Understanding Culture

Theory, Research, and Application

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Understanding Cultural Syndrome Effects on What and How We Think

A Situated Cognition Model

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What is meant by culture and how does it matter? In this chapter, we argue that culture is best understood as a multidimensional rather than a unitary construct. Specifically, we propose that societies socialize for and individuals have access to a diverse set of overlapping and contradictory processes and procedures for making sense of the world and that the processes and procedures that are cued in the moment influence the values, relationality, self-concept, well-being, and cognition that are salient in the moment. This interpretation contrasts with the more common discourse on culture as a single, unified, chronically accessible whole that is isomorphic with one’s country of origin. In the following sections, we outline our perspective and supporting evidence from recent meta-analytic summaries and follow-up studies that, taken together, suggest that such a situated syndrome perspective offers the potential to unpack more of what is meant by “culture’s consequences” — to borrow the title of Geert Hofstede’s (1980) seminal book.

In making our case we also borrow from Triandis (1996) the term syndrome to describe culture. Cultural syndromes are networks of associated features, such that cueing one feature is likely, through spreading activation, to make other features salient in working memory as well. We assume that societies do not have a unitary culture or even a single cultural syndrome, but rather have access to a multiplicity of overlapping and potentially conflicting cultural syndromes that are differentially salient, depending on where one is in a society’s structure and what is relevant at the moment. This notion of multiplicity can be contrasted with the notion of culture as a single entity (e.g., individualism or collectivism), something one has (e.g., a “cultured” person), or a general style of living (e.g., a “culture” of honor or of filial piety) that is fixed (e.g., Chinese “culture” is over five thousand years old). Culture, from our perspective, involves mindsets, practices, and styles of engaging; it is these implicit and nonconscious as well as more explicit and conscious mental representations that are the focus of our attention and the propensity for one or another to be cued differs across societies.

CULTURE: UNITARY OR MULTI-FACETED?

Advances Made With the Unitary Model

The culture as single entity framework has illuminated some aspects of culture’s mutability (e.g., describing change to another country or modernization in terms of “culture shock” and learning to live in more than one society in terms of becoming “bicultural” and “multicultural”; Holt, 1940; Hong, Morris, Chiu, & Benet-Martínez, 2000; Lavrakas, Coleman, & Gerton, 1993; Ward, Bohnert, & Furham, 2001). For example, in her chapter, Hong describes biculturals as those
incorporating culture A and culture B. By assuming that each society or group has a single culture, these formulations facilitate using between-group or between-nation differences as stand-ins for effects of “culture.” Indeed, researchers commonly substitute nation-state (e.g., China, Japan, the U.S.; Anderson, 1999; Bond & Cheung, 1983; Chang, Arkin, Leong, Chan, & Leung, 2004; Chang, Asakawa, & Sanna, 2001; Chen, Brockner, & Katz, 1998; Church et al., 2006; Jackson, Chen, Guo, & Gao, 2006; Kitayama, Mesquita, & Karasawa, 2006; Krull et al., 1999; Ma & Cheung, 1996; Maddux & Yuki, 2006; Matsumoto, 1992; Peng & Nisbett, 1999) or people from differing heritage (e.g., Asian Americans/Canadians and European Americans/Canadians; Abramson & Imai-Marquez, 1982; Aune & Aune, 1996; Heine & Lehman, 1997; Kim & Sherman, 2007; Scollon, Diener, Oishi, & Biswas-Diener, 2004; Singelis & Sharkey, 1995; Spencer-Rodgers, Peng, Wang, & Hou, 2004; Tsai & Levenson, 1997) for “culture” in their analyses.

In these analyses, cross-national comparison has been assumed to mark contrast between cultures, for example, between cultures that emphasize “individualism” and “collectivism” (e.g., Hofstede, 1980), “tightness” and “looseness” (Triandis, 1995), “horizontality” and “verticality” (Triandis & Gelfand, 1998), “survival values” and “self-expression values” (Inglehart, 1997), and “honor-modesty” and “shame” (e.g., Cohen, 2001; Gregg, 2005; Nisbett & Cohen, 1996). Triandis (1995) provides useful descriptions for many of these contrasts. Individualistic societies are said to emphasize individuals and centralize personal choice. In contrast, collectivistic societies are said to emphasize social groups and centralize group membership. Loose societies are said to accept a broad range of behavior without sanction in most situations. In contrast, tight societies are said to provide clear scripts for proper behavior in most situations and to sanction deviation from these scripts. Similarly, hierarchical societies are said to emphasize status differences in making sense of the social world; different behavior is expected, depending on one’s station in life. In contrast, vertical societies are said to emphasize equality in making sense of the social world; differences in power, status, or position are not assumed relevant. Lastly, honor-based societies are said to emphasize proving and defending one’s honor and the honor of close others, whereas societies that do not recognize honor as a basis for meaning making are said to use alternative meaning and morality systems.

Clearly, comparing societies provides some useful information about where to look for cultural differences. However, this conceptualization focuses on each society as having a single culture (e.g., “America is individualistic”). This formulation is at odds with the experience of living in a society as well as with a number of formulations. For example, Waterman (1981) argued that the individualistic socialization in America not only coexists with but actually facilitates valuing relationships, helping and cooperating with others. Similarly, in his examination of socialization of children, Turiel (1983) argued that across societies, both independence and interdependence are valued, but when they are cued is situation-specific and the propensity for one another to be cued differs across societies.

**Gaps in Unitary Models: Moving Toward Multi-Syndrome Models**

Thus, while yielding interesting and seemingly ecologically valid data, the equation of nation-state (or society) with culture masks the fact that between-group differences are at best an indirect indicator that “culture” is at work. Research based in this approach cannot clarify which of many possible “active ingredients” may underlie any detected between-sample differences or, for that matter, whether differences are due to “cultural” factors at all. Moreover, operationalizing culture as a particular society or national origin group creates an artificial sense that culture is stable and is an entity. We disagree with both of these assumptions. Although people from China will always be from China (a stable social fact, even if they later move) and Chinese people will always be Chinese (another stable social fact, even if they also become other things), these social facts are simply markers or placeholders. As such, they do not allow for the inference about likely content of identity or
style of engaging with the world. In our work, we assume that there is not a single “Chinese” way of being and that Chinese society does not necessarily socialize members for only one way of being or style of thinking. Thus “Chineseness” is not an essence.

We argue that conflation of country or national origin with a single “culture” is confusing on two grounds. First, it artificially creates a sense that societies do not socialize for multiple, potentially contradictory cultural component sets or syndromes that may be cued by differing situations. Second, it reduces likelihood of seeing parallels between syndromes in one society or set of societies and other seemingly dissimilar societies. Using the example of collective and individualistic cultural syndromes (which we will define below), we argue that societies socialize members for both individualism and collectivism. Differences between societies do not occur because one society is “collectivistic” and the other is not. Rather, societies differ in how likely collectivism is to be cued and therefore in the chronic salience of this syndrome as a way of making sense of situations. To begin to address limitations of national-origin and single “culture” based approaches, in this chapter we first define cultural syndromes as a way to examine what cultures’ active ingredients may look like. Then, we examine whether priming or making salient these active ingredients produces the effects that are posited to be “cultural” in cross-cultural studies.

**Cultural Syndromes**

By cultural syndrome, we refer to simplifying models that bring certain active ingredients of what is popularly described as “culture” to sharp relief. These models are not meant to provide detailed descriptions of any particular society’s culture, but rather to highlight systematic patterns that characterize clusters of societies. Building on Triandis’s (1993, 1996; Triandis & Trafimow, 2001) formulation of cultural syndromes, we operationalize cultural syndromes as patterned beliefs, attitudes, and mindsets that go together in a loosely defined network: when one aspect of a syndrome is primed, other aspects of the syndrome are also likely to be active and available in working memory. Although cultural attitudes, beliefs, and mindsets are likely to have emerged from distal social and geographic contexts, they have continued influence on societies and individuals within them. This is true even if the initial distal factors associated with these social contexts have changed.

We conceptualize societies as containing multiple cultural syndromes and propose that one important feature of cultural syndromes is that they create meanings and make certain ways of being and thinking accessible when they are triggered or cued. These meanings have variously been called mindsets and mental or social representations (Oyserman & Markus, 1998; Schweder, 1995). Triandis and Trafimow (2001) have identified a number of situational factors that are likely to cue collectivism as a cultural syndrome within a society. These factors include whether one is with in-group or out-group members, the size of the in-group one is with, and whether in-group norms have been cued. Indeed, any situation can cue a cultural syndrome if the content or processes related to the syndrome are brought to mind by the situation. Situations that cue a cultural syndrome should activate both relevant content (mental and social representations) and relevant mindsets. When collectivism is cued, for example, aspects of one’s self-concept that are related to one’s public image may also become salient; whereas when individualism is cued, aspects that are related to one’s private self-evaluation are more likely to come to mind.

