Transitory Determinants of Values and Decisions:
The Utility (or Nonutility) of Individualism and Collectivism
in Understanding Cultural Differences

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Abstract

The determinants and effects of cultural differences in the values described by individualism-collectivism were examined in a series of four experiments. Confirmatory factor analyses of a traditional measure of this construct yielded five independent factors rather than a bi-polar structure. Moreover, differences between Hong Kong Chinese and European Americans in the values defined by these factors did not consistently coincide with traditional assumptions about the collectivistic vs. individualistic orientations. Observed differences in values were often increased when situational primes were used to activate 1) concepts associated with a participant's own culture and 2) thoughts reflecting a self-orientation (i.e., self- vs. group-focus) that is typical in this culture. While the values we identified are helpful in clarifying the structure of the individualism-collectivism construct, they did not account for cultural differences in participants' tendency to compromise in a behavioral decision task. In combination, these results raise questions about the utility of individualism and collectivism in characterizing cultural differences in norms and values and in predicting cultural differences in decision making and other behaviors.

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Individualism and Collectivism in Understanding Cultural Differences

Socially learned norms and values provide standards that people use both to

evaluate others' behavior and to guide their own judgments and behavioral decisions. For

this reason, a conceptualization of the norms and values that pervade different societies can

potentially help to predict differences in the social and nonsocial behaviors that predominate

in these societies and to understand why these differences occur. Cross-cultural research is

stimulated in part by the recognition of this possibility.

Culture-related norms and values can vary along a number of dimensions (Chinese

Cultural Connection, 1987; Hofstede, 1980, 1991; Schwartz, 1994; Triandis, 1972, 1989,

1995; see also Choi, Nisbett, & Norenzayan, 1999; Fiske, Kitayama, Markus & Nisbett, 1998;

Heine, Lehman, Peng & Greenholtz, 1999; Markus & Kitayama, 1991). Differences between

Western (e.g., North American and Western European) and East Asian (e.g., Chinese,

Japanese and Korean) cultures have most frequently been conceptualized in terms of

individualism and collectivism (Hofstede, 1980; Triandis, 1989, 1995; Triandis & Gelfand,

1998). Individualism is typified by an emphasis on individual freedom and independence, on

personal goals rather than the interests of a group as a whole, and competitiveness (cf.

Triandis, Bontempo, Villareal, Asei, & Lucca, 1988; Triandis, Leung, Villareal, & Clack, 1985).

In contrast, collectivism is theoretically characterized by the subordination of personal goals to

those of one's ingroup, a motivation to maintain harmony among group members, a reliance

on others for help and advice, and a high degree of social responsibility and sharing. As

these descriptions indicate, the two constructs are multifaceted.

In fact, Ho and Chiu (1994) have identified no less than 18 different dimensions that

could compose a more general construct of individualism-collectivism (e.g., uniqueness vs.

uniformity, self-reliance vs. conformity, economic independence vs. interdependence,

religious heterogeneity vs. homogeneity, etc.). Their analysis suggests that measures of

individualism and collectivism (cf. Triandis, 1991; see also Rhee, Uleman, & Lee, 1996) often

differ substantially in the specific attitudes and values to which they ostensibly pertain.

Nevertheless, such measures are all implicitly assumed to reflect a single underlying

construct. That is, differences along the many distinct dimensions that compose this construct are assumed to covary.

The validity of this assumption is important. If the various components of individualism-collectivism are highly correlated, the construct could be very useful in conceptualizing the determinants of both social and nonsocial behavior. If, on the other hand, these components are relatively independent, the use of the construct to account for cultural differences in judgments and behavior could create more confusion than clarification. In fact, although individualism and collectivism are offered frequently as explanatory variables in cross-cultural theorizing (cf. Hermans and Kempan, 1999), there is little direct evidence that cultural differences in people's behavior in specific situations are attributable to differences in these constructs (but see Wheeler, Reis, & Bond 1989).

There are two other reasons why individualism-collectivism could fail to account for cultural variations in behavior. First, the norms and values that people bring to bear on their behavioral decisions are frequently domain- and situation-specific. As Mischel's (1999; Mischel & Shoda, 1998) conception of personality attests, an individual's behavior can often be quite consistent within a particular social context and yet can vary substantially from one context to another. (For example, a man might be sympathetic and supportive in his interactions with coworkers, but be self-centered and insensitive in his relations with his wife and children.) Analogously, the cultural norms and values that underlie behavior could also be specific to certain types of social situations. To this extent, global indices of individualism and collectivism may not capture the cognitive bases for this situation-specific behavior.

Second, the social knowledge that cultural representatives acquire and use as a basis for behavioral decisions is clearly not restricted to that which aligns with the norms and values that characterize the culture in general. As Trafimow, Triandis, and Gota (1991; see also Hong et al., 2000) point out, people typically acquire a large body of social knowledge that can include both collectivistic and individualistic concepts. Moreover, the particular subset of this knowledge that they bring to bear on a given judgment or decision can depend in part on its relative accessibility in memory at the time. (For theoretical analyses and empirical evidence concerning the effect of situationally-induced differences in knowledge accessibility on judgments and behavior, see Bargh, 1997; Higgins, 1996; Wyer & Srull,

1989.) The norms and values that pervade a given culture may be "chronically" accessible to

its members as a result of the high frequency with which they have been exposed to these

norms and values in the past (For discussions of the determinants and effects of chronically

accessible concepts and knowledge, see Higgins, 1996). However, transitory situational

factors frequently influence the accessibility of previously acquired concepts and knowledge

as well. The effects of these latter, situationally-activated cognitions can sometimes override

the impact of chronically accessible ones (Hong et al., 2000; Oishi, Wyer & Colcombe, 2000).

These possibilities are conveyed in Figure 1. This figure describes the possible

causal relations among one's cultural background, two sets of situational factors that exist at

the time a judgment or decision is made, and two clusters of norms, values and motives

(NVM) that have implications for the judgment or behavioral decision. In the absence of

situational influences, the particular subset of behavior-relevant cognitions (norms, values and

motives) that are activated and applied is determined largely by culture-related factors that

have led these cognitions to become chronically accessible. However, features of the

situational context in which the judgment or decision is made, or other recent experiences,

can also influence the accessibility of these (and other) sets of cognitions. The effects of

knowledge activated by these situational factors could either add to or diminish the effects of

chronically accessible cognitions on behavior.[1]

The present article has three foci. First, we discuss more fully the construct of

individualism-collectivism. In doing so, we provide further evidence that individualism and

collectivism, rather than being opposite poles of a single bipolar dimension, comprise several

components that vary independently of one another. Second, we show that representatives

of Western and Eastern cultures do not consistently differ with respect to the norms and

values that are typically assumed to compose a general construct of individualism vs.

collectivism. Moreover, experimentally increasing the accessibility of concepts associated

with individualism and collectivism does not produce the pattern of effects that a bipolar

conceptualization of these constructs implies.

Third, we consider the impact of both cultural differences in norms and values and

situational factors on a particular type of behavioral decision that has been previously

demonstrated to vary with individuals' cultural orientation, the tendency to compromise in

multi-attribute decision situations (Briley, Morris & Simonson, 2000). This type of decision is obviously only one of many that might be evaluated in terms of these factors. However, it serves to raise questions concerning the utility of considering individualism and collectivism as explanations for cultural differences in decision making and other behaviors.

