



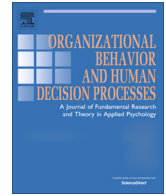
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Culture and decision making

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ABSTRACT

The study of culture and decision making addresses variations in how and why people from different cultures sometimes tend to decide differently. This review is organized around what is intended to be a comprehensive analysis of the distinct fundamental questions that people must answer in the process of making virtually all real-life decisions. Our emphasis was on recent developments as well as identifying important yet neglected topics (e.g., how decision episodes get started—or not, and why some decisions are never implemented). Early as well as current efforts have focused mainly on East Asian and North American Caucasian cultures, with little treatment of other populations. In such studies, individualism and collectivism have been the dominant explanatory factors although related but distinct concepts such as “tightness” and “looseness” have been welcome additions to recent discussions. Throughout, the review emphasizes practical concerns, such as the challenges of intercultural learning and collaboration.

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1. Introduction

“They were a rather unusual couple, weren’t they? I wonder how they chose each other – their opinions and personalities are so different.”

“I have the same impression. Do you think it has anything to do with the fact that they are from ____, where many marriages are arranged, even if no longer officially?”

A conversation like this illustrates the topic of this review—the roles of culture in people’s decision-making behavior. The commenting couple observes the outcome of what, in their own culture, would seem to be a surprising marriage decision by another couple. They speculate, perhaps naively, that arranged marriage traditions, common in some cultures but not others, had a significant impact on how the other couple chose each other. This scenario illustrates just one of many questions that a specialist in culture and decision making, or even a layperson, is likely to encounter. One purpose of this review is to describe and interpret major themes in evolving scholarship on culture and decision making. Another is to argue for greater research attention to key unsettled or unaddressed questions.

“Culture” can mean many things. By “culture” we refer to the myriad ways of living exhibited by a particular group of people, ways that are transmitted from one generation to the next and which

distinguish that group from others (cf. Smith, 1997). Researchers frequently use nationality as a proxy for culture, but other factors such as religion and social class can divide people into distinctly identifiable “cultures” as well (Cohen, 2009). People who rely on different modes of subsistence can give rise to distinct cultures, too (Talhelm et al., 2014; Uskul, Kitayama, & Nisbett, 2008), as can people who carved out their migratory path on a frontier as opposed to settling in a pre-developed area (Kitayama, Conway, Pietromonaco, Park, & Plaut, 2010). While we embrace this broad definition of culture, much of existing work on culture and decision making has focused on North American and East Asian populations to the neglect of others.

As for the term “decision,” we will refer to a commitment to a course of action that is intended to serve the interests and values of particular people (Yates & Potorowski, 2012). In our experience, it is rare for people’s everyday characterizations of decisions to conflict with the definition used here, although people of different cultures may disagree on whether a given specific event constitutes a decision (Savani, Markus, Naidu, Kumar, & Berliu, 2010).

Because our topic is so broad, it is impossible to be exhaustive in answering every question related to it. Instead, we cover how key phases in the decision making process are handled in various cultures. The “cardinal issue perspective” (CIP) describes ten challenges, or “cardinal issues,” that are addressed deliberately or unconsciously in nearly every decision (Yates & Potorowski, 2012). Ten issues is a lot, but the benefit of starting with the CIP is that it provides a detailed and comprehensive anatomy of a decision.

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The list begins with what happens before decision deliberations begin: Does a decision need to be made, or not? Who will make the decision, and how will they go about their work? Will the decider invest many or few resources into the decision-making process? The deciding party then addresses issues that comprise the core of the decision process: What options are available or could be created? What important possible outcomes are associated with each option? What is the likelihood of each outcome occurring? How good or bad would each outcome be for the decision maker (and/or other parties)? How should one manage tradeoffs between options? Finally, the decision maker deals with issues in the aftermath: What do other parties think of the decision? What can the decision maker do to assure that the decision is implemented? Fig. 1 displays the names attached to the cardinal issues roughly in the order they tend to present themselves in many real-life decision episodes.

An advantage of using this framework for the present review is that we not only attend to what is “out there” in the literature, but we also consider important aspects of decision making that somehow escaped researchers’ attention. For example, while issues related to judgment and value have been well researched across cultures, other key issues, such as whether a decision needs to be made, have been relatively under studied. The CIP directs attention to such gaps. Our readers may be interested in a broad variety of questions, most of which we expect are covered by one of the ten cardinal issues. In each issue’s discussion we focus on describing what decision-making differences have been observed between cultures.

In sum, we organize the bulk of this paper according to the CIP issues for clarity and for comprehensiveness. Not every phase of the decision-making process has received substantial attention in cross-cultural research. Therefore we highlighted topics that have received little attention or may be fruitful for further research. To facilitate interpretation of the findings, we have written a preface describing major constructs that have been used to explain cultural differences. Finally, we avoided repeating discussions of work that has already been expertly reviewed previously, particularly work on risk and judgment (e.g., by Choi, Choi, & Norenzayan, 2004;

Savani, Cho, Baik, & Morris, 2015; Weber & Hsee, 2000; Weber & Morris, 2010).

2. Major constructs: What makes cultures different?

Broad social and cognitive differences have been proposed as drivers of more specific cultural differences discussed in this review. One dimension of culture that has received substantial attention is individualism-collectivism (or, similarly, independence-interdependence, Hofstede, 1980; Markus & Kitayama, 1991; Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 2004). These dimensions are associated with different conceptualizations of the “self.” Individualistic cultures bestow greater autonomy on the “self”; each person is understood to be a discrete entity, independent of others, with relatively immutable characteristics and with free agency. Individualistic cultures tend to value personal goal pursuit as opposed to accommodation to others’ goals. Uniqueness and self-expression are also generally valued in such cultures. Collectivistic cultures, by contrast, view the “self” as part of a whole. Each person is expected to work with his or her in-group toward goals, to vary one’s personal behavior according to social context, and to generally “fit in” and pursue group harmony. As reviewed below, these differences have been proposed to underlie much cross-cultural variation in decision-making, such as the decision modes people use, their preferences, negotiation styles, creativity, and more.