Because cultural syndromes link mindsets and mental and social representations, cuing one part of the network should cue others. The model therefore predicts both that cuing collectivism should make salient public or collective aspects of self-concept and also that cuing public self-concept should make salient other aspects of collectivism. Societies may on average have a higher prevalence of one or another cultural syndrome, but that is not to say that less common syndromes are completely absent from the society. Rather, various syndromes may be rarely or more commonly cued.
CULTURAL SYNDROMES AS A MID-LEVEL CONSTRUCT LINKING DISTAL PAST AND CURRENT CONSEQUENCES

Rather than thinking of a society as individualistic or collectivistic, we view these society labels as useful shorthand images, but no more than shorthand images. That is, societies differ, not in whether a syndrome (e.g., collectivism) exists, but rather in how likely such a syndrome is to be cued. While we assume that our model is relevant across various syndromes, we concentrate on individualism and collectivism for two reasons. First, these dimensions have received most research attention (e.g., Hoříně, 1980, 2001; Kağıtçıbaş, 1997; Oyserman, Coon, & Kemmelmeier, 2002; Triandis, 1995, 2007). Second, other identified cultural syndromes are linked to these syndromes (for a review, see Blondel & Inoguchi, 2006).

CULTURAL SYNDROMES ARE NESTED WITHIN SOCIETIES

As represented by the gray middle panel in Figure 2.1, we conceptualize cultural syndromes as the proximal link between the distal factors (e.g., geography, religion) assumed to create these syndromes and cultures' current consequences. As conceptualized, cultural syndromes influence both social institutions and everyday social situations and, importantly, the likely sense made of these situations, what individuals consciously or nonconsciously perceive the situation to be "about" (see Higgins, 1998). Thinking in terms of cultural syndromes rather than a particular philosophic tradition (e.g., Protestantism or Confucianism) is useful because differing distal features may result in similar syndromes.

For example, Confucianism in China and tribalism and harsh ecology in Africa and the Middle East may each foster a collective cultural syndrome. In the case of Confucianism, a meaning-making system focused attention on fitting into context, being obedient, and multicausal networks. In the case of harsh ecology, the need to depend on others to survive is salient.

Although psychologists have characteristically not taken social organization and social structure into account in their theorizing, this larger context and the pattern of behaviors that his larger context implies determine to a large extent the behavior of individuals within a society. Within our model, what is meant by society is not an anthropological description of the unique patterns

FIGURE 2.1 A process model of culture's impact
and history of a society, but rather a more general pattern or process. In this sense, while societies are not the same, their cultural syndromes may have similarities. Such equifinality, or equivalent outcomes from a variety of precipitating factors, is likely because getting along, fitting in, and cooperating has many benefits to societies and is likely to be triggered by multiple sources, while doing one's own thing, being unique, and standing out can have many orthogonal benefits to individuals and so can also be multiply triggered (see Katz & Kahn, 1966). Anything so important is likely to have multiple causes.

Cultural Syndromes: Immediate External and Internal Realities

Situations: Immediate external realities. As presented in the middle panel of Figure 2.1, we assume that individuals experience “culture” by encountering syndrome-relevant situations (e.g., being reminded for not following a social norm, or being asked for one's personal preferences) and making sense of these situations in syndrome-relevant terms. The meaning made of these situations is what influences on-line responses. Following the principles of equifinality, situations that differ in their specifics may nonetheless all cue the same underlying processes. For example, collective focus can be turned on whether the situation involves deferring to one's elders, defending the honor of one's group, or cooperating to insure water reaches crops.

Thus, rather than conceptualizing syndromes as polar opposites, we propose that societies may not differ in terms of whether a cultural syndrome exists, but rather differ in the number of institutions and situations within the society that cue each of a variety of cultural syndromes. When a cultural syndrome is institutionally accessible and situationally cued, its impact is felt in the moment. Following this conceptualization, differences between societies reflect the relative likelihood that the syndrome is cued.

Subjective construals: Immediate internal realities. There are two ways to understand this situated process. One is that situations themselves have meaning and carry with them cultural syndrome cues. Countries would then differ in the kinds of situations their inhabitants usually experience; when the situation is the same, the response would be the same. This logic would suggest, for example, that wartime situations cue relevant cultural syndromes (e.g., collectivism, honor) universally across societies. Another way to understand situated process is that effects are not due to situations but to the meaning drawn from them. Rather than assume that situations themselves cue cultural syndromes, the assumption is that what differs is not so much the situations inhabitants encounter as the meaning given to these situations—how they are subjectively construed. For example, failure may cue honor in one society but not in another. However, whenever honor is cued, the response will be the same. Subjective construals, not situations, produce isomorphic responses. Thus, for example, collectivism can be cued in family situations if they are understood in terms of filial piety, but not necessarily otherwise.

A cultural syndrome model therefore implies three things. First, everyday situations can carry different meanings. Second, culture provides these meanings; and third, different cultural syndromes can be cued, producing sharply different “situated” or momentary realities. We argue for this latter “situated” perspective, focusing on active ingredients of individualistic and collectivistic cultural syndromes and their consequences for what and how we think, and ask what the metanalytic evidence for this model is. A situated model holds great promise of providing tools to begin to open the “black box” of culture as a stable yet dynamic influence, not only providing further evidence that culture matters but also showing how and when it matters.

An Integration

Of course, our approach assumes that all societies socialize for both individual and collective cultural syndromes to some degree. Indeed, the evidence would support this theoretical argument that societies can be high or low in individualism, collectivism, or both (see Oyserman, Coon, &
Kemmelmeier, 2002). In order for the situated model to be defensible, however, it is necessary to document more than just that cultural constructs such as individualism and collectivism are orthogonal. It is also necessary to show that when cultural syndromes are brought to mind, they have the same effects in different societies and that these effects are congruent with those predicted or documented in a cross-national framework. Following a social cognition framework, a culture-as-situated-cognition model assumes that ambiguous situations are likely to be interpreted in terms of chronically accessible cultural syndromes. Once a syndrome is cued, whether it is chronically accessible or chronically inaccessible should not matter. Even chronically inaccessible syndromes should become temporarily dominant when cued in context.

In the following section we provide a brief summary of the individualism and collectivism framework, including assumptions and evidence to date. We then explain more thoroughly the hypothesized consequences of priming individual versus collective cultural syndromes and present the results of a recent meta-analytic review of the cultural-syndrome priming literature and critical examination of extant support for a situated perspective. To foreshadow our conclusions, we find that both individualistic and collectivistic cultural syndromes can be primed in the East and the West, producing significant and moderate-sized effects across dependent variables, country samples, and specific priming tasks.

INDIVIDUALISM AND COLLECTIVISM

ASSUMPTIONS

A main contention of cultural and cross-cultural psychology is that societies differ in individualism and collectivism and that these differences have consequences for what has meaning and value, what is worthy of persistent effort, and how we make sense of ourselves and others (e.g., Inglehart & Oyserman, 2004; Schwartz, 1994). Individualism as a cultural syndrome focuses on the individual as the basic unit of analysis; collectivism as a cultural syndrome focuses on the group as the basic unit of analysis. This initial operationalization carries with it the assumption of distinctive values and content of self-concept, differing conceptualizations of human relationships, and signature cognitive styles. Some of these differences are outlined below.

COLLECTIVISM

Within a collective cultural frame, essential values are assumed to be group solidarity, social obligation, connection, and integration; important group memberships are ascribed and fixed “facts of life” to which people must accommodate; both in-groups and boundaries between in- and out-groups are experienced as stable, impermeable, and important. A basic self-goal is to attain and maintain group membership, so that the self is defined both in terms of one’s social roles (e.g., middle daughter) and group memberships (e.g., Hong Kong Chinese) and the traits and abilities relevant for maintaining these (e.g., loyalty, energetic perseverance; e.g., Liu, 1986; Markus & Kitayama, 1991). Successfully carrying out social roles and obligations and avoiding gaffs or failures in these domains are important sources of well-being and life satisfaction, making emotional restraint an important way of fulfilling one’s social obligations (Kim, Triandis, Kağtçbaş, Choi, & Yoon, 1994; Kwan, Bond, & Singelis, 1997; Markus & Kitayama, 1991).

Collectivism and cognitive style. Social context, situational constraints, and social roles are assumed to figure prominently in person perception and causal reasoning within a collective framework, influencing not just what one thinks about but how one thinks as well (Choi, Nisbett, & Norenzayan; 1999; Liu, 1986; Miller, 1984; Morris & Peng, 1994; Newman, 1993). In this sense, meaning is contextualized and memory is likely to contain richly embedded details. This has been described as a Confucian “holistic” style (Nisbett, 2003) and more generally as a situation-specific relational “embedded and connected” cognitive style that influences not only social but nonsocial
cognitive and basic perceptual processes (Markus & Oyserman, 1989; Oyserman, Kemmelmeier, & Coon, 2002). Thus, collectivism facilitates perceptual attention to connections and relationships between figures and the context in which they are embedded—focusing on the forest rather than the trees.

**Linking cognitive style to self-schema.** Using somewhat different terminology, as outlined below, a number of theorists have linked between-group difference in cognitive style to between-group differences in self-structure. An early description comes from Triandis (1989), who proposed that collectivism is associated with the collective self, which makes social norms more salient as the basis for judgment. Although not quite using a language of cognitive style, Triandis (1989) suggests that self-concept cues a salient procedure, namely, the use of norms as the basis for judgment.