<div align="center">The Dimensionality of Culture</div>

As we have noted, the personal norms and values reported by individual representatives of a culture do not always reflect those that are proscribed and sanctioned by the culture as a whole. A religious group, for example, might promote certain values and norms (e.g., that birth control is immoral and should not be practiced) that its individual members do not adopt. The tendency for individuals' personal norms and values to conform to those that are proscribed by the society to which they belong may itself vary over cultures (Triandis, 1989).

This possibility is important to keep in mind when conceptualizing cultural differences in individualism and collectivism. These constructs have several components, as noted earlier, and a particular culture might be characterized by a certain configuration of these components. Such a configuration, which might be labeled (e.g.) "collectivistic," could differ from the configuration that characterizes some other, "individualistic" culture. The modal responses of individual representatives of the two cultures might reflect these configurations. Nevertheless, the various components of individualism and collectivism might be uncorrelated among the individual members of each society, and the determinants and effects of these components might likewise be independent.

Two previous studies are worth considering in this regard. First, Rhee, Uleman, and Lee (1996) conducted a factor analysis of a number of different measures of individualism and collectivism developed by Triandis (1991), Hui (1988) and Kim et al. (1994). They found that individualism and collectivism were independent constructs rather than opposite ends of a bipolar continuum. Moreover, the nature of these constructs depended on whether they pertained to kinship relations, to acquaintances, or to people in general. Finally, cultural differences in these constructs were not always consistent with the assumption that cultures were consistently either individualistic or collectivist. For example, European Americans were more individualistic than Koreans in their behavior toward family members but were less

individualistic than Koreans in their behavior toward non-members. While in-group vs. out-group distinctions might explain this finding (see Bond, 1988; Gudykunst, Yoon and Nishida, 1987; Iwata, 1992; Triandis, 1972), it nevertheless reinforces our earlier speculation that the norms and values that characterize different cultures are often domain- and situation-specific.

A series of studies by Triandis and Gelfand (1998) is particularly relevant to the research to be reported. An analysis of a modified version of the Individualism-Collectivism scale developed by Singelis, Triandis, Bhawuk, and Gelfand (1995) yielded four varimax-rotated factors. The authors interpreted these factors as reflecting values along two different dimensions: individualism-collectivism and horizontal-vertical. The latter dimension presumably reflects the extent of respondents' concern with status differences within the groups to which they belong. Similar factors emerged in separate analyses of respondents from both the United States and Korea.

Triandis and Gelfand's (1998) interpretation of these factors as reflecting combinations of values along two bipolar dimensions may be somewhat misleading, however. Specifically, the varimax rotation procedure used in their analyses forces all of the factors extracted to be orthogonal. To this extent, it seems more appropriate to treat the factors identified by Triandis and Gelfand as four distinct constructs that vary independently of one another rather than as bipolar opposites. This conclusion is strengthened by the data to follow.

Components of Individualism and Collectivism (Experiment 1)

To confirm the generality of the conclusions drawn by Triandis and Gelfand's (1998) analysis, we collected two sets of data. First, we administered the Individualism-Collectivism scale they employed (Triandis, 1995) to a sample of 120 college students from the United States and 278 from Hong Kong. The scale was presented in English to both sets of participants with instructions to respond to items along a scale from 1 (strongly disagree) to 5 (strongly agree).

An exploratory factor analysis of these data yielded five varimax-rotated factors, all of which had Eigen values greater than 1.0. These factors, which in combination accounted for 37.5% of the variance, were characterized by the sets of items shown in Table 1. The first three factors correspond closely to those assumed by Triandis and Gelfand (1998) to reflect

horizontal individualism, horizontal collectivism, and vertical collectivism, respectively.

However, a scrutiny of the items composing the factors suggests that they are more clearly

interpretable as indices of the values attached to individuality and uniqueness, emotional

connectedness and sharing, and self-sacrifice motivation, respectively. The remaining two

factors (which in Triandis and Gelfand's study combined to form a single index of vertical

individualism) reflect the values attached to (a) not being outperformed by others in

achievement situations that are not necessarily competitive, and (b) defeating others in direct

competition (i.e., winning) with little or no specific concern for the skill or ability that underlies

this success.

Although these factors correspond fairly well to those identified by Triandis and

Gelfand (1998), it seemed desirable to confirm their validity and reliability on the basis of an

independent sample. To this end, we conducted a confirmatory factor analysis of responses

from 176 Hong Kong and 124 United States university students in which we specified a priori

the items defining each of the five constructs. This analysis, which was conducted using

AMOS structural equation modeling software, included the various paths reflecting the

interrelations among the five constructs. Because the chi-square statistic becomes inflated

for large sample sizes, the fit of the model was inferred from the ratio of its chi-square (277) to

its degrees of freedom (125). This ratio, 2.2:1, is well within Wheaton et al.'s (1977)

suggested guideline for acceptable fit of 5:1 as well as Carmines and McIver's (1981) more

stringent criterion (3:1).

The path model that emerged from this analysis is shown in Figure 2. The

coefficients of all paths from latent constructs to observed variables were significant ($p < .05$)

and in the expected direction. Six of the ten correlations among the five constructs are not

significantly different from zero. To provide a further test of construct independence, we

compared the fit of the above model to a version that excluded the paths between them, thus

imposing an assumption of independence. If this assumption is valid, the fit of the full model

should not be substantially better than that of the independence-imposed model. This was in

fact the case. The difference in the AIC (Akaike information criterion; Akaike, 1973, 1987)

index of the two models (404.9 vs. 460.4 for the full model and independence-imposed model,

respectively) was not significant, $\chi^2(125) = 55.8$, $p > .20$).

Thus, these analyses indicate that the five constructs defined by items in the individualism-collectivism scale employed by Triandis and Gelfand are conceptually distinct, and are independent of one another rather than being opposite ends of bipolar continua. This means that cultural differences are best conceptualized in terms of each of these constructs separately rather than a generalized individualism-collectivism dimension.

Cultural and Situational Differences in Norms and Values

Although the attributes that are typically assumed to convey individualistic and collectivist orientations are uncorrelated, certain cultures might nevertheless happen to be characterized by a configuration of attributes that consistently reflects these orientations. In the two cultures investigated in the present research, however, this did not appear to be the case. Each participant's responses to the items defining each factor were averaged to provide a single score for the factor in question. These scores are shown in the top half of Table 2 for both United States and Hong Kong participants. As might be expected, United States participants attached greater value to individuality and less importance to emotional connectedness and self-sacrifice than Hong Kong participants did. However, United States participants did not significantly differ from Hong Kong participants in the value they attached to winning. Furthermore, they attached significantly less importance than Hong Kong participants to not being outperformed by others in achievement situations. Thus, these aggregated data do not reveal a consistent cross-cultural difference in individualistic and collectivist orientation of the sort that is often assumed to exist between Western and Asian cultures.