A related construct that has received relatively less attention is cultural norm strength. “Tight” cultures have many norms that are strictly enforced socially, whereas loose cultures have fewer norms which may be violated to some degree without penalty (Gelfand, Nishii, & Raver, 2006; Gelfand et al., 2011). While most cultural differences have been interpreted in light of the individualism/collectivism framework, many differences could be explained by differences in tightness/looseness instead. The two constructs are somewhat correlated, with collectivistic cultures being tighter than individualistic cultures. This may explain why, in decision-making, collectivists often weigh input from others more

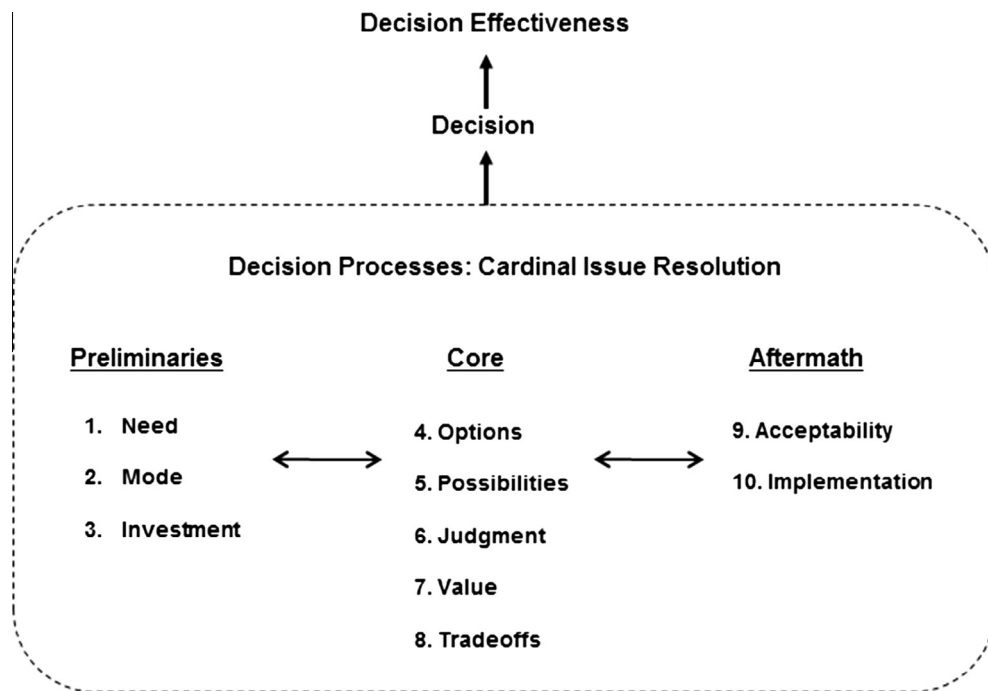


Fig. 1. The cardinal decision issue perspective (cf. Fig. A1 by Alattar, Yates, Eby, LeBlanc, & Molnar, 2016).

than individualists; they may be concerned with adhering to norms.

Cognitive style has also been a popular framework with which to study cultural decision-making differences (Choi et al., 2004). Holistic thinking is a cognitive style frequently associated with East Asian cultures. It is characterized by attention to context, an emphasis on relationships between entities, belief that the world is in constant flux, and tolerance for apparent contradiction (Nisbett, Peng, Choi, & Norenzayan, 2001; Peng & Nisbett, 1999). Analytic thinking is frequently associated with Western cultures, and it is characterized by a focus on the main object, a category (vs. relationship-based) view of objects, belief that the world is stable and predictable, and adherence to rules of formal logic such as non-contradiction. Cognitive style has been theoretically linked to social orientation, such that individualists are relatively analytic, and collectivists are relatively holistic (Varnum, Grossmann, Kitayama, & Nisbett, 2010). Cognitive style has been used to explain various aspects of decision-making, such as what type of information people attend to and how people think about the future.

It is worth noting that while the above frameworks are often invoked as plausible explanations of cultural differences, many studies do not empirically test such links across a broad range of cultures. (We return to similar issues in “Future Directions.”) It is also worth noting that while simple cross-cultural comparisons enlightened by these frameworks are abundant, culture has increasingly been understood as a non-fixed, dynamic, and context-dependent phenomenon (Briley, Wyer, & Li, 2014). Social context activates particular mindsets – say, an independent mindset – and this mindset in turn can influence one’s judgments and decisions temporarily (Oyserman, Sorensen, Reber, & Chen, 2009). In another situation, an opposing mindset may be adopted such that the same person’s judgments and decisions take on an altogether different pattern. This is not to say that culture has no stable component – societies reinforce relatively constant patterns of living and people internalize those ways of living to some degree. Moreover, psychological tendencies associated with different cultures may be due to powerful and relatively stable ecological forces such as climate, population density, disease burden, history of migration, and modes of subsistence (Gelfand et al., 2011; Kitayama, Varnum, & Sevincer, 2014; Talhelm et al., 2014; Uskul et al., 2008). Evidence from neuroscience also supports the constancy of cultural mindsets to some degree; repeated ways of thinking leave physical effects on the brain (Kitayama & Uskul, 2011). While it is beyond the scope of this paper to explore the antecedents of every cultural difference in decision making, we propose that cultural differences are both stable and context-dependent. We anticipate that exploration of the origins and nature of cultural differences will continue.

3. Cardinal issues across cultures

3.1. – Need: “Does a decision need to be made?”

Good decision making depends, in part, on the decision maker’s ability to recognize whether and when a decision needs to be made. For example, entrepreneurs must be particularly good at spotting opportunities before others see them, and pilots must be able to detect threats before disaster befalls their aircraft. Decision makers must also avoid acting upon perceived opportunities and threats that are in fact non-existent. Ultimately, perceptions of one’s environment determine whether the individual makes a decision at all, for better or for worse.

Little work has been done explicitly on this issue in both the general and the cross-cultural judgment and decision making literatures. We review cultural differences in processes that

contribute to how people address the “need” issue, especially focusing on how people perceive their environments. We are not aware of work that explicitly links these perceptions to decision initiation. Thus this question is ripe for further research: Do cultural differences in environment perception lead to differences in when and how decisions are initiated?

3.1.1. Attention differences

Before the decision-making process even begins, people from different cultures are attending to their environments in different ways. For example, focusing on positive versus negative information can reflect whether someone is oriented to approach opportunities or avoid threats (Higgins, 1997). Hamamura, Meijer, Heine, Kamaya, and Hori (2009) found that Canadians and Americans recalled more positive information than negative information after reading about hypothetical life events (Study 1) or product reviews (Studies 2, 3). Americans rated negative reviews to be less helpful (Study 3). Japanese participants showed either the reverse tendency (Study 1) or equal memory for approach and avoidance information (Studies 2 and 3). In related work, the reported personal goals of Korean nationals, Asian Americans, and Russians were more likely to be focused on avoiding threats than those of European Americans (Elliot, Chirkov, Kim, & Sheldon, 2001).

Eye-tracking data across different tasks suggests that various East Asian groups look more at photograph backgrounds than do North Americans (Chua, Boland, & Nisbett, 2005; Masuda, Wang, Ishii, & Ito, 2012), and they preferentially attend to different parts of the face when judging emotions (Jack, Blais, Scheepers, Schyns, & Caldara, 2009). These visual attention findings have been linked to judgment and memory differences in other areas of psychological research (Masuda & Nisbett, 2001; Masuda et al., 2008), but we consider attention differences relevant to the “need” issue; as people attend to different aspects of the world around them, they will feel the need (or not) to make decisions to address different opportunities and threats.