Correspondingly, Markus and Oyserman (1989) proposed that women and individuals from non-Western societies are likely to have self-schemas that focus on connection to others and that this connected self-schema structure is likely to carry with it a chronically accessible “connecting and integrating” cognitive style. Applying these self-schemas and cognitive styles to gender differences, these authors posited that men’s advantage over women in spatial ability tasks requiring the rotation of objects in three-dimensional space (especially under time pressure) may be due to likely between-gender differences in self-schema structure. Given socialization and evolutionary push to tend to, mend, and maintain relationships, women were posited to be more likely to have salient relational self-schemas that would prime a “connect and integrate” cognitive processing style and result in slower and less efficient mental rotation, a skill required to solve three-dimensional spatial tasks quickly and correctly. Given socialization and evolutionary push to stand out, men were posited to be more likely to have salient separate self-schemas that would prime a “pull apart and separate” cognitive processing style and result in quicker and more efficient mental rotation. Parallel to the argument made for gender, the authors argued for West/non-West difference in connection and separation as primary self-schemas.

Markus and Kitayama (1991) refined this model, describing non-Western self-construals as interdependent. Contrasting independent and interdependent self-construal, they provided an integrated review of the literature contrasting East, particularly Japan, and West, particularly the U.S. Drawing on a different literature but coming to parallel conclusions, Wokie and her colleagues (e.g., Wokie, 1994; Wokie, Lavezzary, Barksy, 2001) also propose that individuals with “communion” self-concepts prefer a connecting and integrating cognitive style. Of these various terminologies, that of Markus and Kitayama has become widely accepted and has been further applied to gender differences in self-structure (Cross & Madson, 1997; but see Kashima et al., 1995, for a different perspective on gender and culture).

**Individualism**

Within an individualistic cultural frame, essential values are assumed to be individual freedom, personal fulfillment, autonomy, and separation; relationships are chosen, voluntary, and changeable, can be worked on and improved, or left when costs outweigh benefits (e.g., Morris & Leung, 2000; Sayle, 1998; Triandis, 1995). A basic self-goal is to feel good about oneself as a unique and distinctive person and to define these unique features in terms of abstract traits. Open emotional expression, free choice, and attainment of one’s personal goals are important sources of well-being and life satisfaction (e.g., Diener & Diener, 1995).

**Individualism and cognitive style.** With regard to cognitive style, meaning is de-contextualized because individualism promotes a de-contextualized reasoning style that assumes social information is not bound to social context. This reasoning style has been variously described as an analytic style (e.g., Nisbett, 2003) or a “separate and pull apart” style influencing not only social but nonsocial cognitive and basic perceptual processes (Markus & Oyserman, 1989; Oyserman, Kemmelmeier, & Coon, 2002). Thus, individualism facilitates perceptual attention to distinctions and separations between figure and ground—focusing on the forest rather than the trees (e.g., Markus & Oyserman, 1989).
Linking cognitive style to self-schema. Triandis (1989) proposed that individualism is associated with focus on the private self, which makes personal preference more salient as the basis for judgment. Similarly, Markus and Oyserman (1989) proposed that men and individuals from Western societies are more likely to have separated self-schemas that highlight boundaries between self and others and that the basic self-schema structure is likely to carry with it a chronically accessible "pull apart and separate" cognitive style. Markus and Kitayama (1991) describe Western self-construals as likely to be "independent." Moreover, Wolke and her colleagues (e.g., Wolke, 1994; Wolke et al., 2001) also describe individuals with "agency" self-concepts as preferring a distinguishing and separating cognitive style.

Summary of the Conceptual Literature on Individualism and Collectivism

Taken together, models that associate individualistic and collectivistic cultural syndromes with cognitive style converge on the proposition that each syndrome is associated not only with content but also with process. Each syndrome is hypothesized to have a signature cognitive procedural style, with many models assuming that the influence of cultural syndrome on cognitive style is linked to differences in salient self-concept content. However, to our knowledge, these assumptions have not been isolated experimentally.

It is possible the cultural syndromes cue differences in content of self-concept and cognitive style independently. Alternatively, structure and content of self-schemas may be linked to cognitive style so that if one is cued, the other is also cued. If the two are linked, it may be that the cueing one may cue the other equally, or it may be that effects are uni-directional; for example, cued content of self-schemas mediate cued differences in cognitive style, but not the reverse. Thus, it is unclear from previous research whether self-concept mediates the influence of individualism and collectivism on cognitive style or if some common underlying mindset influences how the self is construed and how the cognitive procedures are brought to mind more generally. For this reason, we use the broader conceptualization of individual versus collective cultural syndromes to reflect networks of integrated content and psychological processes that together produce differences in self-concept, values, relationality, well-being, and cognitive styles.

As described in the following section, individualism and collectivism are associated with content (e.g., defining the self in terms of traits or group memberships) and process (e.g., likelihood of assimilating new information or contrasting new information with existing knowledge). Of course, in many situations outside the laboratory, content and process may be simultaneously salient. For example, collectivism may involve noticing and appreciating similarities between oneself and in-group others and may also make salient relevant procedures, such as assimilating or integrating. Theoretically, however, content and process are separable; a person may be primed to remember contextual cues or primed to think of himself as a team member. To the extent that content and process are associated, then cued one should cue the other.

Evidence from Cross-Cultural Research

A meta-analytic synthesis from our lab (Oyserman, Coon, & Kemmelmeier, 2002) supports the general assumptions of the individualism and collectivism cultural syndrome model with regard to values, ways of relating to others, and self-concept (well-being research is still open to interpretation). Emerging cognitive style research also provides strong support for the hypothesized differences in individualistic and collectivistic cultural syndromes. Below we provide a brief and targeted synopsis of the meta-analytic findings. We also provide a somewhat broader review of the culture and cognition literature. Generally, if a situated condition model is to be useful, it should be possible both to replicate prior cross-national findings using this perspective and also to document that effects are found when proximal situations cue the individualistic and collectivistic cultural lenses through which individuals perceive and make sense of the world.
Values. On average, European Americans endorse values of individualism more and values of collectivism less than Africans, Eastern Europeans, Asians, and Asian Americans. Differences between European Americans and members of other English-speaking countries (e.g., Australia, Canada, Great Britain, and New Zealand) are not significant, suggesting a common cultural core of high individualism and low collectivism. Latin Americans are higher overall in collectivism but not lower in individualism—a cultural syndrome that fits the twin ideas of machismo and simpatico. Combined effect sizes for comparisons with East Asia, Africa, and the Middle East are at least moderate in size and corroborate conventional expectations of cultural theorists.

Although there seems to be a uniquely Anglo and American way of being (high individualism and low collectivism), Oyserman and colleagues’ (2002) review did not support a simple East-West dichotomy. It consequently challenged the notion of a single “Western” culture and the assumption that high individualism and low collective is part of a Western European tradition that was brought to America and, therefore, was particularly accessible to European Americans. Several findings are noteworthy. For example, European Americans are lower in collectivism than Western Europeans. In contrast, value differences between European Americans and Asians are often small and sensitive to scale content. European Americans are also lower in individualism than African Americans, but the groups do not differ in collectivism. These results suggest a patterned clustering of values and also a pressing need for a more nuanced approach to understanding how individualism and collectivism matter both between and within societies. A situated approach addresses these issues and offers testable causal hypotheses.

Relationality. On average, individualism and collectivism as cultural syndromes are associated with differences in relationality and group relations. Individualism is associated with the ease of interacting with strangers and a preference for a direct rather than indirect communication style. Collectivism is associated with a greater preference for in-group members than out-group members in interpersonal relationships and some forms of face saving. The size of the effects is highly variable, especially for conflict management, but is often in the moderate-to-large range.

Work-based organizational research allows for stronger conclusions than studies of close relationship and in-group/out-group relations because they are more likely to include a direct assessment of individualism and collectivism, experimental manipulations, and cross-national comparisons rather than comparisons within the U.S. alone. To the extent that the cross-national differences in work-based preferences were demonstrated to shift systematically with proximal situational cultural syndrome cues, research in this domain has the potential to address concerns about global and diverse workplaces and markets. Moreover, a situated perspective can address the “levels” of collectivism issue (relational versus group; e.g., Brewer & Chen, 2007), which is not yet clearly addressed in the cross-national literature. Research to date cannot clarify whether cultural syndromes that cue connections or relationships with specific others (e.g., friends or family members) have the same effects as cultural syndromes that cue connection with and obligation to larger social groups (e.g., ethnic or tribal group).

Self-concept. Research reviewed in the previous meta-analysis had a weak inferential basis, simply comparing groups within the U.S. or comparing a U.S. group and another country group. This research has assumed that differences in self-concept are due to individualistic and collectivistic cultural syndromes. However, large effects were found in studies that directly assessed individualism and/or collectivism and related these cultural syndromes to self-concept content. Research demonstrating that proximal cues can “turn on” relational, group-collective, or individual-difference focused self-concept content would be immensely useful as a bridge between social identity theory-based models of self-concept (which suggest that all self-concepts contain social elements) and the cross-cultural psychology-based models that emphasize between-society differences in whether social content is included in the self (see Oyscerman, 2007, for a review). Showing that different levels of collectivism can be situational cued could provide more nuanced information about how the self-concept functions.
Well-being. On average, Hofstede’s (1980) individualism ratings for various countries tend to be moderately correlated with life satisfaction. However, individualism has an effect primarily in research that does not control for country differences on other variables (e.g., GNP, national wealth). Research that controls for these confounds shows smaller effect sizes attributable to individualism (e.g., Arrindell et al., 1997). A situated approach may shed light on the causal process by isolating the systematic influence of a relational, a group-collective, or an individual focus on what criteria individuals utilize to assess their overall well-being.