Effects of Cultural Salience on Self-Reported Norms and Values (Experiment 2)

One explanation for the apparent inconsistencies in values reported in the preceding study could be that participants were not conscious of their cultural identities at the time they completed the Individualism-Collectivism questionnaire. When people's cultural background is called to their attention, they may be more disposed to espouse the values that predominate in their culture. This disposition could have both a cognitive and a motivational basis. For example, awareness of one's cultural identity could lead to an increase in the accessibility of concepts with which culture-related values are associated. In addition, it could increase the motivation to report values that are considered socially desirable in the culture

with which one identifies. For either or both reasons, participants' responses under conditions in which their culture identity is salient could provide a further indication of the norms and values that pervade the cultures they represent.

Method. To activate concepts associated with Western and Eastern cultures, we used a procedure similar to that employed by Hong et al. (2000). Thirty-five United States university students and 41 Hong Kong Chinese university students participated. They were introduced to the experiment with instructions that several unrelated studies were being conducted. The first study was described as a test of general knowledge. Participants were told that we were interested in how well individuals can identify certain important persons, objects or events and can estimate the time period with which they are primarily associated. On this pretense, participants were given 6 pictures or drawings. In the American priming condition, the pictures portrayed an American flag, a 1920s dance scene, a Dixieland band, Marilyn Monroe, Superman and Abraham Lincoln. In the Chinese priming condition, they portrayed a Chinese dragon, the Great Wall, a girl playing a traditional Chinese musical instrument, two persons writing ideographs, an actor from a Chinese opera, and the Monkey in a famous Chinese novel ("Journey to the West"). Participants in each condition were asked to identify the picture's referent and to indicate the approximate period of time in which the referent first existed (or, if fictitious, the time it was first created). After performing this task and two other, unrelated ones, participants completed the Individualism-Collectivism scale (Triandis, 1995), responding to each item along a scale from −3 (strongly disagree) to 3 (strongly agree).

Results. Pooled over priming conditions, the cultural differences in values observed in the present study were virtually identical to those identified in Experiment 1. This can be seen from the bottom half of Table 2. Because the response scales used in the two studies differed, direct comparisons of these data with those in the earlier study are difficult. Except for the value attached to winning, however, the direction of the differences in values reported by United States and Hong Kong participants were the same.

Cultural differences in values were nevertheless expected to be more evident when participants were primed with symbols that exemplified the culture to which they belonged than when they were primed with symbols of a different culture. This was generally true.

Table 3 shows the values reported by both United States and Hong Kong participants as a function of whether the priming stimuli to which they were exposed were associated with their own culture or a different one. The cultural difference in the value attached to emotional connectedness and sharing was small and nonsignificant in both priming conditions. However, the tendencies for United States participants to attach greater value to individuality and less value to self-sacrifice than Hong Kong participants were both more pronounced when one's own culture was primed than when a different culture was primed. Thus, the cultural difference in values observed in the previous study (Table 2) was only evident in the present study when concepts associated with participants' own culture were activated. This contingency suggests that concepts activated by symbols of a different culture interfered with the effects that were otherwise evident.

The effects of priming on cultural differences in achievement-related values are more striking. When their own culture was primed, Hong Kong participants attached substantially greater importance than United States participants both to winning and to not being outperformed by others in noncompetitive achievement situations. These differences disappeared, however, when participants were exposed to symbols of a culture other than their own. The interactive effects of cultural background and priming were significant in analyses of values associated with both not being outperformed by others ($F[1,72] = 9.08$, $p < .01$) and winning ($F[1,72] = 4.14$, $p < .05$).

In summary, these data confirm that the values espoused by Americans and Hong Kong Chinese do not consistently differ in the way implied by typical conceptions of individualism and collectivism. In particular, although Americans value individuality and uniqueness somewhat more than Chinese do, they also attach less importance to not being outperformed by others in achievement situations, and may also attach less value to winning in direct competition. Furthermoore, these cultural differences are only pronounced when concepts associated with participants cultural backgrounds are easily accessible in memory and are not offset by other concepts that are temporarily activated by the situation at hand. When concepts associated with a different culture are activated, for example, cultural differences in values may be obscured as such concepts are often not consistent with cultural inclinations.

An alternative interpretation. It should be noted that the tendency of culture-consistent primes to cause greater differences across cultures in values than primes that were not culture-consistent could have an alternative cause. These results could simply be attributable to the independent and additive effects of (a) culture-related values linked to chronically accessible concepts (as reflected generally in participants' cultures) and (b) more transitory concepts, and associated values, activated by the priming stimuli. (For evidence that chronically accessible and situationally-activated concepts have additive effects on judgments to which the concepts are relevant, see Bargh, Bond, Lombardi, & Tota, 1986.) If both United States and Hong Kong Chinese participants are knowledgeable about the values that pervade both Western and Asian cultures, exposure to cultural symbols may have activated similar concepts and values in each cultural group. The effects of these situationally-activated concepts might add to the effects of chronically accessible ones when their implications were similar, but might offset the effects of chronically accessible concepts when their implications differed. Although this alternative interpretation should be kept in mind, it does not compromise the general conclusion that the individualist and collectivist orientations are not necessarily good gauges of culture-related values.

Attention to Self as an Individual vs. Self as Part of a Collective (Experiment 3)

Individualism is typically characterized by an emphasis on oneself as an independent social being, whereas collectivism is characterized by a focus on oneself as part of a larger collective (Hofstede, 1980, 1991; Triandis, 1989, 1995). As noted earlier, however, people often have formed concepts associated with both of these self-perceptions, but can be distinguished due to the relative accessibility of each type of concept. If this is so, values associated with these orientations might be activated by stimulating participants to think about themselves in one of these particular ways (for evidence that the relative accessibility of these different self-conceptions can be experimentally manipulated, see Trafimow, Triandis, & Goto, 1991).

To stimulate such thinking, a sentence-construction task similar to that employed by Srull and Wyer (1979, 1980) was used. Specifically, we told participants that we were interested in how people form meaningful English sentences. Under this pretext, they were given a series of items each consisting of four words in scrambled order. The instructions

indicated that two different 3-word sentences could be formed from the words in each set, and that they should underline the three words that composed the first sentence that came to mind.

Some participants are asked to construct sentences that refer to themselves as a single individual (e.g., statements referring to "I," "me," etc.), whereas others are asked to construct sentences that refer to themselves as part of a group (e.g., sentences referring to "we," "us," "our," etc.). The first procedure should dispose participants to think of themselves as independent beings and, therefore, to activate concepts associated with this orientation. Correspondingly, the second procedure should dispose them to think of themselves as part of a group and to activate related concepts. Thus, the values associated with these different orientations should be activated in the two priming conditions.

The effects of priming self-relevant concepts may be evident regardless of the cultural background of the participants involved. However, it was unclear a priori whether these effects would override culture-based dispositions to think about oneself as an individual vs. part of a collective (Markus & Kitayama, 1991). If cultural differences exist in the tendency to think of oneself as an independent being as opposed to part of a collective, activating concepts that are consistent with these chronic culture-related dispositions should increase the effects of these dispositions in much the same way that activating culture-related concepts does (see Experiment 2 and Table 3). By the same token, activating dispositions to think of oneself in ways that differ from chronic, culture-based tendencies might decrease or eliminate cultural differences in values what might otherwise be apparent. Experiment 3 examined this possibility.