3.1.2. Information interpretation

Even when attending to the *same* information, cultures vary in how they interpret it – is it a threat, an opportunity, or neither? Consider the severe acute respiratory syndrome (SARS) epidemic of the early 2000s. When reflecting upon the same outbreak, Chinese people were more likely than Canadians to identify several positive features of the situation (e.g., having time for rest, appreciating relationships more, Ji, Zhang, Osborne, & Guan, 2004). In a hypothetical stock trading task, Canadians were more likely than Chinese to purchase rising stocks (Ji, Zhang, & Guo, 2008), indicating that Canadians were more likely to see a rising trend as an opportunity. Chinese participants were more likely than Canadians to purchase falling stocks; thus Chinese were more likely to see falling trends as opportunities. As for selling, Canadians were more willing than Chinese to sell falling stocks, but Chinese were more willing than Canadians to sell rising stocks. These findings have been attributed to cognitive style differences. Recall that one feature of holistic thinking is the expectation of future change. East Asians’ holistic tendencies may lead them to expect that trends are susceptible to change.

3.1.3. Motivational differences

Cultures that value personal agency and independence – such as those of North Americans generally and the U.S. American middle class in particular – appear to view the very act of decision-making as desirable (Kitayama, Snibbe, Markus, & Suzuki, 2004; Snibbe & Markus, 2005). They presumably like making decisions because it is a means of expressing individualism. Relative to cultures where individual agency is not so prized, people in individualistic cultures may either address the “need” issue by engaging in

lots of decision making or, relatedly, simply construing more of their actions as decisions. Americans, as compared to Indians, are more likely to label mundane actions like opening a refrigerator as decisions (Savani et al., 2010). Working class Americans report having fewer choices at work than people from the upper middle class, and they are also more likely to perceive individual decision-making as undesirable (Stephens, Fryberg, & Markus, 2011).

In sum, the above cultural differences plausibly may lead people to approach decision-making differently from the very beginning. Cultures vary in whether they focus on opportunities or threats, and they also vary in their interpretations of the same information as a threat, an opportunity, or neither. Finally, people vary in how much they feel the need to engage in decision-making (or to call particular actions “decisions”).

3.2. Mode: “Who (what) decides, and how?”

The expression “decision mode” refers to *who* (or *what*) is involved in making a given decision and *how* that decision is made (Alattar et al., 2016). We focus our discussion on cultural variations in the “who” part of the challenge first, and then on “how” decisions are made. Notably, work on this cardinal issue encompasses various cultural groups and appeals to varied explanations for cultural differences.

3.2.1. “Who.”

Some cultures endorse individual decision making while other groups encourage the involvement of multiple people, in some form or another. Research on this difference has conceptualized culture nationally (e.g., Indian, Russian) as well as by social class. Some work suggests that middle class Americans would rather make decisions individually, whereas working-class Americans prefer the involvement of others. In one set of studies, Americans of working-class backgrounds were more likely than Americans from middle class backgrounds to experience negative affect when making a decision by themselves (Stephens et al., 2011). Unlike higher-SES Americans, they preferred that others make decisions on their behalf and were less likely to devalue an item that was chosen for them by somebody else (Snibbe & Markus, 2005). In studies of cross-national differences, Americans were less likely than Russians to offer unsolicited advice (Chentsova-Dutton & Vaughn, 2012), potentially reflecting a preference for independent, individual decision-making. In the same set of studies, Russians were more likely to ask for advice than Americans, and they were also more likely to offer advice, even when it was not requested.

In another cross-national study, Indian participants were more likely than Americans to comply with advice (Savani, Morris, Naidu, Kumar, & Berlia, 2011), suggesting that they, like Russians, might customarily include other people in their decision making. Moreover, Indians were more likely than Americans to experience positive outcomes (e.g., closer relationships) when they included others’ considerations into their decision processes (Studies 1, 2, and 3).

3.2.2. “How.”

Variations in how decisions are made tend to coincide with variations in who makes the decision. Western researchers have largely assumed that people make decisions by following their own preferences and values, but people in many cultures discount personal preference and instead seek advice, at times deferring to others’ preferences, especially when the perceived norm is to discount one’s own desires (Savani, Markus, & Conner, 2008; Savani, Wadhwa, Uchida, Ding, & Naidu, 2015). We return to this distinction in the “value” section.

Cultures also vary in whether they prize more deliberative decision making or more rapid, intuitive decision making. In one study,

Koreans favored “intuitive” decision making modes over “logical” modes, whereas Canadians favored both equally (Buchtel & Norenzayan, 2008). The finding that Koreans particularly value intuition is consistent with evidence suggesting that Chinese prefer simpler decision modes than do Americans (e.g., lexicographic modes, Chu & Spires, 2008; recognition-based decision making, Weber, Ames, & Blais, 2004). Altogether, it seems that among East Asians, Japanese prefer thorough, slower decision modes whereas Koreans and Chinese prefer faster intuitive or rule-based modes.

Some proposed explanations for differences in decision mode use appeal to cultural norms associated with individualism or collectivism. In independent cultural contexts, there is social approval for meeting goals that promote independent values such as self-expression, uniqueness, and autonomy or self-reliance (Snibbe & Markus, 2005). Making decisions individually represents a means of self-expression and exercising independence. In more interdependent contexts, by contrast, there is social approval for including others in the decision process. Interdependent goals promote social harmony and accommodating to others’ expectations. By including other people in the decision-making process, an interdependent person can anticipate any disapproval that would result from various options, ultimately arriving at a decision that is informed by others’ preferences and therefore likely to be socially accepted.

Alternative explanations for mode differences merit attention, too. Regarding the Russian/American difference in advice giving, Chentsova-Dutton and Vaughn (2012) argue that Russians value advice because they are accustomed to living in a society where official means of information exchange and social aid are unreliable. Thus, in their case, collaboration is not driven by a collectivistic desire to please others but rather by a desire to disseminate helpful information. In contrast to the Russian case, Savani et al. (2011) do not attribute advice giving and accommodation in India to the lack of a reliable informational infrastructure. Rather, they propose that high population density and limited social mobility lead to strong reputational concerns for individuals. These concerns, the authors contend, lead people to strive to be known as supportive and selfless in their advice giving so that they are trusted and embraced in their social networks.

3.3. Investment: “What will it cost to make this decision?”

The “investment” issue concerns how much of a resource – mental energy, time, money – someone will devote to the decision process. A decision made intuitively requires little investment. A decision that is pondered at length reflects a greater investment on the part of the decision maker.

Research on indecisiveness reveals interesting cultural differences in how the “investment” issue is handled. A person who customarily takes an inordinately long time to decide is said to be “indecisive,” although indecisiveness is measured in a variety of ways (e.g., using a scale, measuring extremity of preferences, and time required to make the decision). Many between-and within-region comparisons have been made, and some results are inconsistent. Regarding East/West contrasts, researchers found most East Asian groups – including participants from Japan, Hong Kong, and Taiwan – to be more indecisive than Westerners of European heritage (Li, Masuda, & Russell, 2014; Mann et al., 1998; Yates et al., 2010). Results for mainland Chinese comparisons have been mixed, although leaning toward the side of higher Chinese decisiveness; Tse, Lee, Vertinsky, and Wehrung (1988) found mainland Chinese to be more decisive than Hong Kongers and Canadians, but Patalano and Wengrovitz (2006) found no difference between mainland Chinese and Americans. In Malaysia, ethnic Chinese were found to be more decisive than ethnic Malays (Swami et al., 2008). A more recent study compared East Asians, South Asians, and European Canadians (Ng & Hynie, 2014). The investigators found that

their East Asian participants (of unspecified national heritage) were significantly more indecisive than their participants of South Asian and European heritages.

