Culture and self: An empirical assessment of Markus and Kitayama's theory of independent and interdependent self-construals

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In this paper, I critically evaluate the logic underlying Markus and Kitayama's (1991) theory of independent and interdependent self-construals, and examine the evidence that directly tests its major assumptions. On the basis of my review of the studies they cite, and literature from three other sources, I conclude that the evidence severely challenges the validity of their theoretical framework for explaining observed national differences in psychological phenomena. I offer some ideas about alternative methodologies for research in this important area of psychology that may aid in developing and testing theories of culture and self in the future.

In the U.S., "the squeaky wheel gets the grease"; in Japan, "the nail that sticks up gets pounded down". Markus and Kitayama (1991) contend that anecdotes like these symbolize meaningful and important cultural differences between the U.S. and Japan, and North American/European and almost all other cultures. These differences are the basis for their theory of independent and interdependent self-construals, which is arguably one of the most influential works in the past decade in culture and psychology. Its import and implications are far-reaching, its popularity and usage widespread.

Like all theories, we need to objectively evaluate it in terms of its assumptions and empirical support. Despite its popularity, to my knowledge no work to date has explicated its assumptions, nor objectively reviewed the available evidence in support of them. This paper does so. First, I review the theory, highlight major aspects of it, and describe its basic logic. Second, I identify its major assumptions, and evaluate those assumptions in relation to the evidence that has been suggested as supportive of their theory. My evaluation suggests that no study supports their contentions, because none tests the basic logic underlying their theory. Third, I review three other types of studies that directly test the assumptions in their theory. This evidence also suggests that there is little, if any, empirical support for them. Finally, I discuss the implications of this evidence for their theory, and for future work in this area.

Independent and interdependent selves, and their impact on cross-cultural psychology

A brief review of the theory, and its basic logic

Markus and Kitayama's (1991) well-known theory is based on the premise that

> For many cultures of the world, the Western notion of the self as an entity containing significant dispositional attributes, is simply not an adequate description of self-hood. ... In many Western cultures, there is a faith in the inherent separateness of distinct persons. ... In contrast, many non-Western cultures insist ... on the fundamental connectedness of human beings to each other. (pp. 226–227)

According to their theory, people of Western, primarily individualistic cultures have independent self-construals, where the person is a "bounded, unique, more or less integrated motivational and cognitive universe, a dynamic center of awareness, emotion, judgment and action organized into a distinctive whole and set contrastively both against other such wholes and against a social and natural background" (p. 226). People of many non-Western, primarily Asian, cultures, however, have interdependent self-construals, which feature the person not as separate from the social context, "but as more connected and less differentiated from others. People are motivated to find a way to fit in with relevant others, to fulfill and create obligation, and in general to become part of various interpersonal relationships. The significant features of the self are found in the interdependent and more public components of the self" (p. 227).

The concept of independent versus interdependent selves is similar to concepts of self and human nature proposed by others, including Freud's (1930/1961) union with others versus egoistic happiness, Angyal's (1951) surrender and autonomy, Balint's (1959) ocnophilic and philobatic tendencies, Bakan's (1966) communion and agency, Bowen's (1966) togetherness and individuality, Bowlby's (1969) attachment and separation, Franz and White's (1991) individuation and attachment, Stewart and Malley's (1987) interpersonal relatedness and self-definition, and Slavin and Kriegman's (1992) mutualistic and individualistic urges (all cited in Guisinger & Blatt, 1994). The difference between self as typically conceptualized in mainstream American psychology and other cultures has been noted by others, including Doi (1973), Kim & Berry (1993), and Heelas & Lock (1981). Sampson (1988) referred to the self in mainstream approaches as *self-contained individualism*, contrasting it with *ensembled individualism*, where the boundary between self and others is less sharply drawn and others are part of oneself.

While their theory was originally published in 1991, Markus and Kitayama's presentation of its basic tenets has changed little since (e.g., see Fiske, Kitayama, Markus, & Nisbett, 1998; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Markus & Kitayama, 1994a, 1994b, 1995, 1998). In explaining American–Japanese differences in self-enhancement versus self-criticism, for instance, Kitayama, Markus, Matsumoto, and Norasakkunkit (1997) stated:

> Western, especially European American middle-class cultures are organized according to meanings and practices that promote the independence and autonomy of a self that is separate from other similar selves and from social context. ... In contrast, many Asian cultures do not highlight the explicit separation of each individual. (p. 1247)

Likewise, Markus and Kitayama (1998) contrasted the Western view of the independent self with the non-Western, specifically Japan, China, Korea, Southeast Asia, South America, and Africa, view of interdependent self, suggesting that the East Asian model of individuality

> comes with a commitment that is tied to the recognition that the person is also a social being (i.e., an entity that is made meaningful within a larger social context). Personalities result as people engage in particular roles with specific other people. Behavior is actively responsive to

and incorporates the demands of others. ... Within the Asian interdependent model of the person, the integration of social role and distinctiveness is accomplished by a sort of conditioning of individual distinctiveness on a certain relationship or social position. Individual differences (e.g., diligent or lazy) are defined within a semantic framework or model of human action that corresponds to a pertinent social position or role. ... This conditionality of person description on a social context reflects the appreciation of the relational nature of any behavior in the Asian model of person. (pp. 72–73)

To be sure, the Markus and Kitayama (1991) position does not make assumptions about complete homogeneity within cultural groups. Fiske *et al*. (1998), for example, were careful to point out that there may be considerable differences *within* the two cultural groups. Markus and Kitayama (1994a) have also indicated that they do not assume that all individuals in a given cultural group are alike. Rather, they suggested that members of a given group ''are more likely to have been exposed to and have operated within a given cultural frame than members of the contrasting group, and thus members of the same cultural group may share *some* [italics in the original] similar behavioral tendencies or patterns'' (p. 99).

