The Myth of Individualism-Collectivism: A Critical Review

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The Myth of Individualism–Collectivism: A Critical Review

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ABSTRACT. The authors critically assess the dimension of individualism–collectivism (I–C) and its various uses in cross-cultural psychology. They argue that I–C research is characterized largely by insufficient conceptual clarity and a lack of systematic data. As a result, they call into question the utility of I–C as an explanatory tool for cultural variation in behavior, suggest alternative dimensions for cross-cultural research, and interpret the weaknesses of research on I–C as illustrative of a general trend in social psychology.

Key words: alternative dimensions, critical assessment, cross-cultural psychology, individualism–collectivism

WHEN A WHOLE CULTURE or society is pigeonholed in dichotomous categories (e.g., masculine–feminine, active–passive, or loose–tight), subtle differences and qualitative nuances that are more characteristic of that social entity may be glossed over. Such descriptive labels evoke unduly fixed and caricature-like mental impressions of cultures or societies rather than representative pictures of their complexities. Also, presenting cultures in black-or-white terms not only clouds one’s understanding of them but inevitably leads to good–bad comparisons (Sinha & Tripathi, 1994, p. 123).

Since Hofstede’s (1980, 1983) pioneering research that mapped 53 countries on four dimensions (power distance, individualism–collectivism, masculinity–fem-
inity, and uncertainty avoidance), his work has inspired a great deal of research. The dimension of individualism–collectivism (I–C) has generated the most research, and, as some scholars fear, has become a catchall default explanation for cultural differences in human behavior (Kagitcibasi, 1994).

It is crucial to evaluate I–C critically, for it has become, arguably, the most widely used construct in cross-cultural psychology. It has been used to explain cultural differences in family dynamics (Kim, 1997), preferred methods of conflict resolution (Leung, Au, Fernandez-Dols, & Iwawaki, 1992; Leung & Fan, 1997), resource allocation (Leung & Bond, 1982), leadership styles (Offermann & Hellmann, 1997), and communication styles (Ambady, Koo, Lee, & Rosenthal, 1996; Holtgraves, 1997). Furthermore, cultural variation in I–C has served as the underlying assumption for several other noted theories, such as the self-construal theory (Markus & Kitayama, 1991).

However, a critical review of I–C and related literature reveals little empirical evidence that I–C is a useful explanatory mechanism. In the present research, we identify several flaws that have plagued I–C research, and we briefly touch on the related concept of independent–interdependent self-construal (Markus & Kitayama, 1991), to illustrate the concept's vulnerability to criticism stemming from its assumption of cultural variability in I–C. Finally, we suggest dimensions that may be used in place of I–C and assess, in more general terms, the implications of the construct's weaknesses for cross-cultural research.

What Is I–C? Some Background

According to Hofstede (1991), "Individualism stands for a society in which the ties between individuals are loose; everyone is expected to look after himself or herself and his or her immediate family only. . . . Collectivism stands for a society in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (pp. 260–261). However, the individualism–collectivism distinction had existed in various forms for a long time before Hofstede's formulation. For instance, having first encountered the Japanese, Westerners observed—rather ethnocentrically—"that the Japanese lacked individuality" (Takano & Osaka, 1999, p. 311). Westerners, in contrast, have for hundreds of years espoused the ideals of individualism and self-reliance (Kagitcibasi, 1997; Takano & Osaka, 1999).

Hofstede's main contribution was the systematic mapping of 53 countries on the I–C continuum. Between 1968 and 1972, he administered questionnaires to 117,000 employees of a high-technology multinational corporation (IBM). He factor analyzed 14 work-goal items to derive the four dimensions mentioned earlier. To this day, Hofstede's is the largest comparative study (Kagitcibasi, 1997).

Triandis has conducted a great deal of research on I–C. To provide a clearer distinction between the country and the individual levels of analysis, he suggested using the terms idiocentrism and allocentrism to replace individualism and col-
lectivism at the individual level, respectively (Triandis, Leung, Villareal, & Clark, 1985). He later distinguished between vertical and horizontal individualism and vertical and horizontal collectivism (Triandis, 1995; Triandis & Gelfand, 1998). Horizontal individualism–collectivism emphasizes equality, whereas vertical individualism–collectivism emphasizes hierarchy. This enables one not only to differentiate among the countries on the dimension of I–C but also to compare different individualistic (or collectivistic) societies to one another.

Thus, the aim of I–C researchers has been to derive a useful dimension for explaining cultural differences in behavior. Nonetheless, there has been concern among some of the leading experts that the dimension may be overused or used improperly. Triandis (1995) wrote, "However, their [individualism and collectivism] wide applicability also represents a danger. Like the man with a hammer who uses it at every opportunity, if we do not sharpen their meaning, we can overuse the constructs" (p. 2). Yet, as we demonstrate in the following several sections, such indiscriminate use of I–C to explain cross-cultural differences in attitudes and behaviors has been rather frequent and has led to the loss of the concept's utility.

