

Cross-Cultural Psychology in Applied Settings

Passages to Differences

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During the past 30 years there has been a surge of interest in culture and cultural differences among psychologists, including applied psychologists. From our perspective, the cross-cultural psychology movement started with a desire to reclaim “culture” from its most popular working definitions in terms of “country” or “racial grouping” (Peng, Ames, & Knowles, 2001; Nisbett, Peng, Choi, & Norenzayan, 2001; Norenzayan, Choi, & Peng, 2007). Any nonmental facts such as geographical location or even the biological dispositions of members of the community can be meaningful only because they bear on mental events. Nationality or race may be psychologically relevant because they are enmeshed in a mental world of belief, value, attitude, and human actions, resulting in and being influenced by varying institutions, social structures, artifacts, and tools. In fact, psychological mental activities, such as desire, choice, judgment, decision making, communication, conflict resolution, competition, and cooperation are what really make important social science concepts—nationality, race, ethnicity, class, gender, sexual orientation—meaningful to individuals. Thus, cross-cultural psychology is the study of the way the human mind can be transformed, given shape and definition, and made functional in a number of different ways that are not uniformly distributed across cultural communities around the world (Schweder & Bourne, 1994).

Cross-cultural psychology has also emerged as an important field of applied psychological research as more and more studies have found that theories of psychology developed in the West and thought to be universal do not generalize well to other cultures. Grounded in a conception that mind and culture are mutually constituted, research in this field strives both to identify the effects of culture on the mind and

the effects of the mind on culture. It includes theories and debates about the forms of cultures themselves (e.g., individualism–collectivism) and how different cultures create differences in how we judge cause (e.g., attributions to forces internal vs. external to the individual), conceive of ourselves (e.g., independent of vs. interdependent with others), reason (analytic vs. holistic reasoning) and even perceive the world (e.g., what one attends to and remembers from a scene). Thus far, the most common comparisons have been between East Asian (Korean, Japanese, and Chinese) and European–American participants, from which researchers have discovered profound cultural differences in many seemingly basic social psychology findings. This is not to say East–West differences are the only ones examined: There has been research on other cultures, ethnicities, and nationalities, both subcultures within Eastern and Western countries (e.g., African Americans) as well as on members of cultures within Africa and Latin America (e.g., Morelli, Rogoff, & Angelillo, 2003, see also Smith, Bond, & Kağitçibaşı, 2006). For this review, however, we will focus on East–West differences. Much of this research has implications for how people from different cultures will behave in their everyday social contexts. As countries become more multicultural and trade and communication between nations becomes more common, the interaction between different cultural norms and psychological orientations will become more and more important.

In the field of cross-cultural psychology, there are two theoretical approaches that generate much of the debates and empirical studies. One is the notion of individualism–collectivism and the other is the holistic versus analytic cognitive orientations. Both approaches have specific predictions about possible behavioral differences between people of Eastern and Western cultural traditions and therefore indicate road maps of possible differences in cross-cultural applied settings such as business, law, politics, and international relations. Since we believe that cross-cultural psychology is not merely a content area of applied psychology but a unique approach, we are going to discuss the possible points of entry where cross-cultural contexts may be important to applied research. Hence, this article is not a review of all cross-cultural work in different applied settings, but a theoretical discussion of possible differences across all settings, particularly between cultures of the West (North America and Western Europe) and cultures of the East (East Asia).

Foundational Theories of Cross-Cultural Psychology

One of the most influential applied psychological studies examining cultural differences was Hofstede's (1980, second edition in 2003) massive study across IBM. Hofstede kept the organization under constant review and surveyed individuals in similar occupations across 50 countries between 1967 and 1978. By aggregating across nations, Hofstede determined four culture-level attributes. As behavior on the job is tightly constrained by occupational culture and technology, this was an effective method of teasing out national culture. Hofstede's (1980, 1983) four dimensions were individualism–collectivism, power distance, uncertainty avoidance, and masculinity–femininity.

Individualism–collectivism

Individualism–collectivism has since been conceptualized as two possibly compatible separate dimensions (Triandis, 1990, 1995). Furthermore, they may exist within the same person at different times or within cultures where one dominates (see Li & Aksoy, 2007). Individualism includes a focus on individual autonomy, self-determination, and efficacy; collectivism entails a focus on one's place within a social context and duty toward others, particularly in groups. A further iteration of individualism and collectivism incorporates the dimension of power distance to distinguish between horizontal and vertical individualism and collectivism (Li & Aksoy, 2007; Triandis & Gelfand, 1998). Horizontal individualism focuses on uniqueness and self-reliance, whereas vertical individualism emphasizes competition; horizontal collectivism is focused on pride and cooperation with peers, whereas vertical collectivism emphasizes duties toward those higher in the hierarchy (i.e., parents).