These writings, and many others (e.g., Kitayama & Karasawa, 1995; Kitayama & Markus, 1994; Kitayama, Markus, and Matsumoto, 1995; Markus, Kitayama, & Heiman, 1996; Markus, Kitayama, & VandenBos, 1996; Markus, Mullaly, and Kitayama, 1997), contain a basic logic that can be easily extrapolated, and is outlined in Figure 1 (top). In this view, culture influences individual self-construals; these, in turn, influence all aspects of behavior. In Western cultures, therefore, the imperative to become independent, unique, autonomous, separate, and individual encourages the formation of independent self-construals. Presumably, Western culture's emphasis on individualism provides the platform to foster these cultural goals. Independent self-construals, in turn, affect the way these individuals think, perceive themselves, feel emotions, and act. The imperative of non-Western cultures, however, is to maintain interdependence among individuals. Presumably, their emphasis on collectivism provides the platform for these developments, and is associated with values such as harmony, cohesion, and cooperation, which foster an interdependent sense of self. It, too, influences how individuals in these cultures think, perceive themselves, feel emotions, and act.
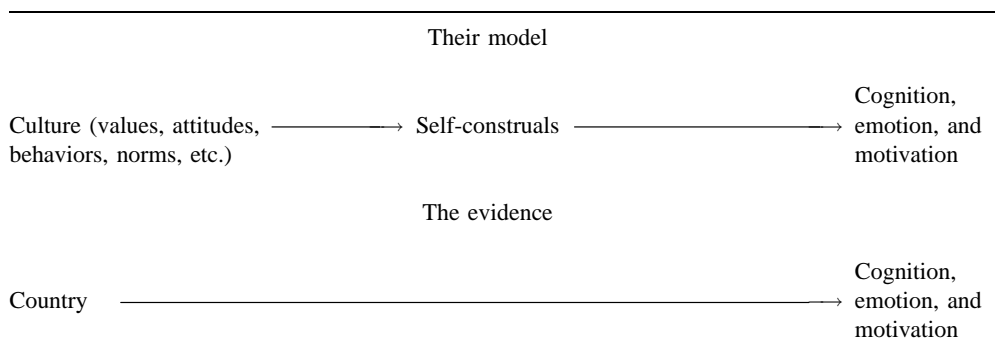
Their model

Culture (values, attitudes, ——————→ Self-construals ———————————————→ Cognition, behaviors, norms, etc.) emotion, and motivation

The evidence

Country ————————————————————————————→ Cognition, emotion, and motivation

Figure 1. Comparison of the logic underlying the Markus & Kitayama (1991) model with that underlying the evidence cited in support of it

The Impact of the Theory

This theory has had a major impact in both cross-cultural and mainstream psychology. For decades, cross-cultural research has documented many differences between cultures. However, the field has been relatively slow in developing theories that can explain, understand, and predict those differences. After all, most cross-cultural research is not cross-cultural *per se*; it is generally cross-national (and more specifically, cross-city or even cross-university). With such limitations in our methods with regard to the operationalization of culture, no wonder the field has had difficulty in explaining differences when obtained.

One way the field has begun to address the issue of defining and measuring culture is through the adoption of psychological descriptions, often focusing on the subjective rather than objective elements of culture (cf. Triandis, 1972). Thus, we speak of cultures in terms of individualism versus collectivism (IC), or power distance, or contextualization, or tightness. These concepts have undoubtedly aided our ability to extract meaningful dimensions of psychological variability in our cross-cultural (national) work so that differences, when observed, can be interpreted in terms of functional psychological characteristics.

The field has also produced valid and reliable measures of some of these constructs on the individual level. Most notably, Triandis and his colleagues (see 1995, appendix) have developed techniques to measure IC tendencies on the individual level, with both theoretical and empirical import. Theoretically, they allow us to define culture psychologically, and to differentiate between group and individual levels of culture; this forces us to consider multiple levels of culture in explaining psychological phenomena. Empirically, they aid in reducing our reliance on cultural stereotypes, anecdotes, and impressions in generating hypotheses about cultural differences, and in interpreting data. These approaches have allowed us to consider variables that mediate cross-cultural differences; this is important because we can specify the psychological mechanisms that may underlie those differences – context variables as described by Poortinga, van de Vijver, Joe, and van de Koppel (1987). It is within this evolution that Markus and Kitayama's (1991) theory was a welcome conceptual framework. It is one of the first process models that explained why cultural differences occurred in so many areas of psychology. It "filled the gap" between culture on one side and behaviors on the other. It made conceptual sense, fit in with previous theories, and appeared to explain a lot of data.

To my knowledge, however, this theory has not been examined objectively. It should be. Like any theory, it contains assumptions that are crucial to it and its postulates. While the theory can be used to apparently explain many cross-cultural differences, many of the claims and assumptions that are crucial to those explanations need to be tested. Without such tests, the validity of the theory only exists if one accepts its assumptions. Instead, they need to be treated as hypotheses and tested formally, rather than merely accepted because they conform to what we think should be right. The field has an obligation to flesh out and examine critically these assumptions; failure to do so relegates our collective work, and the acceptance of this theory, to little more than the self-fulfilling affirmation of cultural stereotypes.

An empirical assessment of the Markus and Kitayama theory

Coverage

Throughout their writing, Markus and Kitayama present a plethora of research documenting cross-national differences across many areas in psychology. Unification of these vast and

disparate findings exemplified not only the utility of their ideas; many have interpreted them as supportive of the conceptual framework as well.

   One of the first issues to be raised concerns the coverage of the cultural areas to which the theory is supposedly applicable. Markus and Kitayama (e.g., 1994b) suggest that the interdependent self-construal is applicable in Japan, China, Korea, Southeast Asia, South America, and Africa. The evidence they present shows considerable coverage of work in Japan and China, some work in India, less in Korea. Work on Southeast Asia, South America, and Africa, however, is almost non-existent in their presentation, because empirical work on the level of quality and rigor that is acceptable to the field is almost non-existent in these areas. By their own claims, Euro-American research on the self comprises almost ''99% of all research on the self and identity'' (Markus & Kitayama, 1995, p. 369). Elsewhere, they write that, other than North America and East Asia, ''no other culture areas have been studied so extensively, and no two culture areas have been compared in as many studies'' (Fiske *et al*., 1998). Their claims about the applicability of their theory to other parts of the world should be curtailed until adequate empirical work exists to support such claims. Presentation of their theory as a model that may *possibly* be applicable to these vast yet unstudied areas is a more accurate reflection of the state of knowledge than the assumed equivalence of non-Western selves, and the assumed adequacy of their theory to capture these selves.

