regarding the role of relational processing in consumer behavior seem reasonable. For example, Chinese individuals' sensitivity to the contextual features of a communication could have implications for the impact of peripheral features of an advertisement on its effectiveness. Television commercials and magazine advertisements often present product information in the context of stimuli that are largely irrelevant to the attributes of the product being presented. For example, audio-visual communications often present music and scenes that may have little to do with the product of interest. Chinese consumers may be more influenced by these contextual features than Western consumers are.

Similar considerations suggest that peripheral features of a product will have a disproportionate influence on Chinese consumers' evaluations relative to central features that have more direct implications for quality and utility. Aaker and Maheswaran (1997), for example, found that Chinese were often influenced by others' opinions about a product's quality to the exclusion of information about the product's attributes. Although this disposition could be attributable to motivational factors, it might also reflect a general processing strategy that increases sensitivity to contextual information.

Chinese consumers' tendency to think relationally also has implications for their reactions to brand extensions. Because they focus more upon relationships between objects, they

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may be more sensitive than Western consumers to a brand extension's similarity to the parent brand and more inclined to base their evaluation on this factor (Ahluwalia, 2008; Monga & John, 2007; see also Kim & Meyers-Levy, 2008). The effects of celebrity endorsers, or a product's country of origin, could also be partly attributable to the general sensitivity of Chinese to contextual information.

2.4. Prevention vs. promotion

As we have suggested, the same socialization processes that give rise to independent vs. interdependent self-construals, and to individualistic vs. collectivist orientations, may also influence the relative importance attached to positive consequences of a decision outcome (a *promotion* orientation) or the avoidance of negative consequences (a *prevention* orientation). A cultural syndrome characterized by differences in the emphasis placed on these consequences is suggested by research on regulatory focus (Higgins, 1997, 2002) and has potentially broad implications for consumer behavior (e.g., Briley & Aaker, 2006a). Cultural differences in this syndrome are indirectly suggested by Oishi, Wyer, and Colcombe (2000). They found that although Americans take responsibility for positive consequences of their behavior and attribute negative consequences to external factors, Asians take responsibility for failure and attribute their successes to external circumstances.

The interrelatedness of a promotion–prevention syndrome and the other cultural syndromes we have discussed is also highlighted by evidence that cultural differences in promotion and prevention orientations can be primed by stimulating people to think of themselves as either individuals or members of a group. In particular, in a study by Lee, Aaker, and Gardner (2000) participants imagined themselves in a tennis match in which the outcome was described in terms of either "winning" (attaining a positive outcome) or "not losing" (avoiding a negative outcome). They were more influenced by the "not losing" scenario if they had imagined participating as part of a team than if they had imagined competing as individuals.

Analogously, Chinese participants were more influenced by the "not losing" scenario than Americans were. Research by Aaker and Lee (2001) and by Chen et al. (2005) has similar implications.

A series of studies by Briley and Wyer (2002) also showed the parallel effects of culture and perceptions of group membership. In one set of studies, participants believed they were participating in an anagram completion task either as individuals or as members of a group. In a later product choice task, those who thought of themselves as individuals made choices that maximized their likelihood of receiving benefits, whereas those who thought of themselves as group members made choices that minimized the likelihood of receiving a negative outcome (e.g., diversifying choices across product options). In a second set of studies, Briley and Wyer showed that calling American and Chinese participants' attention to their cultural identity, and thus reminding them of their national affiliation, had analogous effects. When participants' cultural identity was not salient, however, no effects on product choices were observed. Thus, in the absence of "group mindset" priming, other decision criteria were apparently more accessible in memory and guided participants' decisions.

In a similar vein, Briley et al. (2000) found that East Asians were more likely than Westerners to make prevention-based choices (selection of a compromise alternative) only when they were asked to give a reason for their decisions. Generating reasons led participants to activate culture related criteria that were otherwise not applied. But further, if both promotion and prevention syndromes are equally accessible in memory, which can be the case for people exposed to multiple cultures, fairly subtle manipulations of their cultural orientation can influence which orientation is employed. In a study by Briley et al. (2005), bicultural (Hong Kong) Chinese completed a product choice task under conditions in which the experiment was conducted in either English or Chinese. Participants were more likely to make prevention-based choices when the experiment was conducted in Chinese than they were when it was conducted in English (e.g., selecting an option vs. deferring choice). On the other hand, placing participants under cognitive load minimized this difference. This suggests that although the language of the experiment increased the accessibility of culture-based norms in bicultural participants, it only motivated them to comply with these norms if they had the cognitive resources to take them into account.