One of the most widely accepted interpretations explaining East–West differences is contrasting cultural conceptions of the person and that person's interdependence versus independence from the social context (Triandis, 1989; Markus & Kitayama, 1991). Markus and Kitayama (1991, similarly to Triandis, 1989) suggest that more individualistic cultures lead individuals to develop a more independent conception of the self, whereas collectivistic cultures lead individuals to develop a more *interdependent* (connected with others, overlapping with others) conception of the self. For instance, while Americans on average assume that individual character is fixed and the social world is fluid, the Chinese on average assume individual character is fluid and the social world is fixed. Thus, in general, Asians have a stronger sense of collective autonomy, rather than the individual autonomy that governs American social thinking. Because Americans believe in individual autonomy and that individual character is fixed, they will be more likely to perceive the individual as a consistent explanation for behavior, rather than the situation. This tendency—to blame the behavior of strangers, particularly negative behavior, on individual character—has been previously termed the fundamental attribution error because it was so consistently shown. Morris and Peng (1994) found that this fundamental attribution error is particularly prevalent among Caucasian Americans, the participants in those earlier studies, and less prevalent among East Asians.

These cultural conceptions were probably influenced by the sociological and religious history of the cultures. Individualism in American culture is possibly rooted in the Judeo-Christian notion of the individual soul, and collectivism in Chinese culture is possibly rooted in Confucian precepts about the primacy of social relations and the virtue of role-appropriate behavior. While there has been some debate as to whether there is truly any empirical evidence to support the interdependent/independent self model (Matsumoto, 1999), this tradition and model remains quite influential in psychology today (Smith, Bond, & Kağitçibaşı, 2006).

Empirical evidence has substantiated this difference in perception of agency. For example, studies have shown that Asians may be just as susceptible to the fundamental attribution error when asked to examine a group entity rather than an individual. Even more interestingly, this aspect of attribution has been tested with nontransparent methods, or methods that participants do not consciously associate with social

or cultural topics, such as perceptions of animal behavior. Morris and Peng's (1994) study featured designed animations of fish in which an individual fish swam in a different path from a group of fish. In explaining this behavior, Chinese participants attributed it less to the internal disposition of the fish and more to the group factors than did American participants. In fact, when asked "how does the individual fish feel?" neither group had trouble responding (e.g., lonely). However, when asked "how does the group of fish feel?" Chinese had no trouble responding (e.g., arrogant), but Americans had great difficulty in answering the question, showing confusion. Some subjects even asked, "What do you mean? Do you mean that blue fish there, or that pink fish?" pointing to an individual fish in the group, indicating an individual-centered perception.

Holistic and analytic orientations

In the past few years, research has delved into Eastern and Western cultural approaches to human thinking and cognition (Nisbett et al., 2001; Peng et al., 2001). The intellectual histories of East Asia and Europe are consistent with some differences in the two cultures' cognitive orientations. Western educational principles, assumptions about the mind, and philosophy originated with the ancient Greeks. The relevant parts of this perspective, which flourished during the Enlightenment, held an *analytic* stance, focusing on categorizing an object with reference to its attributes and explaining its behavior using rules about its category memberships. Ancient Chinese philosophy had a *holistic* stance, in which it examined the field in which the object was found and explained its behavior in terms of its relationship with the field. These differing intellectual approaches were manifested in differences in ancient Greek and Chinese science and mathematics. Ancient Greek scientists tended to see the behavior of objects as being exclusively due to the attributes of the object, as in Aristotelian physics. Thus, an ancient Greek would say that a stone drops in water because it has the property of gravity, whereas a piece of wood floats on water because it has the property of levity. Ancient Chinese physics was more similar to Galilean physics, which recognized that the behavior of objects is the result of an interaction between the object and the environment. Thus, whether a stone sinks or wood floats is not explainable by the objects' innate characteristics, but rather by their interactions with water.

Holistic thought is an orientation to the context or field as a whole, including attention to relationships between a focal object and the field and a preference for explaining and predicting events on the basis of such relationships. Holistic approaches are dialectical, meaning that there is an emphasis on change, a recognition of contradiction and the need for multiple perspectives, and a search for the "middle way" between opposing propositions (Peng & Nisbett, 1999). Eastern dialectical thinking accepts contradictory positions within the same person or situation. This stems from the belief that the world is in constant flux, and that the part cannot be understood except in relation to the whole. This cultural tendency helps explain why East Asians demonstrate less fundamental attribution error, because they perceive a person as operating in a larger context or field, and will try to understand his actions within that context.