Their evidence

Markus and Kitayama (1991) suggested that ''there are significant cognitive, emotional, and motivational consequences of holding an independent or an interdependent view of the self'' (p. 231). In their original article they reviewed a broad range of topics, including perceptions of self–other similarity, the nature of person knowledge, causal attributions, linguistic relativity, emotional experience and expression, achievement motivation, motivation for cognitive consistency, and the like. In their more recent review (Fiske *et al*., 1998), they broadened their coverage to incorporate other areas as well, including fundamental attribution error, analytic versus holistic modes of thought, and such. Here, I focus on two studies they reviewed as examples of points I want to make that are applicable to most, if not all, the research cited.

   In one study (Kitayama, Markus, Tummala, Kurokawa, & Kato, 1990), American and Indian students made similarity judgments between themselves and others. In previous research, Markus and Kitayama (1991) write, Americans perceived themselves as more dissimilar to others than they perceived others to themselves. In their study, Kitayama *et al*. (1990) indeed found this pattern to be true of American participants. The pattern, however, was reversed (albeit nonsignificantly) for the Indian participants. Markus and Kitayama (1991) suggested that individuals with a Western background, supposedly with independent selves (i.e., the Americans) consider self-knowledge to be more distinctive and elaborated than knowledge of others; individuals with interdependent self-construals (i.e., the Indians), however, consider knowledge about others to be more elaborated and distinctive than knowledge about the self.

   Markus and Kitayama (1991) also reviewed a study by Cousins (1989) in which American and Japanese participants completed the Twenty Statements Test (TST), describing themselves in relation to the question ''Who am I?'' In one version, respondents answered questions about themselves in general, and in a modified version, in relation to themselves in specific contexts, such as at home, with friends, or at school. On

the context-free TST, Americans endorsed a greater proportion of psychological attributes about themselves than did the Japanese. When context was specified, however, the Japanese endorsed a higher proportion of psychological attributes about themselves than did the Americans. Markus and Kitayama (1991) concluded that the context-free version of the TST was most salient for the Americans (with independent self-construals), because "selfness, pure and simple, seems to transcend any particular interpersonal relationships" (p. 233). The Japanese, however, were more willing to describe themselves abstractly once a context was specified because individuals with interdependent self-construals are more accustomed to thinking about themselves in specific social situations.

A critical examination of these and other studies they cited suggests there is a basic flaw in the translation of the logic underlying the studies to that underlying their theory. In every study they cited, two or more countries were compared on some psychological variable; that is, country was the independent variable, while the psychological variables (e.g., self–other similarity ratings, TST responses, etc.) were the dependents (see Figure 1, bottom). Strictly speaking, therefore, *country* differences were observed. In the two studies described above, for example, American versus Indian differences were observed in the first, while American versus Japanese differences were observed in the second.

If you compare the logic underlying the studies to that underlying their theory, the reason why the studies do not directly offer evidence in support of their theory becomes quite clear (Figure 1). Their theory suggests that culture, in the form of values, norms, opinions, beliefs, behaviors, and the like, affects the self-construals of its members; self-construals, in turn, have cognitive, emotional, and motivational consequences. The studies, however, merely demonstrate countries' differences on various outcomes. Interpretations of these studies as evidence in support of their theory, therefore, are unwarranted because the studies do not address the important characteristics of their theory. In fact, these studies can only be interpreted as supporting their theory *if and only if* two assumptions are accepted:

1   that the countries tested are associated with the underlying self-construals;
2   that the specified self-construals are associated with the hypothesized cognitive, emotional, and motivational consequences.

In addition, there are two additional assumptions if one is to link the self-construals with meaningful dimensions of cultural variability, which serve as the platform for the development of the self-construals in the first place:

3   that the countries tested are associated with the underlying cultural dimensions necessary for the development of the self-construals; in the Markus and Kitayama (1991) framework, this cultural dimension is IC;
4   that the cultures underlying the countries are associated with the specific self-construals.

(Although one may interpret these latter two assumptions as unnecessary to their theoretical framework in a strict sense, I choose to include them as crucial components of their theory for several reasons. First, it is clear from their presentation that culture provides the milieu within which self-construals develop; different cultures, therefore, lead to different self-construals. Second, assumptions about the interaction of culture and self are integral to their theory of mutual constitution, which is a cornerstone of their approach, and is captured by the term "cultural psychology." Third, most students of culture equate independent and interdependent selves with individualism and collectivism, respectively.)

Thus the only way to interpret the findings from the U.S.–India comparison as supportive of their theory is to assume that (1) Indian culture is collectivistic, and American

culture is individualistic, (2) Indians have interdependent self-construals, and Americans have independent self-construals, (3) collectivism is related to interdependent self-construals in India, while individualism is related to independent self-construals in the U.S., and (4) differences in the ratings occurred because of differences in the specified self-construals. Neither psychological culture nor self-construals were measured; thus one can never be sure that the differences occurred because of the mechanisms which Markus and Kitayama (1991) proposed. The only way to accept the findings as supportive of their theory is to accept these crucial assumptions about the nature of the samples and the data.

The same was true for the American–Japanese comparison described above. The only way to interpret these findings as supportive of their theory is to assume that (1) Japanese culture is collectivistic, and American culture is individualistic, (2) Japanese have interdependent self-construals, and Americans have independent self-construals, (3) collectivism is related to interdependent self-construals in Japan, while individualism is related to independent self-construals in the U.S., and (4) differences in the ratings occurred because of differences in the specified self-construals. Again, because neither culture nor self-construals were actually measured, there is no way to accept the findings as supportive of their theory *unless* one accepts these assumptions.

The field's blind acceptance of such drastic assumptions about culture is a problem. Merely assuming that American samples are individualistic and that Japanese samples are collectivistic, without actually demonstrating these differences empirically, is tantamount to allowing cultural stereotypes to guide theory and research. If we are to empirically demonstrate the validity of core beliefs underlying our theories and research, then assumptions of such crucial aspects of our theories and studies cannot be merely accepted as "truth". If we accept stereotypic assumptions about cultures, countries, and self-construals, then we might as well not do the study and assume the findings, too. If, however, we are to do science well, assumptions about crucial elements of the research and of the theory need to be made explicit and formally tested.

