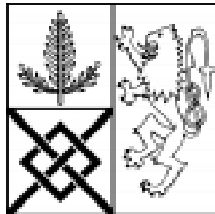


**Research Paper No. 1607**

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Models of Cultural Influence on Decision Making**

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**RESEARCH PAPER SERIES**



**GRADUATE SCHOOL OF BUSINESS**

**STANFORD UNIVERSITY**

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DYNAMIC VS. DISPOSITIONAL MODELS OF  
CULTURAL INFLUENCE ON DECISION MAKING**

**Donnel A. Briley\***  
**Michael Morris\*\***  
**Itamar Simonson\*\*\***

\* Donnel A. Briley is Assistant Professor of Marketing at the Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong (SAR).

\*\*Michael Morris is Associate Professor of Organizational Behavior.

\*\*\*Itamar Simonson is the Sebastian S. Kresge Professor of Marketing, both at Stanford University, Graduate School of Business, Stanford, CA, 94305.

This research is based on a doctoral dissertation guided by Peter Wright, Itamar Simonson, and Michael Morris, and was supported by a doctoral research grant from the Graduate School of Business, Stanford University and a grant from the Hong Kong government (DAG97/98.BM34). We thank Yammie Ho, Michelle Guez, Michelle Pryor, Hillary Haley and Iris Chow for assistance in running the studies.

## **Reasons as Carriers of Culture: Dynamic vs. Dispositional Models of Cultural Influence on Decision Making**

We argue that a way culture influences decisions is through the reasons that individuals recruit when required to explain their choices. Specifically, we propose that cultures endow individuals with different rules or principles that provide guidance for making decisions, and a need to provide reasons activates such cultural knowledge. This proposition, representing a dynamic rather than dispositional view of cultural influence, is investigated in studies of consumer decisions that involve a tradeoff between diverging attributes, such as low price and high quality. Principles enjoining compromise are more salient in East-Asian cultures than in North American culture, and accordingly, we predict that cultural differences in the tendency to choose compromise options will be greater when the decision task requires that participants provide reasons. In Study 1, a difference between Hong Kong Chinese and North American participants in the tendency to select compromise products emerged only when they were asked to explain their decisions, with Hong Kong decision makers more likely and Americans less likely to compromise. Content analysis of participants' reasons confirmed that cultural differences in the frequency of generating particular types of reasons mediated the difference in choices. Studies 2 and 3 replicate the interactive effect of culture and the need to provide reasons in a comparison of North American versus Japanese participants and in a comparison of European-American and Asian-American participants, respectively. Study 4 and 5 found that Hong Kong Chinese participants, compared with Americans, evaluate proverbs and the reasons of others more positively when these favor compromise. We discuss the value of conceptualizing cultural influences in terms of dynamic strategies rather than as dispositional tendencies.

The debate in international marketing between proponents of globalization versus adaptation turns on the issue of whether consumers in different countries are alike in their preferences and decision tendencies. Although, Levitt (1983) and others have described a general convergence in the preferences of consumers around the world, suggesting that globalization strategies may be increasingly viable, a growing wave of research points to cultural differences in the cognitive processes through which consumers make decisions, suggesting benefits of cultural adaptation (e.g., Aaker and Maheswaran 1997; Han and Shavitt 1994; Schmitt and Zhang 1998). Cultural influences on consumer cognition have been understood in terms of an underlying metaphor that cultural knowledge is a “lens” that colors people’s perception of objects and messages in the environment (McCracken 1986). Though this metaphor is useful, we argue that the debate over cultural differences would be greatly elucidated if cultural lenses were not always conceptualized as chronic dispositional traits but rather as dynamic cognitive states. Rather than debating the general presence or absence of cultural differences, the current research focuses on a factor that carries culture to the fore of a decision makers mind, resulting in cultural differences that would not be exhibited were the same choice made under different conditions.

Both in the consumer behavior literature and in psychology more generally, researchers have primarily conceptualized acculturation as imparting a set of general, stable tendencies, akin to personality dispositions. The cultural knowledge that drives these tendencies has been envisioned in terms of highly general attitude- or value-clusters, such as individualism-collectivism (e.g., Han and Shavitt 1994; Triandis 1989). This picture of cultural knowledge is of an abstract, encompassing, and abiding structure. In terms of the lens metaphor, it is like an ever-present contact lens that continually shapes an individual’s view of the world. This dispositional approach to culture has produced important insights, but it may fail to capture many, perhaps even most, influences of culture on cognition. In the current research, we propose a more dynamic picture of culture in mind. Cultural knowledge comprises many specific knowledge structures -- categories, beliefs, decision principles -- that exert an influence only

when they have been activated or brought to the fore of the mind. In terms of the lens metaphor, cultural knowledge is like a prism or telescope -- an interpretive tool that shapes the individual's perception of and, ultimately, navigation of the world, but that only exerts influence when it has been brought into use. This dynamic interpretation predicts different patterns of cultural differences; rather than main effects of individuals' cultural backgrounds, one would look for interactions of these backgrounds with conditions that bring cultural knowledge into activation.

A dynamic view of culture raises an important and largely unexplored research question: What conditions tend to activate cultural knowledge? In the current research, we contend that cultural knowledge is recruited when individuals need to provide reasons for their judgment or decision. Past research has shown that, when consumers need to provide reasons, they select salient, verbalizable, compelling principles, and these reasons sometimes lead to choices that are inferior (e.g., Wilson and Schooler 1991). Recent research further suggests that the need to provide reasons evokes an information processing strategy relying on top-down application of rules or principles instead of bottom-up processing of attribute information (Simonson and Nowlis in press). Many of the rules and principles relevant to decisions that an individual possesses are derived from proverbs and other cultural knowledge and hence the search for reasons brings cultural knowledge to bear on the decision making.

To investigate this dynamic view of cultural influence on decision making, we examine a type of choice problem for which the decision principles of North American and Chinese cultures pull in opposing directions. In particular, we focus on choices among three products differing on two attributes (e.g. price and quality), such that the middle option represents a compromise solution (e.g., Simonson 1989). Proverbs and other normative rules in the Chinese cultural heritage valorize moderation and harmony in a conflict, whereas the North American cultural heritage endorses decisions between the conflicting interests that sacrifice one for the other. Hence, we propose that when American and Chinese consumers face a product choice problem that requires them to provide reasons, they will differ in their tendency toward compromise options, even if they do not differ at all in response to the same problem when no

reasons are required. Specifically, we hypothesize that the effect of introducing a requirement to give reasons will be to shift American consumers in the direction of becoming less compromising than otherwise, and to shift Chinese consumers in the direction of becoming more compromising than otherwise.

We begin with a review of literature relevant to our theoretical analysis and then report the results of five studies. The first three studies examine the predicted interaction between a consumer's culture and the condition under which the choice is made, with or without a request to provide reasons. As shown, the predicted interaction is consistently obtained. Moreover, a content analysis of the reasons offered by subjects indicates that different types of explanations are brought to mind in the Chinese and North American cultures, supporting our proposition that culture-based decision rules drive these effects. To further examine our theory regarding the causes of this interaction, the final two studies directly investigate cultural differences in evaluation of decision rules that argue for or against compromise. One study examines proverbs concerning decision making in the two cultures and how people evaluate these proverbs. The other focuses on how people evaluate the reasons for decisions made by their peers. The paper concludes with a discussion of the theoretical and practical implications of this research.

### **APPROACHES TO CULTURAL DIVERSITY IN CONSUMER COGNITION**

In order to best frame the current research, it is worth reviewing the stances taken in the literature with regard to culture. Two basic stances with regard to cultural influence on consumer decision making have been advanced.<sup>1</sup> First, many researchers have taken the universalist position (either implicitly or explicitly) that decision biases are not influenced by culture. For instance, researchers have emphasized that risk aversion tendencies may have psychophysical mechanisms, and researchers have replicated the patterns of evidence in many countries (Kahneman, Slovic and Tversky 1982) but also in animal behavior (Shafir, Wiegmann, Smith and Real 1999). Others have argued that biases in preferences and in the weighting of

particular forms of information reflect psychological mechanisms shaped by biological evolution (e.g., Cosmides and Tooby 1996; Gigerenzer 1998).

Second, some researchers have taken the dispositionalist stance that cultural dispositions exist in general, stable patterns that reflect core beliefs such as individualistic versus collectivistic world views (Hofstede 1980). A wave of comparative studies has been premised on the findings that Western Anglophone nations are proxies for individualistic culture and East Asian nations are proxies for collectivistic culture (e.g., Triandis 1989). In consumer research, Han and Shavitt (1994) found that advertising appeals emphasizing personal benefits have more influence on decisions of consumers in the United States than Korea, whereas advertisements emphasizing family or in-group benefits have more influence in Korea. Aaker and Maheswaran (1997) tested the related hypothesis that consensus information (others' evaluations of the product) exerts a larger influence in Hong Kong as compared to the United States.

It would be a triumph of parsimony if many diverse cultural differences in decision making could be explained in terms of a single cultural disposition, such as individualism-collectivism. For this reason, the dispositional approach has attracted many advocates. Yet, the existing evidence for the dispositional view falls short. Proponents of the individualism-collectivism construct have arrayed a number of country difference findings, but others studying similar kinds of decisions have observed no country differences and recent meta-analyses find no overall pattern of support for this construct's predictions (Heine, Lehman, Peng and Greenholtz 1999). Moreover, the validity of highly abstract, general measures of cultural knowledge have been questioned on both methodological and conceptual grounds (Peng, Nisbett and Wong 1997).