This difference in thinking is demonstrated in research on the two cultures' attitudes towards psychological contradiction: people from East Asian cultures are more comfortable with contradictions than are Americans, reflected in examples of Chinese folk wisdom such as "beware of your friends, not your enemies" and "too humble is half proud." This difference in thinking has particular salience in the legal field when it is applied to social contradictions, or conditions in which two parties or two aspects of a social system are in conflict with each other. In one study, Peng and Nisbett (1999, 2000) demonstrated how different ways of thinking naturally suggest different forms of conflict resolution. The study presented two everyday-life scenarios to American and Chinese participants, one involving a mother-daughter conflict. Participants were asked to write down what they thought about these conflicts, explain their origin, and offer a resolution. Dialectical responses generally do not find exclusive fault with one side or the other. Chinese participants were much more likely to give dialectical responses, which attributed the cause of the problem to both sides and attempted to reconcile the contradiction. Seventy-two percent of the responses given by Chinese participants were dialectical, such as "both the mothers and daughters have failed to understand each other," whereas only 26% of the American responses were dialectical. Seventy-four percent of the responses given by Americans were non-dialectical, such as "mothers have to recognize daughters' rights to their own values."

The "holistic" and "analytic" modes of thought have also been shown to affect preferred modes of reasoning, in particular preferences for logical and intuitive reasoning. In a series of studies that pitted formal logic against intuitive reasoning, Ara Norenzayan and colleagues (Norenzayan et al., 2002) found that when an intuitive response based on experience and context was at odds with a logical or rule-based response, Koreans preferred the intuitive responses. However, when given purely abstract logic problems, there was no difference between the abilities of Korean and American students. Koreans were more "thrown off" by implausible conclusions of correct logical arguments than Americans and were more likely to say that logically valid arguments were *invalid* when the conclusion was implausible. They were also more likely to find valid arguments to be more convincing if they involved typical examples of categories.

Practical Implications of the Differences

The basic questions facing human beings are justice (what is right or wrong), nature (cause and effect of everything), and other people (how to deal with them), as well as the way we deal with them, such as judgment, choice, and actions. Foundational questions for applied psychology are actually about these basic questions almost all societies face.

Practical question 1: How to judge right and wrong?

Shweder and colleagues have proposed that there are at least three "codes of ethics" that coexist at different levels of emphasis in different communities. The *ethic of*

autonomy, probably the most common among American academics and the basis of American law, stresses justice and individual freedom from interference: Harming or infringing upon the rights of other individuals is seen as the marker of immorality and injustice, and may induce feelings of anger. Another common ethic is the *ethic of community*, which stresses individual obligations to fulfill certain roles and duties; failure to fulfill interpersonal obligations is seen as immoral, and induces feelings of contempt. A third ethic is the *ethic of divinity*. This ethic responds to a sense or belief that there is a “natural order of things” that is sacred; actions that cause impurity or degradation of oneself or others, or disrespect to transcendental authority(/ies), are seen as immoral, and induce feelings of disgust.

Past moral development research in the US primarily focused on an abstract *ethic of autonomy* as the pinnacle of moral development, but cultural psychological research has shown that abstract moral principles based on the other ethics are more important in other cultures. For example, research comparing Hindu Indians and European Americans showed that interpersonal obligations, even to strangers, were seen in much stronger moral terms by Indians than by Americans, and were even seen as legitimately *regulated* actions. Moreover, when interpersonal obligations (e.g., getting to a friend’s wedding) and justice violations (e.g., having to steal a train ticket to get there) were placed in opposition, Indians found the interpersonal obligations to have much greater moral weight than did Americans. Importantly, researchers have found cultural differences *among* Americans when justifying their views on politically charged issues such as suicide or divorce. For example, members of fundamentalist Baptist sects prefer arguments based on the ethic of divinity, whereas members of progressive sects were more likely to use an ethic of autonomy principles to defend their more liberal views. When laws and public conceptions of morality are different, the viability of the legal system may be undermined. The coexistence of these sometimes conflicting moral codes in different communities offers insight into current political debates, and promises to continue to affect inter- and intra-national debates on laws in the future. For example, the debate over same-sex marriage may be seen as a conflict between a specific ethic of divinity and the ethic of autonomy (or even the ethic of community).

Haidt and colleagues (1993) found universal affective reactions to harmless immoral behaviors, such as lying to dying mothers and disrespecting cultural icons. Interestingly, Haidt’s data also showed that collectivistic South Americans are more likely to use moral judgments whereas individualist Americans are more likely to use neutral matter of fact judgments in evaluating such behaviors. Miller (1994) found that Asian moral judgments are based on relational factors or duty rather than on individual rights or harm to others. Haidt and Miller’s findings seem to suggest that, because collectivist people will likely focus on the relational experience of a contractual interaction, moral codes governing relational conduct will be provoked in contract understanding among collectivistic people.