How have researchers proposed to explain cross-cultural variations in decision making investment? Tse et al. (1988) found strong decisiveness among their Chinese participants, and they speculated that that was a reflection of Chinese traditions of classifying the world into sharply defined categories—“black or white” (p. 89). Mann et al. (1998) interpreted high indecisiveness for other (non-Chinese) Asian groups as resulting from more collaborative decision-making practices in collectivistic societies. Thus, when confronted with an unpleasant or difficult personal decision problem, East Asian individuals would be accustomed to calling on others for assistance rather than confronting the challenges alone. This, in turn, can require more time and social energy to navigate the decision.

Indecisiveness in East Asian culture (besides that of mainland China) has been attributed to naïve dialecticism (Ng & Hynie, 2014; Peng & Nisbett, 1999) and need for cognition (NFC; Cacioppo & Petty, 1982). These factors, in Ng and Hynie’s data, mediated the link between culture and indecisiveness. Naïve dialecticism involves embracing conflicting beliefs about the world, such as affirming both the positive and negative side of an issue. This cognitive approach may require more energy and reflection to reach a decision, given its complexity. High need for cognition, by definition, would also promote more cognitive investment in the decision-making process. Yates et al. (2010) proposed that relevant norms common in China and Japan might differ despite their shared collectivism; Japanese might be especially indecisive because they value indecisiveness, perhaps under a more flattering label such as “thoroughness.” The Japanese participants of Yates et al. (2010) reported being more indecisive than Chinese and Americans, and they were more likely than Chinese and Americans to admire indecisive people, too. Moreover, in a “think aloud” reasoning task, the Japanese participants chose to spend far more time on their deliberations than did their Chinese and American counterparts, indicating a preference for thoroughness.

Li et al. (2014) documented a moderating role for decision importance in indecisiveness. They suggest that important decisions universally require the use of similar, high-investment strategies, diluting cultural differences. In their study of European Canadians and Hong Kong Chinese, both groups demonstrated equally high indecisiveness for important decision problems (e.g., choosing a career). Cultural differences were only observed for unimportant decisions (e.g., choosing what to have for dinner). Note that this is another example in which cultural differences depend on context – not all decision problems reveal the same pattern of differences.

3.4. Options: “What are the alternatives?”

Earlier reviews of culture and decision making did not elaborate on the “options” issue specifically (Weber & Hsee, 2000; Weber & Morris, 2010), but research related to this topic has burgeoned recently. Here we focus on creativity, which is important for decision makers because it helps them effectively produce good choice sets that, ideally, contain the best possible option. A poor choice set does not allow the decider to even contemplate the best possible option because it is not contained in the set for consideration. Creativity is also critical in contexts such as negotiations because meeting the needs and desires of all parties often requires reworking existing options imaginatively.

Creativity and culture have been studied together from several different angles. A few studies have focused on whether (and why) some cultures are more creative than others. Westerners have at times been perceived as more creative than East Asians (e.g., Niu & Sternberg, 2001), and more recently both research and

developmental programs have aimed to study and improve creativity in East Asia (Wu & Albanese, 2010). The evidence for Western dominance in creativity is debatable (Morris & Leung, 2010) as such cultural comparisons depend on the social era in which creativity was measured and what measure of creativity was used. Other research has investigated the degrees to which novelty and usefulness are central to different cultures’ definitions of creativity. In a comparison among China, Japan, and the U.S., the influence of perceived novelty on creativity ratings of products did not vary by country, and usefulness was more related to creativity for Americans and Japanese than for Chinese subjects (Paletz & Peng, 2008). Few other studies have examined novelty and usefulness separately, but this distinction will be important for future work in order to determine more precisely how cultures define and evaluate creativity (Erez & Nouri, 2010).

A more well-supported contributor to cultural variation in creativity is variation in social orientation. Researchers have suggested that individualistic cultures promote deviance, uniqueness, and divergent thinking, whereas collectivistic cultures promote conformity in thinking (Erez & Nouri, 2010). Goncalo and Staw (2006) found that, when instructed to be creative, subjects experimentally primed with individualism (vs. collectivism) generated more creative solutions to a problem. They also found that whether groups were asked to list the most creative or the most practical idea from their idea sets, ideas listed by individualistic groups were judged to be more creative than those of collectivist groups – regardless of whether they were instructed to be creative or practical (Study 3). The authors suggest that individualistic groups both generated and chose more creative ideas because of their inclination toward divergent thinking and, in a group context, their desire to be unique and to stand out in discussions for idea selection. Collectivistic groups, by contrast, were hesitant to share deviant ideas and to suggest unique options for selection. These study results support the idea that cultural differences in creativity may be due, at least in part, to how creative processes are shaped by social orientation. They also demonstrate that creativity is malleable via priming of social orientation.

Newer research has investigated when and how cross-cultural experience – either introduced in the lab or measured via individual histories – affects creativity for individuals. First, exposure to other cultures influences creativity when the exposure is “deep” and promotes a challenge to one’s customary ways of thinking and behaving. Maddux and Galinsky (2009) found that the extent to which individuals adapt to – not merely live in – a foreign culture predicts creativity. Notably, some evidence suggests that cross-cultural exposure should be broad and deep in “moderation.” Cross-cultural experience of fashion house directors has been found to be beneficial for the perceived creativity of the house’s products (Godart, Maddux, Shipilov, & Galinsky, 2015), but only when the breadth and depth of the experience was not too extreme. The authors argued that too much depth of cross-cultural adaptation could lead people to lose sight of what is interesting and unique in the culture and they may become cognitively entrenched. Too much breadth in cross-cultural experience (e.g., living in too many places) could lead people to become cognitively overwhelmed by information and therefore unable to use it well. Second, exposure to other cultures enhances creativity when the exposure allows for mental juxtaposition of two or more cultures. Leung and Chiu (2010) found that measured (Study 2) and experimentally-induced (Study 1) multicultural experience predicted creativity, but only when cultures were presented in tandem, either juxtaposed (e.g., a slide set on Chinese culture and American culture) or blended (e.g., a slide set on East/West cultural fusion).

Leung and Chiu (2010) suggest that these effects occur because people with multicultural experience can sample ideas from non-overlapping cultures during the creative process, and joint

presentation (vs. only presenting a single culture) also facilitates broader sampling. This in turn should lead to generating creative ideas. Tadmor, Galinsky, and Maddux (2012) argue that mere access to more cultural information does not lead to creativity, however. They instead suggest that the manner in which the information is processed is key. Specifically, integrative complexity – being able to understand and combine multiple perspectives – yields high creativity. Tadmor et al.'s findings support this mechanism. They found that only people who adopted an “integration” acculturation strategy – identifying with both their host and heritage cultures – were more creative (Cheng, Sanchez-Burks, & Lee, 2008, found similar results). Those who identified with neither culture or with only one culture were less creative despite also having had multicultural experience. Integrative complexity mediated the effect of acculturation strategy on creativity, suggesting that integration acculturation boosted people's ability to simultaneously access and combine disparate information from different cultures.