Cognition. The endorsement of an individualistic cultural syndrome is correlated with an increased use of trait-based inferences and a decreased use of situation-cued recall (among American undergraduates; Duff & Newman, 1997, Studies 1 and 2; Newman, 1993, Studies 1 and 2). Indeed, the possibility that culture influences not just what one thinks about but also how one thinks is particularly intriguing and supported by an increasing number of studies (see Nisbett, Peng, Choi, & Norenzayan, 2001; Norenzayan, Choi, & Peng, 2007). Much of this research compares Americans to another national group and assumes cross-national differences in cultural syndrome. For example, Nisbett and colleagues (2001) and Norenzayan and colleagues (2007) describe the West as “analytic” and the East as “holistic” in cultural syndrome.

Other research simply demonstrates differences in cognitive styles. For example, American students are more likely to focus on dispositions rather than situations in providing rationales for behavior or explaining causality (compared with Saudi students; Al-Zahrani & Kaplowitz, 1993). American students are faster and more accurate in recalling abstract and central information, whereas Chinese are more accurate in recalling details, background, and elements of the whole visual field, and Japanese are more accurate in recalling proportions between elements (Norenzayan et al., 2007).

Female gender (Kemmelmeier & Oyserman, 2001a) and interdependent self-concept (Kemmelmeier & Oyserman, 2001b) are both associated with the tendency to assimilate social information into one’s self-concept, even if the information is negative. Specifically, when asked to think of a person who is similar to oneself and doing poorly in school, women and those with higher interdependent self-concept are more pessimistic about their own chances of success than are men and those with more independent self-concepts. Woike and her colleagues (e.g., Woike, 1994; Woike, et al., 2001) demonstrate an association between agency (communion) self-schema, and distinguishing and separating (connecting and integrating) cognitive style.

This self-schema based difference in basic cognitive processing styles has also been corroborated in more explicitly experimental paradigms (e.g., Hannover & Kühnen, 2004; Kühnen, Hannover & Schubert, 2001; Kühnen & Oyserman, 2002). For example, in a memory task, participants were told that they would be asked to remember objects presented to them. Those primed with independence and those primed with interdependence were equally good at remembering the objects. They differed, however, in their incidental encoding of relationships; those primed with interdependence were better able to remember where objects were on the page. This research provides evidence that when primed, independent self-concept is more associated with a “separate” cognitive style; and that when primed, interdependent self-concept is more associated with an “integrate” cognitive style.

Lee, Aaker, and Gardner (2000) and Aaker and Lee (2001) make a similar distinction but focus on additional cognitive styles. They provide evidence that being from a collectivistic society or thinking about oneself as a member of a group cues a prevention-focused cognitive style in which one is concerned about the negative consequences of behavior and avoiding failure, whereas being from an individualistic society or thinking about oneself as an individual cues a promotion-focused cognitive style in which one is concerned about positive consequences of behavior and attaining successes. Taken together, these results converge on the notion that each cultural syndrome has a signature cognitive processing style and that this style may be cued by different ways of thinking about the self.
A SITUATED MULTI-SYNDROME MODEL OF CULTURE

How are cultural syndrome effects to be interpreted? As we noted earlier, one possibility is that cultural syndromes are based in distal cultural features such as philosophy, religion, or language and that these features have direct current consequences for values, relationality, self-concept, well-being, and cognition. While initially plausible and certainly congruent with some approaches to cross-cultural difference (e.g., Nisbett, 2003), as will be outlined below, a number of studies suggest that “distal” features, such as a society’s philosophical tradition, do not have a direct effect in and of themselves but rather have an effect by making certain subjective construals and cognitive procedures more likely to come to mind than others.

SITUATED EFFECTS

We propose that rather than assuming that distal features of a society directly impact current self-concept, cognition, and behavior, these distal features are better understood as having their influence via their impact on more proximal features. In particular, distal features impact the likelihood of experiencing a particular set of current situations or situational constraints, and more importantly, influence how one is likely to interpret, make sense of, and respond to these situations. This assumption of mediated effects, rather than a straightforward prediction from a distal past to a current situation, is necessary because, as we outline below, the evidence does not support a direct effect of the distal past. First, even when the same situations occur, they may not carry the same meaning. Thus, although Japanese and American students describe similar situations as self-esteem increasers or decreasers, when they are given a set of situations to rate, Americans rate more situations as potentially increasing self-esteem, and Japanese rate more situations as potentially decreasing self-esteem (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). Second, as will be detailed below, even when situations are superficially the same (e.g., one is speaking in English), subjective meaning (e.g., why am I speaking in English?) rather than external similarities predicts outcome.

Subjective construal matters. Why might this be? We propose that subtle features of the situation can be critical in turning on or cuing a particular cultural syndrome, which, once cued, provides meaning. The same situation (e.g., speaking English) can carry different meanings. It can cue a collective or an individualistic cultural syndrome response, depending on subjective meaning in context. Language itself does not automatically prime either individualism or collectivism; rather, what is primed depends on what using the language seems to be about.

English can be a reminder that one is Chinese, as demonstrated in two studies conducted in Hong Kong while it was still under British rule. In these studies, being randomly assigned to fill out a values questionnaire in English was associated with higher endorsement of Chinese cultural values (among Hong Kong Chinese students; Bond & Yang, 1982; Yang & Bond, 1980). However, English, when its use seems natural in context, can also cue individualism, as demonstrated in two studies conducted in the U.S. and Canada. In one study, Russian immigrants to the U.S. who were randomly assigned to structured recall tasks in an all-English response format (rather than an all-Russian response format) were more likely to generate self- rather than other-focused memories (Marian & Kaushanskaya, 2004). In another study, Chinese students studying in Canada were randomly assigned to a values and self-concept questionnaire presented in English or in Chinese. When presented in English, Chinese students’ responses were not significantly different from European heritage Canadians. When presented in Chinese, however, responses were significantly different and in the direction predicted from collectivist values and content of self-concept assumptions (Ross, Xun, & Wilson, 2002). Thus, across studies, language itself was not the predictor; rather, it was the (potentially nonconscious) sense made of this situation that influenced results.

Another example of a study demonstrating the importance of the sense made of the situation involves a German-Chinese comparison (Haberstroh, Oyserman, Schwarz, Kühnen, & Ji, 2002). In this study, Haberstroh and her colleagues drew on previous evidence that the information brought
to mind in response to one question remains available for re-use in responding to subsequent questions. Thus, when asked about satisfaction with one's social life and then asked about satisfaction with life in general, German respondents gave highly correlated answers (in essence giving the same answer twice) unless they were told to set aside their previous answers and think about other potential aspects of life satisfaction. The researchers hypothesized that repeating the same answer twice would be less likely when a collective cultural syndrome was cued because respondents would more likely be attuned to the needs of the questioner, who would unlikely be interested in learning the same information twice. Indeed, Chinese respondents were significantly less likely to give redundant answers than German respondents. More importantly, the researchers demonstrated that they could produce the same results among German respondents as Chinese respondents by first priming German respondents with a collective cultural syndrome.

Taken together, these results suggest that small and seemingly incidental features of the situation (e.g., using English in Canada versus Hong Kong, reading plural first-person pronouns) can cue cultural syndromes and that, once cued, a cultural syndrome will influence what content and process knowledge seem relevant to the task at hand. This simply would not be predicted by models focused on the predictive power of cross-societal differences in distal features, because cross-societal comparisons imply stable between-group differences rather than situational malleability both within and between groups. At first glance, the idea that both an individualistic and a collectivistic cultural syndrome can be cued within a society (because both individualism and collectivism are part of every society's cultural syndromes) may feel contradictory to a "societal-level" understanding of a society's culture as either high in individualism (and necessarily low in collectivism) or high in collectivism (and necessarily low in individualism).

Construal is flexible, depending on what is primed in the moment. While unidimensional models are pictographically simpler, they do not fit the lived experience of "culture" (e.g., Bontempo, 1993; Kagitcibasi, 1987; Lehman, Chiu, & Schaller, 2004; Oyserman, 1993; Rhee, Uleman, & Lee, 1996; Singelis, 1994; Sinha & Tripathi, 1994; Triandis, Bontempo, Villareal, Asai, & Luca, 1988). Twenty years ago, Triandis and his colleagues (e.g., Triandis et al., 1988) suggested that individuals have both collectivist and individualist cognitive "bins" that function separately. Moreover, it is not logical that both syndromes would not be simultaneously present: All societies need to survive over time, requiring some elements of collective cultural syndrome to be cue-able, even if not chronically salient. Similarly, all societies are made up of individuals experiencing the same evolutionary and natural selection processes. Given the universality of both a basic sense of bodily and spatial-symbolic separateness (Burris & Rempel, 2004) and a sense of social connectedness and need to belong (Baumeister & Leary, 1995; Brewer, 1991), it seems plausible that human minds are structured to see both separation and connection (see Cohen, 2001; Oyserman, Kemmelmeier, & Coon, 2002).

A situated multi-syndrome model suggests that all societies incorporate multiple cultural syndromes, including individualism and collectivism. Thus, cultural syndromes are cue-able across all societies. That is, members of societies that are typically assumed to be high in individualism (e.g., Germany and the United States) can be primed to see the world within a collective cultural frame, and members of societies typically assumed high in collectivism (e.g., Hong Kong and China) can be primed to see the world within an individualistic cultural frame. While being socialized in a particular society is likely to shape one's propensity to construe situations as being about a particular syndrome (in our case, individualism or collectivism), a situated multiple-syndrome model suggests that priming can override these propensities.