Cross-cultural psychologists have also examined conceptions of justice and fairness. Tyler, Lind and their colleagues suggest that Asian views of justice are more relational and Americans are more procedural. In the same tradition, Triandis (1995) and Leung and Bond (1984) argue that collectivist societies emphasize equality in fairness distributions whereas individualist societies emphasize equity in the allocation of

justice. Licht, Goldschmidt, and Schwartz (2007) applied a cultural model to examine the interaction between corporate governance and value categories, and found that they are related in significant ways. Levinson and Peng (2003) examined the cultural psychological differences underlying tort law's causation inquiry, highlighting how laypeople's culturally variant causal attributions and fairness judgments often do not match American law's inquiry. Despite this progress, the nature and differences of justice and fairness in different cultures is still poorly understood.

Practical question 2: How to judge cause and responsibility?

There is much evidence that causal attributions between the East Asians and North American are different in fundamental ways. Morris and Peng (1994) and Lee, Hallahan, and Herzog (1996) have showed that Americans explain murders and sports events respectively by invoking presumed dispositions of the individual, whereas Chinese and Hong Kong citizens explain the same events with reference to contextual factors. Correspondingly, Peng and Knowles (2003) found that Chinese students are more likely to explain physical events on the basis of factors external to the object than Americans. In some of their experiments, Chinese students with no formal physical training were more likely to perceive causality to originate externally to the target object (e.g., gravity, medium, friction, field), whereas Americans referred to causes internal to the object (e.g., shape, weight, inertia).

Norenzayan, Choi and Nisbett (2002) found that Korean participants were more responsive to contextual factors when making predictions about how people in general would be expected to behave in a given situation and, much more than American participants, made use of their beliefs about situational power when making predictions about the behavior of a particular individual. Importantly, Norenzayan et al. (2002) found that Koreans and Americans endorsed beliefs about the causes of behavior that accorded with their explanations and predictions. Koreans placed more credence in situational theories than did Americans. Choi and Nisbett (1998) found similar results when they examined circumstances in which both Americans and Koreans mistakenly attributed behavior to the dispositions of a target actor. Koreans were much more willing to revise their mistaken inferences about dispositions than Americans.

Sensitivity to the role of contextual factors, and attention to the field, may have their drawbacks. In a series of experiments, Choi and Nisbett (2000) found that Koreans were more susceptible to the *hindsight bias*, that is, the tendency to believe that one could have predicted some outcome that in fact one could not have predicted. Choi and Nisbett argued that the Asians' greater susceptibility to this bias might be due to a tendency to attend more to contextual factors and to a tendency to causally model events less explicitly.

Through the course of hundreds of years of practice, the American law of contracts has attempted to come up with a fair, predictable way to deal with contractual interactions, particularly with respect to contract formation. These laws often rely on citizens as jury members to determine whether the parties entered into a contract in the first place. But do we, as laypeople, understand contracts and contract formation in ways consistent with these laws? Psychological research on responsibility attribution

(Piaget, 1932/1965; Heider, 1958), moral judgment (Haidt et al., 1993; Miller et al., 1994) and culturally influenced cognitions (Peng, Ames, & Knowles, 2001; Nisbett et al., 2001) leads us to examine empirically people's judgments of intent, morality, responsibility, and character as we strive to understand the psychological processes underlying perceptions of contractual behavior. It even allows us to examine how much morality, intent, and other factors affect laypeople's contract judgments across cultures. After all, contract law—contract formation in particular—relies on culture (Mautner, 2002).

Beyond the legal domain, these different conceptions of responsibility and justice may have implications for the workplace. Different conceptions of fairness and responsibility may lead to different assumptions regarding reward allocation, depending on both individualism–collectivism and power distance dimensions (Erez, 1997). Extrinsic rewards are a fundamental part of the working domain. If salary, benefits, and bonuses are assigned by equity versus equality when the other is expected, people may feel unfairly rewarded. This is something that multinational companies and people working abroad need to keep in mind.

Practical question 3: How to judge others' intents and responsibilities?

Closely related to questions of causality are judgments of intent and responsibility. This reliance on intentionality has clear psychological roots. Intentionality has been the cornerstone of "theory of mind" research in developmental psychology (Leslie, 1995; Gopnik & Meltzoff, 1997; Wellman, 1990) and is increasingly becoming an important part of attribution theory (e.g., Malle, 1994, 1999; Morris et al., 2001). Notions of intentionality in psychology can even be traced back to Heider's early assertion that intention is the central factor in personal causality (Heider, 1958). Children seem to understand mental states (beliefs, desires, and intents) of other people from a strikingly early age, possibly from birth (e.g., Astington, Harris, and Olson, 1988; Gopnik & Meltzoff, 1997; Perner, 1991; Wellman, 1990). As a result, the function of intentionality judgments has been generally assumed to be universal. However, the process by which people make intentionality judgments, particularly the factors that contribute to people's understanding of intentionality, has not been empirically examined, nor have intentionality judgments been examined empirically across cultures.

