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A SITUATED COGNITION PERSPECTIVE ON CULTURE: EFFECTS OF PRIMING CULTURAL SYNDROMES ON COGNITION AND MOTIVATION

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When the term *culture* is used, it refers to something that is both fixed and fluid, both situated and mobile. That is, culture is fixed enough that at least some parts of it are transmitted over generations, but also fluid enough that at least some parts of it are always evolving and changing as features of the environment change; situated enough that we often think of a “culture” as strongly associated with the population in a specific region, but also mobile enough that immigrants can bring their “own culture” to a “different culture.” With these caveats, culture can be operationalized as a set of structures and institutions, values, traditions, and ways of engaging with the social and nonsocial world used in a certain time and place and transmitted across generations (e.g., Shweder & LeVine, 1984). Culture can be thought of as a set of societal-level processes (e.g., legal systems, languages, religions) with societal-level outcomes (e.g., suicide rates, divorce rates, fertility rates) (Oyserman & Uskul, 2008). Just as importantly, as cross-cultural psychologists have noted, these societal-level processes can produce average

effects at the individual-level. Our current focus is on this latter part, examining culture-relevant *contents*, *procedures*, and *motivations* at the individual-level. Thus, by culture we mean culturally characteristic content (what is relevant, moral, central, of consequence), culturally characteristic ways of thinking and making sense of oneself, others and the world, and culturally characteristic motivations (e.g., to self-enhance or self-improve, to assert confidence and leadership or not to offend). These elements together constitute that which “goes without saying,” that which feels transparent, right, and logical in context.

While this feeling of fluency is a telltale marker that culture is at work, it also makes it difficult to systematically model all that “culture” is and reduces social scientists’ ability to make predictions about when and how culture matters. To take on this challenge, cultural psychologists have developed a number of potentially useful basic organizing constructs to describe and distinguish cultural “syndromes.” These simplifying models are not meant to provide detailed descriptions of any particular culture, but rather to highlight systematic patterns that characterize clusters of cultures. Such models are useful to the extent that they set the stage for specific and testable predictions about culture’s consequences.

Proposed cultural syndrome models include contrasts between “individualistic” and “collectivistic” (e.g., Hofstede, 1980), “tight” and “loose” (Triandis, 1995), “horizontal” and “vertical” (Triandis & Gelfand, 1998), “masculine” and “feminine” (Hofstede, 1980), “survival values” and “self-expression values” (Inglehart, 1997), and “honor-modesty” and “shame” (e.g., Gregg, 2005; see also Cohen, 2001) focused cultural syndromes. Each of these models sets up a contrast between prototypes of opposing cultural processes and has provided some predictive insights. Perhaps because it captures salient Western values and has some overlap with the other models, the cultural syndrome model that has received most research attention is individualism and its assumed opposite collectivism (e.g., Triandis, 1995, 2007; Hofstede, 1980, 2001; Kağıtçıbaşı, 1997; Kashima et al., 2001; Oyserman et al., 2002a).

Although the correlational evidence supports the claims made by individualism and collectivism models of culture, without experimental evidence, the process by which culture matters remains hidden. In this chapter, our goal is to illuminate at least part of this hidden process, focusing on *how* individualism and collectivism as cultural syndromes are likely influence how we think – cognitive content, procedures, and motivations. The chapter is divided into three main parts. To set the stage, we first provide a brief summary of the mostly correlational evidence that operationalizing culture in terms of individualism and collectivism captures some important aspects of cross-cultural difference, drawing on the review of Oyserman et al. (2002a). This literature focuses mostly on content differences, with less emphasis on process and motivation. To address gaps in causal reasoning that this correlational evidence cannot address, a situated cognition approach to culture is outlined in the second part, and evidence for this model is presented, drawing on Oyserman and Lee’s (2007, 2008) review and meta-analysis of the culture-priming research. The priming literature has focused on both content

and process, but has not really examined culturally characteristic motivations. Therefore, in the third part of this chapter, we step beyond integrative summary to ask what a situated cognition approach to culture says about how culture influences cognitive content (what), cognitive process (how), and motivation (for what purpose), drawing on the model presented by Oyserman and Sorensen (in press).

INDIVIDUALISM AND COLLECTIVISM

OPERATIONALIZATION

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., Schwartz, 1994; Inglehart & Oyserman, 2004). While much cultural and cross-cultural psychology has emphasized differences in content of thinking, embedded in this description are differences in both content, and motivation and style of thinking. More broadly, individualism and collectivism can be described as cultural syndromes that place differential emphasis on individuals versus social groups (e.g., Triandis, 1995). Individualism as a cultural syndrome focuses on the individual as the basic unit of analysis; societal structures are valued to the extent that they support individual happiness; from an individualistic perspective, groups serve individuals. Collectivism as a cultural syndrome focuses on the group as the basic unit of analyses; societal structures are valued to the extent that they support preservation and enhancement of group resources; from a collectivistic perspective, individuals serve groups. This initial operationalization suggests differences between collective cultural values of group solidarity, social obligation, connection and integration and individualistic cultural values of individual freedom, personal fulfillment, autonomy and separation – either as directly assessed at the individual-level or as implied by examining themes in cultural products such as advertisements, newspapers, text books, fiction, or proverbs. Thus, operationalizations of individualism and collectivism clearly emphasize content of thinking, but as will be evident in this chapter, cognitive processes and motivations are also implicated in these cultural syndromes.

IMPLICATIONS OF INDIVIDUALISM AND COLLECTIVISM

Content

Rather than assess individualism and collectivism directly, researchers often rely on prior cross-national typologies, especially that of Hofstede (1980). Alternatively, they assess differences in individualism values and/or collectivism values directly in their samples (however, see Oyserman et al., 2002a; Oyserman & Uskul, 2008, for a detailed critique of both of these methods). Willingness to use these methods implies that individualism and collectivism as cultural

syndromes are assumed to most directly implicate differences in content – chronically salient values and norms.

As outlined by Oyserman et al. (2002a), in addition to differences in values, other content differences – in relationality, self-concept, well-being, and process differences, in motivational or cognitive style, can also be deduced from how individualism and collectivism have been operationalized. With regard to the impact of cultural syndromes on how relationships are construed, individualism is assumed to scaffold the feeling that relationships are chosen, voluntary and changeable, can be worked on and improved or left when costs outweigh benefits (e.g., Triandis, 1995; Sayle, 1998; Morris & Leung, 2000). Collectivism is assumed to scaffold the feeling that 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.

Cultural syndromes are also assumed to influence how the self is typically construed (e.g., Markus & Kitayama, 1991). Theorists assume that individualism sets up the expectation that 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. Collectivism, on the other hand, sets up the expectation that 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).