3.5. Possibilities: “What could happen if that action were taken?”

Decisions often yield both intended outcomes and side effects. Although side effects are unrelated to the decision maker's original aims, they matter to decision quality because they affect the people the decision was intended to serve, for better or for worse. Exploring potential consequences of each option is usually in the best interests of the decision maker. Despite its obvious after-the-fact importance for how well or poorly decisions can turn out, there is no literature on how people address the “possibilities” issue per se. Nevertheless, two related findings from prior cross-cultural studies suggest a couple of compelling topics for future investigation.

The first, mentioned earlier in this article, is the observation of variations in the degree of individualism (vs. collectivism) across cultures. There are vertical and horizontal varieties of these tendencies. Vertical forms of interpersonal relationships entail acceptance of hierarchies of responsibilities, privileges, and rights (Singelis, Triandis, Bhawuk, & Gelfand, 1995). In contrast, horizontal forms emphasize equality among peers. It seems plausible to anticipate that especially large numbers of people would normally participate in decision making in horizontal collectivistic societies. To the extent that these arrangements are managed well, we should expect that the resulting broader perspectives would also imply good recognition of possibilities.

The second relevant finding is that some cultures emphasize broad, holistic thinking rather than narrowly focused analytic thinking (Masuda & Nisbett, 2001). Evidence suggests that Koreans make use of more information than Americans in judgment tasks, and that the relationship between holistic thinking and preference for large information sets is positive at the individual level within each culture (Choi, Dalal, Kim-Prieto, & Park, 2003). Holistic thinking might promote more thoroughness in detecting potential consequences of any option under consideration.

3.6. Judgment: “What **would** happen if that action were pursued?”

Judgments are different from decisions. Whereas decisions are commitments to particular courses of action, judgments are opinions as to what was, is, or will be some decision-relevant state of the world (Yates & Potorowski, 2012). Decisions rest at least partly on judgments, and highly accurate judgments support good decision making. Because people engage in judgment at several points in the decision process, much of the work on culture and judgment is covered in other sections of this paper. Here, we review cultural differences in overconfidence and attribution.

3.6.1. Probability judgments and overconfidence

Phillips and Wright (1977) sparked great interest in cultural variations in judgments nearly 40 years ago. English and Chinese participants answered trivia questions and indicated how confident they were in each of their answers. The Chinese judgments were much more overconfident than English judgments. Consider the items for which the participants said that they were 80% sure that their chosen answers were correct. The English students were, in fact, correct on about 67% of those occasions. The corresponding statistic for the Chinese students was only 52%.

The basic finding of high Chinese overconfidence was extended to some other East Asian groups in studies comparing participants from Britain, Hong Kong, Malaysia, and Indonesia (e.g., Wright & Wisudha, 1982; Wright et al., 1978). Other studies found similar patterns of overconfidence in mainland China, Taiwan, and India (e.g., Lee et al., 1995; Yates et al., 1989). Japanese people seem to be a notable exception in Asia, having displayed confidence more similar to that of Americans (Yates, Lee, Shinotsuka, Patalano, & Sieck, 1998) and at times even exhibiting under-confidence (Yates et al., 2010).

Apart from East Asia, a high degree of overconfidence has been found among Mexicans relative to Americans (Lechuga & Wiebe, 2011). More broadly, Stankov and Lee (2014) examined overconfidence in 33 countries. Overconfidence was widespread but differed in degree according to region. The authors attributed overconfidence differences to variations in ability rather than confidence judgments per se, since confidence differed little from one country to the next while ability varied substantially.

Why are the judgments of many Asian cultures—but notably, not Japanese culture—so often highly overconfident? Asian overconfidence is all the more surprising given that the need to self-enhance appears to be absent or attenuated in East Asian cultures (Heine & Hamamura, 2007). In the Chinese case, research suggests that they think less probabilistically than the English do. When asked in an open-ended manner whether a certain event is going to occur, Chinese participants were more likely than English participants to reply with words that do not acknowledge degrees of uncertainty at all (e.g., “Yes” or “No”) or with only a limited range of different probability phrases (e.g., “probably”) (Lau & Ranyard, 2005).

Cultural differences in holistic thinking have also been proposed to explain overconfidence differences. One feature of holistic thought is the belief that everything in the world is somehow connected to everything else. This presumption has been suggested as a contributor to the relatively strong tendency for Koreans to exhibit the hindsight bias (Choi & Nisbett, 2000). In this view, events that are observed to have occurred can easily be rationalized as having been inevitable because of the chain of connections revealed after the fact. This, in turn, could lead to overconfidence for groups that think holistically (vs. analytically). Lechuga and Wiebe (2011) suggested that similar reasoning might be extended as an account for extreme overconfidence, too. So far, however, data have not supported this notion, and this account does not explain why Japanese people are not overconfident.

Another plausible contributor to high overconfidence in some Asian cultures is that those cultures do not have traditions that encourage individuals to seek out arguments that might contradict the wisdom of their first impressions as to the possible outcomes of an uncertain event (Yates et al., 2010). Japanese people may be an exception to this rule given that they are especially thorough and deliberate in their reasoning and this practice tends to reduce overconfidence generally (Sieck & Yates, 2001).

3.6.2. Attribution

When people observe interesting events – say, a man kicks a dog on the street – they tend to make causal judgments in an

attempt to make sense of the situation. The man might kick his dog because he is a cruel man (dispositional attribution) or he might kick the dog because the street is known to be dangerous and the dog startles him (situational attribution). Research with Westerners has documented many routine “errors” in causal attribution; for example, they have been found to overestimate the causal influence of people and underestimate the influence of contextual factors in the situation (Ross, 1977).

Soon after the initial observations of attribution errors, however, cross-cultural work with Indians and Americans found that although children in the two cultures explain events similarly, differences emerge with age; American adults make more reference to dispositional (vs. situational) factors when explaining someone’s behavior, whereas Indian adults make more reference to situational (vs. dispositional) factors (Miller, 1984). Research with several East Asian groups and North Americans has found that the former group is more prone to attributing causality to contextual factors. These judgment differences have been observed consistently in cultural artifacts such as newspapers, as well as in survey and experimental culture-priming studies (Lee, Hallahan, & Herzog, 1996; Morris & Peng, 1994; Peng & Knowles, 2003). This is not to say that East Asians do not assign causality to people; they are more likely to do so, however, for collectives rather than individuals (Menon, Morris, Chiu, & Hong, 1999, referring to Hong Kong and Japanese Asians vs. Americans). When they do assign causality to an individual leader, it has been found to be based on the actions of the leader’s group; thus individuals are held responsible according to their group’s behavior (Zemba, Young, & Morris, 2006).