If one were to truly design a study that tested the crucial tenets of such a theory, it would need to achieve the following:

1 samples from two or more cultural groups would be included;
2 the culture underlying the samples needs to be measured;
3 the self-construals of the individual participants need to be measured;
4 cultural differences between the groups would need to be tested in order to show that they differ culturally in the predicted direction;
5 self-construal differences between the countries would need to be tested in order to show that the groups differ in the predicted direction;
6 the self-construals would need to be correlated with the culture scores for each group so that we know that the self-construals are related to the cultures underlying the samples;
7 the self-construals would need to be correlated with the dependent variables in order to demonstrate that cultural differences occurred because of differences in self-construals.

No study they cited did these.

This is not a problem solely for Markus and Kitayama (1991); it rings true for much of the field. Thus this critique is not levied only against their approach, but against the same approach adopted by others, and against the field's unquestioned acceptance of such approaches. That we have been lax to examine objectively and critically the relationship between theory and data is no reason to accept this theory of culture and self-construals. Without data, we run the risk of obvious cultural stereotypes playing a large role in the

interpretation of evidence, and the lack of necessary tests of assumptions. Not one study presented by Markus and Kitayama (1991) demonstrated the necessary links suggested in their theory. Strictly speaking, therefore, they provided no evidence that unequivocally supported their contentions.

Studies that do examine their assumptions

Even though the studies which Markus and Kitayama (1991) cited did not directly test the assumptions crucial to their theory, other studies have. If they show that American culture is individualistic and that Americans have independent self-construals, while the Japanese and Indian cultures are collectivistic and their members have interdependent self-construals, one may relatively safely accept the results of the studies which Markus and Kitayama (1991) cited as evidence in support of their theory, if one is willing to accept the assumptive links provided by "other" evidence. Certainly, these stereotypes are widely held by the field and lay public alike. References to Japanese collectivism and American individualism, for example, are so numerous that they defy listing. (I will focus almost exclusively on American–Japanese comparisons for the remainder of this paper, both because of the wealth of studies comparing these two countries and because of the prominent place such comparisons played in Markus and Kitayama's work.) That the Japanese culture is collectivistic while the American culture is individualistic appears to be a given "truth" that has become accepted by the field, and certainly by Markus and Kitayama (1991).

Contemporary psychological research that has directly tested this notion, however, unequivocally refutes it.

Studies examining IC differences between the U.S. and Japan. In the past decade and a half, numerous studies have actually measured IC in samples from both countries. These studies are important because they reduce the reliance on cultural stereotyping and empirically test the cultural nature of samples. Takano and Osaka (1997), for example, reviewed ten studies comparing American and Japanese regarding IC differences (Asai, 1987; Bond & Smith, 1996; Hofstede, 1980; Kashima, Yamaguchi, Kim, & Choi, 1995; Leung & Iwawaki, 1988; Triandis, Bontempo, Villareal, & Asai, 1988; Triandis, McCusker, Betancourt, & Iwao, 1993; Yamagishi, 1988a, 1988b; Yamaguchi, Kuhlman, & Sugimori, 1995). Two studies on conformity and five questionnaire studies found no differences between the two countries. Two experimental studies on cooperation and one questionnaire study found that Japanese were more individualistic than Americans. Moreover, several of the questionnaire studies used measures of IC that have considerable reliability and validity data (such as Triandis' multimethod assessment). The only study to report the Japanese as more collectivistic than Americans was Hofstede's (1980). In this study, however, individualism was defined without a collectivistic component, and Takano and Osaka (1997) raised doubts concerning the validity of this measurement.

Other studies give the same results. Matsumoto, Kudoh, & Takeuchi (1996), and Matsumoto, Weissman, Preston, Brown, & Kupperbusch (1997), for example, used their Individualism–Collectivism Interpersonal Assessment Inventory (ICIAI) to assess IC tendencies in the U.S., Japan, Russia, and South Korea. The Japanese scored higher on individualism and lower on collectivism than did the Americans. The same result was also obtained in two studies by Gudykunst, Gao, Schmidt, & Nishida (1992), and Gudykunst, Matsumoto, Ting-Toomey, & Nishida (1996).

Carter and Dinnel (1997) administered Yamaguchi's (1994) collectivism scale, Triandis' collectivistic values index (Triandis, McCusker, & Hui, 1990), Singelis' (1994) self-construal scale, and a host of individual and collective self-esteem measures to American and Japanese participants. The Japanese were more individualistic and had more independent self-construals than did the Americans. There were also no differences between the countries on collective self-esteem. In the same light, Arikawa and Templer (1998) administered Yamaguchi's collectivism scale and a social context scale to American and Japanese university students. Contrary to expectations, the Americans scored higher than the Japanese on both scales.

Stephan, Stephan, Saito, and Morrison Barnett (1998) asked American and Japanese students to complete Triandis *et al.*'s (1988) IC scale that consisted of three subscales: Self-Reliance/Competition, Concern for the Ingroup, and Distance from the Ingroup. The participants also rated their perceived comfortableness in expressing emotions, and pleasantness in experiencing them. The Japanese scored lower than the Americans on the Distance from Ingroups scale, which would be predicted if the Japanese were more collectivistic. The Japanese, however, also scored higher on the Self-Reliance/Competition scale, and lower on the Concern for the Ingroup scales, both of which are contrary to that expectation. Item analyses confirmed these results: there were no differences on 8 items; Japanese scored significantly less collectivistic on 11 items, and the Americans were less collectivistic on 12 items. In addition, the Japanese participants "gave less collectivistic answers to virtually every in-group item about sharing or helping, including items regarding parents" (p. 735).