In this paper we describe a third basic stance concerning the influence of culture on decision making. Roughly, this stance lies between the universalist stance that culture never matters and the dispositionalist stance that culture always matters. More specifically, we propose that culture is influential when some aspect of the decision task requires that decision makers draw on thoughts or knowledge that differ cross-culturally. It is important to distinguish

between this view and the typical interactions between culture and stimuli domain, which have been examined in previous research. The notion that cultural differences are specific to contexts or stimulus domains has been emphasized by several traditions, including constructivist approaches emphasizing domain-specific theories (Morris and Peng 1994) and Whorfian approaches emphasizing specific linguistic influences on conceptual structure (Hunt and Agnoli 1991; Schmitt and Zhang 1998; Zhang and Schmitt 1998).

Our approach concurs that the consequences of cultural knowledge will be circumscribed to those domains to which the knowledge applies, yet we differ in drawing attention to the dynamic rather than stable role of this cultural knowledge. The knowledge only exerts an influence, we suggest, if it has been brought to the fore of the mind. Hence, we will look for evidence at the level of culture-by-cognitive state interactions, while the related work mentioned above focuses on an interaction between culture and external, contextual stimuli. To some extent, the dynamic nature of cultural knowledge has been described in models of the working self-concept as sampled from different kinds of self-representation (Trafimow, Triandis and Goto 1991; Triandis 1989). Research has shown that features of a task can influence which aspects of the self-concept are evoked (Brewer and Gardner 1996). In a consumer cognition context, Aaker and Williams (1998) found that different aspects of the self-concept were evoked depending on whether an ad featured an individual or a group. Nevertheless, research has not demonstrated that self-concepts directly mediate the observed cultural differences. We suggest that this may indicate that the self-concept is too general a construct.

Our stance begins with the assumption that cultural knowledge comprises a number of highly specific structures rather than a few monolithic structures, such as an individualist versus collectivist orientations. This assumption is taken in the constructivist approach in developmental psychology that views culture as “toolkit” of cultural models, schemas, and theories (Bruner 1990; Lillard 1997). A dynamic constructivist approach to culture has been developed recently by social psychologists (Hong et al. in press), who build on the processing assumptions of Higgins’s (1996) knowledge activation theory. A key idea is that possessing a



particular cultural construct does not entail relying on it continuously, and that predictable factors determine whether a construct will become operative. This has yielded insights about the boundary conditions affecting cultural influences on social cognition, such as the individual's state of priming (Hong et al. in press) or state of Need for Closure (Chiu et al. 1999).

In studies of decision making, a way to manipulate whether cultural knowledge is activated and brought to bear on a choice is by asking decision makers to provide reasons for their decisions. Past research has found that when people search for reasons, they access decision rules, many of which are culturally conferred. Although this method has not previously been used in cultural research, a review of past findings will elucidate its potential.

### **REASONS, COMPROMISE, AND CULTURE**

Recent research suggests that asking consumers to provide reasons for their decisions shifts their focus from the search of the best option to the search of the option supported by the best reasons (e.g., Simonson and Nowlis in press). Consequently, a requirement to provide reasons has a systematic effect on the choices (American) consumers make, such as a decreased likelihood of buying products on "sale," selecting compromise options, and demonstrating loss aversion. A related stream of research by Timothy Wilson and his colleagues has found that requiring people to give reasons for their choices (referred to as "introspection") often leads them to make different choices than they would have otherwise (e.g., Wilson and Schooler 1991; Wilson, Hodges and LaFleur 1995). This research begins with the well-known article of Nisbett and Wilson (1977), who demonstrated that people asked to report reasons or explanations after their decisions do not have access to the cognitive processes leading to the decision. Hence, reasons are generated by accessing implicit theories or decision rules, many of which are conferred by their culture or sub-culture (Nisbett and Wilson 1977, p. 248). Furthermore, when introspection is required, the principles and rules accessed as reasons take the place of the associational processes that might otherwise have guided decision making; decision making runs "top down" from the rule rather than "bottom up" from attribute values (Wilson et al. 1989; Wilson et al.

1995). The biasing effect of providing reasons was perhaps most subtly demonstrated in an experiment that manipulated whether participants were required to verbally characterize faces as they learned to distinguish them -- the requirement to report verbally led participants to focus on the features that were most easily verbalizable, even if not the most diagnostic (Schooler and Engstler-Schooler 1990). Conversely, actual processes of decision making are often based on associations between particular properties of the choice options and one's preferences, which are not rule-based and easily verbalizable (e.g. Shafir, Simonson, and Tversky 1993). Researchers can make indirect inferences about these decision processes on the basis of various manipulations of the decision problem or the details consumers remember after a choice problem (e.g., Lichtenstein and Srull 1985), even if the consumer himself or herself cannot directly report relying on these details.

#### Cultural Influence on Compromise Decisions

The biasing effect of asking people to provide reasons has been demonstrated in decision problems involving compromise options (Simonson and Nowlis in press). Before discussing how the need to provide reasons for decisions and culture influence the selection of compromises, it is worth defining this class of problems more precisely. By compromise option, we mean the middle option in an arbitrary set, which offers moderate levels of two attribute dimensions as opposed to "extreme" options that maximize one attribute dimension interest while sacrificing the other. Consider a set of three options  $\{x,y,z\}$  described by two attributes (see Figure 1). Suppose the attributes are price and quality:  $x$  is the highest in quality and most expensive,  $z$  is the lowest in quality and least expensive, and  $y$  is the compromise option that falls between the other two on both attributes. One way that a tendency toward compromise options has been demonstrated (Simonson 1989) is that option  $y$  gains choice-share relative to  $x$  when it appears in  $\{x,y,z\}$  as opposed to when it appears in  $\{x,y\}$ . This tendency to select compromise alternatives violates tenets of value maximization theory (Tversky and Simonson 1993).

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Insert Figure 1 about here

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The original demonstration and explanation of the compromise effect based on the notion that consumer choice can often be best understood in terms of a search for good reasons (Simonson 1989). Furthermore, think-aloud protocols of decisions to select compromise options indicated that such choices tended to be associated with more difficult decisions, and the selections of a compromise options were often explicitly explained as such (e.g., “Alternative B combines both characteristics, so it’s a good compromise”). When asked to list the advantages of compromise options, subjects most often mentioned that these alternatives are ‘safe’ and ‘less likely to be criticized.’ However, the choice of compromise options was not rated as easier to justify than the choice of extreme options and was described by some as “wishy-washy.” Another analysis of the compromise, which is based on the property of loss aversion, drew on the notion that any option involves gains and losses relative to the forsaken options and that compromise options minimize the maximum loss (Simonson and Tversky 1992; Tversky and Simonson 1993). This process involves specific comparison of different attribute values and hence is consistent with the findings that the process is ‘difficult’ and results in an option that is ‘safe’ yet hard to justify in terms of a general principle.

The processes leading to compromise choices has been elucidated by recent investigations of boundary conditions. Simonson and Nowlis (in press) found that American participants required to provide reasons for their choices were less likely to choose compromise options. Another finding provides incisive support for the interpretation that the decision rules evoked by a request for reasons take the place of studying the attribute values: Participants in the reasons condition had a poorer memory for the attribute values than participants in the no reason condition. Thus, the findings of Simonson and Nowlis (in press) suggest that a request for reasons leads to decisions based on “top down” application of a decision rule or norm rather than through a “bottom up” calculation from attribute values.

A dispositional perspective of cultural influence might predict that, regardless of the situational context, individuals from some cultures should be more predisposed than those from some others to choose compromise options. This proposition was tested for Japanese and Americans in an unpublished study by Myers and Simonson (1992), which contrasted respondents in terms of the likelihood of selecting compromise options from 3-option sets in different product categories. Contrary to their expectations, Japanese respondents were not more likely to choose compromise options and in fact showed a non-significant trend in the opposite direction.. An examination of notes and comments made by some respondents suggested that Japanese respondents used the strategy of closely attending to attribute values and conducting tradeoff analysis, which often led to selection of non-compromise options. In hindsight, assuming Japanese and American consumers have similar preferences in product categories such as various appliances and personal computers, and make their decisions on the basis of close attention to the attributes, there is no reason to expect significant differences in choice patterns, including the choice of a middle option in a set. However, if consumers need to provide reasons for their decisions and hence rely on a different decision strategy, then a cultural difference may result. The search for reasons, we propose, could cause decision makers to draw on rules that favor or disfavor making compromises. Therefore, the reasons that individuals offer for choices may carry culture into the decision process as these rationales might differ culturally.