These differences have been explained by appeals to cognitive style. Holistic thinking, which is valued in East Asian contexts, involves attending to context and the relationships among objects (Nisbett et al., 2001). Western thinking tends to be more analytic, which involves focusing on objects independently and viewing them as discrete. These tendencies may lead East Asians to attribute causality to context and Westerners to attribute it more to internal dispositions. A Western exception may be Latin Americans. Work with Mexicans has found them to be more holistic than U.S. Americans in some aspects. However, results have been inconsistent (Lechuga, Santos, Garza-Caballero, & Villarreal, 2011; Lechuga & Wiebe, 2011).

3.7. Value: “What will particular people like and dislike, and how much?”

The “value” issue pertains to the fact that people make different decisions in part because they value or like different things. Addressing this issue in decision making involves predicting to what extent the beneficiary of a decision will like or dislike attributes or outcomes of the decision. Because cultures differ in *what* they value, they will differ in their appraisals of how good or bad particular options are. For example, residents of former frontier regions in the United States are more likely to choose unique names for their babies, possibly because frontier environments fostered an ethos of independence which in turn may have led people to value uniqueness (Varnum & Kitayama, 2011). U.S. residents in regions with higher pathogen prevalence tend to vote less for third-party candidates, possibly because higher pathogen prevalence seems to encourage value for conformity (Varnum, 2013). In this section we elaborate on several cultural value differences as well as how cultures adjust their valuation of options over time.

3.7.1. Personal vs. social value impact

Cultures differ with respect to the influence of personal values on decisions. There is evidence that Indians make choices that are less closely linked to their personal preferences than do U.S.

students (Savani et al., 2008). As previously discussed, in Indian and several other collectivist cultures, people often use decision modes that involve and take other people into account. Therefore, the values and expectations of others – not just one’s own – become an important consideration in decision-making. From this perspective, it makes sense that the decision maker’s own values would have relatively less impact than in an individualistic culture, where fewer concerns must be considered. People in collectivist cultures can even find positive value in choosing options that adhere to norms rather than following personal preference. In one study, both Brazilians and Americans indicated that they were likely to follow norms when deciding on behavior. Further, the Brazilians were far more likely than the Americans to also indicate that they would be happy about following those norms (Bontempo, Lobel, & Triandis, 1990). Similarly, Indians have not reported feeling constricted or burdened when accommodating others in their decision making (Savani et al., 2011). Thus, although personal value matters enormously in Westerners’ decision-making, they appear to be less important in other cultures due to their collectivism and tightness.

3.7.2. Impact of the self

A conceptually related principle focuses on the significance of the self for the decision maker. When reporting what courses they would be interested in taking, for example, European Canadians’ choices were more strongly associated with their ratings of expected enjoyment than were East Asians’ choices (Falk, Dunn, & Norenzayan, 2010). In addition to expected enjoyment, evidence suggests that North Americans highly value options that are associated with the self. Consider the “endowment effect,” whereby prospective sellers value objects more than do prospective buyers. This phenomenon was found to be stronger among Canadians and Americans than among Asians of various backgrounds (Maddux et al., 2010). The effect was even stronger for Canadians when subjects’ cognitive association between self and object was experimentally strengthened.

3.7.3. Dissonance and value change

“Spreading of alternatives” is a value-related phenomenon that can occur after making a choice. Imagine having to choose only one of two items that you find equally appealing – say, you only have enough money for one suit despite finding two that you really want. After choosing one item in this type of situation, decision makers often feel badly because they must forego the rejected item which they nevertheless liked as much as the chosen item. Researchers have found that after such a choice, people tend to change their values such that they rate the chosen item more highly than the rejected item despite initially liking the two equally. This presumably helps people feel better about their decisions since their values become aligned with them, “justifying” those decisions.

Heine and Lehman (1997) found this “spreading of alternatives” effect in Canadians, particularly for situations in which decision-relevant negative arousal was induced, but Japanese participants did not exhibit spreading of alternatives in any of their conditions. Another study found again that in a typical dissonance experimental paradigm, Japanese did not exhibit spreading of alternatives (Kitayama et al., 2004, but see Izuma et al., 2010). When primed to think about others, however, Japanese participants did exhibit the effect. The authors suggested that the interdependent values of their Japanese subjects meant that imagining the presence of others activated anxiety about social approval, and thus it became important to exhibit values consistent with their decisions.

Research comparing working versus middle-class Americans also suggests that middle-class Americans, for whom choice may be an important aspect of the “self,” exhibit this dissonance effect

in a standard paradigm whereas working class Americans do not (Snibbe & Markus, 2005). Thus, the change in value that follows tradeoffs in decisions is not uniform across cultures and depends on culture-specific activation of negative arousal.

3.7.4. Loss aversion

Imagine Gamble G: If a fair coin is tossed and it comes up heads, the player loses \$5, and if the coin comes up tails, the player is awarded \$X. Suppose Jill and Luke are each asked to indicate the smallest amount \$X would have to be in order for them to be willing to play. Jill responds, “\$8,” and Luke responds, “\$10.” Who appears to hate losing money more? Most of us would say, “Luke,” because it takes \$2 more in order to persuade Luke to risk losing the same amount of money (\$5). In the standard language of decision scholarship, we would say that Luke is more “loss averse” and the difference of \$2 indexes his additional, relative loss aversion.

As this fictional example suggests, how a person feels about losses is an important element of how that person decides. That is why loss aversion has become a more popular focus of research, including across cultures, often using methods similar in logic to the procedure illustrated. Wang, Rieger, and Hens (2016) studied people from 53 countries around the globe to shed light on potential cross-cultural variations in loss aversion. Eastern European groups represented in their study had especially high loss aversion while African groups on average had the lowest loss aversion. The authors measured various cultural variables in search of explanations of country- and individual-level differences. Country-level individualism was positively correlated with loss aversion. This relationship was also found at the individual level while controlling for country-level effects, such that a person's deviation from her country's mean individualism level was correlated with her loss aversion levels. This finding is consistent with Weber and Hsee's (2000) “cushion hypothesis.” They proposed that collectivist cultures support risk taking because one's close social network members can offer financial support in the event of setbacks. Thus, there is less reason to fear losses; they often can be alleviated. Also of note is that other country-level factors such as religious composition were related to loss aversion, although potential explanations remain to be explored.

3.7.5. Reference point adaptation

A key feature of Kahneman and Tversky's (1979) prospect theory is that how a person feels about a given decision outcome is not fixed. Instead, it depends on the decision maker's “reference point,” which varies from one moment to another. If, at a given moment, Kevin has eaten zero cookies, the prospect of eating one freshly-baked chocolate chip cookie sounds fabulous to him. If, at another given moment, Kevin just finished eating two cookies, then the prospect of eating one more cookie may sound nice but is likely not proportional to the excitement generated by eating the first cookie. If he waits for three hours and “re-sets” his reference point back to zero, eating that third cookie will be just as pleasurable as eating the first cookie.