Bell, Bell, Nakata, and Bell (1996) administered a brief questionnaire assessing individuality, connection, and health to American and Japanese male and female adults and children. These variables were selected because of their association with supposed dominant cultural values related to IC. Bell *et al.* (1996) concluded that

> the most remarkable finding may be the high degree of similarity among the two country cultures. There was a broad agreement that both connection and individuality are important in healthy families. For the adults, two out of the three items measuring individuality ... and two out of the three items measuring connection ... showed no significant differences between countries .... Furthermore, the top three items, judged by the adults to be the three most important qualities in a health family were the same for men and women, Japanese and Americans. (pp. 290–291)

Finally, Ohbuchi, Hayashi, and Imazai (in press) asked employees of businesses in Japan to rate their experiences of conflicts with their supervisors in terms of goals, tactics, and outcomes. The findings indicated that the employees generally wanted to achieve collectivistic goals more strongly than individualistic goals. Fairness goals, however, thought to be more individualistic, increased confrontational tactics. Achievement of fairness goals significantly determined the employee's satisfaction with the outcomes of conflict, but collectivistic goals did not.

Thus, of the 18 studies that I know of which formally tested IC differences between the U.S. and Japan, 17 provide little or no support for the stereotypic contention of American individualism and Japanese collectivism. In addition, the single study that does provide such support has been questioned in terms of validity and reliability in its instrument (there are also questions about the nature of the sample – male businesspersons who were employed by a particular multinational corporation), and about its timing (the fact that data were collected

in the 1960s). Moreover, there are a number of internal surveys conducted within Japan that indicate the same (two are reviewed in Matsumoto *et al*., 1997), as well as unpublished reports that have little chance of being published because they are inconsistent with the mainstream, albeit incorrect, view. The evidence available to date, therefore, overwhelmingly indicates that the Japanese are not more collectivistic than Americans; if anything, in some cases the Japanese are more individualistic than Americans. Thus, these differences cannot possibly account for differences in self-construals between the two countries as typically hypothesized by Markus and Kitayama and others. To the extent that this link is an integral part of their theory, the evidence to date does not support it.

Why does the cultural stereotype of American individualism and Japanese collectivism persist? First, Japanese culture and society may have been more collectivistic in the past than now, as evident in the writing of Japan scholars both in recent history (e.g., Benedict, 1946; DeVos, 1986; Dore, 1967; Hearn, 1894; Lebra, 1976; Miyanaga, 1991; Nakane, 1970; Reischauer, 1988) and earlier. Japanese collectivism may have had its roots throughout history in at least three sources: religion, particularly in Shinto and Buddhist teachings; the agricultural basis of the country in relation to the land mass and resources available for farming; and the military code (*bushido*). All have been a part of Japanese culture for centuries, and all have a strong collectivistic component to them. Additionally, not only do non-Japanese scholars of Japan come to believe in Japanese collectivism; Japanese scholars of Japan themselves, and the Japanese in general, want to believe in Japanese collectivism, despite what may exist in reality.

Culture, however, is not a static entity; it is ever-changing and dynamic, in constant flux because of several factors. Two of these are affluence and the availability of resources. Japan has surely seen many drastic changes in affluence and resource availability from the end of World War II until now. It is not surprising that such changes bring with them a change in culture. Population density also influences culture. While the land mass of Japan has not changed, technological advances (e.g., cellular phones, walkman, etc.) have introduced psychological distances between people functionally. These changes may allow for Japanese culture and society to be less collectivistic and more individualistic than in the past.

Changes in Japanese culture over time were suggested by the second study of Matsumoto *et al*. (1996), in which Japanese university students' responses on the ICIAI were compared with responses by Japanese working adults over the age of 40. The working adult sample was clearly more collectivistic than both Japanese and American university students. Such data, of course, are not definitive, especially because of the time cohort confound in cross-sectional samples. They are, however, suggestive of changing trends in Japanese culture.

Of course, all of Japan has not totally abandoned collectivism; there are a good deal of collectivistic tendencies that remain at all levels and all ages, including the universities. The culture is, however, in flux, which is primarily evident in the younger generation. Such changes are also evident in the American culture, and characterizations of American individualism void of collectivistic tendencies are also mistakes. The problem for the Markus and Kitayama (1991) theory is that *the university student samples that are typically used to document country differences in cognitive, emotional, or motivational phenomena are not associated with the assumed differences in IC between the countries*. The evidence, therefore, does not support the logic underlying this aspect of their theory.

Studies examining self-construal differences between the U.S. and Japan. Another assumption which Markus and Kitayama (1991) made was that Americans have

independent self-construals, while Japanese have interdependent self-construals. To be sure, one methodological limitation that precluded the studies cited by Markus and Kitayama (1991) from actually measuring self-construals was the lack of a valid and reliable measure to do so. Without one, researchers were left only to speculate about the nature of those self-construals, as Markus and Kitayama (1991) did. Singelis and his colleagues (Singelis, 1994; Singelis & Sharkey, 1995), however, have developed such a measure, no doubt in large part sparked by the Markus and Kitayama (1991) theory, and have used it in two studies testing self-construals of different ethnic groups in Hawaii. In both studies, Asian Americans were more interdependent than Caucasian Americans, while Caucasian Americans were more independent than Asian Americans. These findings are consistent with Markus and Kitayama's claims concerning Asian and non-Asian differences in self-construals (assumption #1 above), albeit among ethnic groups within the U.S. (which is also a limitation of these findings; it may be that Asian Americans have interdependent self-construals while native Japanese do not).

Despite these positive preliminary findings, however, there are numerous studies to indicate that Americans and Japanese do not differ in their self-construals in the expected directions. For example, Gudykunst *et al.* (1996) administered self-construal items drawn from various scales (including the Singelis scales) and personality scales to university students in the U.S., Japan, Korea, and Australia. There were no differences between independent or interdependent self-construals between the U.S. and Japan, nor were there differences between IC values between the two countries.

Dinnel and his colleagues have conducted a series of studies comparing Americans and Japanese, all of them using the Singelis scales, and all of them challenging the Markus and Kitayama contentions. Kleinknecht, Dinnel, Kleinknecht, Hiruma, and Harada (1997), for instance, found that there were no differences on independent self-construals; and the Americans actually had significantly higher interdependent self-construal scores than the Japanese. Dinnel and Kleinknecht (1999) found that while Americans had higher independent self-construal scores, there were no differences in interdependent self-construals. Carter and Dinnel (1997) found that Japanese were actually more independent than Americans.