#### Cultural Sources of Reasons

Although Simonson and Nowlis (in press) did not address the question of whether culture shaped the decision rules that came to mind for their American participants, they noted that reasons given emphasized the importance of expressing single-mindedness and uniqueness. The notion that it is important in conflict decisions to determine the greater and lesser interests and to make a principled choice between options is a longstanding theme in Western individualistic culture. Consider Judeo-Christian teachings about how to reconcile sacred and worldly interests: Extreme sacrifices are valorized from the story of Abraham's decision to sacrifice his son to Jesus' parable about a man who blinds himself to reduce his inclination to sin. By way of

contrast, Buddhist teaching about the same human dilemma centers on the notion of the “middle way” which avoids extreme asceticism, on the one hand, and extreme hedonism, on the other. There is a clear contrast between sacrifice-favoring injunctions and the middle way principle, which can be expressed as follows: “To those who choose the path that leads to enlightenment, there are two extremes that should be carefully avoided...” (The teaching of Buddha, 1981). The social thinking of Confucius extended this way of approaching dilemmas into a more general ‘Doctrine of the Mean’:

Confucius said: ‘The morally noble man keeps to the Mean (he avoids extremes and keeps to the ordinary). The petty man does just the opposite.’ The avoidance of extremes and the preference for the ordinary exhibited by the morally noble man is such that at all time he maintains his balance. The opposite tendency of the petty man is such that there is nothing which he restrains himself from doing (Moran 1993).

This key difference in the decision principles of Western versus Chinese logic and ethics have been suggested by a number of scholars (e.g., Lloyd 1990; Peng and Nisbett 1999). However, we propose that consumers’ purchase decisions will often be influenced by the differential cultural embrace of decision rules in these cultures only when consumers need to provide reasons for their choices. That is, in many product categories, such as personal computers and other appliances, consumers in different cultures may have similar needs and preferences, suggesting that there should not be systematic preferences in purchase decisions. Yet, we expect cultural differences to emerge once consumers are required to provide an explanation for their decisions, because reasons for choices depend on the cultural norms as to what is acceptable and persuasive. For example, as discussed further in Study 5 below, there are significant differences between Western and Chinese proverbs with respect to the virtue of compromising, which reflect differences in the common arguments that one might select as reasons for choice.

Thus, we predict that providing reasons for choices will elicit different choice patterns from Chinese and American decision makers. Specifically, a need to provide reasons is expected

to decrease the tendency to select compromise options among Western consumers and to increase the tendency to compromise among Chinese and some other Asians. Figure 2 illustrates our prediction as to the impact of reasons on purchase decisions.

H1: American consumers who need to provide reasons for their choices, as compared to those who do not, will prefer intermediate (compromise) alternatives *less*, whereas Chinese decision makers who need to provide reasons for their choices, as compared to those who do not, will prefer intermediate alternatives *more*.

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 Insert Figure 2 about here  
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The forgoing hypothesis depends on the notion that reasons direct one toward particular types of choice alternatives. Central to this process is the supposition that the content of reasons differs across cultures and predicts the content of choices. In other words, the proximal cause of compromising should be the decision rules that come to the minds of decision makers in each culture.

H2: When decision makers explain their choices, the content of reasons offered mediates the relationship between the cultural background of consumers and their preference for alternatives with intermediate positioning.

## **STUDY 1: REASONS AND COMPROMISE CHOICES IN THE UNITED STATES AND HONG KONG**

Our first study presented students in the United States and Hong Kong with several shopping scenarios involving a choice among two “extreme” options and a “compromise” (intermediate) option. We chose product domains (e.g., computers, cameras) for which students in the two cultures were expected to have similar preferences (an assumption that was subsequently tested in the control condition, as shown below). Consistent with the hypothesis of culturally divergent impact of reasons (H1), we expected an interaction effect in which choice patterns differ in the presence of a reasons requirement. Moreover, consistent with the

mediational hypothesis (H2), we expected that the effect of the manipulation would run through the content of the reasons generated, and the simple effect of culture in the reasons condition could be statistically accounted for in terms of reason content.

So that we can compare our dynamic conceptualization of cultural influence to a dispositional account, we included individual difference measures of cultural knowledge that have been developed in “stasis view” cross-cultural research. Although these measures do not specifically focus on compromising in consumer decisions, they do relate to tendencies for resolving interpersonal conflicts, which might be relevant to compromising behavior. Furthermore, they might serve as manipulation checks by showing that Hong Kong and U.S. respondents indeed differ on the dimensions often used in prior cross-cultural research. The individualism-collectivism scale includes items concerning individuals moderating or harmonizing their interests to those of a group. Workplace conflict scales tap the extent to which people prefer all-or-nothing solutions as opposed to compromises (Tang and Kirkbridge 1986; Trubisky, Ting-Toomey and Lin 1991). Thus, by including these scales, we can check our assumption that our North American and Hong Kong groups differ on the “dispositional view” measures of culture knowledge and, more importantly, show that these differences do not account for our predicted effects. Furthermore, in the event that our results show only a main effect of country and not the predicted interaction, we can further probe static view explanations by assessing whether these dispositional measures mediate country differences.

### Method

Respondents were 124 undergraduate students at a West coast U.S. university and 176 undergraduates students at a Hong Kong university, all of whom participated in the study to fulfill a course requirement. Participants were informed that the study examined the choices people make when they have narrowed potential selections to a few alternatives that differ on two dimensions. They were told to assume that the available alternatives were similar on all dimensions except the two on which the products were described. To avoid any problems that

might arise due to differences in price sensitivity and pricing norms between countries, subjects were instructed to imagine that they were shopping in Australia. Accordingly, pricing information was given in Australian dollars, and the conversion rate for Australian dollars and the local currency (U.S. or Hong Kong dollars) appeared in the introductory instructions.

Subjects made choices in eight familiar product categories, such as computers, and portable CD players. Each scenario began with a short description of the category and features of available alternatives, and three alternatives were presented. The attribute levels were arranged such that subjects were faced with a decision among two extreme options (i.e., options that are best on one dimension and worst on the other) and a compromise. For example, in the personal computer problem, the three options differed in terms of hard disk capacity and memory. One extreme option had 48 megabytes of RAM and one gigabyte of hard disk space, the other extreme had 16 megabytes of RAM and three gigabytes of hard disk space, and the compromise had intermediate values (32 MB RAM and 2 GBs). In each problem subjects chose an option and rated the overall attractiveness of each alternative on a 1 to 10 scale. After making all choices, subjects completed the collectivism scale (Triandis 1995) and the interpersonal conflict resolution scale (Thomas and Kilmann 1974).

Approximately half of the subjects were randomly assigned to a condition in which they provided the reasons for their choices; the other half were in a control condition in which they were not asked to give reasons. In the reasons condition, the instructions indicated that, in addition to respondents' choices, the study sought to understand the reasons for the choices. Thus, after reviewing each of the choice scenarios, but *before* making selections and rating options, subjects wrote the key reason/s for choosing one option over the others. The spaces for reasons were positioned in this way to encourage subjects to develop (and write) reasons prior to making a decision about the alternatives, rather than after making a decision. That is, since our goal was to examine whether considering reasons influences the decisions made in the two cultures, it was important that respondents consider their reasons *before* choosing. Subjects in



both the control and reasons conditions were assured anonymity and were not asked to give their names or any identifying information.

### Results

The data set was limited to citizens of the country in which they were sampled. On this basis, 23 U.S. and one Hong Kong subjects were excluded from the analysis. Also, we removed from our data six U.S. and 16 Hong Kong subjects in the reasons condition who failed to give reasons for their choices. This left a Hong Kong sample of 159 and U.S. sample of 95. The collectivism and interpersonal conflict resolution scales had acceptable inter-item correlations ( $\alpha = .68$  and  $.66$ , respectively). As expected, Hong Kong students were more collectivistic ( $M_{HK} = 3.59$ ,  $M_{US} = 3.47$ ;  $t = 2.40$ ,  $p < .01$ ) and, according to the compromise sub-scale of the Thomas and Kilmann instrument, more likely to use compromise to resolve interpersonal conflict than were the U.S. students ( $M_{HK} = 3.63$ ,  $M_{US} = 3.51$ ;  $t = 2.50$ ,  $p < .01$ ).

Effect of Considering Reasons. In the control condition the patterns of choices of the Hong Kong and U.S. groups were similar, with a compromise choice share of about 50% in both groups (50% in Hong Kong and 48% in the U.S.). However, consistent with H1, in the reasons condition the two groups' choice patterns were different. Whereas the U.S. group's preference for compromises declined to 39% when prompted for reasons, the Hong Kong group's preference for compromises increased to 56% (see Table 1). Thus the difference between the Hong Kong and U.S. groups in the compromise share was 2% in the control and 17% in the reasons task.

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 Insert Table 1 about here  
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We used logistic regression, with the choice of a compromise option as (dummy) dependent variable and the following independent variables: condition (control or reasons), cultural group (American or Hong Kong), the interaction of condition and country, and category-specific dummy variables. Consistent with H1, the interaction of culture and reasons condition is

significant (Wald chi-square = 11.1,  $p < .01$ ). Also, the reasons condition variable (Wald chi-square = 59.0,  $p < .001$ ) was statistically significant.

We also analyzed the attractiveness ratings that respondents provided. For each of the eight choice problems, an indicator of the preference for the compromise alternative was calculated by subtracting the average rating given to the two extreme alternatives from that given to the middle alternative. These (eight) compromise preference indicators were averaged to produce a single compromise attraction measure for each subject.

The results for the attractiveness ratings parallel those for choices, as shown in Figure 3. For the control condition the tendency to compromise is similar for the U.S. and Hong Kong groups (DIFF = .12,  $t = .66$ ,  $p > .20$ ). Conversely, in the reasons task the difference in compromise attractiveness between the U.S. and Hong Kong groups was significant (DIFF = .70,  $t = 4.50$ ,  $p < .001$ ). An ANOVA with compromise attractiveness as the dependent measure and culture, condition, and their interaction as independent variables found a significant interaction, consistent with H1 ( $F_{1,250} = 5.8$ ,  $p < .05$ ).