With regard to well being, individualism implies that open emotional expression and attainment of one’s personal goals are important sources of well-being and life satisfaction (e.g., Diener & Diener, 1995). Collectivism implies that 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 important as a way to successfully carry out one’s social obligations (Markus & Kitayama, 1991; Kim et al., 1994; Kwan et al., 1997).

Cognitive Processes

With regard to cognitive style or chronically salient cognitive procedures, because the de-contextualized self is assumed to be a stable, causal nexus, individualism implies that focus is generally oriented toward the person rather than the situation or social context (see also Miller, 1984; Newman, 1993; Morris & Peng, 1994; Choi et al., 1999). Thus, individualism promotes a de-contextualized reasoning style that assumes social information is not bound to social context. This has been described as a “separate-and-pull-apart” style as opposed to a situation-specific relational “embed-and-connect” style (Markus & Oyserman, 1989; Oyserman et al., 2002b). In contrast, collectivism as a cultural syndrome generally implies that social context, situational constraints and social roles figure prominently in person perception and causal reasoning (Miller, 1984; Morris & Peng, 1994); that meaning is contextualized and memory is likely to contain richly embedded details.

Motivation

While less prominent in the literature, a number of cross-cultural researchers also emphasized motivation differences. A number of studies have focused on differential salience of self-concept goals (e.g., self-enhancement or self-improvement, Heine, 2005). An emerging focus is on difference in the salience of relationality goals (e.g., modesty or “not offend others,” Yamagishi & Suzuki, in press).

EVIDENCE FROM CROSS-CULTURAL RESEARCH

VALUES

Prior research used values as a key to the operationalization of “culture”, assuming that individualistic cultural groups should endorse more individualistic values and collectivist cultural groups should endorse more collectivist values. As shown in a recent thorough review and meta-analytic synthesis (Oyserman et al., 2002a), there is consistent evidence for such difference. With regard to cultural differences in chronically accessible basic values, their meta-analysis shows significant differences in endorsement of individualism values (e.g., personal independence and uniqueness) and collectivism values (e.g., group membership and group processes). On average Anglo Americans endorse values of individualism more and values of collectivism less than Africans, Eastern Europeans, Asians, and Asian Americans. Results are integrated and displayed graphically in Figure 11.1.

In addition to this generally confirming picture, Oyserman et al. (2002a) reported some interesting caveats. The meta-analysis suggests that although Anglo Americans and individuals from other English-speaking countries do not differ in individualism and collectivism, they differ from Western Europeans. Anglo Americans are *lower* in collectivism than Western Europeans, with effects similar to those found in comparisons with Asians. However, while differences between Anglo Americans and Asians of Chinese heritage (including Asian Americans) are robust, differences between Anglo Americans and other Asians are often small and sensitive to differences in scale content and reliability. Moreover, Anglo Americans and African Americans do not differ in individualism and African Americans are lower in collectivism, suggesting that African Americans are in some important ways quintessential Americans. These results challenge the notion of a single “Western” culture, the simplistic approach of contrasting “East vs. West,” and the assumption that high individualism and low collectivism is part of a Western European tradition brought to America and most accessible to Anglo Americans. Rather there seems to be a uniquely Anglo and American way of being (high individualism and low collectivism) common to Americans whether claiming Anglo-European or African descent. These results

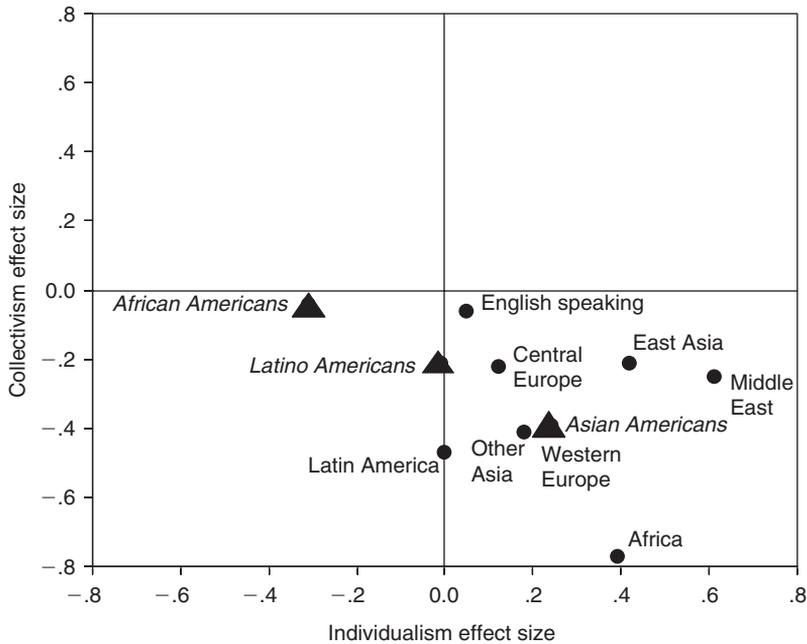


FIGURE 11.1 Are Americans more individualistic and less collectivistic than others? Simultaneous mapping of effects sizes of comparisons between Anglo Americans, African Americans, Latino Americans and other regions of the world on individualism and collectivism. *Source:* Adapted with permission from Oyserman et al. (2002a). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3–73. Copyright 2002 American Psychological Association. Positive effect sizes reflect higher Anglo American individualism and collectivism; negative effect sizes reflect lower Anglo American individualism and collectivism. Circles denote regional international comparisons, triangles denote within US comparisons.

thus suggest a pressing need for a more nuanced approach to understanding how individualism and collectivism matter both within as well as between societies. This need to unpack process raises the next question, which is to what extent differences in values of individualism and collectivism matter for how individuals connect and relate to others, how they make sense of themselves, what constitute their bases of well-being, their motivations and how they process information about the world. Each of these issues is addressed briefly in the next section.

RELATIONALITY

Quality of close relationships (family, intimate relationships), in-group–out-group interactions (social behavior, communication style, conflict resolution style), and groups in work or organizational contexts (working in groups, organizational conflict management) were assessed in 71 studies (Oyserman et al., 2002a). Effects were moderate-to-large in size, though variable. Broadly

speaking, these studies suggest that individualism and collectivism as cultural syndromes are associated with differences in relationality and group relations: individualism is associated with ease of interacting with strangers, preference for direct rather than indirect communication style; collectivism is associated with in-group preference in relationships and some forms of face saving.