**Why Do Collectivists Act Individualistically?**

Although Japanese people are commonly expected to be more collectivist than Americans, researchers have found that they acted more individualistically in the absence of external sanctions for failure to cooperate with the in-group. Yamagishi (1988b) conducted an experiment in the United States and Japan in which participants played a prisoner's-dilemma game. Each participant in the experiment had the option either (a) to contribute money to the group and, thus, risk being exploited if the partners did not contribute or (b) not to contribute money and to gain potentially more if the partners contributed. In one of the conditions, participants were given the option to develop a sanctioning mechanism that would punish the defector. Yamagishi found that, in the absence of a sanctioning system, Japanese participants were less likely to cooperate with the group than were the American participants. Once the opportunity for mutual sanctioning became available, the Japanese participants' cooperation increased from 44.4% to 74.6% (30 percentage points), whereas the American participants' cooperation increased from 56.2% to 75.5% (19 percentage points).

In a follow-up study, Yamagishi (1988a) had his participants play a computerized prisoner's-dilemma game, in which the participants could not see other group members. After every trial, each participant was given the option to remain in the group or to exit. When participants stayed in the group, the rewards were equally distributed; when they withdrew, they were individually rewarded. Participants were assigned to either a high or a low exit-cost condition. At the end of a trial, each participant was informed of how many other people remained in the group, the total performance of the group, and his or her own score and earnings for the given trial. Yamagishi found that both American and Japanese par-
ticipants were more likely to exit from the group when the exit cost became lower. In the high exit-cost condition—in which participants made less money if they exited than if they remained in the group—the Japanese participants were actually more likely to exit the group than were the American participants. "Japanese subjects exited from the group despite the loss in their earnings because they were dissatisfied with the equal allocation of rewards; American subjects, on the other hand did not exit because they did not dislike the equal reward allocation as much as Japanese subjects did" (Yamagishi, 1988a, p. 540). Yamagishi argued that members of a collectivist society act collectivistically (i.e., endorse equality, rather than equity; see Leung & Bond, 1982) not because they like doing so but because they are in an environment where such behavior is a norm.

In another experiment, Jin, Yamagishi, and Kiyonari (1996, as cited in Yamagishi, Jin, & Miller, 1998) found that, although Japanese participants were more likely to give positive feedback to in-group members than to out-group members, they were more likely to give a monetary reward to in-group members than to out-group members only if they were expecting a reward from the in-group. In accordance with that view, collectivism is explainable not in terms of a fundamentally different cognitive organization of the self but because it is advantageous to the self in the long run (Yamagishi, Cook, & Watabe, 1998; Yamagishi, Jin, et al., 1998).

Yamaguchi (1994) expressed a similar view:

Individuals may temporarily sacrifice their self-interest for a group so long as they can expect rewards from the group in the long run. The expectation of punishment by group members can also motivate an individual to abandon personal goals in favor of those of the group. . . . This reasoning suggests that collectivism among individuals is accompanied by a tendency to expect either positive or negative outcomes of interactions with others. (p. 179)

What Ever Happened to the Predicted Differences in I–C?

In support of Yamagishi's findings, several other empirical researchers have not found the presumed cross-national differences in I–C. Takano and Osaka (1999) reviewed 15 empirical studies that directly compared Japan and the United States on the dimension of I–C, by both questionnaire and behavior; they found that results of 14 of the 15 studies did not support the common view. In 9 of those studies, there was no difference between the two countries; in 5, the Japanese were actually more individualistic than the Americans. The only results that supported the common view were from the Hofstede (1980) work. However, as discussed later, Hofstede's methodology has since been called into question. Hofstede (1994) himself pointed out that "there is, by the way, a persistent

1To the best of our knowledge, no meta-analytic study has yet directly dealt with I–C; therefore, the Takano and Osaka (1999) study is the most comprehensive comparison of a purportedly individualistic and a purportedly collectivist society to date.
myth that I found Japan to score at the extreme end of the Collectivism Index scale. In fact, among 53 countries and regions, Japan came in at a shared twenty-second and twenty-third position on the individualist side" (p. xii). Matsumoto, Takeuchi, Andayani, Kouznetsova, and Krupp (1998) investigated cross-national differences in display rules (rules of management of emotional expressions based on social context) and their relationship to I–C. Seventy-one Koreans, 251 Americans, 159 Russians, and 120 Japanese participated in the study. The Russians and the Koreans had the most collectivist scores, whereas the Japanese had the least collectivist scores.