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 Insert Figure 3 about here  
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Mediation of Reasons. H2 predicts that the content of decision makers' reasons mediates the link between their culture and choice patterns. To test this hypothesis, two independent judges coded the content of each reason using a six-category classification that was developed based on a review of the explanations generated by students in the two cultures. Three of the reason types suggest an emphasis on a single attribute (as opposed to combining the two, or compromising): (1) the dominance of one attribute over the other (e.g., "RAM is more important than hard disk space"), (2) the value or importance of one attribute (e.g., "more RAM shortens processing time"), and (3) the sacrifice of higher levels of one attribute for higher levels of the other (e.g., "for a big hard disk I'll give up RAM"). The other three reason types express a preference for balancing between the two attributes: (4) the value or importance of both

attributes (e.g., “both RAM and hard disk space are important”), (5) the adequacy of one option or the inadequacy of the other two options (e.g., “option X is decent on RAM and has enough hard disk space”), and (6) explicit mention of the ‘average’ or ‘middle’ positioning of the option or its attributes (e.g., “I like the middle one”). Inter-judge reliability was 83%, and disagreements were resolved through discussion.

A subject’s culture is a good predictor of the type of reason he or she generated. As expected, Hong Kong subjects were more likely to use compromise-oriented reasons (42% of cases) than were American subjects (24% of cases). Additionally, as would be expected, reason type was a good predictor of choices. Eighty-seven percent of extreme choices were supported by reasons that emphasized a single attribute and 61% of middle choices were supported by reasons that expressed some balancing between attributes. In particular, compromise-oriented reasons had a particularly strong effect on the Hong Kong group: In 91% of the cases in which these subjects gave an explanation that endorsed balance, they selected a middle option. Table 2 summarizes these results.

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 Insert Table 2 about here  
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To examine the relationship between subjects’ culture, choice patterns, and reasons, a mediation analysis (Baron and Kenny 1986) was preformed. The results indicate that reason content is a significant predictor of culture (Wald chi-square = 225.8,  $p < .001$ ), and that culture is a significant predictor of choices (chi-square = 35.3,  $p < .001$ ). When both culture and reason content are used to predict choices, the reasons variable maintains significance (Wald chi-square = 59.0,  $p < .001$ ) but culture does not (Wald chi-square = 1.6,  $p > .20$ ). Because the culture variable drops in significance when the reasons variable is included in the model, we can ascertain that reasons have the expected role as mediators of the relationship between culture and type of choices.

Individual Difference Measures. Although the above analysis shows strong evidence that country differences in compromising arise from the types of reasons that individuals generate rather than from dispositional characteristics, it is interesting to see whether our study's individual difference measures might influence the way that subjects respond to the reasons manipulation. For example, it could be that high levels of collectivism are associated with the tendency to provide reasons that are compromise-oriented. Recall that a significant interaction of culture and condition (consistent with H1;  $F_{1,250} = 5.8, p < .05$ ) was found in an ANOVA model above using a dependent variable based on the attractiveness ratings of alternates and culture, condition, and their interaction as independent variables. To test collectivism's ability to explain our interaction, we add to the model tested above the collectivism variable and its interaction with the condition variable. The results show that, while the key country-condition interaction remains significant in the new model ( $F_{1,248} = 4.8, p < .05$ ), neither collectivism ( $F_{1,248} = 1.6, p > .10$ ) nor its interaction with condition ( $F_{1,248} = 2.2, p > .10$ ) are significant. Also, the country variable remains significant ( $F_{1,248} = 10.1, p < .01$ ).

An analysis using the social compromise sub-scale of the conflict resolution instrument instead of collectivism produced a similar result. The interaction of country and condition remains significant ( $F_{1,248} = 5.00, p < .05$ ), though the social compromise variable is marginally significant ( $F_{1,248} = 3.8, p < .10$ ), and its interaction with condition is not significant ( $F_{1,248} = 1.9, p > .10$ ). That is, in both of these augmented models we find that the country-task interaction is significant and that the interaction of the individual difference variable and task is not significant. These analyses suggest that dispositional variables cannot account for the diverging effects of providing reasons on compromising in the two cultures.

## Discussion

Although U.S. and Chinese respondents tended to make similar choices in the control task, consistent with our analysis, having to provide reasons decreased the tendency of U.S. respondents to select compromise options whereas it increased the share of compromise options among Chinese respondents. The lack of a main effect of culture is important in supporting our

emphasis on the conditions that trigger cultural knowledge and cultural differences. It is not simply that requiring reasons increases the degree of a cultural difference; rather, the reasons requirement evokes a different cognitive strategy that brings culture into a choice problem where it otherwise would not come up at all. Furthermore, the results indicate that the content of the provided reasons mediates the impact of culture on the choices of those who are told to explain their decisions. Conversely, measures of cultural dispositions, such as collectivism and compromising conflict style, did not mediate the country difference in choice. As several other researchers have recently noted (Peng et al. 1997; Heine et al. 1999), the high degree of error in these measures means that they generally fail to improve much on simply using an individual's country as a proxy for culture. This finding rules out an interpretation that would try to preserve some aspects of a dispositional view, such as that an individual's collectivism disposition "switches on" when a reason is required and hence a social audience is implied. Thus, our results weigh against the notion that decisions follow from general cultural dispositions and suggest that the determinants of decisions involve specific decision principles that are activated when the individual searches for a reason.

Next, we examine whether the effect of providing reasons on compromising generalizes to another Eastern culture with similar norms of moderation and compromising.

## **STUDY 2: REASONS AND COMPROMISING IN THE UNITED STATES AND JAPAN**

Japanese culture is influenced by the same heritage of Buddhist and Confucian thought that valorizes moderation in one's actions (Morisaki and Gudykunst 1994; Yamaguchi 1994). Therefore, we expected that, consistent with H1, Japanese consumers as well would be more likely to compromise when they need to provide reasons for their choices, whereas U.S. respondents would again be less likely to compromise when giving reasons.

## Method

The subjects were 33 undergraduate students from a West coast U.S. university and 33 undergraduate students from a Japanese university. For their participation, U.S. respondents received \$8.00 and Japanese respondents received coupons worth 600 Yen (approximately \$5.00). The procedure and manipulation used were similar to those used in Study 1, though some product categories were different. As in Study 1, subjects made choices and rated the attractiveness of the three alternatives in each problem on a 1 to 10 scale.

Questionnaires for the Japanese sample were translated from English to Japanese, then back-translated by a second translator to identify inconsistencies. The two translators discussed all inconsistencies and agreed upon the final translation.

## Results and Discussion

In the control condition, the share of compromise options was similar in the Japanese and U.S. groups (38% and 40%, respectively). However, in the reasons task there was again the predicted difference in the share of compromise options. Specifically, U.S. subjects who explained their choices selected fewer compromise alternatives (29%) whereas Japanese subjects who gave reasons chose slightly more compromises (43%). These data were analyzed using a logistic regression with cultural sample (U.S. and Japan), reasons condition (control and reasons), the interaction of these two variables, and product category dummies as predictors. Consistent with H1, the interaction of culture and reasons condition, as expected, was significant (Wald chi-square = 5.6,  $p < .05$ ). Also, the main effects of culture (Wald chi-square = 5.7,  $p < .05$ ) and reasons condition (Wald chi-square = 9.7,  $p < .01$ ) were significant.

In addition, we ran an ANOVA on a measure of compromising behavior derived from the attractiveness ratings assigned to alternatives. As in Study 1, a summary indicator was obtained for each subject by subtracting the average rating given to the extreme options from the average rating given to compromise options. The independent variables included the cultural sample, reasons task, and the interaction of these two variables. Again, the interaction of culture and

reasons condition was significant ( $M_{U.S., control} = 1.96$ ,  $M_{U.S., reasons} = .40$ ,  $M_{Japan, control} = .95$ ,  $M_{Japan, reasons} = 1.73$ ;  $F_{1,62} = 14.9$ ,  $p < .001$ ).

These results provide further support for the proposition that the need to consider reasons before making a choice elicits culturally-specific response patterns from consumers. Japanese subjects, like the Hong Kong Chinese, evaluated compromise alternatives more favorably after developing explanations for their choices whereas U.S. respondents were less likely to compromise. This pattern of findings is consistent with the idea that culturally conferred decision guidelines are drawn upon when consumers search for reasons to support their decisions, but they may not be accessed spontaneously in many other situations.

### **STUDY 3: THE EFFECT OF REASONS ON COMPROMISING WITHIN A SINGLE COUNTRY**

A limitation of Studies 1 and 2 – and cross-national comparisons in general – is that they do not control for many non-culture factors that might impact and confound experimental results. In Study 3 we test whether the Study 1 findings replicate using Asian-Americans and European-Americans that have lived in the U.S. (for at least four years). By using subjects who have had substantial experience in and are residents of a single country, we can attenuate potential confounds. Furthermore, it is of interest to test our predictions using bicultural (Asian-American) subjects. One might expect that bicultural consumers have experienced some acculturation and, therefore, may not display some of the behaviors peculiar to their ethnic origins. Thus, our single-country sample should be more homogeneous than that of Studies 1 and 2 and, therefore, should provide a stronger test of our key proposition.