Arkes, Hirshleifer, Jiang, and Lim (2008) found that people “re-set” their reference points more after gains than after losses, reflecting behavior that maximizes hedonic pleasure. (This asymmetry makes subsequent gains especially satisfying and subsequent losses less aversive.) The same authors (Arkes, Hirshleifer, Jiang, & Lim, 2010) replicated this effect with both Americans and Asians (Chinese and Korean nationals), suggesting that this “hedonic engineering” may be a general human strategy. However, the Asian subjects adjusted their reference points more than American subjects. This tendency may reflect lower loss aversion in Asians. The authors also hypothesized that it may be related to East Asians' preference for accommodation to circumstances rather

than altering circumstances to fit one's own preferences (Hsu, 1981).

3.8. Tradeoffs: “Every alternative has at least one flaw, so what now?”

Consider the following grossly simplified apartment search situation:

Apt 1:	Condition: ***	Distance: **
Apt 2:	Condition: **	Distance: ***

In this display, the stars represent degrees of goodness of a given apartment with respect to the considerations described—the condition of the apartment and its distance from the decision maker's workplace. More stars indicate greater goodness, in the decision maker's eyes. Observe that the situation illustrates “feature conflict.” One feature dimension favors Apt 1 while the other favors Apt 2; neither alternative would be described as “dominating” the other. Such a situation is sometimes described as a challenging “tradeoff dilemma.” Apt 1 is better by one star on Condition whereas the opposite is true for Distance. If the searcher chooses Apt 1, it might be because she feels that, in picking Apt 1 over Apt 2, she has traded a one-star advantage on Distance for a one-star advantage on Condition, and that that is consistent with what her actual experiences would be if she were to live in each apartment. The “tradeoffs” issue concerns how people should and do, in fact, resolve tradeoff dilemmas. This is important because almost all decision situations eventually are reduced to such dilemmas, in some form or another.

Our primary concern here is whether and how cultures differ in how they resolve tradeoff dilemmas. There has been very little research on the matter. However, efforts by P.C. Chu and Eric Spire have been informative about cultural variations involving the People's Republic of China, Taiwan, Japan, and the U.S. (Chu & Spire, 2008; Chu, Spire, Farn, & Sueyoshi, 2005; Chu, Spire, & Sueyoshi, 1999). One key finding has been that Japanese decision makers are significantly more attracted to noncompensatory schemes for addressing dilemmas and that Americans are among the most strongly inclined toward compensatory schemes. A “compensatory” approach is one such that weakness on one feature dimension can be offset or “compensated for” by strength on another. This was implied in our apartment example, where the decision maker chose Apt 1 because she felt that gaining an extra star's worth of condition more than made up for the sacrifice of suffering an extra star's burden in commuting each day. A “non-compensatory” scheme is one for which a deficiency on one feature dimension cannot be offset by strength on another. Suppose that in our apartment case, the searcher's scheme is such that an apartment simply must have three stars or more with respect to Condition. Thus, no matter how good Apt 2 was on Distance, it would never be chosen. This is just one form of noncompensation we see.

Why would Japanese decision makers be attracted to noncompensatory schemes? The data necessary to answer this question have not been reported. However, Chu et al. have suggested three contributors. The first is Japanese aversion to confrontation. Another is the relative comfort of Chinese culture (in the PRC and Taiwan) with compromise as implicit in the Chinese “Doctrine of the Mean.” A third is tied to the fact that noncompensatory schemes are comparatively easy to apply. This is just one among several research directions for the future in this domain.

3.9. Acceptability: “How can we get others to agree with our decision?”

How other people feel about our decisions can spell the difference between decision success and failure. Some years ago, a major

insurance company announced its decision to deny insurance policies to women involved in relationships with men who abused them. In response, many in the public and the government were outraged and threatened boycotts. The company reversed its decision. The “acceptability” issue is about how to avoid situations in which other parties undermine one’s decision because of their opposition to the decision or to how it was reached. There is good evidence that cultures often differ substantially in how they address the acceptability issue. We focus in particular on decisions in negotiations.

3.9.1. Strategy differences in intra-cultural negotiations

Several cultural differences in negotiation practices have been observed. In some studies, relative to their counterparts of another culture, Americans have been found to prefer direct communication (Adair, Brett, & Okumura, 2001) and take a more competitive approach (Pearson & Stephan, 1998). In contrast to Americans, Japanese negotiators have been seen as more likely to use indirect communication and influence (e.g., sympathy, reference to status) while Brazilians more strongly favor collaboration, accommodation, and avoidance, especially for negotiations with in-group members. Other work has examined cultural effects in a more nuanced way. Gelfand et al. (2013) studied negotiating groups vs. individuals in Japanese and American cultures. They expected that groups would show greater cultural differences because social monitoring, which occurs in groups but not individual settings, would amplify concerns for adhering to social norms. Thus, a group (vs. solo) negotiation would strengthen already-present norms of competitiveness for Americans, whereas group negotiation would strengthen already-present norms for harmony with their Taiwanese participants. The researchers also expected that groups would outperform individuals in U.S. contexts, because people in groups would be more competitive than individuals. In the East Asian context, groups would perform worse than individuals, because people in groups would be more concerned with harmony, which is detrimental to achieving optimal negotiation outcomes. The study found partial support for this idea; American teams did not outperform solo negotiators, but Taiwanese groups performed worse than solo negotiators. Taiwanese groups also performed more poorly than American groups. The latter effect was mediated by harmony differences; Taiwanese groups performed more poorly due to their concerns with maintaining harmony.

3.9.2. Strategies and joint outcomes

Are any particular strategies for negotiation universally beneficial for joint outcomes? Brett et al. (1998) examined negotiating dyads from France, Russia, Japan, Hong Kong, Brazil, and the United States engaged in intra-cultural negotiation. Japanese and American dyads had the highest joint gains, followed by ones from Brazil and France. Hong Kong and Russian dyads had the lowest outcomes. The authors found that cultural characteristics such as individualism and hierarchy did not seem related to joint outcomes. Instead, other factors were more important for achieving good joint outcomes, including values for information sharing, the ability to deal with several issues simultaneously, and motivation to continually improve on current options.

Graham, Mintu, and Rodgers (1994) studied the “problem-solving approach” (PSA) to negotiation across 11 cultures. This approach emphasizes the use of information exchange to understand the other party’s needs and concerns, ultimately with the goal of achieving mutually beneficial outcomes. The authors did not test the effect of its use on joint outcomes, but found it to be beneficial to the opposing party’s profit in 5 cultures. It was detrimental to the user’s profit in only one culture – Mexican – and the use of PSA was likely to be reciprocated in 8 of the cultures. They did find that bargainers from more individualistic cultures had

lower PSA scores (that is, they bargained with more individualistic strategies) and achieved higher profits. Future work should further test whether and how negotiation practices can be successfully transplanted from one cultural context to another.