SELF-CONCEPT

A total of 30 studies assessed self-concept related constructs (self-esteem, self-concept, or personality), and associated these with individualism and/or collectivism. Research typically compared groups within United States or made comparisons between United States and another country group. In these studies, when cross-group differences were found, they were assumed to be due to individualism and collectivism, but individualism and collectivism were not directly assessed. This is clearly a weak inferential basis. However, large effects were found in studies that did assess individualism and/or collectivism and then correlated levels of individualism and collectivism with content of self-concept, especially content describing the self in terms of in-group and collective memberships. Because research in this area is either correlational or lacks direct assessment of individualism and collectivism, it remains open to criticism and awaits a more critical assessment of the claim that individualism and collectivism have a causal influence on content of self-concept.

WELL-BEING

Evidence from 29 studies on well-being and/or emotional expressiveness suggested that Hofstede's (1980) individualism ratings for various countries tend to moderate the correlations between sources of satisfaction and general life satisfaction, with higher correlations in higher individualism countries. However, individualism has an effect primarily in research that does *not* control for country-level differences on other variables (e.g., national wealth, civil rights, social comparison of income). Research controlling for these confounds shows smaller effect sizes attributable to individualism (Arrindell et al., 1997). In terms of emotional expression, effect sizes were generally large and positively associated with individualism. Other emotion-related analyses did not provide enough information to calculate effect sizes.

COGNITIVE PROCESS

While research on content of self-concept and relationality support the notion that individualism and collectivism as cultural syndromes matter in everyday life, potential impact of culture on cognitive process is particularly intriguing (as noted by Nisbett et al., 2001; Norenzayan et al., 2007). In their review, Oyserman et al. (2002a) summarized 40 studies on this topic, with 29 focusing on explanations,

6 on persuasion, and 5 on attributions about obligations. Americans were consistently more likely to focus on dispositions than on situations in providing rationales for behavior or explaining causality than were participants from non-Western countries. Where measured, individualism and collectivism appeared to mediate between-country effects, thus among Americans, individualism correlated with increased use of trait-based inference and decreased use of situation-cued recall (Newman, 1993, Studies 1 and 2; Duff & Newman, 1997, Studies 1 and 2). Where calculable, orthogonal and medium to large effect sizes were found for the influences of individualism and collectivism on social cognition. In the past few years, evidence of cross-national differences between the United States, China (Nisbett, 2003), and Japan (Kitayama et al., 2003) in non-social cognitive processes has emerged as well. This emerging research suggests that Americans are faster and more accurate in recall of abstract and central information, Chinese more accurate with details, background and elements of the whole, Japanese more accurate with proportions between elements (see Norenzayan et al., 2007, for a review).

MOTIVATION

Different cultural groups also appear to differ in chronic motivations. This has been assessed particularly in terms of differential salience of basic self-concept goals and relational goals, comparing the United States and Canada with Japan, Korea, and China (between-countries) and comparing Anglo Americans with Asian Americans (within-U.S., between-ethnicities). Results suggest that self-consistency (being the same in different contexts) and self-enhancement (perceiving the self as positively as one can) are more salient self motives in North American contexts than in these other contexts but that effects may be due in part to a more salient relational goal of “not offending others” in these contexts. Specifically, compared to European Americans, Koreans are more likely to describe themselves differently in different contexts (Suh, 2002) and mainland Chinese and Asian Americans are less interested in reducing these inconsistencies (Spencer-Rodgers et al., 2004). US and Canadian self-images are systematically biased toward the positive end so that participants from these societies generally view themselves as better than others, but such self-enhancement bias is much weaker among Japanese participants (Heine et al., 1999). This latter effect may be due to a relational motivation – to fit in, be modest (Heine, 2007), or not offend others (Suzuki & Yamagishi, 2004). Thus, US and Japanese respondents equally demonstrate implicit self-regard as revealed by semantic associations between positive evaluative judgment and the self (Kitayama & Uchida, 2003). However, positive self-evaluations are more suspect in Japanese contexts, so that Japanese participants do not explicitly report better-than-average self-ratings unless concern about offending others is overridden by research-induced incentives (e.g., payment for accurate self-estimates, Suzuki & Yamagishi, 2004).

SOCIETIES VARY IN SALIENCE OF INDIVIDUALISM AND COLLECTIVISM IN VARIOUS SITUATIONS

How are these results to be interpreted? One possibility is that cultural syndromes are based in distal cultural features such as philosophy, religion, or language and that these features directly influence values, relationality, self-concept, well-being, cognitive style, and characteristic motivations. While initially plausible and certainly congruent with some approaches to cross-cultural difference (e.g., Nisbett, 2003), a number of studies suggest that distal features do not have a direct effect in and of themselves. Rather, features of the immediate situation are critical in turning on individualistic versus collectivistic cultural syndromes. In other words, empirical findings suggest that culture may be better understood as *situated* cognition.

For example, a number of studies have used language as a proximal cue, with results of these studies suggesting that what language cues is dependent on the meaning of using that language in the particular experimental context. The same language can cue a more collective or a more individualistic response, depending on subjective meaning in context. Thus, two studies conducted in Hong Kong while it was still under British rule demonstrated higher endorsement of Chinese cultural values in Hong Kong Chinese students randomly assigned to fill out the questionnaire in English than in Chinese (Yang & Bond, 1980; Bond & Yang, 1982). These studies suggest that feeling forced to use the out-group's language can intensify in-group feelings. Conversely, two studies with immigrants and international students suggest that in contexts in which out-group language is felt to be chosen (rather than forced by colonial power), language used cues congruent cultural syndrome. Thus, when Russian immigrants to the United States are randomly assigned to an all-English response format rather than an all-Russian response format, they are more likely to generate self- rather than other-focused memories (Marian & Kaushanskaya, 2004). Similarly, Chinese students studying in Canada do not differ in their responses to values and self-concept questions from European heritage Canadians when both groups are randomly assigned to respond in English, but do differ when randomly assigned to an all-Chinese response format (Ross et al., 2002).

These results together suggest that cultural syndromes can be situationally primed in the moment, and that what comes to mind in the moment is that working subset of content and process knowledge relevant to the task at hand (see also Oyserman et al., 2002b). Rather than thinking of language or heritage or history as directly determining culturally characteristic content, cognitive, or motivational style, it is more plausible to think of these distal differences as influencing cognitive content, cognitive style and motivation indirectly, through their effect on the social structures and social situations individuals are likely to encounter. Social structures and situations likely in a society cue meaning for

individual participants (e.g., “this is about separation, being unique”; “this is about connection, being part of a group”).

Because all cultures are rooted in evolutionary and natural selection and have the same adaptive needs, all societies likely provide sufficient experience of both individualism and collectivism to allow either cultural syndrome to be primed when situationally relevant (see Cohen, 2001; Oyserman et al., 2002b). A society that did not have the potential to invoke group loyalty would not be likely to survive as a coherent whole over time, nor would a society that did not provide spaces for individual choice when group needs were met. 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), it seems plausible that human minds are structured to see both separation and connection.