Another methodological refinement is the manipulation of choice sets that are presented to subjects. Participants in Studies 1 and 2 all saw the same set of three product alternatives in each product category. As a result, for any particular choice set, it is not possible to determine whether selections of the middle option are due to its compromise position or to its particular combination of attribute values. Although the fact that we pooled the results across multiple

product categories alleviates this problem, it is generally preferable to test the compromise effect using two or three sets (e.g., Simonson 1989; Simonson and Tversky 1992), such that the same option is in the compromise position in one set but not in another (as illustrated below).

### Method

We collected data from 110 students at three West Coast colleges, including 36 European-Americans, 39 Asian-Americans, and 35 other respondents. Subjects were presented with 12 different product sets and, for each set, were instructed to make a choice and rate the attractiveness of all available alternatives on a 1 to 10 scale. All product sets were from the consumer electronics class (e.g., stereo receivers, portable CD players and televisions), a category in which young people from all cultural groups are generally knowledgeable and interested. In addition, subjects completed a collectivism scale (Triandis 1995).

As indicated, in the present study we manipulated, between subjects, both the choice set that respondents evaluated and the need to provide reasons. Specifically, following the methodology in Simonson (1989), for each product category respondents evaluated one of two three-option sets, which were designed such that the two common options were each a compromise in one set and an extreme in the other. As illustrated in Figure 4, with a total of four non-dominated options, one set includes options {A,B,C} whereas the other is “shifted” and includes options {B,C,D}.

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 Insert Figure 4 about here  
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With this design, the compromise effect can be tested by contrasting the attractiveness of the common options (B and C). We designate option B as the focal option in the set, indicating that we are concerned with how much more (or less) it is valued than option C. Accordingly, our dependent measure is: (Attractiveness of B – Attractiveness of C). Note that in the original set {A,B,C}, option B is the middle option; but in the ‘shifted’ set {B,C,D}, option B is an extreme. Thus we can observe the extent of compromising by examining how the choice set ‘shift’



changes the magnitude of the dependent variable. Compromising occurs when aggregate data show that the dependent measure ( $B - C$ ) is larger for subjects selecting from the original set condition than for those selecting from the ‘shifted’ set.

### Results

The 75 Asian-American and European-American students were included in the analysis. The collectivism measure had a Cronbach alpha of .74, indicating acceptable reliability. The Asian-American group had a significantly higher collectivism score than the European-American group ( $M_{\text{European}} = 3.3$ ,  $M_{\text{Asian}} = 3.6$ ;  $t = 3.1$ ,  $p < .01$ ).

An ANOVA full-factorial model was based on a 2 (ethnicity: Asian-American or European-American) X 2 (condition: control or reasons provided) X 2 (choice set: original or ‘shifted’ choice set) between-subject design. The dependent variable, as mentioned above, indicates the relative attractiveness of the core options, B and C. As expected, the key three-way interaction is significant ( $F_{1,67} = 6.9$ ,  $p < .05$ ), indicating that prompting subjects to provide reasons for their choices affects the two cultural groups differently. Figures 5A and 5B show the patterns of results for the original set (focal option is a compromise) and the ‘shifted’ set (focal option is an extreme), respectively. For the European-American group, the need to provide reasons for choices decreases the attractiveness of the focal option (relative to the other recurring option) when it is a compromise alternative, but increases the attractiveness of the focal option when it is an extreme. The Asian-American group, on the other hand, has similar levels of attractiveness for the focal option (relative to the other recurring option) in both the control and reasons conditions.

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 Insert Figure 5A about here  
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 Insert Figure 5B about here  
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The pattern of choices was similar to that indicated by the attractiveness measures. European-American subjects chose 33% fewer compromise options in the reasons than in the control condition, whereas Asian-American subjects chose compromises 4% more in the reasons task.

### Discussion

The pattern of results in Study 3 was similar to that obtained in Studies 1 and 2, indicating that having to provide reasons enhances or (in Study 3) has no effect on the tendency to compromise among Asian-American consumers whereas reasons significantly decrease the share of compromise options among European-Americans. Because this study was conducted in a single country, it allowed us to control for other factors that can confound cross-country comparisons. The fact that the effect of reasons on compromising among Asian-American consumers was not significant and weaker than the corresponding effect on Asian consumers in Studies 1 and 2 might reflect the combined impact of the Asian origins and of living in the U.S.

Overall, the results of Studies 1-3 are consistent with the basic proposition that having to provide reasons activates cultural knowledge and can thus produce different choice patterns. Next, to gain greater insights into the origins of differences in cultural norms regarding compromising, in Studies 4 and 5 we study Chinese and American proverbs and the manner in which they are perceived by consumers.

### **STUDY 4: PROVERBS AS A SOURCE OF REASONS**

We have proposed that cross-cultural differences in choice behavior are magnified when consumers need to provide reasons for their decisions, because acceptable reasons depend on the cultural norms. Thus, the choice of reasons activates cultural norms (e.g., regarding the virtue of compromising), which, in turn, may lead to the selection of different options. Conversely, without the need to explain, consumers in different cultures may often have similar needs and preferences (e.g., for TVs and PCs). Although the pattern of results in Studies 1-3 is consistent with this analysis, we should examine more directly the conjecture that norms as to appropriate

behavior vary across cultures. In particular, to further test our interpretation of the results of Studies 1-3, we need to examine whether Western and Asian norms relating to preferences for compromise and extreme options differ in the predicted direction.

Proverbs are particularly useful reflections of cultural norms, though only recently have researchers started to use proverbs in cross-cultural research. Proverbs, many of which have long histories, store and transmit cultural wisdom as well as offer advice and recommended courses of action. Accordingly, a comparison of Chinese and American proverbs might provide insights into any differences in the bases of reasons and decision guidelines associated with these cultures and thus complement the choice data of Studies 1-3. Such analysis can also help us distinguish between long-standing cultural values differences, which may be reflected in proverbs and other cultural products, and more short-term environmental factors such as economic or political conditions, which generally are not (Weber, Hsee and Sokolowska, 1998).

In the context of this research, we would expect Chinese proverbs to emphasize moderation, balance, and compromise as a resolution to conflict situations. American proverbs, in comparison, are expected to have a lesser emphasis on compromise and a larger emphasis on actions that sacrifice one interest for another. Thus, it is predicted that the compromise theme is better represented in Chinese than American proverbs.

H3: The content of proverbs of China, as compared to those of America, are more likely to endorse compromise actions and attitudes and are less likely to endorse extreme (non-compromise) actions and attitudes.

One limitation of an analysis based on the frequency of proverbs of certain types is that proverbs may sometimes be used to correct and go against the cultural norms. That is, in some cases proverbs counsel against prevailing cultural ideas and are thus unrepresentative of the cultural norms. To confirm that the distinctions that we observe across cultures in the emphasis of proverbs is consistent with cultural tendencies, we can examine the reaction of each culture's members to proverbs that endorse and those that do not endorse moderation and compromising.

Our prediction, consistent with the earlier analysis, is that Chinese consumers will be more likely than Americans to endorse “pro-compromise” proverbs and less likely to endorse “pro-extreme” proverbs.

H4: Chinese consumers, as compared to Americans, are more likely to endorse compromise-enjoining proverbs and are less likely to endorse sacrifice (pro-extreme)-enjoining proverbs, regardless of the culture from which the proverb originates.

These hypotheses were tested in a two-part study. In the first phase, we examined the content of samples of American and Chinese proverbs. And in the second phase, we examined the evaluations of American and Chinese subjects toward a subset of these proverbs.

### Method

We used two existing proverb compilations (Hirsch, Kett and Trefil 1988; Lian 1964), which included 254 American proverbs and 538 Chinese proverbs. A coder, who was blind to the study’s purpose and hypotheses, classified each proverb into one of three categories: (1) proverbs that promote compromising, balance, or moderation, (2) proverbs that promote taking a position, going all out, and avoiding compromises (hereafter, pro-extreme proverbs), and (3) other proverbs. The coder was a Chinese graduate student who had spent five years in the United States and was familiar with both Chinese and U.S. cultures. To ensure that no cultural bias was present in the coding, 200 of the proverbs from each of the two cultures represented were also coded by a North American judge. The interjudge reliability for these 400 proverbs was 76% and 70% for the American and Chinese proverbs, respectively. Disagreements were resolved by discussion. Examples of compromise- and extreme-oriented Chinese and American proverbs are presented in Table 3.

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 Insert Table 3 about here  
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To develop a list of proverbs for the second phase of this study, which examined how the different proverbs were evaluated by Chinese and American respondents, we selected 24 proverbs -- four from each cell of our 2 (proverb's culture of origin: Chinese and American) X 3 (proverb content category: pro-compromise, pro-extreme, and "other") proverb classification. The four proverbs for each of these six cells were randomly chosen from among those on which coders agreed and for which, based on the results of a pretest<sup>2</sup>, there were not large differences across the two cultures in familiarity.

The 24 proverbs were evaluated by 21 U.S. students and 51 Hong Kong Chinese students. They were told that they would see proverbs or sayings from different cultures and asked to evaluate each one. Each proverb was presented with a brief explanation that conveyed its meaning. Subjects indicated the extent to which they tend to follow the advice offered by each proverb using three measures: how much you 1) like each proverb, 2) rely on each as a guide for making decisions, and 3) use each as a basis for providing advice.