Method. College students from both the United States ($\underline{n}$ = 33) and Hong Kong ($\underline{n}$ = 29) participated at their respective universities. Participants first performed a sentence-construction task that consisted of 35 4-word stimulus items. Two alternative 3-word sentences could be formed from each item. The behavior and attributes described in the sentences had few if any implications for values associated with either individualism or collectivism. However, in individual-self conditions, the sentences constructed from 14 of the items required the use of a first-person singular pronoun (e.g., "bought I it them," "read me speak to"), whereas in collective-self conditions, they required the use of a first person-plural

pronoun ("bought we it them," "read us speak to"). Participants were told to complete the test as quickly as possible. After completing this and two unrelated tasks, they completed the Individualism-Collectivism scale.

Results. Table 4 shows the values reported by both United States and Hong Kong participants under each priming condition. Although priming "I" and "we" had little influence on the value attached to emotional connectedness, it had appreciable effects on other values. When participants were primed to think of themselves as individuals rather than part of a group, they attached relatively greater value to individuality and uniqueness (1.29 vs. 0.80), greater value to winning (0.39 vs. -0.12), and less value to self-sacrifice (0.26 vs. 0.54). Pooled over United States and Hong Kong participants, only the first of these differences approached significance, $F(1,58) = 3.44$, $p < .07$. However, the differences were similar in direction in both participant groups and were significant in two of three cases in analyses of Hong Kong participants alone.

In contrast, the effect of priming on the value that American and Hong Kong participants attached to outperforming others differed not only in magnitude but direction, as evidenced by an interaction of priming and cultural group, $F(1,58) = 5.38$, $p < .02$. Specifically, Hong Kong participants attached greater importance to not being outperformed by others when they had been primed to think of themselves as independent individuals. American participants, however, attached greater importance to not being outperformed when they had been primed to think of themselves as part of a group.

Evidence suggesting that Westerners and Asians differ in their chronic dispositions to think about themselves as independent individuals vs. part of a group (Markus & Kitayama, 1991) can be used to interpret these data. If this is so, experimentally activating concepts that are consistent with these dispositions should magnify the effects of these dispositions on the values reported. To evaluate this possibility, we compared the values of United States participants who were primed to think of themselves as independent beings with those of Hong Kong participants who were primed to think of themselves as part of a collective. These values are shown in the upper left and lower right cells of each set of data in Table 4. The difference in values reported under these two conditions was significant and of the nature expected for three of the five constructs, individuality (1.55 vs. 0.27), winning (0.44 vs. -0.41)

and self-sacrifice (0.08 vs. 0.65). When participants were primed to think of themselves in a way that contrasted with culturally conditioned dispositions, however, the corresponding differences in their values were negligible.

These tendencies were not evident for the other two values. Hong Kong participants attached nonsignificantly (p > .10) more value to emotional connectedness than United States participants in both priming conditions. More striking is the fact that both American and Hong Kong participants attached significantly less importance to not being outperformed by others when they were primed to think of themselves in a way that coincided with their cultural dispositions (M = 0.31) than when they were not (M = 0.93). Perhaps concepts activated by the priming manipulations have different implications in the two cultures being compared. When Hong Kong Chinese are exposed to primes that prompt a group rather than individual orientation, they may think more about the desirability of maintaining harmonious relations with group members. These thoughts could increase their desire to avoid appearing different from (e.g., better than) others. When Americans think about themselves as part of a group, however, they may be inclined to evaluate themselves in relation to other group members without thinking about group harmony and cohesiveness. Therefore, these individuals may increase their concern with not being outperformed or beaten by others. In contrast, Americans who think of themselves as independent may attach less importance to their performance in relation to others, and so they may be less concerned about being outperformed.

Direct Effects of Priming Individualistic and Collectivist Concepts (Experiment 4)

The low correlations among the components of individualism and collectivism suggest that these components are more highly interrelated in the minds of cross-cultural theorists and researchers than they are in the minds of the individuals being investigated. Further evidence bearing on this possibility was obtained in a fourth experiment. If the various components of collectivism and individualism are interrelated in people's minds, priming these general constructs should increase the accessibility of values that are associated with them. This increased accessibility should be reflected in the individuals' responses to items that reflect these values. If the general components of individualism and collectivism are

unrelated in the conceptual systems that people have formed, however, this may not be the case.

We examined the effect of priming general concepts associated with individualism and collectivism using a sample of 38 Hong Kong college students as participants. Priming procedures similar to those employed in the Experiment 3 were used. Specifically, the priming task consisted of 35 sentences, 22 of which had no implications for either individualism or collectivism. However, the remaining 13 items were constructed on the basis of Trandis' (1989, 1995) conception of individualism and collectivism.

In the individualism-priming condition, the sentences that could be constructed conveyed independence, distinctiveness, competitiveness, and personal goal seeking (e.g., "distinct am I different," "am competitive I independent, "it's money my own," "he free is she," etc.). In the collectivism-priming condition, the sentences constructed from the items conveyed group harmony, cooperativeness and sharing, and group orientation (e.g., "similar alike all we're," "join team group the," "visit please us join," share wealth money the," "are cooperative we agreeable," etc.). Participants were asked to complete the form as quickly as possible without making mistakes. After completing the form and two unrelated tasks, participants in both priming conditions were administered the Individualism-Collectivism scale used in other experiments (Triandis, 1995). A third group of (control) participants completed the scale without having first been exposed to the priming task.

For each of the five values constructs composing the Individualism-Collectivism scale, the means across the individualism priming, collectivism priming and control cells did not differ significantly at $p < .05$. Thus, interestingly, neither the individualism nor the collectivism priming was effective in influencing the values that underlie the individualism-collectivism construct. The insignificant differential effect of stimulating subjects to think about individualistic vs. collectivistic concepts can be contrasted with the significant and generally interpretable results in Experiments 2 and 3. The breadth of the individualism-collectivism construct, and the independence of its components, may explain the relative weakness of individualism and collectivism as priming tools. Given the breadth of this construct, a number of distinct concepts may be brought to mind by priming either individualism or collectivism. The assortment of concepts associated with either of these dimensions, taken together, often

may not have a uniform influence on any of the five values that compose individualism-collectivism. The present study's null results provide further support for our assertion that the individualism-collectivism construct contains components that, rather than working in concert, operate independently in people's minds.

<div align="center">The Effects of Cultural Values on Decision Making</div>

Research has identified differences between European Americans and Asians in a number of quite different judgments and decision behaviors, including the effect of free choice on the intrinsic attractiveness of behaviors (Sethi & Lepper, 1998), compromise choice (Briley et al., 2000), probabilistic thinking (Whitcomb et al., 1995; Wright & Phillips, 1980; Yates et al., 1989, 1996, 1997, 1998), risk attitude (Hsee & Weber, 1999; Weber & Hsee, 1998, 2000; Weber, Hsee & Sokolowska, 1998), assessments of fairness (Bian & Keller, 1999, 2000; Buchan, Johnson & Croson, 1997) and decision strategies (Pollock & Chen, 1986; Yates & Lee, 1996), and prediction of future outcomes (Oishi et al., 2000). Culture-specific behaviors can sometimes reflect socially conditioned responses to configurations of stimuli that occur with little thought about the specific factors that elicit them (Bargh, 1994, 1997). Other behavior, however, is likely to be the result of conscious deliberation, and to be mediated by norms and values that have implications for its appropriateness or desirability. Given the widespread concern with individualism and collectivism as distinguishing characteristics of culture, one might expect these constructs to be important predictors of cultural differences in judgments and behavioral decisions. In fact, however, evidence that such differences can be accounted for by differences in these global constructs has rarely been reported (for a possible exception, see Wheeler et al, 1989).