A related psychological process is the judgment of responsibility. Piaget (1932/1965) was the first to propose two distinctive criteria in judgments of responsibility. He argued that young children's judgments of responsibility are a function of the amount of harm done to other people, which he labeled as the "objective responsibility rule". Over the course of individual development, people learn to incorporate mental state information into responsibility judgments, coming to hold people responsible only for the outcomes they intended, which he labeled as "subjective responsibility." Heider (1958) proposed five levels of responsibility attribution: association, causality, foreseeability, intention and justification (Hamilton & Sanders, 1992), by which people display different levels of "sophistication" in responsibility judgments. Both Piaget and Heider seem to suggest that internal mental state judgments (e.g., of intention) are more important than pure association judgments or

judgments regarding consequences in responsibility attributions. These studies suggest that the standard of judging intentions may be psychologically related to the overall notion of contracts—that someone should be held responsible for complying with their bargains.

However, cross-cultural studies on lay conceptions of justice may challenge the views of Piaget and Heider. In their expansive study of culture and moral judgment, Hamilton and Sanders (1992) found that Japanese judgments of responsibility and punishment were less sensitive to intention information than were American judgments. They attributed this diminishing role of intention in responsibility judgments to the greater impact of “relational” factors among Japanese, including the role of relationships, hierarchical distinctions, and solidarity between perpetrators and victims. This cultural explanation fits nicely into existing scholarship in cultural psychology indicating that Japanese culture tends to be more relational, collective, and interdependent, while American culture tends to be more individualistic and independent (Triandis, 1995; Markus & Kitayama, 1991). These studies on the importance of relational factors in Asian cultures indicate that a collectivist understanding of contracts may focus more on the relationship between contracting parties and less on the parties’ individual intents in contract formation.

Practical question 4: How to deal with uncertainty and predict the future?

Estimates of probability and perceptions of the future have implications not only for economic judgments (e.g., stock assessments), but also for business decisions by managers. In 1977, Phillips and Wright (1977, also Wright & Phillips, 1980) carried out an interesting cross-cultural comparison between Chinese and British participants on probability judgment, such as questions like “Which river is longer: the Yangtze River or the Mississippi River?” They found that British people had a greater tendency to view the world in terms of uncertainty than did Hong Kong Chinese. British people were more likely to ascribe different degrees of uncertainty to events, and could then express the uncertainty as a numerical probability in response to general knowledge questions. The Chinese, on the other hand, were more likely to make extreme probability estimations (e.g., “100%” or “no chance”). These findings have been confirmed by more recent experiments undertaken with students in the United States, Japan, China, and many other Asian countries and regions by Yates and his colleagues (Yates et al., 1989; Yates, Lee, & Shinotsuka, 1996). This finding has implications for assessment and testing: If an American or British-derived exam involving probability assumes certain kinds of answers are the norm, then people from different cultures may be penalized for following a different norm regarding probability statements.

Phillips and Wright (1977) suggested that an individual’s world view of causality influences his or her tendency to adopt probabilistic thinking. They distinguished a Laplacean worldview and a fatalistic worldview, and suggested that British people are more familiar with the Laplacean view that events do not just happen through the action of mysterious forces, but are caused by previous events acting according to natural laws that can be discovered by systematic investigation and inquiry. On the

other hand, most of the Hong Kong Chinese tended to accept a fatalistic view. The British (Laplacean) probabilistic worldview, it was argued, tends to cultivate probabilistic thinkers, while the Hong Kong Chinese fatalistic worldview, in contrast, tends to foster nonprobabilistic thinkers. Holding this worldview, Hong Kong Chinese are more likely to accept uncertainty even at the risk of contradiction, but not to make fine differentiation between uncertainties.

Yates and his colleagues (1996) proposed an alternative explanation for the overconfidence phenomenon in probability judgments among Chinese on general knowledge questions. They suggested that the problem with Chinese participants' overconfidence in judgments about probability is that they usually generate fewer counterarguments for their judgments. According to the "argument recruitment model" described by Yates, Lee, & Shinotsuka (1996), when a person is confronted with a general knowledge question, the person first tries to bring to mind (or "recruit") arguments for and against each of the possibilities being considered, and then evaluates the relative strengths of the arguments. If the arguments generally favor one particular option, that alternative is selected as the correct one. The more heavily the arguments favor that option, the greater is the probability that the given alternative is correct. The Asian overconfidence may arise from the fact few counterarguments are generated for the questions (or propositions in general). Such a culture-specific characteristic may have roots in Chinese educational practices. In Chinese classrooms, teachers do not encourage questions or criticisms of textbooks and lectures, whereas the development of critical thinking is central to the ideology of American education (Yates, Lee, & Shinotsuka, 1996; Lee, Yates, Shinotsuka, Singh, Onglatco, Yen, Gupta, & Bhatnagar, 1995).