## Results

Content of Proverbs. Based on the judges' coding, 46% of the American proverbs and 33% of the Chinese proverbs endorsed either compromise or extreme behavior; the remaining proverbs fell into the "other" category. As expected, the emphasis on compromise and moderation, relative to the emphasis on favoring a single interest, was greater for Chinese than for American proverbs (Chinese = 63%, American = 45%; see Table 4). By applying a chi-square test of independence to the 2 (country of origin: American or China) X 2 (behavior endorsed: compromise or extreme) cell design, we found that this pattern of relative emphasis differs significantly based on country of origin ( $\chi^2_{1,293} = 9.2, p < .01$ ).

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Insert Table 4 about here  
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Endorsement of Proverbs. Proverb ratings were standardized within subject to control for any cultural differences in the way that subjects use the scales. Data were analyzed using an

ANOVA with two within-subjects factors, proverb origin (American or Chinese) and content (extreme or compromise), and one between-subjects factor, cultural sample (Hong Kong Chinese or U.S.). The dependent variable was the mean of the three endorsement measures. As predicted, the interaction of proverb content and cultural sample was significant ( $F_{2,69} = 4.2$ ,  $p < .05$ ). As compared to American subjects, those from Hong Kong endorsed compromise proverbs more and extreme proverbs less. This pattern holds for both the American and Chinese origin proverbs (see Figures 6 and 7).

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 Insert Figure 6 about here  
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## Discussion

Study 4's findings indicate that Chinese proverbs encourage compromise as a solution to life's dilemmas more often than do American proverbs, while American proverbs are more likely to suggest "extreme" behavior (or action based on a single interest/goal). The results also indicate that the attitudes of individuals in these cultures reinforce this pattern. Hong Kong Chinese, as compared to Americans, found compromise proverbs more useful as decision guides and extreme proverbs less useful. This pattern holds regardless of the proverbs' culture of origin.

Together, these results provide substantial support for the proposition that culture presents guidelines for resolving decision situations and illustrates an important way in which these guides differ for Chinese and Americans. Furthermore, these findings are consistent with the results of Studies 1-3 and the notion that a need to provide reasons leads to different choices because it activates different cultural norms. However, to provide a more direct test of whether reasons that endorse compromise or extreme options are evaluated differently across cultures, we

examine in Study 5 how respondents in the two cultures rate reasons (supposedly) provided by other respondents.

### **STUDY 5: SOCIAL DESIRABILITY OF REASONS**

We saw in Study 4 that cultural tendencies affect how reasons in the generalized form of proverbs are evaluated. It is not clear, though, that the same pattern applies to reasons provided by an individual for a specific decision. Furthermore, it is of interest to understand what motives might underlie these behavioral patterns. For example, it could be that particular types of reasons are viewed as socially desirable in some cultures, but not in others. In Study 5 we investigate cross-culturally the social desirability of various types of reasons that are offered by decision makers. In particular, subjects were asked to review reasons that other individuals had given for their choices and try to predict how these reasons would be evaluated by their peers. The reasons that subjects saw and evaluated were either compromise- or extreme-supporting reasons. We expected that assessments of the social desirability of reason types would be consistent with the pattern of proverb endorsements observed in Study 4.

H5: Chinese consumers, as compared to Americans, will find compromise-oriented reasons more socially desirable and extreme-oriented reasons less desirable.

#### Method

Subjects were 120 Hong Kong and 60 West coast U.S. students, all of whom participated in the study to fulfill a course requirement. Participants were asked to review product choices that had been made by some of other students in a previous study and the reasons those students provided to explain their choices (see also Simonson 1989). Accordingly, in four product categories (cars, binoculars, hotel rooms and cameras), participants saw the choice problem students in the earlier study had seen and the reasons they had provided. The task of (the real) subjects was to indicate how other students at their university would evaluate the reasons offered by four individuals in the previous study.

To ensure that subjects knew that each reason had come from a different student and to add realism to our cover story, we provided a “disguised name” of the (supposedly) real student who had made each choice and provided the reason presented. The instructions indicated that this name was disguised so that, in case some subjects knew the students who made the choices and gave the reasons, they would not make judgments based on their familiarity with these individuals. The names used in the Hong Kong version were Wong Ka Yee, Ho Chi Wai, Lee Wai Man and Chan Chun Kit; those used in the U.S. were Lance Johnson, Kim Lee, Albert Ross and Angela Roberts.

For each of the four product categories, subjects saw a short scenario describing the product category and purchase situation, with three alternatives described on two attributes. The choice of the participant in the earlier study was marked and his/her reasons was provided. The (real) subjects were asked to predict how other students would evaluate each reason using three 10-point scales. Specifically, they indicated whether other students would find the reason (1) persuasive, (2) a good basis for making decisions, and (3) consistent with their way of thinking.

The position of the alternative selected in the four choice situations that our participants reviewed was manipulated. Each subject saw two choice situations in which a middle option had been selected and two in which an extreme option had been selected. The product categories in which the middle (and extreme) options are selected were randomized. For the provided reasons, we selected four reasons given by several Study 1 respondents: one compromise and one extreme-supporting reason came from Study 1’s U.S. sample, and one of each type came from the Hong Kong sample. The two reasons used to support compromise choices were “It is best to look for balance when making decisions; the medium option is a good compromise” and “The average option is usually a good one, so I choose the one in the middle.” Those supporting extreme choices were “I prefer the option with the best value on what I consider most important; I would rather not compromise” and “It is important to figure out exactly what I want and not to settle for something average.”



## Results

One Hong Kong student who was not ethnically Chinese and 21 U.S. students who were ethnically Chinese or east Asian were not included in our analyses. This left 119 Hong Kong and 39 U.S. subjects. Inter-item reliability for the three measures reflecting the social desirability of the reasons was acceptable ( $\alpha = .88$ ); therefore, the three measures were combined to form a single index variable.

An ANOVA was run on the variable indicating the social desirability of reasons, with culture (U.S. or Hong Kong Chinese) and reason type (compromise- or extreme-supporting) as independent variables (as well as product category dummy variables). As expected, the interaction of culture and reason type was significant ( $F_{1, 625} = 6.6, p < .01$ ). As shown in Table 5, U.S. subjects rated pro-extreme reasons as more socially desirable (an average difference of 0.76) and pro-compromise reasons as slightly less socially desirable (a difference of 0.14) than did Hong Kong subjects.

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## Discussion

The results of Study 5 indicate that Hong Kong Chinese and American subjects have different perceptions of the social desirability of pro-compromise and pro-extreme reasons. U.S. subjects felt that extreme reasons would be more acceptable than did their Hong Kong counterparts, though the two samples did not differ significantly as to their perceptions of compromise reasons. Interestingly, the significant interaction of culture and reason type is driven by the strong difference in the perceptions of reasons within the American group. While Americans indicated that extreme reasons were much more acceptable than compromise reasons, Hong Kong respondents rated both types of reasons similarly. It is possible that Hong Kong students, as compared to U.S. students, were less apt to be critical of reasons offered by a fellow student. That is, the tendency to be supportive and avoid criticism could have constrained the

range of responses to reasons. We might expect the pattern of responses to better reflect the Hong Kong students' relative appreciation for the social acceptability of compromise reasons if they had not felt they were disparaging a colleague's thinking.

## **GENERAL DISCUSSION**

In this research we investigated the proposition that cross-cultural differences in product preferences become more pronounced when consumers need to explain their decisions. This proposition was examined in the context of consumer preferences for compromise options, based on evidence that East-Asian Confucianist heritage and norms are more likely to favor pro-compromise reasons than Western Judeo-Christian heritage and norms. In the first three studies we find support for our prediction that prompting decision makers to provide reasons before making selections from choice sets with a "compromise" and two "extreme" options produces choice patterns that are culturally dependent. This result has proved impressively robust.

The predicted interaction between a decision maker's culture and the condition under which choices are made, either with or without the need to provide a reason, was obtained when contrasting Hong Kong Chinese and Americans in Study 1, Japanese and Americans in Study 2, and Asian-Americans and European-Americans in Study 3. The (European) American subjects consistently had a significantly lower tendency to select compromise alternatives when they gave reasons than when they did not, while the Chinese and Japanese subjects had a greater tendency to select compromise alternatives when they gave reasons than when they did not. The Asian-American group, which we expect has some ethnic Asian as well as American cultural tendencies, also had a higher level of compromising in the "reasons" as compared to the "no reasons" condition, though this difference was not significant. Indeed, it is not surprising that the bicultural group's response falls between those of the European-American and Asian country groups. Finding the predicted interaction in Study 3's single country environment is especially encouraging as this, in many respects, is a tougher test of our theory. The single-country test controls for many factors that could offer alternative explanations for our results.

Furthermore, analysis of Study 1 data indicates that the content of reasons offered for choices mediates the relationship between individuals' culture and their tendency to select middle options. That is, culture impacts the process by influencing the type of principles that come to mind as decision makers search for a reason to support a selection. Our mediation analysis offers compelling empirical support for our theoretical assertions that explain the pattern of results. By recording subjects' reasons, we are able to show the important role of reason content on compromising behavior. Another methodological strength of this effort is the between-subjects manipulation of the alternatives offered in the choice sets of Study 3. By presenting subjects with three of four potential options, we are able to account for possible differences related to base-level preferences for the offered alternatives.