Research performed in our own laboratory provides an additional example of the limited utility of these constructs. This research was stimulated by results obtained by Briley et al. (2000). In Briley et al.'s studies, European American and Asian (either Hong Kong Chinese, Japanese or Asian Americans) university students were told that the experimenters were interested in the reasons that guide preferences for choice alternatives. On this pretense, participants were presented with several shopping scenarios in which they chose from among three products. In each scenario, the three alternatives were described along two attribute dimensions. The attribute levels were arranged such that participants were

faced with a decision among two extreme options (i.e., options that were high on one dimension and low on the other) and a compromise alternative (i.e., an option that had moderate values along both dimensions). In one scenario, for example, participants were asked to choose one of three 35 mm cameras that were described as follows:

	Reliability rating of expert panel	Maximum autofocus range
typical range	40-70	12-28 meters
Option A	45	25 meters
Option B	55	20 meters
Option C	65	15 meters

Briley et al. found that when participants were not asked to justify their choices, European Americans and Asians showed similar tendencies to compromise. When participants were asked to provide a reason for their selection before reporting it, however, Asians were significantly more likely to choose the compromise alternative than Americans were. These findings suggest that situational factors are an important consideration in understanding the influence of culture on decisions. On the other hand, differences in choice behavior were unrelated to a general index of individualism-collectivism in any of Briley et al's studies.

The fact that cultural differences in choice behavior only occurred when participants gave reasons for their choices suggests that the process of generating reasons activated culture-related knowledge structures that influenced the decisions that participants made. We examined this possibility further in two of the experiments described earlier. In Experiment 2, we administered a choice task similar to that employed by Briley et al. (2000) to United States and Hong Kong participants who had been primed with either American or Chinese cultural symbols. In Experiment 3, we obtained similar data from participants who had been primed to think of themselves as either independent individuals or as part of a collective. In both experiments, the task (which consisted of 6 sets of choice alternatives, each in a different product category) was administered immediately after the priming task.

Effects of Priming on Choice Behavior

Cultural symbols (Experiment 2). The top half of Table 5 shows the mean

percentage of compromise choices as a function of cultural group and priming conditions.

Exposing participants to symbols of their own culture generally increased their tendency to

compromise relative to conditions in which symbols of a different culture were primed (62%

vs. 51%). This was true for both United States and Hong Kong participants. The significance

of this pattern was confirmed statistically by a logistic regression analysis of the proportion of

compromise choices as a function of priming condition (American or Chinese icons), cultural

group (United States or Hong Kong), and the interaction of these two variables. (The product

category in which choices were made was used as an additional dummy variable in the

analysis.) The interaction of sample and condition was significant (Wald chi-square = 5.2, $p <$

.05).

Concepts of self as an individual vs. part of a group (Experiment 3). The effects on

choice behavior of priming different self-orientations are shown in the bottom half of Table 5.

A logistic regression analysis similar to that performed on the data in Experiment 2 indicated

that Hong Kong participants were generally more likely to compromise (55%) than Americans

were (49%) (Wald chi-square = 4.99, $p <$ .05), consistent with findings reported by Briley et al.

(2000). Further, the interaction of culture and priming conditions was also significant (Wald

chi-square = 4.62, $p <$ .05), indicating that this cultural difference depended on the self-

orientation that was primed. Specifically, participants were more likely to compromise when

they were primed to think of themselves in a way that was normative in the culture they

represented (57%) than when they were was not (46%). Results for both the Hong Kong and

United States samples followed this pattern.

Relation of choice behavior to values. The self-orientation priming manipulation

influenced choice behavior and the importance of not being outperformed (Table 4) similarly.

That is, when participants were primed to think of themselves in a way that was consistent

with the norms of the culture to which they belonged (cf. Markus & Kitayama, 1991), they both

decreased the importance they attached to not being outperformed and increased their

tendency to compromise. However, this similarity may not reflect a causal relation between

the importance attached to not being outperformed and the tendency to compromise. Rather,

a third variable that is activated by thoughts about oneself may be exerting an independent influence on both.

To determine whether values constructs arising from the individualism-collectivism framework can explain the patterns of choices, a mediation analysis (Baron & Kenney, 1986) was performed using the data from both the cultural symbols and the self-concepts study. We tested seven constructs arising from the Triandis (1995) topology (individualism, collectivism, vertical individualism, vertical collectivism, horizontal individualism, horizontal collectivism, general index of individualism-collectivism[2]) and the five factors from our more refined framework (emotional connectedness, self-sacrifice, winning, not being outperformed, and individuality). Each of the above variables was tested in a separate model that included a priming manipulation variable. None of these variables significantly mediated the relationship between culture and compromise choices.

This raises the question, "what values and motives do underlie cultural differences in compromise behavior?" One possibility is suggested by evidence that Asians tend to focus on the avoidance of negative outcomes, whereas North Americans are relatively more inclined to pursue positive outcomes (Lee, Aaker & Gardner, in press). In the choice task constructed by Briley et al. (2000), negative outcomes can be avoided by choosing the compromise alternative as this option minimizes potential regret (see Simonson, 1989). In contrast, the two extreme alternatives, which have an extremely favorable value along one attribute dimension, provide positive outcomes. Thus, if Asians and Americans differ in the manner suggested by Lee et al. (in press), this could account for the general cultural difference in compromise choices observed by Briley et al. (2000). To explain the data obtained in the present research, however, one must assume that making salient one's cultural identity, or activating concepts of self that are consistent with tendencies that predominate in one's cultural milieu, increases concern about negative outcomes. This heightened concern, in turn, may increase the tendency to compromise over and above that observed by Briley et al. (2000).

Discussion

Attempts to identify general cultural differences in norms and values are presumably stimulated in part by the assumption that these differences can potentially account for cultural

variation in both judgments and behaviors. Although this assumption might be valid, our

research calls into question the utility of the individualism-collectivism construct in explaining

this variation. This construct does not appear useful either in describing the norms and values

that predominate among individuals within cultures or in predicting the conditions in which

these norms and values are active. Nor does the construct help to reveal the antecedents of

behavior of the sort of concern in this article. Several general conclusions can be drawn from

this research, and more specific insights are suggested that deserve further exploration.

The Constructs of Individualism and Collectivism

      Our results indicate that individualism and collectivism are not bipolar opposites,

confirming the conclusions drawn from earlier research (Rhee et al., 1996; Triandis &

Gelfand, 1998). Moreover, the norms and values that are typically assumed to reflect these

constructs vary independently both within and across cultures, and consequently are likely to

have different determinants and effects. The Individualism-Collectivism scale we employed in

the present research is only one of many that have been used to infer differences in

individualism and collectivism (for other measures, see Hui, 1988; Triandis, 1991, 1995).