Arguably, the most devastating blow to the typical classification of countries along the I–C dimension was delivered by Schwartz (1994), who administered a value survey to 86 teacher and student samples drawn from 41 cultural groups in 38 nations. Using the Guttman–Lingoes smallest space analysis, he derived seven factors, or culture-level value types: Conservatism, Intellectual Autonomy, Affective Autonomy, Hierarchy, Mastery, Egalitarian Commitment, and Harmony. Several of those value types approximate I–C. Individualism was positively correlated with Autonomy (Affective and Intellectual) and Egalitarian Commitment and negatively correlated with Conservatism.

Schwartz’s (1994) data “do not support a view of the United States as a highly individualistic nation, if individualism refers to a conception of the person as autonomous relative to the group” (p. 110, italics in the original). The U.S. sample scored neither high on autonomy nor low on conservatism. According to those data, if one defines a collectivist society as one where a person is inseparable from the group, then China is hardly a prototypical collectivist society. The Chinese sample scored average on the autonomy–conservatism dimension and low on the importance of egalitarian commitment. The Western European nations (e.g., France), on the one hand, came closest to the ideal of an individualistic country. The French respondents scored high on autonomy, low on conservatism, and high on egalitarian commitment. Singapore, on the other hand, came closest to fitting the profile of a pure collectivist nation. The Singaporean respondents scored high on conservatism and hierarchy and low on autonomy and mastery. As for the United States versus Japan comparison, the two samples were rather similar. They had similar conservatism scores, the U.S. respondents scored higher than the Japanese respondents on affective autonomy, and the Japanese respondents scored higher than the U.S. respondents on intellectual autonomy.

Unlike Hofstede (1980), Schwartz (1994) derived both culture-level and individual-level dimensions; however, we have focused exclusively on the culture-level values.

The aggregation of Schwartz’s (1994) value types to thus approximate I–C actually provides a more accurate index of “pure” I–C, as distinct from national wealth. Whereas Hofstede (1980) obtained a correlation of .82 between gross national product (GNP) per capita and individualism, GNP accounted for much less variance in the value types (Autonomy–Conservatism) most similar to I–C, .40 and .57 for the teacher and the student subsets, respectively.
Within-Country Variability in I-C

In addition to the cross-national differences in I-C that call into question the usual classification, research also indicates that there may be significant within-country differences as well. As previously mentioned, China has historically been categorized as a collectivist society. That view was challenged by Ho and Chiu (1994), who analyzed 9,995 popular Chinese sayings, of which 458 were judged to be relevant to I-C. Although more sayings affirmed collectivism rather than individualism, more sayings affirmed individualism than negated it. Thus, at the cultural level, China could not be considered a pure collectivist society. To investigate the nature of Chinese collectivism, the researchers then administered a questionnaire consisting of the Chinese Popular Sayings Scale (Ho & Chiu), the Individualism–Collectivism Scale (Hui, 1988), and the Chinese Values Survey (Chinese Culture Connection, 1987) to 158 Chinese students in Hong Kong. The students demonstrated a “cooperative yet self-reliant orientation,” which the researchers interpreted as “an exemplary synthesis of individualist and collectivist values” (Ho & Chiu, p. 154).

Similarly, India has been portrayed as a collectivist society. This view has recently been challenged. For instance, Sinha and Tripathi (1994) conducted a small exploratory study, in which they administered a questionnaire (developed specifically for the study) to 82 undergraduates at a university in northern India. They found that the participants held both individualist and collectivist attitudes. The authors argued that Indian culture is neither predominantly individualist nor predominantly collectivist. It incorporates elements of both. Mishra (1994) studied 200 males (fathers and sons) in eastern India to examine the changes in I-C orientation across generations. He did not find a high degree of either individualism or collectivism. However, the younger, urban, and more educated participants tended to be less collectivist.

The Hofstede Project and Its Methodological Flaws

Because Hofstede’s (1980) study remains the most popular reference source for determining where on the I-C continuum a country under consideration belongs, it is important to revisit that project to evaluate its methodology and limitations.

Arguably, the biggest limitation of Hofstede’s (1980) study is the differential representativeness of the samples for each country. As mentioned earlier, the sample consisted of employees of a multinational high-technology corporation. The participants were highly educated and highly skilled managers, technicians, and other white-collar professionals. Indeed, it is questionable how representative such a sample would be for any country. However, the divergence from the general population differs from one country to the next, depending on its wealth. As Schwartz (1994) pointed out, “the divergence was probably greater, for example, in the Third World nations (e.g., El Salvador, Pakistan) than in industrialized
Western nations (e.g., Switzerland, United States)” (p. 91). Thus, it is unclear whether a given country’s score on the I–C dimension reflects the country’s orientation or the orientation of one large high-technology company’s employees in that particular country.