To show that decision makers' reasons drive the effects in Studies 1 through 3 and may have an important role in decision making in general, Studies 4 and 5 illustrate the existence of culture-specific decision guides and verify that compromise-oriented rationales are more common and acceptable to Chinese than to Americans. Using the novel approach of examining cultural proverbs, Study 4 shows that Chinese proverbs, as compared to American proverbs, are more likely to advise individuals to resolve decision conflict by compromising rather than pursuing a single interest. Further, as compared to Americans, Hong Kong Chinese subjects endorsed compromise proverbs more and extreme proverbs less. Our analysis of proverbs provides strong, historically-rooted evidence of the different perspectives of Americans and Chinese with regard to the value of pursuing compromise. This analysis complements laboratory studies because of its strong external validity. And in Study 5 we demonstrate that the tendencies of Americans and Chinese to offer compromise- vs. extreme-oriented rationales, which are shown in Study 1 and further indicated in Study 4, are consistent with notions of normative social behavior. In a consumer choice context Hong Kong Chinese subjects viewed compromise-oriented reasons, as compared to extreme-oriented reasons, as more socially acceptable than did U.S. subjects. Moreover, studies 4 and 5 corroborate the assumptions underlying our hypotheses about the forms of cultural knowledge that are carried to the fore of

American and Chinese minds, respectively, when they have to provide reasons for a choice. Yet another insight from these findings is that reasons are a mechanism for carrying culture in the long-term, historical process of cultural transmission (as well as in the short-term cognitive process of decision making).

### Theoretical and Marketing Implications

Reasons in Decision Making. The present effort provides new insights regarding the role of reasons in shaping decisions. We find that prompting individuals for reasons can evoke cultural differences in choices that would otherwise not occur. Past researchers have argued that deliberating on the reasons for a decision causes individuals to launch a search for an acceptable rationale or principle (Simonson and Nowlis in press; Wilson and Schooler 1991). This search leads one to access knowledge that is not drawn upon during many daily tasks, but only when particular situational needs for such knowledge arise and the knowledge becomes activated (Bargh 1997). The current research makes the additional argument that the knowledge that is drawn upon to develop reasons is culturally rooted.

By documenting a cultural divergence in decision making as a function of giving reasons, the current studies provide new and more incisive evidence for the crucial role of reasons in shaping decisions. Often these reasons do not tap underlying preferences for options' attributes, but instead, reflect generic strategies for resolving the conflict inherent in choice situations. Our results suggest that when reasons are required for decisions, individuals from Chinese and some other Asian cultures may often choose those that support compromise, while individuals from American culture may often choose those that support pursuing a single interest. We find evidence of the application of these generic strategies in the reasons decision makers offer for choices (Study 1) and the proverbs they find most compelling (Study 4). Further, the strategies chosen by individuals are encouraged by various forces in their cultural environment. Appropriate decision strategies are indicated in the counsel of cultural proverbs (Study 4) and in social norms regarding the acceptability of decision makers' reasons (Study 5).

Further evidence supporting our interpretation of the way reasons give rise to cultural differences in preference for compromise options comes from Simonson (1989). Simonson showed that the compromise effect can be distinguished from seemingly similar context-driven choice phenomena in that preference for compromise options is “cognitive” rather than “perceptual.” Many choice context effects, including consumers’ attraction to options that asymmetrically dominate another (Huber, Payne and Puto 1982), are more perceptual in that decision makers have few specific thoughts or insights as to why the target option is preferred. But the compromise effect is generated by a more cognitive process. Simonson’s (1989) think-aloud protocols of choices from sets with compromise options reveal that decision makers explicitly refer to their decisions as choosing the “middle option” or “compromise.” Because decision makers think about their choices in these terms when they compromise, it is reasonable to expect that such decisions will elicit reasons that are relevant to the selection or rejection of compromises.

A related question, which was not specifically examined in this research, relates to possible cross-cultural differences in the role of reasons in everyday choices that do not involve an explicit requirement to provide reasons. Yates, Lee, and Bush (1997) explain the finding that Asian individuals are more likely to exhibit overconfidence based on the notion that there are cross-cultural differences in the ability to generate disconfirming evidence and make critical assessments. In particular, the Chinese education system encourages students to follow traditions and precedents rather than criticize them, whereas American students are typically not shy about voicing criticism (see Price and Briley 1999, for a review of cultural differences in education styles). This proposition suggests the possibility that, just as counter-reasons are produced more easily by Americans, reasons in support of one’s decisions are more likely to be generated spontaneously by Asian respondents. Consequently, an explicit requirement to provide support reasons significantly affects American consumers (e.g., Simonson and Nowlis in press), because they are less likely to spontaneously recruit such reasons, whereas this task may generally have a weaker effect on Chinese consumers, who are more likely to seek support from

accepted rules and principles that support their decisions. Although the results of the present research cannot substantiate this proposition, future studies might be designed more specifically to address this question.

Approaches to Culture in Consumer Research. The most embraced vehicles for understanding cultural differences in consumer behavior, and for defining and conceptualizing culture, have been dichotomous pan-cultural dimensions of values such as individualism-collectivism. Although this approach has produced important insights about some aspects of culture that influence consumer cognition, it has been criticized by a number of scholars on both conceptual and empirical grounds. According to conceptual criticisms, the dispositional view assumes that cultural inclinations are ever-present and static in the minds of individuals. Due to this limitation, this view does not facilitate nuanced models that capture the dynamics through which culture impacts decision makers (e.g., Hermans and Kempen 1998; Hong et al. in press). While some critics of the mainstream conceptions of cross-cultural psychology stake their arguments on commitments to post-positivist, interpretive methods (e.g., Gergen, Gulerce and Lock 1996), others have simply pointed out limitations of static accounts in handling important empirical phenomena, such as the experience of bicultural individuals (LaFromboise, Coleman and Gerton 1993).

Further, empirical problems with the scales developed to measure these dispositional dimensions have been raised. For example it has been suggested that individuals tend to rate themselves relative to some 'normal' reference point, where normal is defined within one's own cultures, leading to nonsignificant or counter-intuitive results (see Heine et al. 1999). Peng, Nisbett and Wong (1997) raise similar concerns, concluding that dispositional scales often have substantial measurement error and, therefore, limited usefulness as predictors of behaviors. High measurement error results in part from the coarseness of dispositional measures, which tend to reflect a breadth of potential cultural tendencies, and the ambiguity inherent to most value and attitude constructs. Due to these and perhaps other problems, studies have failed to find the

expected differences between some Asian and American samples in individualism-collectivism scale levels (e.g., Peng et al. 1997; Rhee, Uleman and Lee 1996).

Our findings add to this mounting evidence questioning the predictive ability of static measures and mediating mediating role of the constructs they portend to reflect. Specifically, the dispositional variables included in Study 1 were not able to explain our pattern of effects. We found in Study 1 that the interaction between the dispositional variables and providing reasons was not significant, whereas the interaction between ethnic group and providing reasons is significant. Dispositional measures, as mentioned above, are impeded as predictors by measurement error problems; though ethnic group can be measured with virtually no error. Our conceptualization suggests, further, that a source of dispositional scale measurement error is the dynamic nature of cultural influence. In the same way that cultural inclinations, as reflected in choice behaviors, change depending on the situation faced, individuals' values and attitudes also can shift (Briley and Wyer 1999). Because attitudes and values are subject to changes, individuals' "core" levels on such measures may be elusive.

While cultural research in consumer behavior has often focussed on the group and its consensus values rather than the complex operation of the mind, the current studies open up a different, complementary approach. Our paradigm rests on the idea that cultural knowledge is often latent but arises to influence cognition under certain conditions, such as when decision makers search for a decision principle to state a reason. Our account can be called a dynamic constructivist approach to culture and cognition. It emphasizes that cultural knowledge is not monolithic and continuously present, but instead, is a set of discrete knowledge structures that become operative as a function of the situation. This approach reveals a way to understand some inconsistencies in the findings of previous research on culture and suggests a research agenda emphasizing the important situational variables that may cause individuals to turn to their cultural leanings.

The present effort is timely in that a shift toward more dynamic views of cultural knowledge is being seen in many disciplines concerned with culture. Cognitive anthropologists

have been concerned with the question of how some cultural beliefs come to exert directive force over decisions and behavior whereas others remain nothing more than hollow cant (e.g., D'Andrade 1984; Shore 1996; Strauss 1992). Likewise, sociologists (e.g., DiMaggio 1997) have endorsed a conception of culture knowledge as fragmented, specific, dynamic structures in order to avoid the errors of previous approaches to culture that over-estimated the unity and integration of cultural norms (e.g., Parsons 1951). Finally, researchers of bicultural individuals have reported phenomena that call for a dynamic account of cultural influence. For example, a common experience reported by bicultural individuals is "switching" between cultural frames in response to exposure to culturally associated settings or symbols (LaFromboise, Coleman and Gerton 1993; Padilla 1994). Studies of minority or expatriate employees observe similar experiences of switching each day from one set of cultural models or schemas to another in the transition from home to work (e.g., Bell 1990). Most studies of bi- or multi-cultural individuals have been based on interpretive methods (Mehta and Belk 1991; Penaloza 1994). Yet recent research has captured the frame switching phenomena in experiments that prime bicultural individuals with putatively unrelated cultural icons before asking them to interpret an ambiguous social event, finding that implicit theories from the primed culture shape interpretation of the stimuli (Hong et al. 1997).