The evidence that cultural differences in prevention orientation are not evident when participants are unable to think carefully about their decision is particularly noteworthy in the context of Lee and Semin's (2009) observation that these differences are also eliminated when participants deliberate *extensively* about the decisions they make (see also Briley & Aaker, 2006b; Chiu, Morris, Hong, & Menon, 2000). Perhaps when Chinese are asked to make a decision in which they have little interest, they may do so with little thought and thus without considering culture-related norms, beliefs and values. When they think extensively about their decision, on the other hand, they may access decision-relevant knowledge in addition to culture-related criteria, and so the latter criteria may have little effect under these conditions as well. Thus, cultural norms may have their greatest impact on participants whose motivation to make a decision falls between these extremes.

The disproportionate emphasis that Chinese appear to place on negative consequences of their decisions is likely to be reflected in their impulsiveness. As Zhang and Shrum (2009) found, individuals with interdependent self-construals, who presumably are prevention focused, are more likely to suppress impulsive consumption than others are. To this extent, Chinese should be less inclined toward impulsive buying and consumption than representatives of other cultures. Indeed, a multi-country survey of consumers in Australia, United States, Hong Kong, Singapore and Malaysia confirmed that Asian consumers engage in less impulsive buying than Anglo consumers do (Kacen & Lee, 2002).

2.5. Temporal orientation

The three cultural syndromes we have described thus far may have a common root that is reflected in early childhood

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socialization practices (Miller et al., 1997; Miller et al., 2007). However, other syndromes may have completely different antecedents. An additional dimension postulated by Hofstede (1991) suggests a fourth cultural syndrome, temporal orientation, which divides the subjective experience of time into three classifications: past, present and future. But because these temporal frames emerge from cognitive processes, individual differences in the relative importance attached to each can occur (Boniwell & Zimbardo, 2004), creating differences that are traceable to people's socio-cultural backgrounds (Briley, 2009b; Brislin & Kim, 2003; Guo, Ji, Spina, & Zhang, 2012; Ji, Guo, Zhang, & Messervey, 2009). For example, Ji et al. (2009) found that Chinese, relative to Canadians, consider past behaviors to be more relevant for understanding a current problem, recall these past behaviors in greater detail and perceive them to be subjectively closer to the present. Similarly, East Asians rely more on past feelings and events than on those that occur in the present, whereas Anglo Americans rely more on present feelings and events than on those that occurred in the past (Briley, 2009b; Brislin & Kim, 2003). But also, Guo et al. (2012) found that Anglo Canadians assign greater value to an event if they believe it will occur in the future, whereas Chinese and Chinese Canadians value an event more if they believe it had occurred in the past.

When participants are induced explicitly to attend to a given time frame, however, these cultural differences can dissipate. As Guo et al. (2012) show, Chinese who are induced to think about the future value future events more than past events, and Anglo Canadians who are induced to think about the past value past events more than future ones. Thus, cultural differences in the value attached to past and future events may result from a chronic difference in temporal orientation, but the effects of this difference may be overridden by situational demands.

Furthermore, East Asians perceive distal events to be subjectively closer than Westerners do (Ji et al., 2009; Lee, Lee, & Kern, 2011), consider past events to have greater consequence (Menon, Morris, Chiu, & Hong, 1999; Morris, Menon, & Ames, 2001; Morris & Peng, 1994; for a review, see Chiu & Hong, 2007), and are more sensitive to the consequences that events might have on the future (Lee et al., 2011; Maddux & Yuki, 2006). As Briley (2009b) suggests, these differences could reflect the relative salience of knowledge structures associated with past, present and future, and may arise because cultural norms affect how information associated with each of these different timeframes is encoded.