Likewise, Kim, Hunter, Miyahara, Horvath, Bresnahan, & Yoon (1996) administered two scales to assess self-construals – the Ego Task Analysis Scale and the Singelis scales – to respondents in Hawaii, the mainland U.S., Japan, and Korea. While the U.S. had significantly higher independent self-construal scores than the Japanese, there was no difference between the countries on interdependent self-construals. These findings complement studies within Japan by independent researchers contrasting different groups of Japanese students, indicating that some groups of students give higher priority to independent self-construals rather than interdependent self-construals (Kiuchi, 1996; Miyanaga, 1991). Similar findings are also reported by Kashima *et al.* (1995), and Endo, Heine, and Lehman (1998).

Findings from studies that test other supposedly collectivistic groups also challenge the Markus and Kitayama (1991) position. Stephan, Stephan, and deVargas (1996) administered an independence–interdependence scale designed and used by Kitayama *et al.* (1990) to university students in the U.S. and Costa Rica. This scale produces four subscales: maintaining self–other bonds, self-knowledge, concern with others' evaluations, and self–other differentiation. There were no differences on two of the subscales. The Americans did score higher on the independence subscale measuring self-knowledge; the Costa Ricans, however, scored lower on the interdependence subscale measuring maintenance of self–

other bonds. Similar non-findings have been reported with other cultural groups supposedly differing on individualism and collectivism (e.g., Chang, Lee, & Koh, 1998; Dabul, Bernal, & Knight, 1995; Watkins & Regmi, 1996). These findings seriously challenge the propositions offered by Markus and Kitayama (1991), and collectively indicate that *there is no evidence to support the claim that individualistic and collectivistic cultures are associated exclusively or relatively more with the two self-construals in the directions predicted by Markus and Kitayama (1991)*.

Studies that attempt to link culture and self-construals with psychological outcomes. The strongest test of Markus and Kitayama's (1991) claims involves studies where IC values and independent and interdependent self-construals are measured in the same group of subjects from at least two different countries, in addition to measures of various psychological outcomes. Such a study was reported by Gudykunst *et al.* (1996), who examined communication styles in the U.S., Japan, Korea, and Australia. There were significant between-country differences on the communication styles. The between-country differences on IC cultural values, however, and on independent versus interdependent self-construals, were not in the direction predicted by the researchers or by Markus and Kitayama (1991). Therefore, there is no way that these variables could account for the country differences. In fact, the researchers opted not to test for between-country differences for this reason. While subsequent multivariate analyses of covariance on the communication styles using country as the independent variable and either cultural values or self-construals as covariates indicated significant covariate effects, the multivariate and univariate effects for country were still large and substantial, indicating that the differences between countries could not be accounted for by individual-level relationships between the self-construals and the dependents.

Kim *et al.*'s (1996) study on communication styles also provides evidence against Markus and Kitayama's (1991) claims. Participants in the U.S., Japan, Korea, and Hawaii completed two self-construal scales, and rated the perceived importance of conversational constraints in six situations. Although the differences in interdependent self-construals were significant across the four groups, these differences were minimal and not in the direction predicted. There were no differences between Korea, Japan, and the U.S.; participants from Hawaii had significantly higher scores on this self-construal than did the other three groups (this finding also argues against the notion that the Singelis studies support the Markus and Kitayama claims). Thus, between-group differences on the communication styles could not be attributed to differences on this self-construal. Although the authors subsequently built a path model involving cultural effects on self-construals, and subsequently on communication restraints, the model was only successful after the authors operationalized culture according to self-construal scores, which is essentially a tautology.

Carter and Dinnel's (1997) study provides similar evidence in the domain of self-esteem. American and Japanese students completed a collectivism scale, a collectivistic values index, a self-construal scale, an achievement motivation scale, the Rosenberg self-esteem scale, and a collective self-esteem scale. There were significant differences between the two countries on self-esteem. Contrary to prediction, however, Americans scored higher than the Japanese on both the Rosenberg as well as the collective self-esteem scales. Moreover, because Americans endorsed more collectivistic values than did the Japanese, and because Japanese had higher independent self-construal scores, there is no way that their data could suggest that culture, self-construal, and self-esteem are related in the ways in which Markus and Kitayama (1991) would suggest.

Dinnel and Kleinknecht (1999) administered the Singelis self-construal scales, along with measures of social phobia, and two measures of social interaction anxiety to large samples of American and Japanese students. In attempting to predict the two measures of social interaction anxiety, these researchers computed a hierarchical multiple regression, using self-construal scores, culture (dummy coded by country), and the interaction between culture and self-construal in three steps, respectively. In this analysis, the interaction term represents Markus and Kitayama's claims concerning the differential effects of culture on self-construals. While self-construals and culture independently predicted social interaction anxiety, however, the interaction did not in either analysis.

Finally, Endo, Heine, and Lehman (1998) asked participants in Canada and Japan to complete measures that assessed relationship-serving biases, self-enhancement (self-serving biases), and self-esteem. Both groups of subjects viewed their own relationships as more positive than those of their peers, and to roughly the same extent (i.e., they exhibited relationship serving bias). Some between-country differences were observed in specific types of relationships; but neither self-enhancement nor self-esteem was significantly correlated with these biases. If one accepts measures of self-enhancement to be indicative of self-construal typologies (as suggested by Markus and Kitayama, 1991), these findings suggest that self-construal does not mediate these types of ratings, despite between-country differences in them.

The studies reviewed in this section indicate that there is no evidence to support the validity of Markus and Kitayama's (1991) claims concerning the role of independent versus interdependent self-construals mediating between country/culture differences in psychological outcomes. When considered in conjunction with the studies cited in the first two sections above, and with other studies that challenge stereotypic cultural differences (e.g., Aune & Aune, 1996; Stephan *et al.*, 1996; Yan & Geier, 1994), I can come to only one reasonable conclusion. *The evidence available to date severely challenges the validity of their theoretical framework for explaining observed national differences in psychological phenomena.*

Implications for the theory of independent versus. interdependent self-construals

There are several potential interpretations that one may make based on the evidence described above, and I discuss some of them below.

Possibility 1: The studies cited above are flawed

One possible interpretation is that the studies cited above are flawed, and that the measures do not represent the constructs intended by the Markus and Kitayama position, especially in relation to the measurement of IC and self-construals. If the measurement of either of these constructs was not valid, or if they were not as originally intended by Markus and Kitayama, then one may argue that the findings from those studies may not be applicable to their theory.