3.9.3. Negotiation between cultures

Negotiating cross-culturally (vs. intra-culturally) has been associated with certain negative outcomes (Brett & Okumura, 1998) which may be partly due to variation in how cultures negotiate. There is evidence that negotiation results in higher joint gains the more that parties use tactics that are typical of their own cultures (Adair et al., 2001). Specifically, single-culture dyads (American and American, Japanese and Japanese) had higher joint profit outcomes than inter-cultural dyads (American and Japanese). American (vs. intercultural) dyads were more likely to use direct communication, whereas Japanese (vs. intercultural) dyads were more likely to use indirect communication and influence tactics.

Adair and colleagues’ findings also suggest that one culture adapting negotiation styles to match the other culture’s style is not enough to increase joint profit. In their study, Japanese, but not American, negotiators adjusted their styles during intercultural negotiations. Despite this adjustment, intercultural dyad outcomes were inferior to intra-cultural dyad outcomes.

While that study did not find one party’s adaptation of specific strategies to be sufficient, other research has suggested that “cultural intelligence” (CQ) plays an instrumental role in achieving mutually beneficial outcomes. CQ is the ability to effectively adapt to culturally diverse situations (Earley & Ang, 2003). It includes preparing for, adapting to, and learning from cross-cultural interactions as well as engaging in perspective-taking (Mor, Morris, & Joh, 2013). In one study, negotiating dyads that had higher overall CQ were shown to be more likely than lower CQ dyads to employ mutually-beneficial bargaining strategies (integrative information behavior), which led to more joint profit (Imai & Gelfand, 2010, Study 2). Importantly, the dyads were only as effective as their lowest-CQ members. Other factors such as international experience, emotional intelligence, and extraversion failed to predict integrative information behaviors (Imai & Gelfand, 2010). CQ has also been found to be positively related to cultural perspective taking which, in turn, boosts intercultural cooperation (Mor et al., 2013). A cultural perspective-taking intervention designed by Mor et al. successfully increased negotiators’ cooperation, particularly for negotiators who were low in CQ. Thus, there is good reason to expect that CQ can be manipulated and improved.

3.9.4. Sacred values

During negotiations, values can clash, sometimes intractably. In ordinary decisions, the negative aspects of an option can be compensated for by adding something appealing, like money (recall “compensatory strategies” for making tradeoffs). However, “sacred values,” sometimes referred to as “protected values,” appear to be immune to material tradeoffs (Jassin, Sheikh, Obeid, Argo, & Ginges, 2013). For example, someone who does not “sacredly” value gun ownership might support legislation that offers cash for handing in firearms in an attempt to reduce gun violence. If gun ownership is a sacred value for that person, however, virtually any option involving handing in his or her weapons would be unacceptable. Moreover, attempts to “sweeten” options that violate sacred values with money can actually backfire – such options become even less appealing because they evoke moral outrage (Ginges & Atran, 2014). Research suggests that better ways of handling sacred values in cross-cultural decisions include adding a culturally meaningful, symbolic gesture (such as an apology) to increase the value of an option (Atran & Axelrod, 2008).

3.10. Implementation: “How can we implement this decision?”

It seems that nearly everyone has made New Year’s resolutions that were forgotten within a few weeks. Such instances illustrate the “implementation” issue, which concerns the actions people take in their attempts to assure that their decisions do not suffer the fate of so many resolutions. It is easy to appreciate the significance of the “implementation” issue in personal and organizational life. Nevertheless, the decision implementation literature is recent and remains small but can be expected to grow rapidly. Representative papers include those by Gollwitzer (1999), Dholakia and Bagozzi (2002), and Nickerson and Rogers (2010). The line of work represented by these articles is specifically about the benefits of using “implementation intentions” – concrete, actionable plans to carry out a decision. The strategies people employ to ensure that their decisions “stick” might vary between cultures, and the effectiveness of such strategies may vary as well. We imagine that adhering to precise plans might make someone a stick-in-the-mud in some cultures, but an admirable colleague in others.

4. Future directions

This review reveals several areas of progress in the study of cross-cultural decision making. Since initial reviews of this discipline, which focused on probability judgments, risk, and decision making modes (Weber & Hsee, 2000), many other topics have received attention. Overall, the following cardinal decision issues have enjoyed the most attention: “mode,” “investment” (indecisiveness), “options,” “judgment”, “value,” and “acceptability.” Certain features of the “need” issue – such as attention – have been studied, but it would be illuminating for scholars to directly study how cultures vary (or not) in the way they begin the decision making process itself. The “possibilities,” “tradeoffs,” and “implementation” issues appear to have received relatively little attention, but they are clearly relevant to the quality of the decision outcome and the effectiveness of the decision being acted upon, respectively. Therefore we recommend that scholars give attention to and ask questions regarding these less studied issues.

What have studies in cross-cultural decision making contributed besides describing differences in decision making in particular cultures? Such studies have yielded evidence that many presumed “basic” processes are not universal (Henrich, Heine, & Norenzayan, 2010). Such work has also attempted to explain cultural differences, attributing them to psychological forces such as individualism or to more distal forces that shape human psychology (e.g., modes of subsistence or migration history).

Many important and generative lines of research have examined only two or three cultural groups, often of East Asian and Western origin. While that body of work has been richly informative, we note three resulting limitations. One, obviously, is that the generalizability of those findings to other cultural groups might be limited. Someone who hopes to learn about Mexican decision making would be ill-advised to only read the literature largely about East Asians and conclude, “Since Mexicans are fairly collectivistic, like East Asians, their decision making practices must be similar.” Thus we propose that investigators focus their efforts on a more diverse set of national cultures as well as differences within regional boundaries. A second, related limitation is that individualism and collectivism are frequently used to explain cultural differences to the neglect of other factors. When considering only a single East Asian and Western cultural group, this construct may very well account for differences. However, other collectivistic cultures likely make decisions very differently than, say, Japanese people, so other factors will need to be developed and examined as explanations of those differences. A third limitation is that early cultural work in psychology seldom differentiated between individual and

group-level effects. That differentiation is crucial to properly understanding the relationships between variables of cultural interest. Hypothetically, a researcher might find a positive relationship between individualism and preference for unique products across 30 cultures at the group level. However, if the investigator were to look at individuals within a given culture, the relationship might be virtually null, reversed, or variable between groups (Na et al., 2010). Some researchers have indeed demonstrated this type of effect (Leung & Cohen, 2011).

In closing, we raise a final question for scholars to explore: How can this research help people make better decisions? Can individuals from one culture import another culture’s decision making strategies in order to improve decision making effectiveness? Effectiveness is subjective; it depends on the extent to which the intended outcome is achieved for the decision’s beneficiary. Nevertheless, decision making practices of one culture may have inherent benefits or pitfalls affecting any culture that uses them. For example, Toyota’s American offices seem to have imported very thorough Japanese decision making strategies (Liker, 2004). Thoroughness might almost universally reduce people’s likelihood of being blindsided by unexpected consequences, but it may also render decision making slow and cumbersome. Researchers may also explore what factors lead to successful (vs. disastrous) transfer of decision making practices. Must features of a particular strategy “match” the culture in order to be effective? Or might a clash between a foreign decision strategy and local habits push people to decide better?

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