In a series of studies, Ji, Nisbett, & Su (2001) examined how beliefs about stability and change among North Americans and Asians affect their prediction of future events. They described various current states and asked whether participants thought the state would continue or change. For example, participants were told about a man who grew up in a poor family, and they were asked to predict whether he would remain poor in adulthood or grow rich one day. For each of four events, Chinese were more likely than Americans to think that the future would be different from the past. Ji and colleagues also presented participants with alleged recent trends in world events that participants were unlikely to have direct knowledge of, for example, participants were told that the world's economy has been growing in the last decade, and were asked to predict whether this trend would go up, go down, or remain the same. Chinese participants were more likely to predict that the next step would halt or reverse the direction of change, whereas Americans were more likely to predict that the trend would continue in a linear fashion. In one study, Chinese participants were more likely to predict reversals of trends in all but 1 of 12 cases (Ji et al, 2001).

Practical question 5: How to avoid dangers?

Related to assessments of the future and uncertainty, the current worldwide economic recession illustrates an important practical question: how to control risk? Risk percep-

tion is a specific form of probability judgments. In a series of studies, Weber and Hsee (1999; Hsee & Weber, 1999; Weber, Hsee, & Sokolowska, 1998) have examined American and Chinese cultural differences in risk preference (e.g., choosing between a smaller sure gain option versus a larger risky option). Contrary to the predictions of American and Chinese participants and popular stereotypes, Weber and Hsee found that Chinese were more risk-seeking and Americans were more risk-averse in their financial decisions. However, this difference was specific to the financial domain. In the social domain, the pattern was reversed, with Chinese being less risk-seeking. Congruent cultural differences also emerged when the authors analyzed the risk-seeking (or risk-avoiding) advice implied in Chinese and American proverbs.

Hsee and Weber (1999) propose a “cushion hypothesis,” according to which people living in a collectivistic society (such as China) are more likely to receive financial help when in need than people living in an individualistic society (such as America). In a sense, a collectivist social order provides a “mutual insurance” or “cushion” against financial losses. As a result, Chinese perceive the same financial situation as being less risky than Americans. However, the same collectivist cushion that protects the Chinese from financial loss cautions them from taking social risks, as interpersonal harmony is of paramount importance in a collectivist society. In further support of this hypothesis, Hsee and Weber found that the cultural difference in risk preference in the financial domain was mediated by the larger size and better quality of the Chinese participants’ social networks. The cultural difference was also found to result from different perceptions of the riskiness of the options, not from different risk–value tradeoffs (Hsee & Weber, 1999).

Practical question 6: How important are choices and autonomy?

It is a fundamental notion in Western psychology that people make choices every day and that these choices make up the narrative history of a person. Choice and autonomy are particularly important in the context of work. A growing body of cross-cultural research, however, suggests that strong desires for choice or control are not necessarily equally important to all. Choice or control does not necessarily increase performance or well being among people of different cultures.

In an experiment performed by Ji, Peng, and Nisbett (2000), Asian and Euro-Americans were given a series of covariation tests and the Rod-and-Frame test. They found, in general, that East Asians do worse on those tests than Euro-Americans when they have many choices, and reported less confidence in their self-evaluation of their own performances.

Iyengar and Lepper (1999) performed an experiment where Asian-American and Euro-American children played a computer game in which they had to solve arithmetic problems to send an animated rocket into outer space. In one condition, students could choose most of the game’s optional settings, like the color of the space ship, the name of the astronaut and so forth. In another condition, the students were told that their mothers had been contacted and had configured the settings in a way they thought best for them. In the condition where their mothers chose the settings, Asian Americans’ performance was better than in the personal choice condition, while European Americans did worse. Having control over peripheral

“aesthetic” features of the situation improved the performance of European Americans but diminished that of Asian-American children. In another study, the researchers gave American, Chinese, and Japanese children anagrams to solve. In one condition the children got to decide for themselves which type to solve; in another, their mothers chose the type to solve. Again, American children did better when they chose for themselves, while Asian children did better when their mothers made the choice. Iyengar, when she began researching attitudes of Japanese and Chinese factory workers compared to Anglo-Americans in the US, found it difficult to have a conversation about choice with East Asians, and equally difficult to have a conversation with Americans about the need for group harmony. When asked to catalogue the number of choices made during the day, Americans reported 50% more than East Asians. And when asked to enumerate occasions when they would wish never to have a choice, 30% of Americans said that they could not imagine such a situation, while none of the Asians felt that way. There are within cultures ethnic differences as well. Iyengar found, in her ongoing research at Citigroup, that having the ability to choose when to take work breaks and how to perform one’s job predicts employee satisfaction and enhanced performance among Anglo-Americans and African-Americans, but has no such relevance to Asian-American and Latin American employees. She also found that Americans performed better and were more satisfied with work activities they chose to do, while Asians tended to be more satisfied and performed better on tasks that trusted others, like well-regarded managers, have chosen for them.