This argument, however, is extremely difficult to defend. Different researchers independently used multiple methods of assessing both IC and self-construals. While some methods may have been designed specifically for that study, a number of studies used methods that have been well validated in other research (e.g., the Triandis IC scales,

Matsumoto's IC scales, Yamaguchi's collectivism scale, Singelis' self-construal scales, etc.).

One may also argue that the IC cultural milieu discussed by Markus and Kitayama is not captured solely by individual-level assessments of psychological representations of culture. However, this argument holds no water because of the validation studies that demonstrate correlations between these measures and other cultural indices of IC. In addition, not all of the studies reviewed above used such questionnaire methods; behavioral studies were included as well that produced the same types of findings.

Arguments suggesting the invalidity of the studies presented earlier are too contentious, given the fact that multiple researchers working independently, and using a variety of methods, produced essentially the same pattern of findings. Arguing against the validity of one or a few studies may be warranted; in this case, however, the evidence is rather overwhelming.

Possibility 2: The crucial assumptions underlying the Markus and Kitayama theory are not true

Given that it is too difficult to argue away the rather convincing evidence to the contrary, one must entertain the possibility that the crucial assumptions underlying the theory of independent versus interdependent selves are not valid. That is,

1   IC may not account for the cultural differences that produce differences in self-construals, at least in contemporary studies of Americans and Japanese;
2   Independent versus interdependent self-construals may not account for American–Japanese differences in psychological phenomena.

To be sure, neither of these possibilities necessarily suggests that the general model underlying the Markus and Kitayama approach (Figure 1, top) is incorrect. Culture on the social, institutional, and individual level may very well influence individual self-construals in different ways, and these self-construals, in turn, may influence cognitions, emotions, and motivations. It may just be that IC is not the cultural dimension that can explain those differences, at least between U.S. and Japan, and that independent versus interdependent self-construals are not the type of self-construals that can explain cross-national differences in behavior.

If IC cannot explain American–Japanese cross-national differences in psychological phenomena, then what dimension can? Certainly, there are other potential dimensions that need to be considered, such as Hofstede's (1980, 1984) power distance, uncertainty avoidance, and masculinity, Pelto's (1968) tightness versus looseness, Hall's (1966) contextualization, and the like. We also need to incorporate possibilities we traditionally don't consider, such as socioeconomic differences, religion, and other demographic variables that blur the boundary between culture, society, and individual. Alternatively, we may consider a refinement of the IC construct itself, especially in relation to its possible interactions with other cultural, social, demographic, institutional, and political dimensions in influencing self-construals and behaviors.

Of course, improving our conceptualizations of culture is one thing; developing methods to validly and reliably assess them is another. Still, despite the difficulty in doing so, it is a task that must be done, and research in the future must explicate and formally test the assumptions about culture underlying any cultural theory that attempts to explain cross-national or cross-group differences in psychological behavior.

If independent versus interdependent self-construals are not the type of self-construals that can explain American–Japanese cross-national differences in behavior, then what can? Fortunately, the field has made substantial progress in our knowledge of the nature of self-cognitions, due in no small part to the original Markus and Kitayama (1991) claims. In particular, although the theory of independent versus interdependent selves has often been presented as mutually exclusive dichotomies, conceptualizations of the self in the past decade or so have increasingly incorporated the view that culturally bound cognitions related to the self are multi-faceted – activated some of the time and dormant at others. While this view is different from Markus and Kitayama's (1991), it is, at the same time, the result of an evolution of ideas that received an important boost from their theory. Triandis (1989), for example, distinguished between the private, public, and collective selves, proposing that culture affects the relative development of these selves. Guisinger and Blatt (1994) suggest that evolutionary pressures of natural selection aided the development of two basic developmental approaches, one involving self-definition, the other focusing on interpersonal relatedness. They contend that these dual processes are not mutually exclusive; rather, they are fundamentally intertwined, as the development of a mature sense of self in one aspect is dependent partially on the development of a mature self in the other. Niedenthal and Beike (1997) focused on the level of cognitive representation, proposing the existence of interrelated and isolated self-concepts. Writing that ''some concepts derive their meaning through mental links to concepts of other people, whereas other concepts of self have an intrinsic or cognitively isolated characterization'' (p. 108), they suggested that individuals represent the self with a variety of more or less interrelated structures at any one time, and that any single person can have separate interrelated and isolated self-concepts in the same domain. Finally, Hermans and Kempen (1998) argued that

> globalization involves social processes that are complex and laden with tension. These processes fall squarely outside the scope of cultural dichotomies, which by their nature are oversimplifying and insensitive to the apparent tensions that are so typical of the relationships between cultural groups. (p. 1112)

Through a discussion of three factors – (1) increasing cultural connections with subsequent hybridization, (2) the emergence of a world system that implies an interpenetration of the global and the local, and (3) the enlarged cultural complexity as a result of large-scale distribution of cultural meanings and practices – Hermans and Kempen (1998) conclude that research and theories involving cultural dichotomies are based on the assumption that cultures are internally homogeneous, externally distinctive, and geographically located. Instead, they emphasize the relevance of intersystems, mixture, travel, contact zones, and multiple identities.

These recent, complex theories of self have received support in the literature as well. Trafimow, Triandis, and Goto (1991), for example, showed that private and collective self-cognitions are encoded separately in memory, but that both are accessed depending on a prime given in the instructions to the TST. Bhawuk and Brislin (1992) found that people were able to switch between collectivist and individualist modes of self, depending on cultural context. Cross and Markus (1991) found evidence for a bicultural self system. Studies demonstrating multicultural identities also suggest the existence of multiple construals of self in the same individual (e.g., Kosmitzki, 1996; Oyserman, 1993; Oyserman, Gant, & Ager, 1995). Ybarra and Trafimow (1998) also showed that priming of the private

or collective self affects the relative weights of attitudes versus subjective norms in their influence on behavioral intentions.