**How Does the Process Work?**

We assume that individuals across modern societies have access to both individual and collective cultural perspectives, even if one syndrome or the other is more chronically turned on or cued. What is not yet clear from this literature is the mediating process. How are contextual cues translated
into differences in values, self-concept, ways of relating to others, cognitive style, and, potentially, goals?

Literature to date sets the stage for two models. One model focuses on the self as the mediating cognitive structure that carries with it content and goals as well as cognitive procedural knowledge. The other model does not evoke the self, focusing instead directly on the procedures likely to be cued in cultural contexts, with two main classes of procedures described: those related to inclusion, assimilation, and field-dependent reasoning, and those related to exclusion, contrast, and field-independent reasoning. The evidence summarized below can be used to support both of these models because researchers often asserted that what they primed was self-concept.

However, simply because a prime is labeled as being about self-concept does not rule out the possibility that what is primed is a general cognitive procedure. The reverse is also true; simply because a prime is not labeled as being about the self-concept does not rule out the possibility that what is primed is self-concept. Future research must experimentally isolate these possibilities to clarify processes beyond labeling of primes.

Our focus. We focus on an emerging literature that attempts to document the effects of priming cultural syndromes. We address a number of still open questions about the robustness and generalizability of these effects. We ask: (a) Can individual and collective cultural syndrome be primed with equal effect? (b) Are effects of cultural-syndrome priming dependent on priming method or outcome? (c) Are effects of priming cultural syndrome of similar magnitude to cross-cultural effects? (d) Is it possible to document effects of cultural-syndrome priming for both individual cultural syndrome and collective cultural syndrome? (e) With regard to collective cultural syndrome, are effects of similar direction and magnitude when relational-level or group-level collectivism is primed?

As demonstrated in Haberstroh and colleagues' (2002) priming study, a situated multi-syndrome model is a better fit to the evidence than a distal fixed-features model. A distal fixed-features model would predict the initial difference between Chinese and German respondents but would not predict the reversal of the “German” effect after priming. One shorthand way to describe Haberstroh and colleagues' findings is to say that German participants were “turned into” Chinese participants, at least for a few moments. This shorthand provides a vivid picture but is misleading to the extent that participants did not require deep knowledge about another society (e.g., Chinese collectivism) to be influenced; rather, they were influenced because the cultural syndrome (collectivism) was available to be cued as part of German social knowledge. In the same way, we are not suggesting that cultural-syndrome priming effects are limited to certain individuals with special bicultural knowledge due to migration, learning multiple languages, and exposure to Western media and American movies (for example, see Hong, (this volume)). Rather we suggest that all societies provide socialization experience with multiple cultural syndromes so that each can be cued.

Insights that can be provided by research on biculturalism. Of course “biculturalism” in the traditional sense can occur as a result of these processes, and an explicitly bicultural model in the traditional sense has been articulated by Hong and her colleagues (e.g., Hong, this volume). Their model suggests that individuals with deep experience in more than one society can be cued to function like members of either society through cuing of relevant cultural icons (e.g., the Great Wall of China, the Statue of Liberty). Cuing cultural icons cues deep cultural knowledge, including, but not limited to, information about individualism and collectivism. The bicultural model assumes that non-bicultural Chinese have exposure only to a “Chinese” (e.g., collectivist) cultural syndrome and similarly, that non-bicultural Americans have exposure only to an “American” (e.g., individualist) cultural syndrome; the model could not predict the results of the Haberstroh priming study since the German students could not be assumed to be bicultural in the sense of exposure to “Chinese” culture. In that sense, our situated model is both more general in population eligibility (anyone can be primed to focus on individualism or collectivism, not only those with deep cultural knowledge of multiple societies) and also more targeted in content (we focus on one particular cultural syndrome,
individualism and collectivism, rather than all of the multi-syndrome attributes of culture more broadly defined).

Religion, worldview, dominant philosophy, and other factors that are assumed to make up cultures are complex and can include redundant, overlapping, or conflicting aspects. This complexity rules out the possibility of clear a priori specification of which particular "active ingredients" underpin effects in cross-national comparisons or when cultural icons are used to prime culture in bicultural models. By focusing on real differences (e.g., in where one lives, in the language one speaks), cross-national comparisons provide high ecological validity. Beyond simply showing that people from two cultures differ, the goal of this kind of research is to document an association between these differences and how individuals make sense of themselves, their social worlds, and how they think more generally. Unfortunately, the potential for ecological validity typically comes at the expense of specificity. Cross-national comparison and bicultural studies are less likely to address the multiplicity of cultural syndromes within each society and cannot pinpoint the nature of the active ingredients within any particular cultural syndrome. When heterogeneity is sought only within bicultural individuals, the implication is that effects are due to exposure to different societies rather than exposure to the multiple cultural syndromes within a society. When comparisons are cross-societal or are based in cuing cultural icons among bicultural individuals, even when differences are found, the active ingredients producing these differences are not clear. Differences may be due to differences in collectivism, in sensitivity to power differences, in concern for honor or face, or in a variety of other unspecified factors.

**Priming Cultural Syndromes**

*Why use priming?* To pinpoint when, how, and which elements of cued cultural syndromes matter, it is necessary to experimentally manipulate the salience of particular components of a cultural syndrome (e.g., an individual or a collective cultural syndrome) and to compare effects of bringing active ingredients of each syndrome to mind. The idea that culture sets up procedural knowledge that is cued in context was articulated over 20 years ago (Liu, 1986). While this earlier formulation focused on procedural knowledge about how to engage with others and how to go about learning in the context of Chinese culture, an emerging broader body of literature involves the use of experimental techniques based in social cognition research to prime aspects of individualism or collectivism. By studying specifically primed active ingredients of a particular cultural syndrome, the priming method can isolate effects on outcome measures of interest.

*Priming generally involves making content and/or procedures temporarily accessible.* The influence of construct accessibility on social perception is well documented (Higgins & Bargh, 1987; Higgins, Rholes, & Jones, 1977). Accessibility can be the temporary result of priming (Sull & Wyer, 1978, 1979) or a more chronic result of routine or habitual activation of a construct in one's everyday environment (Higgins, 1989, 1996). Temporary and chronic accessibility effects on social judgments are comparable in nature and additive in quantity (Barth, Bond, Lombardi, & Tota, 1986; Rudman & Borgida, 1995). Recent priming and chronic activations are both predictive of construct accessibility.

In the lab, priming typically involves having participants engage in a series of tasks. Participants are not made aware of the researchers' intent to influence them. Unbeknownst to participants, the semantic content and procedural knowledge cued by the first task (prime) carries or "spills" over to subsequent tasks (outcome measures). This spillover effect can be studied by comparing groups exposed to different primes. Priming experiments typically involve simple between-subjects designs that ask how engaging in task "A" influences responses to task "B".

Priming studies can create an experimental analogue of chronic between-society differences by temporarily focusing participants' attention on cultural-syndrome relevant content (values, norms, goals, beliefs, and attitudes) and cultural-syndrome relevant cognitive styles. By comparing the effects of priming a (collectivistic or individualistic) cultural syndrome with (hypothesized or
documented) between-society differences, researchers can examine the extent to which between-society differences are actually due to the primed active ingredients of a particular cultural syndrome. Experiments also provide the possibility of studying whether effects associated with one society (e.g., individualism and the U.S.) can just as well occur in another when primed (e.g., effects of priming individualism in China).

Of course, cultural syndrome priming tasks can only be effective if the content and procedures relevant to the cultural syndrome exist in memory. Thus, individualism cannot be primed if one has only collectivism-cultural syndrome relevant content and procedural knowledge. In the same vein, priming collectivism is ineffective if one has only individualism-cultural syndrome relevant content and procedural knowledge. Moreover, because societies differ in many ways, not all of which are likely to be mapped neatly into cultural syndromes of individualism and collectivism, primes need to be tested across societies to see if they cue the same response.

Content priming. Also described as conceptual priming, content priming involves activation of specific mental representations such as traits, values, norms, or goals which then serve as interpretative frames in the processing of subsequent information (Bargh & Chartrand, 2000; Higgins, 1996). Once a concept is primed, other concepts associated with it in memory are also activated ("spreading activation"; Neely, 1977). For example, previously stored goals (e.g., for achievement, for power, for remembering, for impression formation) can be primed without explicit, conscious intention formation (e.g., Bargh, 1990; Chartrand & Bargh, 1996). Average between-society or between-racial or -ethnic group differences attributed to differences in cultural syndrome may be due to chronic differences in the likelihood that particular conceptual networks will be primed in everyday situations (e.g., hard and soft embodiments; as described by Leung & Cohen, 2007a, 2007).

Cognitive-style priming. While conceptual priming activates a concept or meaning structure, cognitive-style or mindset priming activates a way of thinking or mental procedure (Bargh & Chartrand, 2000). Mindsets can be thought of as a procedural toolkit used to structure thinking; mindsets tell us how to think and provide ways of reasoning about the world, also termed heuristics or naïve theories. Procedures tell us how to process information to make sense of experience (Schwarz, 2002, 2006). Mindset priming involves the unconscious carryover of a previously stored mental procedure to a subsequent task. Procedural priming may be conscious, but we focus particularly on unconscious procedures, that is, procedures that are cued outside of awareness and used because, being at hand, they are assumed to be relevant to the task at hand.