Another concern, raised by Kagitcibasi (1997), is the lack of correspondence between Hofstede’s (1980) operational definitions of individualism and collectivism and the items that Hofstede designated to tap the construct. The three items associated with individualism had to do with having a job that provides sufficient time for family life, freedom to adapt one’s own approach to the job, and fulfilling and challenging work. The items associated with collectivism had to do with training opportunities, satisfactory working conditions, and the possibility of fully using skills and abilities on the job. Clearly, the foregoing items have little to do with Hofstede’s and other common definitions of individualism and collectivism. One may also question whether it is sufficient to rely on just six items (three for individualism and three for collectivism) to obtain accurate country scores for a construct.

Hofstede’s (1980) results are also suspect because of his reliance on factor analysis. Kagitcibasi (1997) pointed out that such a procedure merely shows which items belong together but does not demonstrate construct validity. Yamagishi, Jin, et al. (1998) provided an illustration of why the results of a factor analysis could be misleading. They constructed a data set of collectivists’, universalists’, and pacifists’ hypothetical responses to three questions about competition: Of the three groups, only collectivists would agree with the strategy of cooperation within group and exploiting outsiders as a desirable means of accomplishing personal goals. Only universalists would agree with the strategy of universal competition as a desirable means of achieving personal goals. Only pacifists would agree with the strategy of communal sharing and harmony as the goal of life. Those were hypothetical groups of people, and Yamagishi and his associates (Yamagishi, Jin, et al., 1998) did not claim that there are actual groups or societies that behave like any one of the foregoing three groups. Their point was to illustrate the occasionally misleading results of factor analyses. In this case, factor analysis would produce two factors: Universalism–Particularism and Individualism–Collectivism (see Yamagishi, Jin, et al., 1998, for factor loadings). Those factors, however, are meaningless, because both the hypothetical universalists and the hypothetical collectivists valued personal goals. The only difference was the preferred method of attaining those goals. Yamagishi and his associates concluded: “We should pay more attention to logic than to results of factor analyses” (p. 325).

Finally, Hofstede (1994) acknowledged that national wealth accounted for 67% of variance in I–C. He also pointed out that I–C was never meant to be a psychological dimension but a sociological one. He does not believe that a unidimensional model is sufficient for individual level analyses. Harre (1999) added that “if 90% of a population, all treated the same way, have a certain characteristic or reaction, it does not follow that any one of them has a propensity, strength 0.9, to react that way” (p. 60). Overall, Hofstede (1994) cautioned that the scope
of I–C is limited. "It is an abstraction that should not be extended beyond its limited area of usefulness" (p. xi).

The literature reviewed in the previous four sections suggests that the dimension of I–C is not particularly robust and that a great deal more research is needed before researchers are able to use the construct to map countries accurately and to explain cross-national differences in behavior. Nonetheless, as we show in the following sections, I–C appears to have been overused and misused by psychologists as the default explanation in situations where other explanations would have been in order.

**Questionable Usage of I–C**

As mentioned earlier, I–C has been associated with a great many behaviors and personality attributes. In many cases, the relationships were assumed rather than measured; under other circumstances, apt care was not taken to rule out alternative explanations.

Hui, Triandis, and Yee (1991, as cited in Kagitcibasi, 1997) found that scarcity of resources tended to intensify generosity in the Chinese but not in the Americans. When the researchers controlled for collectivism, the cross-national difference remained. Thus, I–C did not explain generosity.

Because (as mentioned earlier) Hofstede (1980) obtained a strong correlation between individualism and national income, some researchers jumped to the conclusion that Western individualistic values are particularly conducive to growth and development. Such reasoning has been called into question by the rapid growth of several East Asian societies. Their models of development are quite distinct from those found in the West and cannot be attributed to the increased individualism or Westernization in those societies (Kagitcibasi, 1997). Yu and Yang (1994) suggested that the achievement motivation of East Asian people is socially oriented, as contrasted to the individually oriented achievement motivation of the North American and European people. Thus, the relationship between individualism and economic growth appears to be an illusory one.

The rapid changes experienced by most societies during the past centuries, such as industrialization, increased interactions with other societies, technological advances, and so on, have rendered several of I–C’s putative correlates redundant. For instance, although some researchers have attempted to link cultural complexity to individualism and simplicity to collectivism, such a relationship is hardly informative; most societies today are highly complex, and the simple–complex distinction is useful only in describing preindustrial societies (Kagitcibasi, 1997).