A graphic presentation of a working process model linking distal and proximal features of culture and their effects on psychologically meaningful outcomes – affect, behavior, and cognition – is displayed in Figure 11.2. As can be seen, distal culture is assumed to influence social structures, social situations and the norms and values likely to be internalized. But these are *not* the proximal sources of influence on the subset of values, ways of understanding relationships, making meaning of the self, attitudes, judgments and style of thinking, and motivational goals likely to be on-line at any particular moment. Rather, as will be detailed below, these outcomes are most proximally influenced by how the situation is construed and this construal cues both content and process knowledge.

The notion that societies include both individualism and collectivism cultural syndromes differs from the initial view that societies high in individualism are necessarily low in collectivism and those high in collectivism are necessarily low in individualism. Though conceptualizing societies as including both individualism and collectivism seems novel, quite a few scholars have advanced the idea that individualism and collectivism are not opposing ends of the same unidimensional cultural syndrome (e.g., Kagitçibasi, 1987; Triandis et al., 1988; Bontempo, 1993; Oyserman, 1993; Singelis, 1994; Sinha & Tripathi, 1994; Rhee et al., 1996; Lehman et al., 2004). Each of the previously cited social scientists noted that a unidimensional model simply does not fit the experience of living in a culture. Some suggest that individualism increases while collectivism remains viable in traditional societies that modernize (e.g., Kagitçibasi, 1987). Others suggest that individuals have both collectivist and individualist cognitive “bins” that function separately (e.g., Triandis et al., 1988).

From a situated cognition perspective, all societies incorporate *both* individualism and collectivism so that both individualism and collectivism are enough part of the general cultural socialization process that when cued, each can come to mind. What differs across societies or cultures is the extent that individualism or collectivism is likely to be made accessible or cued by proximal situations. This situated model is a better fit to the evidence than a distal fixed feature model and also allows for the use of experimental methods to gain insight into

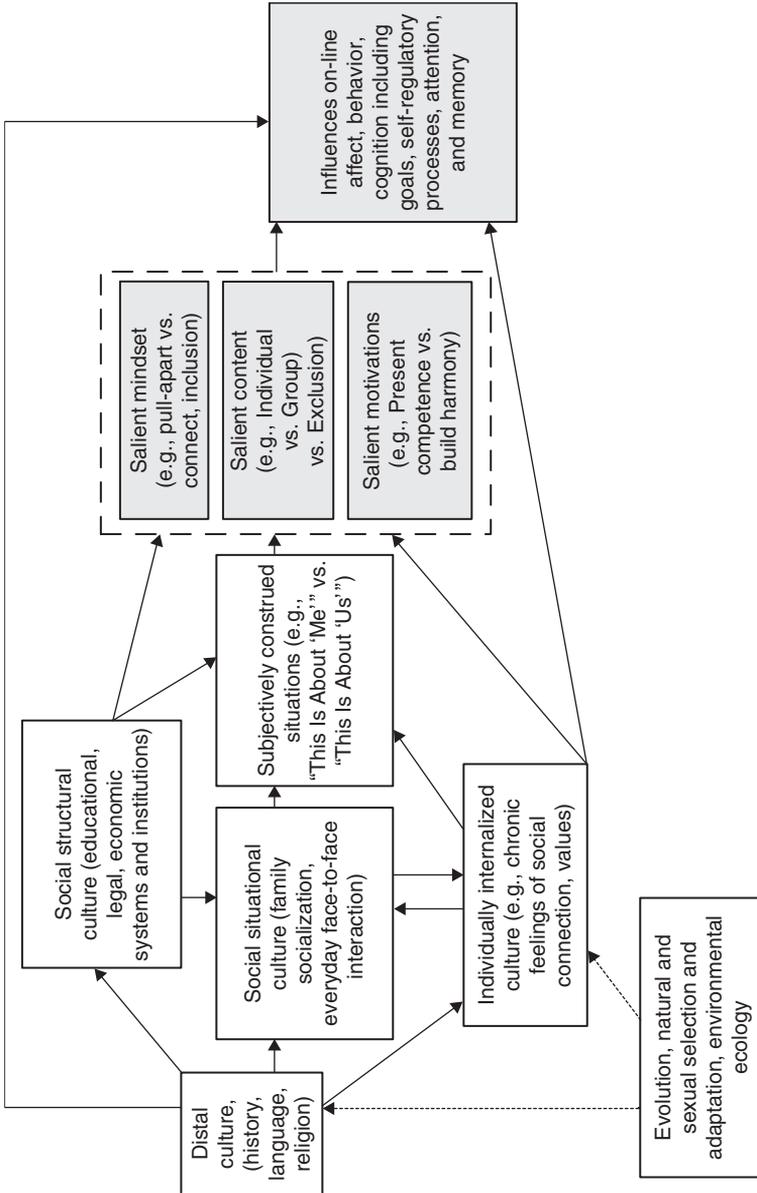


FIGURE 11.2 Culture as situated cognition: Influencing what comes to mind, how one thinks, and what one is trying to do. *Source:* Adapted with permission from Oyserman et al. (2002b). Cultural psychology, a new look: Reply to Bond (2002), Fiske (2002), Kitayama (2002), and Miller (2002). *Psychological Bulletin*, 128, 110–117. Copyright 2002 American Psychological Association.

situations that evoke cultural syndromes as well as the implications of evoking these syndromes. Such experimental evidence has been generated by a good number of studies that primed or made salient individualism and collectivism, to which we now turn.

PRIMING CULTURAL SYNDROME: CULTURE AS SITUATED COGNITION

The literature on priming has distinguished between conceptual priming, mindset priming, and goal priming (Bargh & Chartrand, 2000). In this section we first ask why priming is useful in the study of culture. Then we briefly outline each category of priming so that in the next section, results of culture-priming studies can be better understood.

WHY USE PRIMING?

Cross-national comparisons and studies using bilingual or bicultural participants provide a feel of ecological validity – they use real differences in where one lives and the language one speaks, and document an association between these differences and how individuals make sense of themselves and their social worlds and how they think more generally. However, these comparisons make it difficult to answer questions about the psychological mechanisms through which culture exerts its effects. Cross-national comparisons are difficult to interpret when differences are assumed to be due to cultural syndrome without measurement; any and all differences may be attributed to “culture” reducing the term to unwieldy vagueness. The alternative of using of bilingual or bicultural participants is also not satisfying. When comparisons focus on distinct subgroups – those who are bilingual and/or bicultural, they do not allow clear generalization about the fluidity of culture as a situated process; rather, they subtly reinforce the focus on culture as an “in-the-head” within-person variable like other traits or personality factors. Equally importantly, studies with bilingual and bicultural participants are mute as to whether individualism and collectivism are the active ingredients in observed differences and if so, which aspects of individualism and collectivism make a difference.