Priming cultural syndromes. According to Oyserman and Lee (2008), a number of tasks have been used to prime individualism and collectivism, including standard priming procedures such as unscrambling a series of sentences containing syndrome-relevant words. Across this field, however, the three most common priming tasks were developed specifically for this work. One task involves reading a paragraph about a day in the city and circling the first-person singular (I, me, myself) or plural pronouns (we, us, ourselves; Gardner, Gabriel, & Lee, 1999) embedded within it. A second involves imagining similarities (collectivism) or differences (individualism) from family and friends (Trafimow, Triandis, & Goto, 1991). A third involves imagining a Sumerian warrior who chooses a general based on skill (individualism) or family and group ties (collectivism; Trafimow et al., 1991).

To demonstrate that cultural-syndrome priming techniques can be used to evoke what is understood to be "culture," a first task is to demonstrate that cultural-syndrome priming does in fact evoke culturally relevant content (values, ways of defining the self, and ways of interacting with others) across different societies and regions of the world. Priming collective cultural syndrome (compared to individualistic cultural syndrome) should make collectivistic (individualistic) values more salient and likely to be endorsed, render relational and group membership (individual traits, unique self-features) content of self-concept more accessible and likely to be recalled, and heighten (reduce) felt closeness to in-group members. This effect should be found in both the East and the West and should not depend on other characteristics (e.g., knowing multiple languages). Showing effect on
content is to be considered our first task because accessible content is typically what is meant by “culture” in its broadest sense.

Once an impact of cultural-syndrome priming on salient content has been demonstrated, a second task is to demonstrate that cultural-syndrome priming also evokes culturally relevant cognitive procedures across different societies and regions of the world. Priming collective cultural syndrome (compared to individualistic cultural syndrome) should make collectivism-relevant (connect, integrate, compromise, assimilate judgment to norms, and social information) cognitive procedures salient; priming individualistic cultural syndrome should make individualism-relevant (separate, contrast, exclude) cognitive procedures salient. Prior cross-national research suggests differences in content and cognitive styles. If these are shown to be stable within and between societies when the relevant cultural syndrome is primed, then it can be argued that the proximal impact of culture occurs via situated construal and situated cuing of relevant cognitive procedures.

**WHAT IS THE EVIDENCE THAT WE HAVE ISOLATED AT LEAST SOME OF CULTURAL SYNDROME’S ACTIVE INGREDIENTS VIA PRIMING?**

We hypothesize that priming an individualistic (relative to a collectivistic) cultural syndrome will (a) enhance endorsement of individualistic values and reduce endorsement of collective values; (b) make unique traits and attribute-based elements of self-concept more accessible, and social or relational-based elements of self-concept less accessible; (c) dampen felt closeness and obligation to in-group others and reduce sensitivity their needs and goals; and (d) enhance the accessibility of contrasting, pull apart, distinguish-and-separate, or personal goal-attainment focused processing strategies and reduce the accessibility of assimilating, connect-and-integrate, norm and compromise, or prevention-focused processing strategies.

To examine these hypotheses, we draw upon a recent meta-analysis of the individualism and collectivism cultural-syndrome priming literature through January 2005 (Oyserman & Lee, 2008). Meta-analytic techniques involve calculating overall effect sizes across studies, accounting for the sample size of each study and, by increasing the range of variables, facilitate examination potential moderators of effect sizes by coding particular aspects of each study in the relevant literature. For example, across studies it is possible to ask if effect sizes differ by priming task, by outcome variable, or by characteristics of the sample.

Oyserman and Lee conducted a main meta-analysis on the 67 studies (with 6,240 participants) that primed both individualistic (independence) and collectivistic (interdependence) cultural syndromes and assessed effects on values, relationality, self-concept, well-being, and cognition. Fourteen of these 67 studies (1,664 participants) included both the cultural syndrome primes and comparison to control. These studies were used to draw inferences as to the relative size of effect when priming individualistic cultural syndrome and collectivistic cultural syndrome, something that cannot be learned from the first set of analyses, which simply demonstrate the relative effect of priming individualistic versus collectivistic cultural syndromes. A final analysis focused on 32 studies (with 2,939 participants) that were not included in the main meta-analysis because the prime itself was difficult to interpret or because data were reported for only one of the two priming tasks (either individualism or collectivism). By examining whether effect sizes differed, this latter set of studies as compared to the initial “cleaner” studies, the authors were able to demonstrate that effects are robust.

**Effects of priming individualism versus collectivism.** Oyserman and Lee (2008) report a moderate effect of cultural-syndrome priming overall, and effects are not substantially different for their analyses of the 32 studies that primed only individualism or only collectivism. They found moderate effects of priming on relationality, cognition, and values, and a small effect of priming on self-concept. In the latter two cases, operationalization mattered. That is, effects were small if value items other than ones from the more established value scales (i.e., Schwartz, 1992; Triandis,
were used. With regard to self-concept, effects were small and heterogeneous, suggesting that there is significant variability in the sizes of the effects of cultural-syndrome priming on self-concept across studies. Thus, multiple potential moderating variables may be important for explaining the variability in effect sizes, including the method used to assess self-concept or prime individual versus collective cultural syndromes. Analyses examined these potential moderators, though a clear understanding of the factors that explain this heterogeneity across studies was not obtained.

In addition to examining the effect of priming cultural syndrome overall, Oyserman and Lee (2008) examined potential differential effects when relational, group, or both relational and group levels of collectivism are primed. This was possible because collectivism cultural-syndrome priming tasks focus on the collective self (e.g., using “we” as a prime), on specific aspects of the collective self (e.g., similarity with or obligation to family, friends, and larger groups such as teams), or on connection and integration more generally (e.g., using “connect” as a prime). This allowed for categorization to levels of collectivism primed as either relational-level, group-level, or both. Priming effects were moderate in size (and substantially larger) when both levels of collectivism were primed rather than only one.

As is typical in the psychological literature, university students were the focus of enquiry. Only two studies had non-university student samples, and most studies did not provide analyses by gender. Studies were obtained from North America (mostly from the U.S.), Southeast Asia (mostly from Hong Kong), and Western Europe (Germany and the Netherlands). Thus, in the priming literature published to date, there is an over-representation of American, German, and Dutch participants, with other societies represented via East Asian (primarily Hong Kong Chinese) and Asian American samples, but omitting Americans other than European American and Asian American. Moreover, as we outline below, even when East Asian participants were used, priming tasks were typically in English or used language as the prime. We address both of these gaps in our own current research, demonstrating effects in the expected direction when Korean and Hong Kong Chinese participants are primed in their native languages as well as for African Americans, as we summarize in a later section.

Across studies, European American/American effect size was moderate, Asian American effect size was large, and East Asian effect size was small. Moderator analyses suggest that these East-West differences in size of effect of cultural-syndrome priming are due to use of different priming tasks in East and West and with more reliance on language as a prime in studies in the East. Thus, given the information available, it seems reasonable to argue that individualistic and collectivistic cultural syndromes can be primed in the East and the West when using the Sumerian Warrior and the Similarities and Differences to Family and Friends task.

It is not yet known if the pronoun-circling task is effective in the East and effects for scrambled sentence tasks are small. Effects are moderate for both East and West when the outcome of interest is values and cognition. However, most cognition studies in the East focus on attitudes and social cognition, and much less is known about nonsocial cognition. None of the studies using Asian participants examined effects on relationality. Effects of self-concept were difficult to interpret and seemed to point to less malleability of content among East Asians, but this may be due to the nature of the coding schemes used.

In sum, though questions still remain to be addressed by future research, the meta-analytic summary suggests that a variety of priming techniques can be used to cue individualism or collectivism, and that across domains, primes produce effects in the expected direction. This chapter does not fully unpack how salient cultural syndromes influence these outcomes and whether individuals are universally equally sensitive to these effects. However, research to date suggests that effects occur in both East and West.

One priming task that produced widely varying results was use of language as a prime. As noted by early (Liu, 1986) and more recent reviews (e.g., Chiu, Leung, & Kwan, 2007; Norenzayan et al., 2007; Wang & Ross, 2007), language is related to culture, memory, and cognition. A number
of authors have shown interesting language correlates, highlighting differences in language use depending on the nature of dependency with one's conversation partner (de Montes, Semin, & Valencia, 2003) and also differences in the structure of language, particularly use of concrete as compared with abstract language (operationalized as verbs as compared to adjectives) in describing life events as well as others (e.g., Stapel & Semin, 2007). While studies using language are limited to participants who are multi-lingual, potential effects of language can be operationalized and studied with other primes, thus disentangling language from other culture-relevant factors.

This process is exemplified by Semin, Görtz, Nandram, and Semin-Goossens (2002) and Maass, Karasawa, Politi, and Suga (2006), who provide evidence of cross-national difference. For example, Maass and her colleagues find that Italians favor abstract language (context-free adjectives as descriptors) and Japanese favor concrete language (context-limiting verbs as descriptors). Stapel and Semin (2007) go on to demonstrate that language effects can be mapped onto cued differences in global and local reasoning. Our interpretation of the available data is that the meaning of language is highly contextualized and influenced both by the meaning given to the request to use one language or another and its interface with the nature of the task.