One should consider that what is often interpreted as differences in I–C can be accounted for by demographic variables such as education, type of employment, and urban versus rural environment (Kagitcibasi, 1997). Furthermore, although (as demonstrated in the preceding paragraphs) one should not assume that individualism causes prosperity or that collectivism causes poverty, it is still
possible that the observed differences in I–C are, in fact, caused by a given group's economic circumstances. For instance, people living in poverty are more likely to pool whatever scarce resources are available than are those living under more prosperous circumstances. That has nothing to do with psychological variables—it simply has to do with need.

Finally, it is important to distinguish I–C from modernity. As Kagitcibasi (1997) pointed out, the practices of filial piety, ancestor worship, subordination of women, and certain other presumed collectivist practices are best explained by traditional lifestyles rather than by psychological collectivism. In fact, Bond (1994) suggested that individualism is just another name for modernity.

I–C and Social Organization

Another controversial issue related to I–C is the capacity for social organization. On the one hand, the particularistic ties prevalent in "collectivist" societies may retard larger social organizations. On the other hand, all collectivist societies, at one time or another, have demonstrated the ability to organize toward attaining a common society-wide goal.

People from so-called collectivist societies have demonstrated a tendency to show little care or consideration for people not belonging to the in-group—little civic-mindedness (Yamagishi, 1988a, 1988b; Zhang & Yang, 1998). Ho (1993) explained that collectivism, in the sense that collectivists put the interests of the group before their own interests, may be somewhat of a misnomer in describing Asians. He argued that "relational orientation also differs from collective orientation. The emphasis is on relationships, rather than collective interests. Loyalties based on personal relationships within the collective often contradict, even sabotage, the larger interests of the collective" (Ho, 1993, p. 254). It is a mistake to confuse collectivism with altruism. Hofstede (1994) also argued that how one deals with out-group members is not a function of collectivism but another variable (such as femininity, one of the other three dimensions that Hofstede originated). The question whether collectivists are capable of forming large-scale coalitions is, then, a vacuous one, because a society's collectivism index has nothing to do with the extent to which loyalties extend beyond the immediate in-group.

The Special Case of the Self-Construal Theory

Markus and Kitayama's (1991) theory of self-construals builds upon the I–C distinction. Because of its prominence, self-construal theory makes an especially effective illustration of the mistaken conclusions that can result from assuming cross-national I–C differences. According to Markus and Kitayama, the boundaries of the self correspond to those of one's physical body for someone with a high independent self-construal. The focus tends to be on asserting one's needs, as well as preserving one's individuality, uniqueness, and independence;
personality tends to remain relatively consistent across different situations. For a person with a high interdependent self-construal, the boundaries of the self tend to be more fluid and to include significant others in a particular situation (e.g., family members, coworkers); the concept of the self tends to be less static and more situationally determined.

Markus and Kitayama (1991) suggested that people in collectivist societies tend to have higher interdependent and lower independent self-construals, whereas the opposite relationship is expected in individualistic societies. Thus, to make meaningful cross-cultural comparisons in terms of self-construals, one must assume that a person from an individualistic society has a higher independent self-construal and that a person from a collectivist society has a higher interdependent self-construal (Matsumoto, 1999). That assumption becomes particularly apparent in light of the close resemblance between independent self-construal and the aggregate mode of individualism and between interdependent self-construal and the relational mode of collectivism (Choi, Kim, & Choi, 1993).

However, according to Matsumoto (1999) and the foregoing discussion, there is not a robust cross-national distinction in I–C that would allow one to accept the necessary premise of the self-construal theory. As a result, there is no empirical basis for assuming cross-national differences in self-construals. That observation is somewhat troubling, because the self-construal theory has become one of the most influential and most cited theories in cross-cultural psychology and has appealed to a number of mainstream psychologists as well (e.g., Operario & Fiske, 1999).

The theory has been used to explain the greater emphasis on self-enhancement in the United States and the greater tendency toward self-criticism in Japan (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). Morisaki and Gudykunst (1994) relied on the self-construal theory to explain the Japan–United States differences in facework. Chao (1995) argued that Chinese American and European American child-rearing practices reflect the dominant self-construals in the respective cultures. Thus, the self-construal theory relies on the unsupported assumption of cross-national differences in I–C and, in turn, serves as a basis for several other theories.

I–C as a Dependent Variable

The preceding sections illustrate an attribution error that has plagued much of the I–C research. Kagitcibasi (1997) argued that some of the alleged effects of I–C may be due to other variables. Here, we would like to take this argument even further by suggesting that what is referred to as I–C not only does not function as an independent variable that affects behaviors and attitudes but is, in fact, a dependent variable determined by societal conditions. There really is no psychological individualism or psychological collectivism per se. Instead, there are individualist and collectivist behaviors. In certain societies, collectivist behaviors are more consistently adaptive, thus resulting in collectivist behavioral patterns that
are sometimes misconstrued as psychological traits. The same explanation applies to individualist behaviors.