3. Communication, language and emotional expression

As the preceding discussion indicates, a large number of cultural differences in judgments, decisions and behavior are potentially traceable to differences in the cultural syndromes that predominate in the cultures being compared. However, many cultural differences in behavior cannot easily be attributed to such differences. The effects of cultural syndromes are manifested in deliberative, goal-directed behavior. Although individuals are not always aware of the situational factors that give rise to these effects, they are typically conscious of the behavior itself and the goal to which it is directed. Many behaviors, however, are elicited automatically by features of the situation in which they occur, essentially constituting complex conditioned responses (or *productions*; see Anderson, 1983; Wyer et al., 2012) that have been acquired through learning and are elicited with little if any awareness of either the situational factors that stimulated them or, in some cases, the behaviors themselves.

If such behaviors occur in the course of communicating with members of different cultures, they could lead to miscommunication and misinterpretation. As an intuitive example, Europeans typically maintain more eye contact with one another than Americans do. However, eye contact is often interpreted as an indication of intimacy. Thus, if a European man is interacting with an American woman, the American may feel that the European is "coming on" too strongly, whereas the European may feel that the American is aloof and not interested in interacting.

As this example suggests, the way we communicate with others, both verbally and non-verbally, is linked inextricably to our cultural traditions (Gudykunst, Ting-Toomey, & Chua, 1988). Cultural norms and principles govern not only the content and style of our messages to others, but also the interpretation of the messages we receive. Thus, cultural differences in these norms and practices, many of which are applied without awareness, have an impact on both verbal and nonverbal communications among members of different societies. Cultural differences in language provide an example.

3.1. Cultural differences in language

Since the 1950's, anthropologists and psychologists have sought evidence for the assertion that the grammatical structure of a language constrains the way its speakers perceive the world and represent phenomena they encounter (Bloom, 1981; Whorf, 1956). Whorf (1956), for example, suggested that due to the close ties between language structure and the mental processes of those speaking it, the grammar of a language encodes a particular worldview. As Chiu and Hong (2007) note, little evidence supports Whorf's hypothesis that *global* differences in comprehension are affected by language. However, more specific effects may indeed be evident.

An example is provided by differences in the grammatical structures that characterize different languages. Some languages, such as English and French, require the use of a subject or pronoun (e.g., "I like ice cream"), whereas others (e.g., Spanish, Chinese, Japanese, Korean) allow the pronoun to be dropped ("Like ice cream"). In the latter case, the subject of the sentence is understood by either the verb conjugation (e.g., Spanish) or the context in which the words occur (e.g., Chinese, Japanese, Korean). The use of pronouns focuses attention on the subject of the sentence being communicated. When the pronoun is dropped, however, emphasis shifts to the context and surrounding circumstances. Societal norms and expectations coincide with these differences: Societies whose languages require pronouns emphasize independence and individual autonomy, whereas societies whose language allows

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pronouns to be dropped emphasize interdependence and fitting in with one's group (Kashima & Kashima, 2003).

Other research has examined cross-national differences in the frequency with which particular grammatical structures are used. As Semin (2000) noted, an event can be construed at different levels of generality and different types of sentence constructions are associated with these levels. For example, a person's behavior toward another can be conveyed either concretely ("Charlie kicked Fred") or abstractly ("Charlie is mean"). Because linguistic dispositions are shaped by the way one interprets and represents daily interactions, cultural differences may exist in the relative accessibility of these descriptions (Semin & Rubini, 1990).

For example, members of cultures in which an independent cultural syndrome predominates might emphasize the person rather than the situation that he or she encounters, whereas members of cultures in which an interdependent syndrome dominates might focus on the circumstances and activities that the individual encounters (Briley & Aaker, 2013). This pattern might be reflected in the linguistic descriptions used by people in different cultures to characterize events they encounter. In independent cultures, for example, a particular event may tend to be described by adjectives, which focus attention on the individual (I was fast.). In interdependent cultures, the same event might be described using action verbs, which bring greater attention to the context the individual experiences (I won the race.). Semin, Gorts, Nadram, and Semin-Goossens (2002) confirmed this prediction using Hindustani Surinamese and Dutch participants, who represent interdependent and independent cultures, respectively. Hindustani Surinamese were more likely than Dutch participants to use action verbs in describing emotional events and less likely to use adjectives in doing so. Similar differences were found in comparing Italian (independent) and Japanese (interdependent) participants' descriptions of persons and groups (Maass, Karasawa, Politi, & Suga, 2006).