Briley, Morris, and Simonson (2000) asked participants to choose among three consumer products that bore the following relation to one another: product A was superior to products B and C on one dimension and product C was superior to products A and B on a second dimension. In a control condition, Chinese and American participants were equally likely to choose product B, which was intermediate on both dimensions. In an experimental condition, participants had to justify their choices. This prompted the Americans to go for one of the more extreme choices, either A or C, which could be justified by the invocation of a single principle. In contrast, it caused the Chinese to be more inclined to choose the intermediate object, which they justified by saying that both dimensions were important.

Practical question 7: How to resolve conflicts and differences?

There is a long tradition for Chinese not to engage in debates and formal argumentation about absolute truth and conflict (e.g., Becker, 1986; Nakamura, 1964/1985). When Peng presented two types of arguments—logical linear and dialectical compromising—to Chinese and American students, the Chinese preferred the compromising arguments to the linear arguments. The two logical arguments were much superior in terms of sophistication, including Galileo’s famous discussion concerning the falsity of Aristotle’s assumption that a heavier object falls to the ground first, and David Hume’s argument for the existence of God (adapted from Fisher, 1988). Two parallel dialectical arguments were generated to argue the same positions but applying the principle of holism. The participants were instructed to read these two types of arguments, A and B, for each topic, then to answer the following two questions:

- (1) "Which argument is more persuasive (convincing) to you personally, A or B?"
- and (2) "Which argument do you like more, A or B?"

The results indicated that the Chinese participants preferred dialectical arguments more than did Americans, and found them generally more persuasive and likable. This cultural difference may explain the famous "Needham's paradox" in the history of physical science (Capra, 1975; Needham, 1962; Zukav, 1979). Needham's paradox is the question as to why the Chinese did not develop the modern physics of electromagnetism or quantum physics despite their rich concepts concerning "field" and "force over distance." One possibility is that naive dialectical thinking restricts any reductive, analytic, logical, or personal quests for a discrete true understanding of nature and the world. The finding is also consistent with the Chinese practice of polytheism (whereas Americans embrace monotheism) and the lack of religious wars like the Crusades or Jihads in Chinese history.

Cross-cultural comparisons of indigenous preferences for conflict resolution methods have also shown strong cultural variations with Asians typically favoring harmony-seeking procedures (Leung, 1987; Leung & Lind, 1986; Ohbuchi & Takahashi, 1994). Peng and Nisbett (1999) found that most of the American participants' resolutions of contradictions in everyday life were noncompromising, blaming one side for the problems, demanding changes from one side to attain a solution, and offering no compromise in dealing with interpersonal conflicts. In contrast, most of the Chinese responses were much more dialectical, usually blaming both sides and preferring a compromise approach to resolve the contradictions.

As Peng and Nisbett point out, both ways of thinking have their own flaws. For example, dialectical thinking tends to accept too much at face value, fail to generate counterarguments for a statement, and try to reconcile opposing views even when one viewpoint is inferior in terms of the evidence supporting it. They conclude that both ways of thinking have their strengths in different areas. The logical ways of dealing with contradiction demonstrated in Western thinking may be optimal for scientific exploration and the search for facts because of their aggressive, linear, and argumentative style. In fact, in Westerners, naive dialectical thinking seems to hurt problem finding, a type of creativity, particularly in low-contradiction problems (Paletz & Peng, 2009). However, "dialectical reasoning may be preferable for negotiating intelligently in complex social interactions" (Peng & Nisbett, 1999, p. 751). These complex social interactions are precisely the content of legal disputes. If Eastern holistic thinking is a more effective approach to understanding social behavior, then this supports the use of mediation, because mediation attempts to find a consensus between contradictory positions.

It is not surprising to learn that Asian cultures have a history of using mediation as the preferable form of dispute resolution. Mediation is the cornerstone of dispute resolution in China. The philosophy ruling China's dispute resolution is "first decide, then try." Approximately 70% of all cases in China are settled by mediation rather than legal judgments. Recently, Singapore formally reformed its judicial system to emphasize mediation, and lawyers touted it as "one of the best reforms" in Singapore's legal history. Asian cultures also prefer mediation because it "saves face," since both parties can be winners or share the burden of the loss together. "Nobody wants to lose or be seen to have lost." Because mediation focuses on restoring the relationship

between the two parties, reflecting a holistic approach to the conflict, the opportunities for satisfaction on both sides is much greater. Because a mediated settlement is the result of the voluntary agreement of each party, it can only come about if each party believes he has gained something from it.