Comparison to control. Recall that Oyserman and Lee (2008) also found a subset of studies that included a no-prime comparison group. These studies were sometimes difficult to interpret because participants in the control condition were likely to be heterogeneous with regard to whether they brought an individualistic or collectivistic focus to the task. However, these results also suggest effects of priming. Priming either individualistic or collectivistic cultural-syndrome significantly shifted responses compared to control, and effect size did not differ by individualism versus collectivism prime, and effect size did not differ by individualism versus collectivism prime. However, though not differing in average effect size, studies that compared individualism priming to control and studies that compared collectivism priming to control did differ in another important way. On average the studies that focused on the effect of individualism showed about the same effect size (they were not heterogeneous), whereas the studies that focused on the effect of collectivism differed among themselves in effect size (they were heterogeneous). Larger effects were found when both relational and group-level collectivism were primed and effects of priming collectivism compared to control ranged from very small for relationality and self-concept to moderate for values and cognition. Only three studies involved Asian participants, so a difference between East and West cannot be established.

Priming studies that included either a prime for individualism or a prime for collectivism but not both showed overall effects similar to those found for studies including both primes in spite of the heterogeneity in their choice of comparison group, lending support to the robustness of priming effects described in the main meta-analysis. With regard to region of the world included, while participants from the U.S., Germany, the Netherlands, and Hong Kong were again represented, these studies also included participants from Canada, the United Kingdom, and Japan, providing some much-needed breadth to findings. A few studies begin to unpack effects of individual cultural-syndrome priming, separating effects of priming difference from effects of priming positive uniqueness. These results are important because they go beyond what can be tested with straightforward cross-national comparisons and provide a mechanism for testing dimensions of cultural syndromes such as individualism and collectivism.

**Integration of Meta-Analytic Results With Other Evidence**

Oyserman and Lee (2008) found eight studies that either directly compared data from within-country cultural-syndrome priming with a between-country comparison or compared results of cultural-syndrome priming in two countries. These results, in addition to the integration of results when priming and cross-national comparison data are compared, suggest that at least some active ingredients of culture can be primed in the moment. That is, they do not depend on lengthy socialization
in a particular society but rather are available for use, even if not chronically accessible, across very different societies.

Oyserman, Coon, and Kemmelmeier's (2002) meta-analyses of cross-national comparisons between European Americans and others suggest a moderate-sized difference in endorsement of individualistic and collectivistic values with some caveats. Because cross-national comparisons are correlational, they cannot provide access to process, leaving open the question of whether individualists from different societies always differ in individualism and collectivism values or if the salience of these values depends on what comes to mind in the moment. Our review of the cultural-syndrome priming literature suggests that expressed endorsement of individualism and collectivism values is sensitive to situational priming, and that across priming tasks, effects are moderate in size when the kinds of value scales used in the cross-national literature are employed. Although the cultural-syndrome priming evidence comes mostly from European American and Western European participants, studies with Asian participants (primarily Hong Kong Chinese) show parallel effects. Priming cultural syndrome shifts salience of individualism and collectivism values to about the same degree that is found in the cross-national literature. The size of effect is comparable for European Americans and Asians and is influenced by the kind of prime used, with larger effects when the Sumerian Warrior and Similarities/Differences with Friends primes are used. When studies used comparison with control, effects were found in the predicted direction for both individualism and collectivism priming.

Just as size of effects of cultural-syndrome priming on values parallels the size of cross-national comparison effects, the size of effects of priming on relationality parallels the size of cross-national comparison effects. Both literatures suggest moderate-to-large effects of individualism and collectivism on ways of engaging with others. In addition, overall effects of priming cultural syndrome on relationality are robust regarding type of prime, with the exception of small effects when using language as a prime. Few studies include a control comparison group. However, those that do use a control generally find effects of both individualism and collectivism priming. Unfortunately, the cultural-syndrome priming literature on relationality is limited to Western samples. We found only one study assessing effects of cultural-syndrome priming on relationality using an Asian American sample (Gardner, Gabriel, & Dean, 2004), suggesting a need for further research in other regions of the world. That said, the fact that the effects of cultural-syndrome priming on individualism and collectivism values and social-relational engagement parallel the effects obtained in research on cross-national differences does provide some ecological validity to priming as a way of studying the active ingredients of cultural syndrome.

Effects of priming cultural syndrome on self-concept are similar to effects found in cross-national comparisons. Both literatures heavily rely on content coding of responses to the Twenty Statements Task (TST) to obtain information about content of self-concept. When priming cultural syndrome is compared with a non-primed control group, effects on self-concept are larger when individualism is primed than when collectivism is primed. When impact of cultural-syndrome priming on the salience of collective self-descriptors is used, effects are consistent across gender but smaller for Asian than for Western samples. This is unlike the cross-national literature, where differences in content of self-concept are found for Asian samples, but it is less clear which aspect of culture influences this content. Effects are heterogeneous; whether they are based on the cross-national or cultural-syndrome priming data, differing samples produce differing estimates of the sizes of the effect. This may be due to the way that self-concept data are obtained and coded. That is, once a social identity is primed, either by cultural-syndrome priming task or by simply thinking of a social identity to list on the TST, the traits and attributes that become accessible are likely to be components of this public, relational, or collective self. However, any mention of traits is simply coded as part of the private self-concept in all the coding schemes we found. Of course, coding relies on what people actually write, not on the implied social context, which is not made explicit and so cannot be coded. This may explain why a number of studies report a preponderance of private self-content in individuals' working self-concept, regardless of whether an individual or a collective cultural
syndrome is primed and whether the individuals are European American or Asian (e.g., Lee et al., 2000, Study 2–4).

Finally, with regard to effects of cultural-syndrome priming on how we think, there is emerging and consistent evidence that priming cultural syndrome influences cognitive style. Thus, priming collective cultural syndrome increases the likelihood of assimilating information about another into one's self-rating. Similarly, priming individual cultural syndrome increases the likelihood of contrasting information about another with one's self-rating and of using the other as a standard of comparison, rather than assimilating knowledge about the other into self-knowledge. Moreover, cultural-syndrome priming shifts the use of pull-apart versus integrate-and-connect processes when nonsocial cognitive tasks are used as well. Thus, priming collective versus individual cultural syndromes shifts the speed of recognizing both embedded figures and big letters made up of smaller other letters (e.g., Kühnen & Oyserman, 2002). These effects parallel cross-national effects found by Norenzayan et al. (2007), Nisbett (2003), and Kitayama (e.g., Kitayama, Duffy, Kawamura, & Larsen, 2003).

This previous research on the nonsocial cognitive consequences of individualism and collectivism focused on visual perception. In this research, salient individualism cues perception of objects out of context, whereas salient collectivism cues perception of relationships. Missing are, first, a demonstration that these effects (using the same primes and tasks) can be replicated beyond European American and German participants, and second, demonstration that effects occur across modalities (these tasks focused on the visual field).

To that end, we replicated Kühnen and Oyserman’s (2002) bound memory task (Study 2) among East Asian participants (Korean, Korean-American, and Hong Kong Chinese). We demonstrated consistent effects, that is, that compared to participants primed for individualism, those primed for collectivism perform equally well in remembering objects, but those primed for individualism are less able to recall the objects (Oyserman, Sorensen, Reber, Sannum, & Chen, 2008). To demonstrate that effects are robust across modalities, we also demonstrated the same pattern of effects using a color-word Stroop task and a listening task.

In the Stroop color-recognition task, participants read out loud color words that are either printed in color-congruent or color-incongruent ink. Fluency and therefore speed are impaired when the color of the ink and the color represented by the word are incongruent. We expected that participants primed for collectivism would be slower relative to those primed for individualism to the extent that collectivism cues an assimilating, connecting cognitive procedure. This is what we found. In the listening task, participants heard sounds in both ears but were asked to repeat sounds from one ear while ignoring the other. We expected that participants primed for collectivism would be slower and make more mistakes relative to those primed for individualism to the extent that collectivism cues an assimilating, connecting cognitive procedure (which would not be helpful in a task that requires ignoring some information). That is what we found.

To address lack of research including racial-ethnic groups in the United States beyond Asian Americans, we included African Americans in our research. Asian American, African American and European American participants were each primed with individualism or collectivism or not primed prior to solving word problems similar to those found in standardized tests. Across groups, performance improved with individualism priming and declined with collectivism priming and the comparison group was in between. Taken together, these studies provide consistent evidence for effects of priming individual versus collective cultural syndrome on nonsocial cognition in the East-West and across racial-ethnic groups in the United States.

CONCLUSIONS

The cross-national comparisons we have summarized suggest that societies differ and that these differences have consequences for individuals, influencing how the self is defined, how relationships with others are imagined, what is of value, and how the mind works. Furthermore, these differences are
patterned so that simplifying models focused on cultural syndromes can be used. Our focus on understanding culture within a situated cognition framework is not meant to argue against cross-national comparisons or examination of change over time with migration or use of bicultural individuals. Each of these has value in addressing part of the concerns that cultural psychology must address.

For example, cross-national comparisons can be high in ecological validity. After all, they demonstrate real differences between real groups. However, they are limited methodologically. By their nature, they focus on between-societal differences and cannot provide insight into the possibility that multiple overlapping and potentially contradictory cultural syndromes coexist in each society, influencing content and process of thinking when cued and not otherwise.

Moreover, in cross-national studies, there is a reliance on self-reports. A reliance on self-report survey response raises questions about the interpretability of self-reports and of comparisons across societies more generally. Even studies that move beyond this methodological limitation by demonstrating a cross-national difference in response to the same stimuli simply clarify that culture matters beyond differences in self-report. They cannot address how culture matters and cannot argue that the part of culture that matters is only that focused on individualism and collectivism.