Ecological Determinants of Individualist and Collectivist Behaviors

Watanabe and Yamagishi (1999) devised a computer simulation in which "players" (agents within the computer program) were programmed to use different strategies (e.g., unconditional cooperation, tit-for-tat, and the like) in interacting with each other. The players were then randomly placed in various geographic locations within the program. The players were free to interact with one another by using their respective strategies.

Each player would play one game with each selected partner. The player could either give the partner 1 point (cooperate) or take 1 point away from the partner (defect). When a player cooperated, the partner gained 2 points; when the player defected, the partner lost 2 points. Each player could also refrain from playing altogether. Having accumulated a certain number of points, a player produced an offspring. Having lost all the points assigned to it, a player died. A player approached (and played again with) players that cooperated and moved away from those that did not.

Eventually, colonies began to emerge. After 1.7 million activations, stable colonies of tit-for-tat (TFT) players (those who cooperated with cooperators and defected against defectors) were observed. The lone defectors kept to themselves, because they had already had mutual defections with the TFT players and because other players with even less adaptive strategies had disappeared. A degree of stability was reached.

Such a simulation could provide an ecological explanation for the formation of the so-called collectivist societies. As previously discussed, such societies are characterized by strong in-group loyalty and by mutual cooperation within the in-group that does not spread beyond the group's boundaries.

The Theory of Trust

The basis of the theory of trust of Yamagishi and his associates is the so-called "institutional" view of culture. According to that view, people contribute to the in-group not because they like doing so but because it advances their own long-term goals (Yamagishi, 1986, 1998a, 1998b; Yamagishi & Cook, 1993; Yamagishi, Cook, et al., 1998; Yamagishi, Jin, et al., 1998; Yamagishi & Yamagishi, 1996).

4We drew quite heavily on the research of Yamagishi and his associates (e.g., Yamagishi, Jin, et al., 1998; Yamagishi et al., 1999; Yamagishi & Yamagishi, 1994). Interestingly, to the best of our knowledge, no researcher in the area of I-C (dominated by theoretical and questionnaire studies) has acknowledged the (primarily experimental) research on trust of Yamagishi and associates. Although their data contradict much of what is commonly believed about I-C, we have found no studies to refute their arguments.
1994). This explanation is quite similar to the one offered by exchange theory (Thibaut & Kelly, 1959). However, as we have shown in the following sections, the putatively collectivist behavior is related to the societal structure and to the level of general trust (or the belief in goodness of people) that such a structure fosters. Thus, unlike the social exchange theorists, whose focus is on individual and small-group interactions, Yamagishi and his associates have offered a culture-level theory. According to Yamagishi, Cook, et al., general trust "provides a spring-board for people who have been 'confined' to committed relationships to move out into the larger world of opportunities" (p. 171).

So-called collectivist societies, such as East Asian societies, have traditionally tended to be rather closed; that is, relationships have usually been considered stable and permanent, and alternative relationships have been largely unavailable (Hwang, 1987, 1998; Yamagishi, Cook, et al., 1998; Yamagishi, Jin, et al., 1998; Yamagishi, Kikuchi, & Kosugi, 1999; Yamagishi & Yamagishi, 1994; Yang, 1995, 1997). As a result, East Asians tend to be distrustful of strangers. In contrast, the United States is what Yamagishi, Jin, et al. classified as a universalistic society. Trust is allowed to spread beyond the in-groups. Doctrines of civil society and community, the idealistic underpinnings of U.S. democracy, are based on alliances across family, and even ethnic, lines (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). Similarly, romantic relationships emerge not from family ties but from individualist notions of two strangers who build a loving relationship within their private dyad (Gergen & Gergen, 1995). Relationships are not considered as stable or permanent as in collectivist societies, and one may find alternative relations. Thus, the level of general trust in the United States is generally high (Hayashi, Suzuki, Suzuki, & Murakami, 1982, as cited in Yamagishi & Yamagishi, 1994).

People in collectivist societies learn that they may trust only the in-group. They know that they may expect preferential treatment from the in-group, but not from the outsiders (Yamagishi, Cook, et al., 1998; Yamagishi, Jin, et al., 1998; Yamagishi et al., 1999). This point was best summarized by Yamagishi, Jin, et al. (1998):

> How big an advantage in-group favoritism provides is a positive function of the degree to which social relations are closed to the outsiders. When most relations are closed to the outsiders, it is in the member's own self-interest not to exploit partners in continuing relations in search of short-term quick profits because it is hard to find alternative relations to turn to after the collapse of the current relationship. In-group