These differences can have important effects on inferences and judgments. If people have interpreted information about a stimulus in terms of a more general concept, their later judgments of the stimulus are often based on the implications of this concept rather than on the stimulus features that led the concept to be applied (Carlston, 1980; Srull & Wyer, 1980). For example, suppose people have learned that someone gave a friend an answer during an examination and have interpreted the behavior as "kind." They may later infer the person to be "honest" on the basis of the evaluative implications of their first judgment without consulting the original behavior (Carlston, 1980). In the present context, this suggests that differences in the grammatical structures that predominate in a language could lead to differences in the frequency and type of semantic categories applied to stimuli people encounter. These categories, once applied to a stimulus, could have an impact on memory and judgments at a later point in time, after the stimulus is no longer present.

3.2. Auditory vs. visual processing differences

A more important difference between the processing of information in Chinese and English results from the difference in the relationship between the way a word "looks" and how it "sounds." Although this relationship in most Western languages is not perfect, one can often guess how an English word is pronounced from seeing it. Consequently, the meaning of the word can be conveyed equally well when it is spoken and when it is written. Thus, children who learn to read in English can recognize a written word as one they have often heard spoken by "sounding it out." This is not the case in Chinese, in which the sound of a word and its visual representation are unrelated. This suggests that the sound of a word plays a less important role in processing written information in Chinese than it does in English or European languages, whereas visual cues have correspondingly greater influence.

The impact of this difference on categorization and memory was identified by Tavassoli (1999). Chinese participants were asked to learn objects in two categories (fruits and animals) on the basis of either pictures of the object or the ideographs that referred to them. Americans were asked to learn the same objects on the basis of either pictures or English words. Later, participants were asked to recall the objects. The order in which the words were recalled suggested that when the objects were pictured, both Chinese and Americans organized the stimuli in memory according to the semantic category to which they belonged. This was also true of Chinese participants when the objects were denoted by ideographs. In contrast, Americans' recall of the English words reflected the order in which the words were presented (or, in some cases, their phonetic similarity) and showed little organization by semantic category.

Cultural differences in the attention paid to visual and auditory features of a verbal communication were identified by Pan and Schmitt (1996) in a study of consumer behavior. Chinese and American participants evaluated brand names of products that were either used by men (e.g., power drill) or used by women (e.g., lipstick). In *auditory presentation* conditions, the stimuli were conveyed orally by either a male or female speaker. In these conditions, American participants evaluated brand names more favorably when the sex of the speaker matched the type of product being described, whereas Chinese participants' evaluations were unaffected by the speaker's sex. In *visual presentation* conditions, the brand names and products were written in a typeface that was normatively either masculine or feminine. In this case, Chinese evaluated the brand name more favorably when the script matched the product being described whereas Americans' evaluations were unaffected.

3.3. Emotion and facial expressions

All people have the same set of universal emotional expressions; that is, emotions and the physiological responses they elicit are consistent regardless of culture (Ekman, Levenson, & Friesen, 1983). Research by David Matsumoto and his colleagues (e.g., Matsumoto & Willingham, 2009) provides further support for this assertion. Nevertheless, cultures impose guidelines regarding the expression of emotions. These "cultural display rules," which are learned early in life, dispose people to modify their expressions of emotion to conform to cultural rules regarding what is appropriate in the context at hand (Matsumoto

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et al., 2008). Consequently, their observable emotional responses do not always reflect the feelings that give rise to them.