To answer these situated-process questions, it is necessary to experimentally manipulate the salience of components of individualism and collectivism and to compare effects of bringing active ingredients of these syndromes to mind. Indeed, an emerging 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 cultural syndrome, the priming method can isolate particular effects on outcome measures of interest.

Generally, priming involves making content, procedures, and/or motivations temporarily accessible. The influence of construct accessibility on social perception

is well documented (Higgins et al., 1977; Higgins & Bargh, 1987). Accessibility can be the temporary result of priming (Srull & Wyer, 1979, 1980) or a more chronic result of routine or habitual activation of a construct in one's everyday environment (Bargh, 1984, 2006; Higgins, 1989, 1996). Temporary and chronic accessibility effects on social judgments are comparable in nature and additive in quantity (Bargh et al., 1986; Rudman & Borgida, 1995). Recent priming and chronic activation are both predictive of construct accessibility.

In the laboratory, 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, procedural knowledge and goals 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 first tasks (priming stimuli). By comparing spillover effects to cross-national differences, it is possible to test hypothesized models of cultural influence on content, cognitive process and motivational style.

Priming studies create an experimental analog of chronic differences between cultural groups by temporarily focusing participants' attention on culture-relevant content (declarative knowledge), mindsets (procedural knowledge), and goals. By using a priming technique, culture-relevant values, norms, goals, beliefs, attitudes, cognitive and motivational styles can be cued automatically, simply because they were brought to mind by the previous task and without participants' awareness. Rather than simply compare groups, priming requires an a priori commitment to an active ingredient of individualistic and/or collectivistic cultural syndrome to be cued. By comparing responses to individualism- versus collectivism-primed conditions against hypothesized differences between individualism and collectivism, researchers can examine the extent that hypothesized differences between cultures are actually due to the primed active ingredients of cultural syndrome. Experiments also provide the possibility of studying whether effects associated with one society (e.g., individualism and the United States) can just as well occur in another when primed (e.g., effects of priming individualism in China).

Of course, priming can only make accessible that which is available in mind. Like all priming methods, cultural-syndrome priming tasks can only be effective if semantic content, procedural mindset knowledge and motivations relevant to each construct is available to be primed. One cannot be individualism-primed if one has available in memory only collectivism-relevant semantic and procedural knowledge and goals; similarly one cannot be collectivism-primed if one has available in memory only individualism-relevant semantic and procedural knowledge and goals. Thus, for cultural syndrome priming to be effective, a basic assumption is that across societies and cultures, individuals are capable of thinking about themselves and the world as both separate and independent and as connected and interdependent even if they are typically likely to focus on one or the other and likely to be habitually motivated to self-present or self-efface.

CONCEPTUAL PRIMING

Conceptual priming involves activation of specific mental representations such as traits, values, norms, or goals which then serve as interpretive frames in the processing of subsequent information (Higgins, 1996). Once a concept is primed, other concepts associated with it in memory are activated through spreading activation (Neely, 1977). Following this line of reasoning, average between-society or between racial-ethnic group differences attributed to differences in cultural syndrome may be due to differences in the conceptual networks primed in everyday situations. Objects and practices continually activate corresponding culturally meaningful thoughts. Different cultural syndromes may therefore prime different cognitive contents by creating differing content and associative networks that together influence what we think about ourselves, about others, and about the world.

MINDSET PRIMING

Mindset priming involves activation of a previously stored mental procedure or way of making sense of the world in one context that is carried over into another (Bargh & Chartrand, 2000). For example, when primed to think either about *whether* to engage in a goal or *how* to engage in a goal, participants later use this same thinking style in a second unrelated task (e.g., Gollwitzer et al., 1990). Mindset priming is consistent with the general assumption that processing strategies are situated and tuned to meet current situational requirements (for a review, see Schwarz, 2002, 2006). These processing strategies or procedures can be thought of as part of a procedural toolkit used to structure thinking and reasoning about the world.

MINDSETS AND CULTURE

Markus and Oyserman (1989) proposed that women and individuals from non-Western societies are more likely to view themselves as importantly connected and that, in contrast, men and individuals from Western societies are more likely to view themselves as importantly separate from others. They argued that basic cognitive procedures are associated with these divergent basic self-schemas: connected self-schemas cue a connecting and integrating cognitive style; separated self-schemas cue a separating and distinguishing cognitive style. These arguments were refined by Markus and Kitayama (1991) in their follow-up review in which connected self-schemas were termed interdependent self-construals and separate self-schemas were termed independent self-construals, with the proposal that this difference in self-concept is true of average differences between Eastern and Western self-construals. Cross and Madson (1997) made the same argument for gender (for a different perspective on gender and culture, see Kashima et al., 1995).

Following these initial reviews of the literature, empirical work demonstrating the association of “separate” and “connected” self-schemas with preference

for “separating” and “connecting” cognitive processes was carried out by Woike, Lavezzary, and Barksy (Woike, 1994; Woike et al., 2001) and by Hannover, Kühnen, and colleagues (e.g., Kühnen et al., 2001; Kühnen & Oyserman, 2002; Hannover & Kühnen, 2004). Woike and her colleagues follow the terminology of Bakan (1966) and describe connected self-schemas as communion self-concepts and separate self-schemas as agency self-concepts and term the relevant preferred cognitive processes integration and distinction, respectively. The cognitive procedure chronically preferred by those with an agentic self-schema is to distinguish or separate while the cognitive procedure chronically preferred by those with a communal or connected self-schema is to connect and integrate. Hannover, Kühnen, and colleagues (e.g., Kühnen et al., 2001; Kühnen & Oyserman, 2002; Hannover & Kühnen, 2004) describe differences in procedures associated with independent and interdependent self-representations using priming procedures to demonstrate effects on cognitive process.

GOAL PRIMING

Motivations or goals can also be primed. The priming literature has not consistently separated priming of goals or motivation from priming of content. This makes sense because a goal is a representation of a desired end state and in that sense includes content (Bargh, 1990). However, goals can also be thought of as processes, in that strategies and a general array of procedures are necessary to attain the end state represented in a goal (e.g., Gollwitzer & Moskowitz, 1996; Kruglanski, 1996). Thus, goals can be thought of as a mix of content and mega-procedures. Indeed, goals-and-means networks overlap with semantic networks (Bargh & Chartrand, 2000; Förster et al., 2007). Like content and procedures, once stored in memory, goals can be primed without explicit, conscious intention formation (Chartrand & Bargh, 1996). For example, Bargh et al. (1995) and Chen et al. (2001) exposed participants in the lab to words associated with possession of power and found that this manipulation activated specific, individualized goals associated with power which influenced participants’ perception and behavior. Priming power made salient sexualized images of women among men chronically likely to sexually harass (Bargh et al., 1995). But priming power made salient social responsibility among individuals high in communal orientation (Chen et al., 2001).