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5East Asian societies are commonly perceived as having a high level of trust. However, as Yamagishi and Yamagishi (1994) argued, this perception is due to the frequent confusion of "trust" and "assurance." They explained, "Trust is based on the inference of the interaction partner's personal traits and intentions, whereas assurance is based on the knowledge of the incentive structure surrounding the relationship" (Yamagishi & Yamagishi, p. 132; italics in the original). Indeed, East Asian societies are characterized by a high level of assurance because personal interactions are determined largely by the social actors' roles in a given relationship (Chuang, 1998; Ho, 1993; Hwang, 1987, 1998, 1999; King & Bond, 1985; Zhang & Yang, 1998).
favoritism is thus more commonly practiced in a society characterized by relations closed to outsiders. And thus, the group heuristics or expectations of such reciprocal in-group favoritism are expected to be more strongly shared by people who have been raised and are living in such a social environment than those who live in a social environment characterized by relations open to outsiders. (p. 322)

The computer simulation (Watanabe & Yamagishi, 1999) described in the previous section is an excellent illustration of the foregoing point. In a "society" characterized by high uncertainty, players tended to "stick" with those who cooperated and avoid going outside their respective groups for fear of being exploited by strangers. A kind of equilibrium was created. As Yamagishi, Jin, et al. (1998) put it, "It means in this context that each trait of a cultural configuration is made to be adaptive by the configuration itself. People acquire such a trait since it is advantageous to do so when the configuration exists, and the configuration exists since people exhibit such traits" (p. 322; see also Kim & Markus, 1999, for a related discussion). Thus, the closed nature of collectivist societies promotes a low level of general trust, whereas the low general trust reinforces the closed relations that characterize these societies.

The equilibrium also characterizes individualistic societies. The difference is that, in such societies, it is adaptive for individuals to have a high level of general trust, and the high level of general trust in the society is perpetuated by individuals who display such level of general trust.

Hayashi and Yamagishi (1998) held a tournament in which social-dilemma researchers were invited to submit computer programs simulating various strategies for resolving social dilemmas. There were 23 competing strategies, and the researchers found that, in a scenario in which opportunity costs were high (i.e., remaining committed to a relationship while failing to take advantage of outside opportunities causes a player to perform poorly), the DOG strategy was the best performer. The feature that set it apart from all other strategies (including the second-best performer) was its high trustfulness. Thus, in interacting with a new partner, DOG had a positive bias. It was willing to "deal" with strangers, whereas other strategies tended to avoid interactions with strangers.

The preceding point was further explicated by Yamagishi et al. (1999), who, having reviewed the literature on trust, concluded that a high level of trust does not equal gullibility. In fact, in an open society, highly trustful people are less likely to be exploited than low trusters, because the former have developed a social intelligence, namely, a higher sensitivity to the partners' cues about trustworthiness. High trusters, on the one hand, are less likely to be exploited by interaction partners because they are less likely to find themselves in committed relationships with untrustworthy partners. Low trusters, on the other hand, are more likely to make an inaccurate trustworthiness judgment about a potential interaction partner. Thus, Yamagishi and his associates explained that, as the societies characterized by low general trust (i.e., the collectivist societies) open up, the people may find themselves unprepared for the new modes of interaction.
According to Fiske (2000),

Participants' actions are often mutually presupposing and mutually completing: The fulfillment of the participants' intentions depends on the congruence of others' actions. This is essential for large-scale cooperation, especially when it goes beyond immediate face-to-face responses. This social complementarity results from joint usage of the coordination devices that people construct by joining a mod [ability to learn from other people how to get along with them] with a congruent cultural paradigm. (p. 79)

The preceding quote illustrates the inadequacy of the popular conceptualization of culture as static and self-sufficient, which, we suggest, is responsible for the present state of research on I-C. Clearly, individualism and collectivism do not exist within people's minds but, rather, manifest themselves in people's behavior, which is determined by the social context. The behaviors and the interpretations of these behaviors result from the interaction between individuals and their milieu. The meaning of these behaviors is collectively constructed (Bauer & Gaskell, 1999; Kim & Markus, 1999; Wagner, 1998; Wagner et al., 1999).

The social context is, in turn, shaped by ecological variables. Yamagishi et al. (1999) provided a possible explanation of the evolution of societies that are now characterized by low and high levels of general trust, respectively. Peasants in isolated mountain villages, for instance, developed a low level of general trust, because their environment made it wasteful to invest cognitive resources in learning to assess the trustworthiness of strangers. Because the environment did not allow for regular interaction with outsiders, the villages had to be completely self-sufficient. Thus, they had learned to rely on the resources provided within the village and developed behavioral patterns that now tend to be characterized as collectivist. Strangers were assumed to be untrustworthy, and villagers avoided dealing with them.