However, even this single scale appears to consist of at least five independent values.

      Furthermore, representatives of Western and Asian cultures do not consistently differ

in ways that are assumed to reflect individualism and collectivism as it is generally

conceptualized (cf. Hofstede, 1980; Triandis, 1989, 1995). As might be expected, Americans

attached relatively greater value than Hong Kong Chinese to individuality and uniqueness,

and attached relatively less value to sacrificing one's own goals for the benefit of others. At

the same time, they attached less importance to not being outperformed by others than Hong

Kong participants did. Moreover, calling participants' attention to their cultural identity not

only increased the magnitude of these differences, but also led Americans to attach relatively

less value to winning than Hong Kong participants did.

      The tendency for Americans to attach less importance than Hong Kong Chinese to

not being outperformed by others is particularly provocative. This difference seems contrary

to traditional conceptions of Western and Asian cultures as individualistic and collectivistic,

respectively. It may nevertheless be consistent with Markus and Kitayama's (1991)

postulation of cultural differences in the conception of self. That is, if European Americans

define themselves independently of others, they may consider others' performance to be relatively unimportant. The self-concepts of Asians, however, are typically interdependent. This interdependence may be manifested in a tendency to subordinate one's own interests to those of the groups to which one belongs, as reflected in the value attached to self sacrifice (see Tables 2 and 3). However, it could also be evidenced by a tendency to use others' performance as a standard of comparison in evaluating oneself and, in turn, a concern about not being outperformed.

In this regard, Heine et al. (in press) suggest that whereas North Americans and Europeans appear to be motivated by a desire for self enhancement, Asians are motivated to engage in self criticism with an eye toward self-improvement. Conceivably the importance that Asians attach to not being outperformed does not reflect a desire to do be superior to others per se. Rather, Asians may use others' performance to determine whether they could have done as well as they could or whether there is room for improvement. It is noteworthy in this regard that Asians tend to attribute others' successes to dispositional characteristics (e.g., ability) whereas Americans attribute others' successes to luck or external, situational factors (Oishi et al., 2000). In combination, these findings suggest that Asians evaluate others' success positively and are motivated to attain the same level of performance themselves. Americans, on the other hand, are motivated by a desire to maintain a positive self-image rather than to improve themselves. As a result, they disparage others' successes rather than using them as standards that they aspire to attain.

Chronic vs. Situational Influences on Culture-Related Values

Norms and values may often be chronically accessible in memory as a result of frequent exposure to circumstances in which the cognitions have been applied (Higgins, 1996; Bargh et al., 1986). However, cognitions associated with other competing values are also likely to exist and, if easily accessible, to potentially influence the values that people report. Thus, cultural differences in values may not be detected if transitory situational factors activate values that are inconsistent with cultural inclinations.

This possibility was evident in the research reported in this article. That is, cultural differences in values were pronounced when situational primes engendered general concepts associated with participants' own culture, or induced them to think about themselves in a way

that coincided with culture-related dispositions. However, these differences were often

decreased or eliminated when situational factors activated concepts associated with a

different culture than participants' own, or disposed them to think of themselves in ways that

conflicted with cultural norms (Markus & Kitayama, 1991). In short, individuals' cultural

backgrounds appear to influence the values they espouse; however, this influence can often

be overridden by situational factors that make other, competing values more accessible.

Priming general concepts associated with one's culture and priming dispositions to

think of oneself in a way that coincided with cultural dispositions often had similar effects on

the values that participants reported. However, there were two striking exceptions, both of

which involved competition-oriented values. First, exposing Hong Kong Chinese to symbols

of their own culture increased the importance they attached to not being outperformed by

others relative to conditions in which symbols of a different culture were primed (1.46 vs. 0.85;

see Table 3). On the other hand, priming concepts of self as part of a collective decreased

the importance these participants attached to not being outperformed relative to conditions in

which self as an individual was primed (0.36 vs. 0.94; see Table 4). Perhaps activating

concepts associated with Chinese culture leads Hong Kong students to emphasize self-

improvement and, therefore, to evaluate their performance in relation to others. However,

stimulating these individuals to think of themselves as part of a collective may activate

concepts associated with social harmony and, therefore, may decrease their motivation to

compete and excel in achievement activities.

A second distinction between the effect of priming cultural awareness and priming

self-relevant concepts was found for the value attached to winning. When participants'

cultural identities were made salient to them by priming symbols of their culture, Americans

attached less importance to winning than Hong Kong participants did (-0.56 vs. 0.59; see

Table 3). When participants were primed to think of themselves in a way that was

presumably predominant in their own culture, however, Americans attached more importance

to winning than Hong Kong participants did (0.44 vs. -0.41; see Table 4). The effects of

cultural priming on the importance of winning, which parallel its effects on the importance of

not being outperformed, may be mediated by self-evaluation concerns similar to those

discussed earlier. That is, culture-consistent priming may decrease Americans' tendency to

define themselves and their performance in relation to others and thus may reduce their

concern about being outperformed. Indeed, stimulating Americans to think of themselves as

an individual rather than part of a group had a similar effect. At the same time, these

thoughts appear to increase the value that Americans attached to defeating others in direct

competition independently of these self-evaluation concerns.

Caution should be taken in overgeneralizing this particular pattern of findings to

Western and Asian cultures in general. As others (e.g., Markus, Mullally & Kitayama, 1997)

point out, important differences are likely to exist between the norms and values that

predominate in different Asian societies (e.g., Japan, Korea, Mainland China, Hong Kong,

etc.). The configurations of values that typify these cultures may differ as much from one

another as they do from Western cultures. Nevertheless, the present data raise questions

concerning the meaningfulness of characterizing Western and Asian cultures in terms of a

general individualism-collectivism construct rather than more specific sets of norms and

values whose determinants and consequences can be more easily understood.

The Influence of Cultural Values on Behavior

In the decision task constructed by Briley et al. (2000), participants can choose either

a product that has both highly desirable and highly undesirable attributes or one that is

moderately desirable along all attribute dimensions. Although Asians and European

Americans generally have similar inclinations to select the latter, compromise alternative,

differences emerge under certain conditions. For example, cultural differences are not

evident unless participants are asked to give reasons for their choices (Briley et al., 2000).

Moreover, Asians are less disposed to compromise when concepts associated with Western

culture are primed, or when they are stimulated to think of themselves as individuals rather

than part of a group (see Table 5). More generally, people appear more likely to compromise

when their own cultural identity is salient to them, or when they are disposed to think of

themselves in a way that is normative in their own culture. This suggests that making one's

cultural identity salient increases cautiousness and, therefore, increases the desire to avoid

alternatives with potentially undesirable features.

However, neither general differences in individualism-collectivism nor differences in

the specific values that are associated with this general construct were particularly helpful in

accounting for cultural variation in compromise behavior. Other dispositions that appear to distinguish Asian and Western cultures may be more useful. As noted earlier, differences in the choice behavior identified by Briley et al. (2000) may be traceable to a more general differences in the relative emphasis placed on avoiding negative outcomes and attaining positive ones (Lee et al., in press). (The evidence that Hong Kong Chinese attach more importance than Americans to not being outperformed by others could be another manifestation of this general cultural difference.)