EFFECTS HYPOTHESIZED BY A SITUATED COGNITION MODEL OF CULTURE

The proposed culture-as-situated-cognition model suggests that priming individualism will evoke individualism-relevant content, mindset, and goals in both men and women across diverse societies. Five broad areas of content knowledge

are proposed to be cued when individualism, rather than collectivism is primed. Priming individualism will

1. Enhance endorsement of individualistic values and dampen endorsement of relational or collective values.
2. Make unique traits and attribute-based elements of self-concept more accessible and social or relational-based elements of self-concept less accessible.
3. Dampen felt closeness and obligation to in-group others and reduce sensitivity to their needs and goals.
4. Enhance the accessibility of well-being based in happiness, self-fulfillment, and personal success and dampen the accessibility of well-being based in fulfilling social obligations and commitments, providing reflectable glory for in-group members and basking in the reflected glory of other in-group members.
5. Make messages focused on the self, difference, and uniqueness more believable and persuasive than messages focused on the group, similarity and connection.

In terms of cued procedural knowledge, the model proposes that compared to when collectivism is primed, priming individualism will enhance the accessibility of pull-apart and separate processing strategies (and dampen accessibility of connect and integrate processing strategies). In terms of cued motivations, the model proposes that compared to when collectivism is primed, priming individualism will make certain self (self-enhancement and self-consistency) and relational (be competent, be equitable) goals more salient and other relational goals (do not offend others, maintain harmony) less salient.

META-ANALYSES OF CULTURAL SYNDROME PRIMING LITERATURE

Oyserman and Lee (2008) reviewed the priming literature through January 1, 2005, obtaining 67 studies conducted in three regions (and eight countries) that prime individualism and collectivism cultural syndromes and assessed effects on values, relationality, self-concept, well-being, and cognition. They found a significant and meaningful overall effect of cultural syndrome priming (mean unweighted $d = 0.45$, mean weighted $d = 0.34$, Confidence Interval (CI) = 0.29/0.39). This average effect was comparable across the three most common cultural syndrome priming tasks (pronoun circling, Brewer & Gardner, 1996; thinking about similarities/differences with family and friends [SDFF] and Sumerian warrior story, Trafimow et al., 1991) and when the same priming tasks are used, effects are in the same range for both European/European American samples and for Asian (primarily Hong Kong Chinese) samples.

Among these 67 studies, Oyserman and Lee (2008) examined those that reported comparison to control condition to provide an estimate of whether priming moves responses of those primed with individualism, those primed with collectivism, or both groups equally. They found 14 studies that included a comparison with control, reporting small-to-moderate effect sizes in both directions when individualism was compared with control, $d = 0.35$, $CI = 0.23/0.48$; when collectivism was compared with control, $d = 0.34$, $CI = 0.21/0.46$. They also note that in currently used individualism and collectivism primes there seems to be a trade-off in priming effectiveness. Primes that involve relational priming tasks such as SDFP or pronoun circling task, are not as effective in cuing collectivism ($d = 0.23$) as they are in cuing individualism ($d = 0.43$), at least among the samples tested so far. Similarly, priming tasks that include both relational and collective-group collectivism primes (e.g., Trafimow et al.'s Sumerian Warrior task) are not as effective at cuing individualism ($d = 0.25$) as they are at cuing collectivism ($d = 0.48$). Unfortunately, results are sample-dependent and not all primes have been used in every society. However, results are promising as they provide support to the situated cognition model's prediction that both individualism and collectivism can be activated and influence psychological outcomes. Though to be sure, they also call for an expanded set of priming tasks in order to better understand active ingredients of both individualism and collectivism.

In their final set of analyses, Oyserman and Lee (2007b) also examined results from 32 other studies that primed individualism or collectivism (but not both) and compared the primed groups to various control or comparison groups. Taken as a whole these additional studies show effects consistent with those found in the main meta-analysis comparing both individualism and collectivism. This suggests that results are robust to differences in methodology and study quality.

Cultural syndrome primes are diverse in task type, content, and transparency (i.e., the likelihood that what is being primed is plausibly clear to the participant). In combination with the general stability of findings across primes, this diversity is helpful because it constitutes strong evidence that effects are due to an underlying process rather than due to the specifics of a particular prime. The only priming task that produced widely varying results was use of language as a prime (with effects in the hypothesized direction in some studies and effects in the opposite direction in others, overall $d = 0.10$). As noted by recent reviews (e.g., Chiu et al., 2007; Norenzayan et al., 2007; Wang & Ross, 2007), language is related to culture, memory, and cognition. While studies using language are limited to participants who are bi- or multilingual, potential effects of language can be operationalized and studied with other primes, thus disentangling language from other culture-relevant factors. Our interpretation of the near zero average effect of language-priming is that the meaning of language is highly contextualized (see earlier discussion in *Societies Vary in Salience of Individualism and Collectivism in Various Situations* section).

EFFECTS OF PRIMING CULTURAL SYNDROMES ON CULTURE-RELEVANT CONTENT

Effects in the priming literature are consistent with those in the cross-national literature, in the expected direction across outcome domains, with moderate effects on both relationality and cognition, and small effects on values, well-being and self-concept. Effects for values are stronger when known measures of individualism or collectivism are used. With regard to self-concept, effects are stronger when effects on private or collective self-concept are examined; no effect on relational self-concept content was found. Effects are particularly robust for relationality, not only large in size, but also internally homogeneous across various priming tasks and outcome measures. This robust finding is important because, along with values, how one relates to others is central to many operationalizations of cultural difference. Therefore the large and homogeneous effect size suggests that priming cultural syndrome systematically shifts which way of engaging others is cued.

EFFECTS OF PRIMING CULTURAL SYNDROMES ON COGNITIVE PROCESS

Each of the priming tasks Oyserman and Lee (2008) describe clearly involves a conceptual prime, that is, the task and task instructions prime words related to individualism and collectivism. These are likely to bring to mind relevant content in the form of values, ways of being a self, ways of engaging with others and ways of making sense of the world. None of the tasks or instructions is explicitly process oriented – participants are *not* told to connect or pull apart, assimilate or contrast. Two key questions then are: Do these tasks nonetheless prime procedural knowledge – separating out and focusing on a main object versus connecting, integrating, and focusing on the whole. And second, does priming procedural knowledge influence *how* (not only *what*) we think, feel and act. Thus when words like *separate*, *different*, *dissociate*, or words like *similar*, *connect*, *together* are used in instructions or in the task itself, do they prime mindsets rather than simply content knowledge? And if mindsets are primed, is there evidence that they influence cognition, affect and behavior? In the next section, we summarize Oyserman and Lee's (2008) results as relevant to this question.