Merchants, in contrast, lived in an environment in which assessing the interaction partners' trustworthiness was necessary for survival. Dealing with a limited number of trustworthy partners incurred high opportunity costs. To maximize profits, merchants had to explore new relations. The environment was conducive to such explorations, because merchants typically lived and traded in market places, where interactions with strangers were more than abundant. Thus, such people had no choice but to develop social intelligence for assessing people's trustworthiness.

Figure 1 summarizes the developmental process that may explain why people in some societies are more likely to exhibit individualistic behaviors, whereas those in other societies are likely to act collectivistically. According to this model, the ecological environment that people inhabit may make a certain level of general trust adaptive (i.e., how frequently people must interact with strangers). Depending on the level of trust, the society may become relatively open or relatively closed. Collectivistic behaviors tend to be adaptive in more closed societies.
and individualistic behaviors in more open ones. Such behavioral patterns may reinforce the levels of general trust and, thereby, create the equilibrium that Yamagishi and his associates (Yamagishi, Jin, et al., 1998) described. The dashed lines in Figure 1 indicate that the distinctions are relative and not mutually exclusive. For instance, a society is not closed or open in the absolute sense. All variables in this model are located on a continuum. The arrows from the dominant behavioral pattern loop back to the level of general trust, rather than to the ecology, because contemporary societies have, in some respects, grown apart (temporarily) from ecology. For instance, although Japan is no longer isolated, it still has a relatively low level of general trust, as compared with the United States (Yamagishi et al., 1999).

Kollock (1994, as cited in Yamagishi et al., 1999) offered a more concrete illustration of the ecological effects on interaction patterns by contrasting rice and rubber markets. The quality of rice is easily determined; thus, a buyer runs a low risk of purchasing an inferior product. The quality of raw rubber, in contrast, is difficult to assess, and a buyer is, thus, easily exploited. Rice is generally sold at an open marketplace, whereas rubber is typically traded between a producer and a broker who have formed a long-term relationship that may span generations. The buyer of rice, therefore, can afford—indeed, is likely to benefit from—a high level of trust, whereas the buyer of rubber is better off with a low level of general trust.

Although researchers have taken some steps to link ecology to social behavior and psychological variables (see Berry, 1994, for a review), more research is needed in that area, especially on the effects of ecology on people in postindustrial societies. Nonetheless, historical accounts provide unmistakable illustrations of the change of the social fabric of many societies, resulting from technological
advances, improved communication and transportation, and so forth. One cannot overemphasize the role of ecology in shaping cultures.

Conclusion: Now What?

We have reevaluated the dimension of individualism–collectivism and its utility in cross-cultural research. The foregoing discussion suggests that the I–C dimension is inadequate. A given country's I–C score tells one little beyond how a certain group of people (who may or may not represent the general population) scored on a measure of a vague concept that is associated with several other concepts; the overall significance remains uncertain.

The present review of the I–C research has also illustrated a larger issue—the uncomfortable relationship that psychology has had with culture. Having finally realized the futility of culture-blind research, psychologists still sometimes find themselves tempted to reduce culture to a collection of ideas, attitudes, and behaviors (Hermans & Kempen, 1998). Hence, one finds the excessive reliance on dichotomies, such as I–C. Researchers' discomfort with cultural issues is also reflected in the frequent confusion of cross-cultural and cross-national research. Much of the so-called cross-cultural research published in the leading psychology journals and texts is, in fact, cross-national research. With today's unprecedented exchange of information between countries and continents, one may no longer assume the correspondence between geographical and cultural boundaries. As Hermans and Kempen (1998) argued, "As long as cultures (e.g., Japanese, Balinese, and those of indigenous people) are conceived as localized, cultures are described and investigated without any recognition of the influences that the global has on the local and vice versa" (p. 1115).

Despite the present criticism of I–C, dichotomies have their place in cross-cultural research. For instance, several constructs (e.g., cooperativeness–competitiveness and agency–communion), currently subsumed under the heading individualism–collectivism, would be a great deal more informative, because those concepts correspond to specific aspects of behavior and are more easily operationalized and measured. Cross-national and cross-cultural research in collective efficacy would shed more light on cross-national variation in social organization. Research on trust, as reviewed in the present study, has yielded some extremely fruitful results. In addition, studying concepts originated by non-Western scholars, such as amae (Doi, 1981) and face (Ho, 1994), cross-culturally and cross-nationally may illuminate important cross-cultural–cross-national variations in dealing with in-groups as opposed to out-groups.

The main lesson from the weaknesses of the I–C research is that a reductionist approach to studying culture (just like studying anything else) is simply inadequate. Researchers must aim to capture the complexities of human behavior and understand its interaction with the larger socioecological context. Mapping societies along the axes of a single dimension, be it I–C or any other dichotomy, is not enough.
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