However, both Americans and Chinese compromise more when they think about their own culture than when they do not. In fact, Americans compromise as much as Chinese do when concepts associated with their own culture are primed. The need for cautiousness that appears to arise when one's cultural identity is made salient may over-ride the underlying cultural tendencies found by Briley et al. (2000). Moreover, although bringing concepts associated with one's own culture to mind may increase cultural differences in values (see Table 3), it may generally decrease risk-taking under conditions in which people are required to justify their behavior.

As we noted at the outset, however, the norms and values that underlie many cultural differences in behavior may be specific to certain types of situations. This being the case, the search for general norms and values that account for cultural differences in decision behaviors may not prove fruitful. Moreover, cultural differences in decision making may often reflect socially learned response patterns that, once acquired, are performed with a minimum of mediating cognitive activity (see Footnote 1). If the influence of cultural norms and values on decision behaviors occurs due to an automatic process such as this rather than through conscious deliberation, individuals may not be able to accurately report values guiding their decisions.

The desirability of identifying the general norms and values that distinguish different cultures cannot be summarily dismissed. An understanding of these differences may be of considerable interest in many contexts. If one's objective is to explain cultural differences in decision making, however, it may be desirable to put the cart before the horse. That is, identifying general cultural differences in norms and values and then searching for behaviors that they predict could be a vacuous pursuit. It may be more fruitful to begin by identifying

differences in specific subsets of decision behaviors that are of a priori theoretical or empirical

interest, and determining the cognitive and motivational factors that influence their

occurrence. Once this is done, we may be in a better position to conceptualize and

investigate empirically the norms and values that mediate the behavior in question and the

extent to which these norms and values predominate in the cultures being compared.

Ultimately, this more bottom-up approach could help us to understand cultural differences in

norms and values more generally.

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FOOTNOTES

1. This diagram does not preclude direct influences of situational factors and cultural orientation on behavior that are not mediated by norms, values or motives, as indicted by dashed pathways. These influences, which might occur spontaneously with a minimum of conscious cognitive deliberation (cf. Bargh, 1997), could constitute cognitive "productions" (Anderson, 1983; Smith, 1984, 1990) that are acquired through social learning and are automatically activated when the situational features to which they have been conditioned exist. Although these possibilities are also of importance to consider, they are not germane to the concerns of this article and, therefore, will not be discussed in detail.

2. A single index of individualism collectivism, based on the set of items composing the individualism-collectivism scale, was generated for each subject by subtracting the individualism score from the collectivism score.

Table 1

Items Loading on Factors Emerging from Confirmatory Analysis of the Individualism-
Collectivism Scale (Triandis & Gelfand, 1998)

Emotional connectedness, sharing

     E1. To me, pleasure is spending time with others (.655)
     E2. It is important for me to maintain harmony within my group (.611)
     E3. The well-being of my co-workers is important to me (.568)
     E4. If a co-worker gets a prize, I would feel proud (.449)
     E5. I feel good when I cooperate with others (.574)

Not Being Outperformed by Others

     O1. It annoys me when other people perform better than I do. (.825)
     O2. It is important to me that I do my job better than others (.447)
     O3. When another person does better than I do, I get tense and aroused. (.760)

Individuality

     I1. I enjoy being unique and different from others in many ways (.539)
     I2. I often do "my own thing." (.562)
     I3. am a unique individual (.660)

Self-Sacrifice

     S1. I would do what would please my family, even if I detested that activity. (.733)
     S2. We should keep our aging parents with us at home (.551)
     S3. I would sacrifice an activity that I enjoy very much if my family did not
     approve (.725)
     1. S4. Before taking a major trip, I consult with most members of my family (.462)

Winning

     W1. Winning is everything (.562)
     W2. I enjoy working in situations involving competition with others (.739)
     W3. Some people emphasize winning; I am not one of them (-.577)

Note: Factor loadings are given in parentheses. Only items loading greater than .40 are
shown.

Table 2

Mean Values Reported by United States and Hong Kong Participants (a) in the Absence of Situation-Specific Cultural Priming and (b) in the Presence of this Priming.

		United States participants	Hong Kong participants	Difference
A.	In the absence of Priming (Experiment 1)			
	Individuality	3.73	3.32	0.41*
	Emotional connectedness	3.59	3.77	-0.18*
	Self-sacrifice	3.12	3.24	-0.12*
	Not being outperformed	3.05	3.24	-0.19*
	Winning	3.04	2.94	0.10
B.	In the presence of priming (Experiment 2)			
	Individuality	1.36	1.11	0.25
	Emotional connectedness	1.22	1.32	-0.10
	Self-sacrifice	0.18	0.30	-0.12
	Not being outperformed	0.41	1.15	-0.74**
	Winning	-0.12	0.48	-0.60**

*$F(1, 396) > 3.88$, $p < .05$

**$F(1, 74) > 3.98$, $p < .05$

Table 3

Mean Values Reported by United States and Hong Kong Participants Under Conditions in
Which Symbols of Their Own or A Different Culture Were Primed—Experiment 2

	United States participants	Hong Kong participants	Difference
Individuality			
Same culture primed	1.51^a	1.08^b	0.43
Different culture primed	1.21^{ab}	1.15^{ab}	0.06
Emotional connectedness			
Same culture primed	1.39	1.33	0.06
Different culture primed	1.05	1.31	-0.26
Self-sacrifice			
Same culture primed	0.27^{ab}	0.61^a	-0.34
Different culture primed	0.16^b	0.10^b	0.06
Not being outperformed			
Same culture primed	0.06^a	1.46^b	-1.40
Different culture primed	0.75^{ab}	0.85^{ab}	-0.10
Winning			
Same culture primed	-0.56^a	0.59^b	-1.15
Different culture primed	0.32^b	0.38^b	-0.06

Note: cells with unlike superscripts differ at $p < .05$

Table 4

Mean Values as a Function of Cultural Background and Priming of Personal Pronouns—
Experiment 3

	United States participants	Hong Kong participants	Difference
Individuality			
"I" priming	1.55^b	1.04^b	0.51
"We" priming	1.44^b	0.27^a	1.17
Emotional connectedness			
"I" priming	1.42	1.56	-0.14
"We" priming	1.35	1.63	-0.28
Self sacrifice			
"I" priming	0.08^a	0.45^{ab}	-0.37
"We" priming	0.42^{ab}	0.65^b	-0.23
Not being outperformed by others			
"I" priming	0.27^a	0.94^b	-0.67
"We" priming	0.91^b	0.36^a	0.55
Winning			
"I" priming	0.44^b	0.23^b	0.21
"We" priming	0.18^{ab}	-0.41^a	0.59

Note: Cells with unlike superscripts differ at $p < .05$

Table 5

Proportion of Compromise Choices as a Function of Priming and Cultural Background

	United States participants	Hong Kong participants
Cultural priming (Experiment 2)		
American icons	63%	45%
Chinese icons	57%	62%
Personal pronouns (Experiment 3)		
"I" priming	52%	46%
"We" priming	46%	63%

Figure Captions

1. Possible causal relations among a person's cultural background, two sets of situational

    factors that exist at the time a judgment or decision is made, and two sets of norms,

    values and motives (NVM) that have implications for this judgment or decision.