For example, Jensen and Whaley (1994) tested Los Angeles school children in grades 4 to 6, finding that Chinese children outperformed Anglo children by one-third of a standard deviation on the Raven’s Progressive Matrices test, a task that requires pattern matching and noticing missing elements in visual displays. An interesting set of studies by Kitayama and his colleagues (2003) shows differential accuracy of American and Japanese respondents to line-drawing tasks requiring recall of lines, either in relation to provided background (tasks that Japanese respondents are better at) or separate from this background (tasks that American respondents are better at). Jensen and Whaley’s results and Kitayama and colleagues’ ingenious tasks drive home the idea that societies differ in their preferred cognitive procedures and are congruent with the notion that individual cultural syndrome cues a separate-and-pull-apart style and collective cultural syndrome cues a relate-and-connect style. However, these studies lack an experimental manipulation of cultural syndromes, and so they cannot illuminate the process by which particular factors of culture matter. Moreover, by their nature, they focus on between-societal differences and cannot provide insight into the possibility that multiple, overlapping, and potentially contradictory cultural syndromes coexist in each society.

This latter possibility has been raised by quite a number of scholars in various guises (e.g., Aaker & Lee, 2001; Bontempo, 1993; Hannover & Kühnen, 2004; Kağıtçibasi, 1987; Kemmelmeier & Oyserman, 2001a, 2001b; Kühnen et al., 2001; Kühnen & Oyserman, 2002; Lee et al., 2000; Lehman et al., 2004; Oyserman, 1993; Rhee et al., 1996; Singelis, 1994; Sinha & Tripathi, 1994; Triandis et al., 1988; Woike, 1994; Woike et al., 2001). Indeed, concern that contrasting societies to study “culture” is limiting by its nature is a popular stance within cultural psychology. Recently, empowered by the methods of experimental social psychology, an emerging literature suggests that cultural syndromes can be cued or brought to awareness just like other cognitive information.

Our goal was to synthesize the results of the individualistic and collectivistic cultural-syndrome priming literature with the cross-national literature, using as an organizing framework a situated multi-syndrome model that focuses on proximal antecedents of what might otherwise be assumed to be effects of distal cultural factors. As presented graphically in Figure 2.1, this model assumes that societies socialize for multiple cultural syndromes and that the cultural syndrome cued in the moment is the one that will influence affect, behavior and cognition. In this sense our multiple syndrome model focuses on cultural process as a form of situated cognition as what comes to mind, and how information is processed and interpreted depends on a patterned set of cues that frame meaning (e.g., is this about “me” or is this about “us”) and set a process in motion (e.g., “separate” or “connect”).

Our review of the literature shows moderate-sized effects of priming cultural syndromes. These effects are in the direction suggested by the cross-national, cross-cultural literature but occur in both the East and the West. The size of the effects parallel those found in the cross-cultural literature
(e.g., Oyserman, Coon, & Kemmelmeier, 2002) and are robust to variations in design characteristics, such as use of different cultural-syndrome priming tasks and whether studies report results of priming both individualistic and collectivistic cultural syndrome or report results for only one of these primes. These results focus our attention on the power of situated understandings (the sense made of the immediate situation) as a carrier of the active ingredients of "culture" broadly defined.

Far from being immutable, cultural differences are malleable in the moment. Because cultural-syndrome priming can be understood as setting up a situation that cues or makes subjectively salient isolated active ingredients of culture, the evidence that cultural-syndrome priming is effective suggests that in everyday life such malleability is also plausible. Subtle priming evokes subjective construals that afford and elicit culturally meaningful and relevant thoughts, feelings, and behaviors. Thus, while feeling natural, real and immutable, cultural meanings and cultural differences are likely fluid.

These findings suggest that culture acts as both a conceptual prime, activating relevant knowledge, and a procedural prime, activating relevant ways of thinking about the social and physical world. The cognitive tools (procedures) that come to mind when individualistic cultural syndrome is cued focus on pulling apart and separating, contrasting figure from ground and self from other. The cognitive tools that come to mind when a collectivistic cultural syndrome is cued focus on connecting and integrating, compromising, and assimilating figure with ground and self with other. Moreover, some initial work suggests that these procedures can be separately primed when specific elements of these broader cultural syndromes are primed. Thus, the studies by Stapel and Koomen (2001, Studies 1 and 5) using Dutch participants and by Lockwood, Dolderman, Sadler, and Gerchak (2004, Study 2) using Canadian participants suggest that priming individualism activates both separating and also elevating, at least in Dutch samples, and that the two procedures can be disentangled. This finding is important because many of the other priming tasks explicitly evoke the self. It is important to determine whether it is actually the self-concept and/or other procedural knowledge that is driving priming effects. For example, it would be helpful to test effects of the same priming tasks (e.g., scrambled sentence or subliminal prime) when the self is included or excluded from the priming materials. If effects, across East and West, are stronger when the self is included in the priming materials, this would lend stronger empirical support to the assumed mediation of cultural syndrome effects via impact on self-concept.

This caveat aside, results clearly support a version of the situated multi-syndrome model. Some questions remain unanswered. Though it seems that both individualism and collectivism can be primed in both the East and the West, it is not yet clear whether non-chronically salient syndromes require stronger primes than chronically salient ones. We also cannot yet say how long priming effects are likely to last or whether their effect remains when long-term and deep processing is required. Without doubt, conclusions are limited by the current available literature, but Oyserman and Lee's (2008) recent meta-analytic findings strongly supports further research to understand how cultural syndromes influence the cognitive procedures that come to mind to solve tasks of daily life.

At minimum, current research seems applicable to different societies in the West (e.g., the U.S., Germany, the Netherlands) and the East (e.g., Hong Kong). Of course it would be helpful to add more diversity before making sweeping generalizations. Priming research does not yet include regions of the world such as Latin America, Africa, and the Middle East. These regions are important to include if the generalizability of the situated multi-syndrome model is to be better tested and if priming tasks are to be refined so that we do not make overgeneralizations about effects.

Moreover, as noted previously, the evidence for a mediating role of the self is indirect rather than direct. The mediating role of self-concept may itself depend on the nature of the individualistic and collectivistic cultural syndromes the field has examined to date. Perhaps our understanding of collectivism is limited by the fact that the field has focused on the West and societies in the East that do not have goings-on within societal ethnic or tribal strife. How might things differ if research focused on collectivism within African and Middle Eastern contexts in which a culture
of honor may combine with collectivism rather than the culture of modesty suggested for Eastern collectivism (e.g., Nisbett, 2003)?

It is possible that cueing a collectivistic cultural syndrome in these more heterogeneous societies cues inter-group conflict with the relevant cognitive procedures being to separate and contrast, rather than the closeness and assimilation to in-group demonstrated to be cued in the current set of studies. To tease apart these issues, it is necessary to understand both (a) how collectivism works in other regions of the world and (b) which cultural syndromes may overlap with collectivism. Given this understanding, tasks could be devised to test effects of each syndrome, and a more general model of culture’s proximal antecedents and consequences could be developed.

In addition to teasing out effects driven by how the self is perceived in the moment versus other effects of individualistic and collectivistic cultural syndromes, future research needs to consider tasks that tease apart effects of individualistic and collectivistic cultural syndromes from effects of other, likely correlated cultural syndromes. Shavitt and her colleagues (e.g., Shavitt, Laiwani, Zhang, & Torelli, 2006) are working on Triandis’s conceptualization of cultural syndromes in terms of their construal of power differences: Is equality valued and are power differences unacceptable (horizontal cultural syndromes), or are power differences acceptable (vertical cultural syndromes)? They show that adding this specification clarifies cross-cultural differences. Priming tasks have not yet been used but have been proposed to separate this syndrome from individualism and collectivism (e.g., Cuyperman, 2006).

More generally, increased specification of cultural syndrome priming tasks would allow for disentangling which cognitive processes are universally cued when a cultural syndrome (e.g., individualism) is cued and which ones are more variant, so likely rooted in particular modes or styles of being an individualist. By unpacking these effects, it will be possible to understand how the procedures cued by individualism and collectivism fit with overlapping but not identical procedures (e.g., “global” and “local” procedures, “prevention” and “promotion” procedures, “abstract” and “concrete” procedures). For example, Stapel and Smim (2007) demonstrate that priming the use of adjectives increases global reasoning, and priming the use of verbs increases local reasoning—effects that seem contrary to the currently reviewed priming literature if it is true that chronically collective cultures are higher in use of verbs and chronically individualistic cultures are higher in use of adjectives, as suggested by Maas and colleagues (2006).

The stakes are high. After all, humans do much of their thinking in a social context, and the exploration of socially situated cognition is currently a main thrust of social psychological research, with cultural influences on social judgment emerging as an important aspect of this field (Schwarz, 2000). Since, as notably argued by William James (1890), thinking is for doing, it seems reasonable to assume that social contexts provide a frame for suggesting what can or cannot be undertaken in the moment. Social contexts also cue which of the multiple information processing strategies available to each of us is likely to be used in a specific moment (Schwarz, 2000; Taylor, 1998). What we have suggested is that one of the ways in which meaning is organized in context is through the meaning cultural syndromes provide, and that once a particular cultural syndrome is cued, it is likely to carry with it relevant goals, motives, ways of interpreting information, and processing strategies.

REFERENCES