Of the 28 studies Oyserman and Lee (2008) coded as focused on cognition, about a third focused on cognitive content (attitudes and judgment) and the remaining two thirds focus on cognitive process in social and nonsocial domains. Across each domain, effect size was moderate ($d \geq 0.50$). These results suggest that priming cultural syndrome does prime a style of thinking in both social and non-social domains. These results were not moderated by gender or region. Priming collectivism made it more likely that men and women,

Europeans/European Americans and Asians would use a “connect and relate” mindset; priming individualism made it more likely that men and women, Asians and Europeans would use a “pull-apart and separate” mindset. For example, collectivism priming improves recall for spatial position of a random array of objects and speed of recognition of a big letter made up of little letters (Kühnen & Oyserman, 2002); individualism priming improves accuracy in an embedded figures task (Kühnen et al., 2001).

In addition, a number of studies examine microprocesses within the cultural syndrome priming tasks. Following up on their initial finding that collectivism priming cues assimilation and individualism priming cues contrast, Stapel and Koomen (2001, Study 4) asked why contrast effects were significant only when the contrast favored self-enhancement. They decomposed the effect of their prior priming using first person pronouns and showed that first person pronouns cues self-enhancement among Dutch participants but that separation and distinction can be cued separately from self-enhancement.

EFFECTS OF PRIMING CULTURAL SYNDROMES ON GOALS

While less examined, as demonstrated in the Stapel and Koomen (2001) research summarized above, it seems plausible that priming cultural syndromes should also prime culturally relevant goals and motives. Integrating and synthesizing prior research, it seems reasonable to argue that self-enhancement and self-consistency motives (Swann, 1985; Taylor & Brown, 1988), competence and leadership goals, and relational principles that emphasize individual benefit (e.g., fairness, equality matching) and competition for success (e.g., market pricing; Fiske, 1991) should all be cued at least in some circumstances, by individualism. With the group taking primacy, collectivism should be likely to prime self-effacement and self-improvement motives (Heine, 2003, 2005), harmony-building goals and strategies (e.g., loyalty, modesty, not offending others, protecting face; Yamagishi & Suzuki, in press), as well as relational principles that emphasize collective benefit (e.g., communal sharing; Fiske, 1991). Theorizing along these lines, Oyserman et al. (1998) varied the salience of individualism and collectivism and found that both Jewish and Asian American participants were faster and more confident in choosing to help others at the cost of their own goals across a variety of scenarios when relevant cultural values were primed and endorsed. Specifically, helping in-group others increased when cultural values were primed and collectivism was highly endorsed, whereas helping broader society others increased when cultural values were primed and both collectivism and individualism were highly endorsed. Results suggest that different forms of obligation are salient when one is reminded of one's values and these values reflect individualism, collectivism, or both individualism and collectivism.

These results were conceptually replicated by Gardner et al. (1999, Study 1), who found that compared to those primed with individualism, people primed with collectivism perceive a target person as more obligated to help a close friend. Similarly, Gardner et al. (2004) found that individualism-primed participants were more oriented toward self-goals but collectivism-primed participants were more oriented toward group-goals. The effect of priming was robust across Anglo American and Asian American participants (for similar findings, see Utz, 2004a, b; Wenzel, 2002). Collectivism-primed motivation to support group goals was also found by Gardner et al. (2002), who found that mismatch between *own* and *group's* performance produced opposite effects among individualism-primed, compared with collectivism-primed, participants. Individualism-primed participants reported more positive mood when their own performance was good (and their group's was not good). Collectivism-primed participants reported more positive mood when their group's performance was good (and their own performance was not good).

The effects of priming on group-focused motivation have also been studied with regard to endorsement of social justice relevant attitudes. Kimmelmeier (2003) primed participants with individualism by having them circle singular first-person pronouns (*I, me, my, mine*, Study 1) or read and rephrase a paragraph revolving around the theme of personal freedom (Study 2) and compared results to participants primed with collectivism (Study 1, circling plural first-person pronouns *we, us, our, ours*; Study 2, read and rephrase a paragraph revolving around the theme of family commonality). In both cases, collectivism-primed participants favored affirmative action more than individualism-primed participants and individualism-primed participants favored equal opportunity more than collectivism-primed participants. It is possible to interpret these results in terms of shifting relational goals, with ending in the same place being more important for those primed with collectivism and beginning at the same place being more important for those primed with individualism.

BUT WHICH GOALS ARE PRIMED?

Existing findings seem to support the general contention that cultural syndrome primes activate culturally prescribed goals and accordingly, direct motivated reasoning and actions: individualism-primed people are more motivated for equality and individual-focused fairness; collectivism-primed people are more motivated for group benefits and helping in-group others in society. Indeed, these findings were described by the original authors in terms of goals or in similar motivational terms. However, aside from the suggestive research summarized above, the priming literature has yet to provide the type of motivation-focused evidence provided in the cross-national literature (e.g., Yamagishi & Suzuki, in press). That is, while cross-national studies such as those summarized below strongly suggest differences in chronic relational motivation, priming studies have yet to demonstrate that these motivations can be turned on and have the same effects across national groups.

In their cross-national studies, Yamagishi and Suzuki (in press) demonstrate that Japan–United States differences in choices and in how modest one is

in one's self reports of successes, skills, and abilities can be made to disappear when differences relational motivation is taken into account. First, they provide a conceptual replication of Kim and Markus's (1999) findings. Kim and Markus (1999) showed differences between Asian (Chinese American, Koreans, East Asian Americans) and European American participants in their choice of a common or uncommon pen in an array of pens provided as a gift. While Kim and Markus attribute choice difference to difference in preference for uniqueness, Yamagishi and Suzuki disagree with their interpretation and argue that the difference in choice was due to difference in relational goals. They argue that Asian participants simply did not want to offend others by making a choice that would inconvenience others (taking an uncommon pen might mean that others would not have access to this choice). They demonstrate that the initial effect remains when Japanese participants are told that they are making the first choice and that others will choose later, but disappears when Japanese participants are told that they are making the last choice and no one will follow. If there is no one to be offended, that is, when they are last, they can and do take the uncommon pen.