Thus it may be time to evolve from a dichotomous view of North Americans/Europeans versus Asians/Japanese to one that incorporates similar self-cognition mechanisms in all humans, primed to different degrees by context, culture, and the psychological domain accessed. Contemporary views of self-culture relations suggest that this relationship is much more complex than previously thought, and certainly more complex than a generalized view of self that pits individual and group needs in opposition to each other. Future work will need to allow for the possibility of the simultaneous co-existence of seemingly opposing views of the self that contribute to behavior in differing relative degrees depending on the specific context of behavior and the psychological domain accessed. Such a conceptualization, and its operationalization, may explain cross-national differences between the U.S. and Japan, and other countries as well, better than a dichotomous view of independent versus interdependent selves.

Some ideas about future research in this area

If we are to search for new ways to study culture and self-construals we may need to incorporate alternative methods of measurement, because the methods used to date limited our understanding of the constructs we study. We have come to understand culture only on the level of individual representations, and self-construals solely from the ways in which we can measure them in a questionnaire. We forget that our data are encapsulated, pigeonholed approximations of the more complex psychological phenomena we are trying to capture from real life. If we are to go outside of that box conceptually, we need to go outside of the box methodologically as well. I briefly discuss three issues for future consideration below.

The incorporation of qualitative data

We need to reconsider the use of qualitative data gathered from in-depth interviews with individuals across time, much like the personology studies of the past. Such data will afford us views of the complexity of self-knowledge, its relationship to behaviors, and the influence of the larger sociocultural milieu on that self-knowledge. In particular, we need to use such approaches in areas of the world that have typically been understudied, such as Africa, Southeast Asia, and Latin and South America. These investigations may tell us about self and culture in ways that we cannot even dream of now, and are sure to give us more clues about the complexity of the self in ways that cannot be captured through questionnaire studies of well-examined populations.

We also need to consider the incorporation of extra-individual factors that influence psychological phenomena. To be sure, such approaches already exist in abundance; my suggestion, therefore, is the marriage of such approaches with traditional psychometric approaches. The field can no longer afford to simply adapt and adopt quantitative-based measures, particularly questionnaires, in cross-cultural research in this area. The cultural areas where we know the least about self are the very areas in which such traditionally psychometric approaches are the least likely to be valid. It is particularly in these areas that we may learn much more about culture and self if we don't simply re-create a questionnaire.

Multimethod and cross-domain method development

We need to give more attention to the possibility of creating multimethod systems. I do not refer to systems such as Triandis' (1995) multimethod assessment of IC, which essentially covers different psychological domains. Instead, I refer to the creation of methods that incorporate self-reports, behaviors, and observations on the individual level, while at the same time allowing for the inclusion of extra-individual factors such as economic, religious, demographic, and social variables. We also need to incorporate assessments of multiple psychological domains in our understanding of both culture and self-construals. Given that individuals bring to any context a wide range of psychological constructs – attitudes, opinions, values, self-perceptions, and the like – we need to allow for the possibility that self-representations may differ in each of these areas, and that those differences themselves may differ in different contexts. While this level of complexity is mind-boggling for most of us who wish to deal with single-score assessments of culture or self from a questionnaire, we are at a point where such approaches are becoming increasingly limited.

Issues in data analysis

When dealing with quantitative data, as many of us do, we need to consider three potential areas of improvement. First, we need to utilize more efficiently and productively intercorrelations among similar variables, and among scales of the same construct, within cultural groups. These different within-group intercorrelations should provide researchers with interesting views of the nature of the psychological composition of their samples. These may include intra-individual-level correlations among different measures to assess individual differences. Procedures exist that allow for the significance testing of grouped patterns of correlations, and these techniques need to be used more often.

Second, we need to allow for the use of effect-size-based statistics that go beyond the mere testing of group means through traditional methods (e.g., t-tests, ANOVA). It is entirely possible to obtain significant findings of group differences on ts or Fs despite a 99% overlap in distributions between any two or more cultural groups. Still, given the significant t or F, we mistakenly interpret the group differences as if they were applicable to most of the people in both samples, when in fact they are not.

Finally, we need to utilize techniques that allow for the inclusion of group- as well as individual-level variables simultaneously in predicting dependents. While traditional regression techniques allow for the inclusion of group- and individual-level variables in linear estimation of a dependent, they are essentially treated equivalently. What I am suggesting here is the consideration of statistical techniques that will assess the contribution of group-level variables to specific *relationships* between other independent and dependent variables. Such possibilities exist in techniques like hierarchical linear modeling.

Conclusion

Markus and Kitayama's (1991) theory has played an important role by providing students of culture with a mechanism of explaining national differences when they occur. For years, research has been too concerned with documenting differences without really searching for the variables that mediate those differences. Differences in self-construals are certainly one possible mediator that may explain a lot of cross-national differences, and by focusing on

such mediating variables, we can elevate the level of science in cross-cultural psychology through the specification of the exact mechanisms by which differences occur. This specification speaks to the very heart and core of the definition of culture itself, and it is no doubt because of this overwhelming positive potential that Markus and Kitayama's (1991) theory has been received with such popularity in the literature.

Still, examination of the literature that directly tests the assumptions underlying the Markus and Kitayama theory suggests unequivocally that there is little support for them. The studies reviewed may not be all of the possible studies that have ever been conducted on these topics; yet, even so, their existence itself raises many red flags for the acceptance of the assumptions underlying Markus and Kitayama's (1991) claims.

This review raises many questions about where we collectively go from here. Fortunately, the field is currently evolving in its view of culture and self relations, inspired in no small part by the Markus and Kitayama (1991) approach. These views are innovative, unique, and interesting, and represent the nature of culture and self-related cognitions as qualitatively more complex than previous approaches. If future research is to keep up with, and push, our thinking in a progressive manner, we need to complement our traditional methods of research with new, and old, methods. Alternative approaches should help us to get outside of the box created by traditional methods of doing research and creating theories in psychology. If we can adopt and use such alternative methods, and create models of culture and self that go beyond duality and encompass separate but mutually interrelated ''multalities'' – of similarities and differences, independence and interdependence – and relative flexibility in them, we may be able to continue our evolution in thinking and science in this, and other, important areas of psychology. Such a view of mutual co-existence of seemingly apparent contradictions is a more accurate reflection of an Asian perspective on self than what we currently have available. After all, many squeaky wheels are greased even in Japan, and many nails are pounded down in the U.S.

Acknowledgments

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