This assumption has two implications. First, though people may experience similar emotional reactions regardless of their culture, and may automatically show signs of these emotions in their facial expressions as well, they may sometimes differ regarding their desire to suppress these expressions. Matsumoto, Willingham, and Olide (2009) found evidence of this sort of difference in analyses of Olympic athletes' reactions to winning and losing (see also Matsumoto & Willingham, 2006). The immediate facial reactions of wrestlers upon the completion of a match were universal; winners showed uncontrolled smiles, and losers showed genuine sadness. Within seconds, however, athletes from collectivistic cultures (e.g., Japan) moderated their expressions, masking both smiles after a win and grimaces after a loss. In contrast, athletes from individualistic cultures (e.g., United States) continued to express the emotions triggered by their win or loss. This is not to say that emotion regulation is the province of collectivists only. Whereas emotional control in collectivist cultures is achieved by means of expressive suppression, control in individualistic cultures is more likely to be achieved through cognitive reappraisal (Gross & John, 2003).

A second implication is that because cultural differences can exist in the appropriateness of displaying particular emotions, discrepancies can occur between the expression of an emotion and the interpretation of this expression by members of one culture versus another. Matsumoto (1992) confirmed this possibility. Because the expression of anger, disgust, fear and sadness are discouraged among Japanese, Matsumoto found that recognition of these emotions, which threaten group harmony, was lower among Japanese than among Americans.

4. Further questions and future directions

As this review indicates, recent conceptualizations of culture and behavior can potentially account for a wide range of consumer judgments and decisions. Further elaboration and refinement of these conceptualizations may be necessary, however, to obtain a precise understanding of *when* differences across cultures will and will not occur. Others have also noted the need to develop explanatory constructs that increase the ability to explain and predict these contingencies (e.g., Chiu & Hong, 2007). At this writing, however, only a few efforts have been directed to this end (e.g., Shavitt, Torelli, & Riemer, 2011).

Much of the work we have reviewed has been guided implicitly or explicitly by assumptions concerning the determinants and consequences of accessible culture-related knowledge in memory. From this perspective, several additional questions deserve attention.

4.1. Dynamic constructivism versus cultural syndromes

The two most dominant cognitive approaches to understanding culture differ in their assumptions about the representation of culture in memory. Consequently, they have different implications for the conditions in which culture-relevant knowledge is likely to be applied. According to a dynamic constructivist view, making salient symbols of one's culture is sufficient to activate the entire body of culture-related knowledge that one has acquired. As Briley's research indicates, however, culture-relevant norms and values, although chronically accessible, may not be applied if other decision-relevant criteria have been activated more recently (Briley & Wyer, 2002; Briley et al., 2000; see also Danziger and Ward, 2010). Furthermore, the criteria that individuals use as a basis for their judgments and decisions depend on not only how quickly these criteria come to mind, but also the ease with which they can be applied (Chaiken, 1987). Thus, if the application of culture-related criteria takes cognitive effort, people may often not use them as a basis for their decisions (Briley et al., 2005). Moreover, although certain types of cognitive deliberation can increase the impact of cultural norms on judgments and decisions (Briley et al., 2000), other types can also lead culture-irrelevant criteria to be applied and decrease the impact of cultural knowledge (Briley & Aaker, 2006b; Tappan, 1997).

A conceptualization of cultural syndromes avoids these problems. In fact, it implies that the impact of culture on behaviors can occur without activating individuals' consciousness of their cultural identity at all. That is, although cultural syndromes may be formed as a result of social learning in the culture to which one belongs, they may be activated and applied independently of the factors that gave rise to their construction. Therefore, the situational factors that increase the accessibility of cultural syndromes may not pertain to culture per se. For example, individualism and collectivism might be activated by stimulating persons to think of themselves as individuals or as part of a group, or by exposing them to first-person singular pronouns (I, me, etc.) or first-person plural pronouns (we, our, etc.) in the course of reading a persuasive message.

As we also noted, however, situated cognition approaches to understanding culture is limited by the need to identify the nature of the cultural syndromes that characterize different cultures. Although we have suggested several candidates in this article (see Hofstede, 1980, and Schwartz, 2009, for other possible candidates), only independence–interdependence and individualism–collectivism have typically been examined and these two syndromes have not been clearly distinguished. Moreover, several of the phenomena we have interpreted as examples of cultural syndromes could be conceptualized within a dynamic constructivist framework.