Suzuki and Yamagishi (2004) also show that what would otherwise appear to be a goal of modesty also seems to be part of the "not offend others" goal. First, they replicate prior research showing greater modesty in Japanese than American respondents: only a third of Japanese but 70% of Americans estimate that their achievement test performance is better than average. Then they demonstrate that the Japanese but not the Americans shift their responses when told that they will be paid for accurate responses, in which case Japanese are just as self-enhancing as are Americans. Yamagishi and colleagues argue that these results suggest that the chronic "not offend others" motivation is turned off only when it is clear that others will not be offended. Their results mesh well with research by Kitayama (Kitayama & Karasawa, 1997; Kitayama & Uchida, 2003) demonstrating that Japanese do not differ in their implicit self-regard, but rather in their willingness to express positive self-regard openly. When social situations are ambiguous – as they generally are – Japanese are more likely to assume by default the presence of others and are motivated not to offend others by conforming to the majority, sharing and being modest. Conversely, in ambiguous situations, such relational motives are not cued in Americans, allowing free reign for self-enhancement and authority-asserting motivations. These results are highly relevant, but without experimental manipulation, it is impossible to tell if these effects are part of the active ingredients of individualism and collectivism or due to some other differences between Japanese and American societies. As demonstrated in these studies, if culture-congruent self or relational motivation processes are ignored, effects may be misinterpreted.

AN INTEGRATION

We have provided evidence that a situated cognition approach to culture is necessary and that a situated model highlights how culture influences cognitive

content (what), cognitive process (how), and motivation (for what purpose). While cross-national comparisons can be high in ecological validity (because they demonstrate real differences between real groups), these studies are limited in other ways. Reliance on survey response leaves open questions about interpretability of comparisons and studies that lack experimental manipulation cannot illuminate the process by which culture matters, leaving as a black box the mechanism through which culture influences individuals. To address these problems, social cognition research provides content, mindset and potentially, goal priming as tools to assess the impact of some key aspects of cultural syndromes.

Oyserman et al.'s (2002a) meta-analyses of cross-national comparisons between Anglo or European Americans and others suggests a moderate sized difference in endorsement of individualism and collectivism values with some caveats. Oyserman and Lee's (2007, 2008) follow-up meta-analyses and 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. Priming cultural syndrome shifts salience of individualism and collectivism values with about the same magnitude of effect as is found in the cross-national literature. When studies used comparison with control, effects were found for both individualism and collectivism priming.

With regard to effects of cultural syndrome priming on content and process of thinking, we find evidence that priming cultural syndrome influences mindset. Thus, collectivism priming increases likelihood of including rather than excluding information, resulting in assimilating information about another into one's self-rating, while individualism priming increases likelihood of contrasting information about another with one's self-rating – using the other as a standard rather than as part of oneself. Moreover, cultural syndrome priming shifts use of pull-apart versus integrate-and-connect processes even for non-social cognitive tasks. Thus, collectivism priming relative to individualism priming shifts speed of recognition of embedded figures, of letters made up of other letters and speed in the Stroop Task (e.g., Kühnen & Oyserman, 2002; Oyserman et al., 2008). These effects parallel cross-national effects found by Norenzayan et al. (2007), Nisbett (2003), and Kitayama et al. (2003).

Both cross-national and priming literatures suggest moderate-to-large effects of individualism and collectivism on ways of engaging with others. Some of these studies seem to be priming culturally relevant relational goals such as desire for personal achievement, relationship building, and collective success. While the cross-national literature documented apparent goal differences between a good number of countries, the cultural syndrome priming literature on relationality is mostly limited to Western samples. We found only one study assessing effects of cultural syndrome priming on relationality using an Asian

American sample (Gardner et al., 2004), suggesting a need for further research in other regions of the world. That said, the fact that effects of cultural syndrome priming on both individualism-collectivism values and social-relational engagement parallels cross-national differences affords important ecological validity to priming as a way of isolating the active ingredients of cultural syndrome (Oyserman & Sorensen, in press).

Our review supports the cross-cultural psychological contention that culture matters – influencing how the self is defined, how relationships with others are imagined, what is of value and how the mind works – and more importantly, moves beyond this general framework by suggesting that culture matters *because it situates cognition*. Culture makes certain ways of being in the world “go without” saying because they have been brought to mind without conscious awareness. That is, priming culture-relevant content shows a clear impact on accessible cultural knowledge resulting in shifting values, altered self-descriptions, and differences in understanding about one’s social obligations and relations with others. These findings suggest that culture is a conceptual prime, activating relevant knowledge. Perhaps more intriguingly, priming influences situated cognitive processes as well. That is, priming different cultural syndromes makes accessible different procedural knowledge. The mindset of individualism is to pull apart and separate, to contrast figure from ground, self from other. The mindset of collectivism is to connect and integrate, to assimilate figure with ground, self with other. These findings suggest that culture is also a procedural prime, activating relevant naïve theories as to how to make meaning.

Evidence thus supports a situated cognition model of culture that is applicable to both “East” and “West.” 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 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, despite the phenomenal experience of culture as natural, real, and immutable, cultural meanings and cultural differences are likely to be fluid. Such fluidity is grounded in the notion that culturally situated reasoning is action based, that is, the situation cues what is relevant to making meaning and taking action in the moment (see Smith & Semin, 2004). The finding that cultural syndrome priming influences both content and process is particularly important because procedural knowledge or naïve theories about how to process information and make meaning of meta-cognitive experience matter for the sense we make of ourselves and others, goal-pursuit and inter-group dialogue.

Clearly there is much to be done. Priming research does not yet include regions of the world such as Latin America, Africa, and the Middle East. To understand more about the underlying process, to make predictions with regard to differences in real groups (other than college students) and population, it will

be necessary to conduct at least some priming research off college campuses. Good cultural syndrome primes should provide the ability to test effects within and across countries and to test effects with non-college student participants. Use of varied primes is recommended as none alone should be assumed to fully embody the latent construct of “culture” or even its active ingredients. The general argument that cultural syndromes are situated cognition – that cultural syndromes work by cuing cognitive content and cognitive style, which in turn influence what and how we think – is greatly strengthened by robustness of findings across tasks, regions, and outcome variables.

Taken together, evidence suggests that the situated cognition model provides an excellent starting point for future research: Expanding beyond individualism and collectivism is likely to provide new insights by providing additional ways of identifying active ingredients of culture. As we have argued, meanings in situation matter because culture is a form of situated cognition that provides cues as to who one is, what is meaningful and desirable, and how to process information about the world. While not initially salient, research on motivational processes is beginning to emerge. This work promises to better situate what content and processes come to mind when active ingredients of culture are primed. By articulating what turns on culturally characteristic motivations and studying the extent that these motivations map on to individualism and collectivism or other cultural syndrome models, research on the interface between culture and motivational processes provides a new frontier on cultural psychology.

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