2. Results of confirmatory factor analysis: figures in bold are significantly different from zero

    at p < .05; EMOTION = emotional connectedness and sharing, OUTPERFORM = not

    being outperformed by others, INDIVIDUAL = individuality, WINNING = winning,

    SACRIFICE = self-sacrifice. See Table 1 for item descriptions.
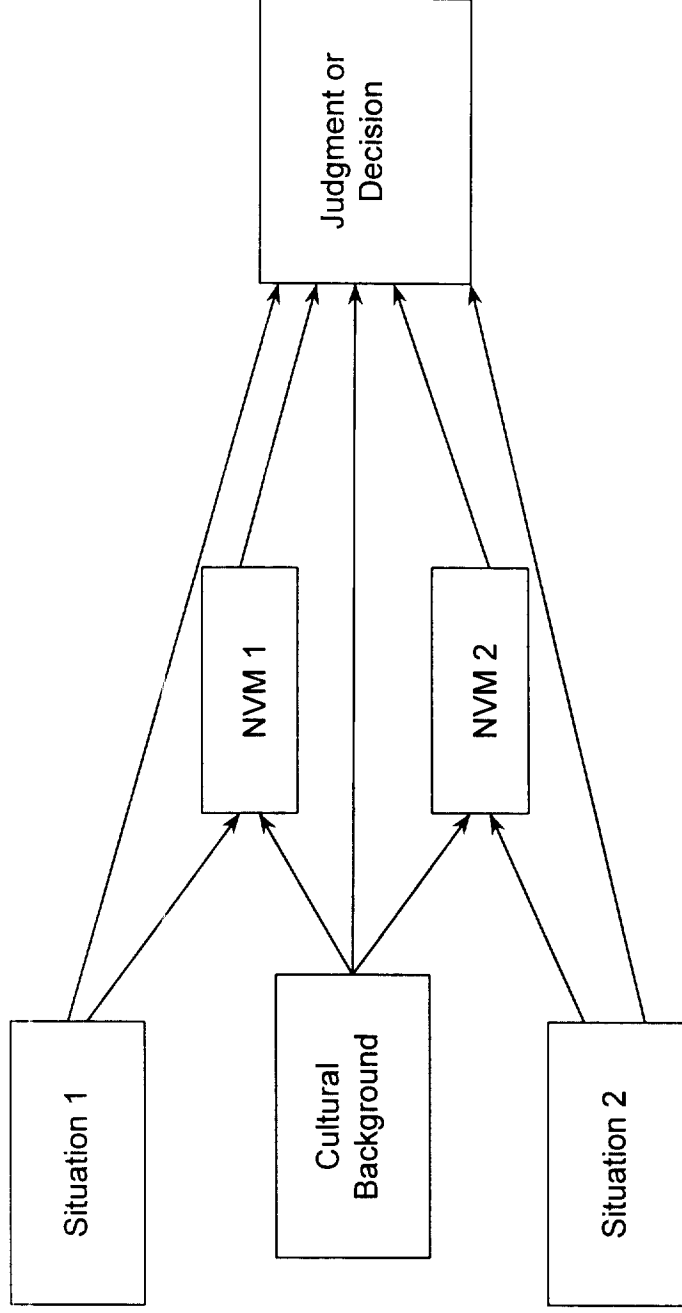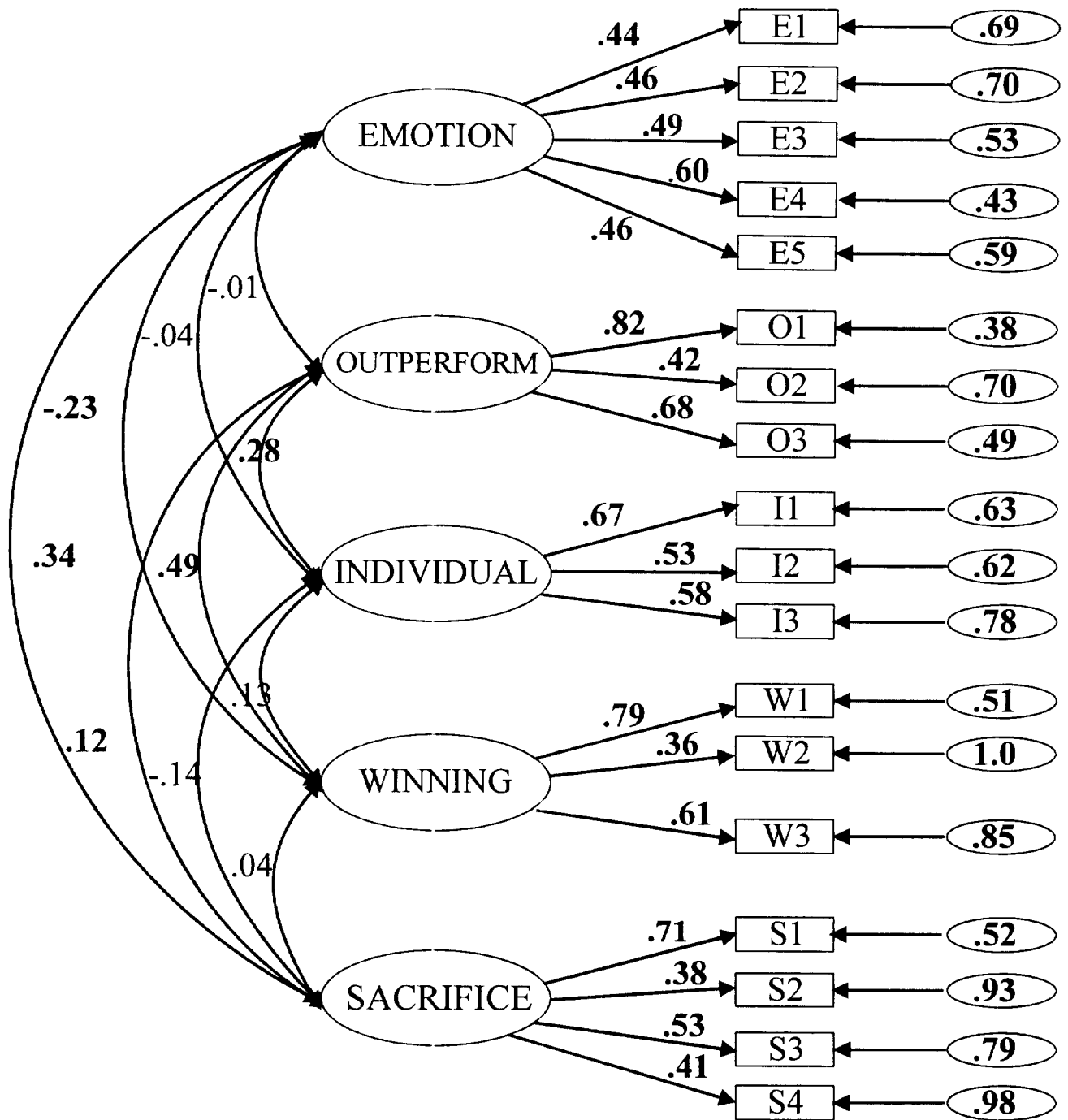
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