Although the mental representations of cultural knowledge assumed by the two conceptualizations differ, these representations (like mental representations more generally) are inherently metaphorical (Wyer, 2004) and should be evaluated in terms of their utility in raising empirical questions rather than their validity. A dynamic constructivist approach has been particularly successful in identifying a wide range of cultural phenomena that might otherwise not have been discovered, and these phenomena may lead to the postulation of cultural syndromes that have not previously been considered. Once identified, however, the implications of these syndromes can be investigated independently, potentially leading to a more precise conceptualization of culture than would emerge on the basis of a dynamic constructivist formulation alone.

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An additional consideration arises. Research performed from the dynamic constructivist perspective implicitly assumes that exposing individuals to symbols of their culture influences their awareness of themselves as members of this culture. In some cases, however, this procedure could activate concepts of the culture without stimulating individuals to think of themselves as members of this culture at all. (In some cases, self-focused attention is necessary in order for individuals' cultural identity to influence their behavior; see Hung & Wyer, in press.) This contingency could have implications for consumer behavior. As but one example, if exposure to symbols of people's culture increases attention to their cultural identity, it might induce feelings of loyalty and increase their preferences for products that originate in their own country. If these symbols activate cultural norms without making individuals' cultural identity salient, however, this might not occur.

4.2. Other considerations

Early research on the impact of knowledge accessibility focused on the activation and use of declarative knowledge (Higgins, 1996). More recent research, however, has focused on the activation of goal-directed procedures independently of the content to which the procedures are applied (Wyer et al., 2012; see also Janiszewski & Wyer, 2014). In fact, cultural syndromes of the sort we have reviewed in this article, the influence of which cuts across many content domains, exemplify the influence of procedural knowledge.

Although individuals are often aware of the processing strategy they use to attain a particular objective, they may not be aware of its cultural relatedness. In some instances, they might also be unaware of the behavior itself. As Wyer et al. (2012) point out, the processes that underlie the automatic activation of behavior may differ from the processes that govern the activation of conscious decision strategies. Consumer behavior, like behavior more generally, is likely to involve a mix of both conscious and nonconscious processes, and culture could play a different role in each. Although the separation of these processes is difficult, it may be of particular importance in understanding cultural influences on consumer judgment and decision-making.

Although chronically accessible knowledge and situationally induced knowledge accessibility are likely to have similar effects (Bargh et al., 1986; see also Aaker & Lee, 2001), the impact of recently accessible knowledge decays more quickly than that of frequently accessible knowledge (Higgins, Bargh, & Lombardi, 1985). This means that situationally primed cultural knowledge is likely to have transitory effects. That said, however, Srull and Wyer (1980; see also Carlston, 1980) found that once a judgment or decision has been made on the basis of information that was primed in a particular situation, this judgment or decision can be later retrieved out of its original context and used as a basis for later judgments. Furthermore, this tendency can increase over time. This suggests that if situationally activated cultural knowledge has an impact on consumer judgments in a particular situation, the implications of these judgments may persist to influence decisions in a quite different situation later, and this influence could persist indefinitely. The identification of conditions that lead to short-term and long-term influences of activating culture-related concepts and knowledge is a worthwhile avenue for further research.

5. Concluding remarks

Social science research has often implicitly assumed that the findings identified using a population within a single country generalize to all populations. The research summarized in this article calls this assumption into question. The danger of making this assumption is increased by virtue of the fact that the range of countries sampled by behavioral scientists is quite narrow—96% of psychology studies have used participants from Western industrialized countries, though these countries represent only 12% of the world's population (Arnett, 2008; see Henrich, Heine, & Norenzayan, 2010). Moreover, this over-sampled group is not at all representative of the rest of the globe (Henrich et al., 2010). In some cases, long-standing theories developed using Western ideals and subjects have been overturned (for example, our understanding of the importance of free choice and self-determination to well-being; see Markus & Schwartz, 2010). These and other findings testify to the importance of examining critically the extent to which psychological "universals" actually deserve that status. The research we have reviewed provides evidence of this importance and hopefully will stimulate further research that will permit insight into cultural differences in consumer behavior.

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