Other types of cultural norms may have an impact on non-legal conflict situations. Merritt (2000) mostly replicated Hofstede's (1980) four dimensions in a sample of over 9,000 pilots. Individualism–collectivism, power distance, masculinity–femininity, and uncertainty avoidance (particularly individualism–collectivism and power distance) were replicated above and beyond the strong norms of aviation. The implications of this finding revolve specifically around disagreements within the cockpit between pilots of different ranks. Crew (or cockpit) resource management (CRM), a specific pilot training module geared toward increasing the assertiveness of junior pilots in raising problems to senior pilots (who then should heed their juniors), was not as well received outside the United States as expected (Helmreich, Merritt, & Wilhelm, 1999). This is typically considered to be because of national differences in power distance, where CRM is more counternormative in some cultures than others (Helmreich et al., 1999). In some cultures, power distance makes it more difficult for a junior pilot to question the senior pilot, and more likely for a senior pilot to perceive pointed questions as threats. As a response, some airlines have incorporated culture training in their CRM training (Helmreich & Merritt, 1998). Some researchers have recommended that the framing of CRM should be around error management, with error as seen as a universal problem for pilots of any level of hierarchy to avoid, prevent, and mitigate (Helmreich et al., 1999).

Practical question 8: How to work with others?

Successful and appropriate leadership, whether in the cockpit or on the shop floor, is complex, difficult, and vital in all applied settings. Most organizations also require their members to work in teams. Although the antecedents and correlates of successful leadership and teamwork will not be dealt with in detail here, it is important to note that several cross-cultural studies have examined the effect of culture on both concepts.

Culture can have an impact on teamwork and team decision making in both multinational teams (e.g., Ilgen, LePine, & Hollenbeck, 1997) and in differences in teamwork across cultures (e.g., the success of quality circles in Japan and their relative failure in the United States, Erez, 1997). Taking the theme of individualism–collectivism, Earley (1993) found that individualism completely mediated country differences in social loafing. Social loafing, like the fundamental attribution error, is a commonly found effect in the United States. In social loafing, individuals work less hard when they think they are part of a team than when they think they are being evaluated individually. He found it was more prevalent in the United States than in Israel, and more prevalent in Israel than in China, but that the relationship between nationality and social loafing was almost entirely mediated by individualism scores. This is just one of many possible culturally influenced differences in teamwork across nations (Smith, Bond, & Kağitçibaşı, 2006).

In terms of leadership, the GLOBE (Global Leadership and Organizational Behaviour Effectiveness) project has surveyed over 17,000 managers across 62 nations (House et al., 2004). The participants were asked to select traits that they perceived to be associated with effective leaders. The findings were complex: some general patterns were found, as well as differences at the national and organizational level. Some of these differences were in line with Hofstede's dimensions of collectivism and power distance. For example, in-group collectivism at the level of the organization and nation was associated with a preference for charismatic leadership (and at the level of just the organization, a preference for team-oriented leaders), whereas high power-distance organizations and nations had a preference for self-protective leadership styles. A smaller but still impressive study by Smith and colleagues (2002, 2006) asked 7,000 managers in over 40 nations how much they relied on eight different sources for guidance in handling a set of specific work events. Hofstede's dimensions once again were relevant: relying on one's own experience was considered effective in lower power distance nations, whereas reliance on one's peers was considered more effective in collectivistic nations.

Concluding Remarks

This chapter has examined many findings in cross-cultural research and made suggestions about the possible implications for applied psychology. Much of the literature reviewed here focused on cultural differences, but this is not to deny that there are basic, universal, developmental processes. These similar psychological processes, however, must be tested cross-culturally. Possible similarities cannot be assumed and do not preclude the impact of culture on mental processes.

Human psychology takes place in specific cultural contexts. Cultural differences and differences that are created over time tend to be heightened in the applied settings compared to conventional psychological research laboratories. For most of its history, psychology proceeded as if studies and experiments were unrelated to the cultural environment in which the mind developed and functioned. This picture has been changing with the growth of cross-cultural research that investigates the ways by which cultural experiences are implicated in human psychology. Applied settings provide cultural environments to study psychology in real contexts by which inferences can be made about human universals as well as about culture-specific differences. For applied psychology, the cross-cultural psychology research paradigm promises to provide a firmer scientific grounding while encompassing the world's cultural diversity. As a result, cross-cultural psychology and applied psychology make a perfect research couple whose marriage is enhanced by complementarity rather than similarity.

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