Linking Disparate Areas of Cultural Research. Our findings suggest that some link may exist between the rules that guide us in both the social and cognitive domains. The principle of compromise is an important vehicle in the social domain for resolving conflicts in Chinese but not American culture (Leung 1988; Leung and Lind 1986; Tang and Kirkbridge 1986; Trubisky, Ting-Toomey and Lin 1991). A consistent pattern is found in the present study for Chinese and American tendencies to use compromising to resolve decision conflicts, a task in the cognitive domain. Cultural training may induce Chinese to seek middle ground solutions to conflict issues and Americans to avoid them, regardless of the domain. But as the pattern of results in our studies indicate, situational factors are important and caution should be used in predicting ever-present cross-cultural differences. Indeed, we find similar situational influences that guide the



tendency to use compromise for Chinese in the social context. In Chinese culture, one has a much stronger tendency to compromise when dealing with ingroup members. The maintenance of harmony is only important for the ingroup membership; outsiders are not necessarily privy to this more amicable treatment. In sum, for both the social and cognitive domains, the tendency to seek or avoid compromise appears to be driven by the influence of the situation one experiences. The principles of harmony and compromise, apparently, are not activated at all times in either domain.

Implications for Global Marketing. The rapidly increasing importance of the international business environment has lead marketers to invest much effort in trying to understand better how consumers and markets differ around the world, so that they can build more effective global marketing approaches. The tide of popular opinion as to how to market internationally has migrated between the “multi-local” or adaptation premise, which presupposes that consumers in each country market are different, to the “standardization” premise, which presupposes that consumers around the globe are similar. Culture-related literature in marketing, not surprisingly, has been tied to this framing of the issue: researchers have focussed on revealing differences (or similarities) in behaviors across cultural groups in various persuasion and decision making domains. The present findings suggest a new way for marketers to view the international landscape and the segmentation task. Consumers’ cultural tendencies may be activated or dormant, depending on the shopping situation and accompanying marketing stimuli. By better understanding the tie between activation of cultural tendencies and marketing inputs, marketers can learn to predict when cultural leanings may arise or be suppressed, and to guide this process using marketing tools.

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<sup>1</sup> Several research streams that have produced important insights will not be reviewed in detail, because they do not directly address how an individual consumer's cultural knowledge affects his or her decision making. One large research area, for example, concerns how the country-of-origin of a product affects how it is perceived (e.g., Hong and Wyer 1989). This involves the product's culture rather than the consumer's culture. Additionally, many interesting studies have compared the content of advertisements in different countries (e.g, Tse, Belk and Zhou 1989). Yet these differences are probably better interpreted in terms of public social conventions affecting the marketer rather than cognitive tendencies of the consumer. Likewise, many differences in the interpersonal dynamics of sales negotiations have been documented (e.g, Graham, Robinson Lin and Kim 1988). Yet again, these are less matters of an individual consumer's cognition and more matters of norms governing business.

<sup>2</sup> The pretest asked 20 undergraduates from a U.S. and 20 from a Hong Kong university to indicate their familiarity with 36 proverbs. On a 1 to 7 scale, subjects indicated (1) how *familiar* the proverb was to them and (2) whether they had *heard often* the general idea conveyed by the proverb when growing up.



FIGURE 1  
ILLUSTRATION OF THE COMPROMISE EFFECT

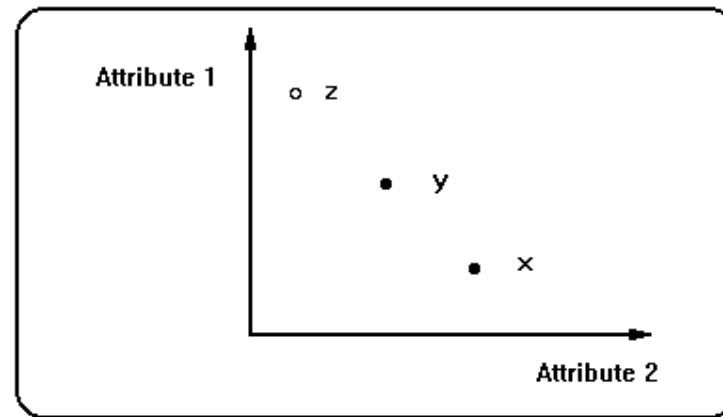


FIGURE 2  
STUDY 1 H1 PREDICTION: INFLUENCE OF PROVIDING  
REASONS ON COMPROMISING

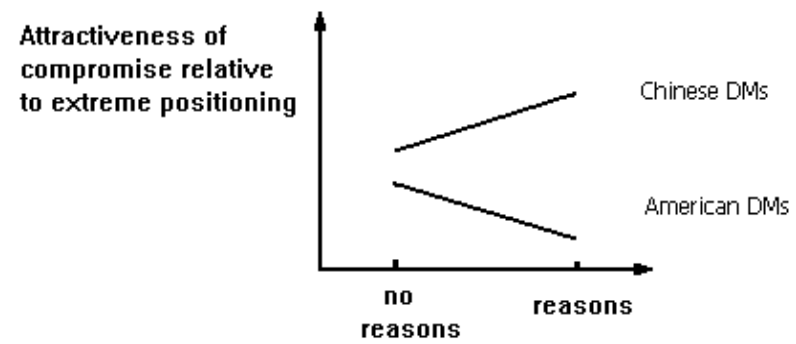


FIGURE 3  
INFLUENCE OF PROVIDING REASONS ON COMPROMISING IN STUDY 1:  
HONG KONG AND U.S. SUBJECTS

Attractiveness of  
compromises relative  
to extremes

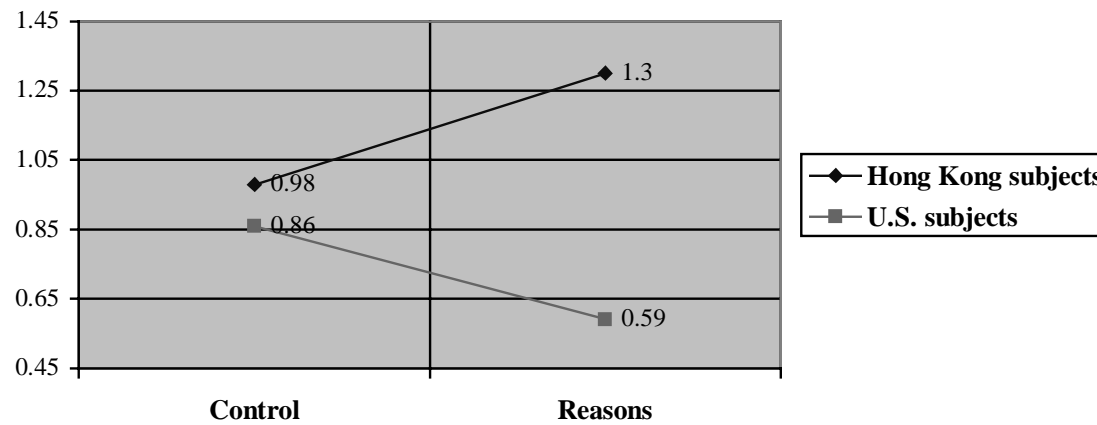


FIGURE 4  
STUDY 3 CHOICE SET CONFIGURATION

EXAMPLE PRODUCT: BINOCULARS

		<u>Price</u>	<u>Magnifying Power</u>	
<i>high quality set</i>	A. Minolta	\$109	13 times	<i>low quality set</i>
	B. Minolta	\$84	10 times	
	C. Minolta	\$59	7 times	
	D. Minolta	\$34	4 times	

High Quality Set: {A, B, C}

Low Quality Set: {B, C, D}

FIGURE 5A

INFLUENCE OF PROVIDING REASONS ON COMPROMISING IN STUDY 3:  
EUROPEAN- AND ASIAN-AMERICAN SUBJECTS - 'ORIGINAL' CHOICE SET {A,B,C}

Attractiveness of  
compromise relative  
to extreme option

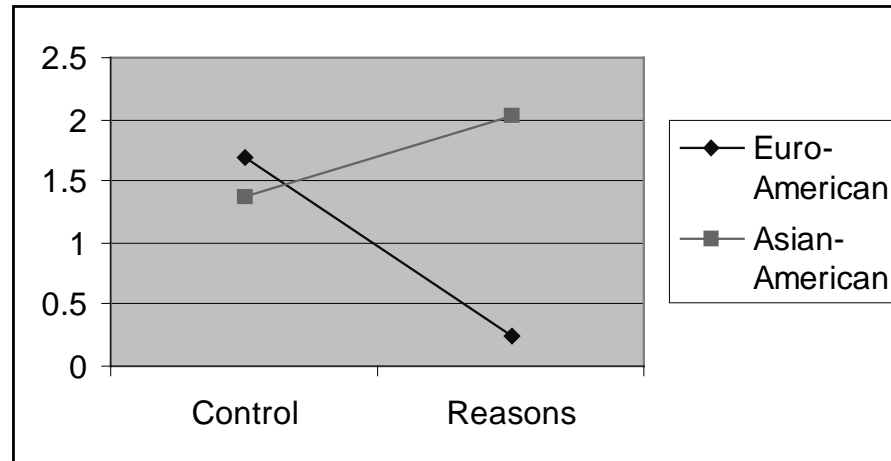




FIGURE 5B

INFLUENCE OF PROVIDING REASONS ON COMPROMISING IN STUDY 3:  
EUROPEAN- AND ASIAN-AMERICAN SUBJECTS - 'SHIFTED' CHOICE SET {B,C,D}

Attractiveness of  
extreme relative  
to compromise option

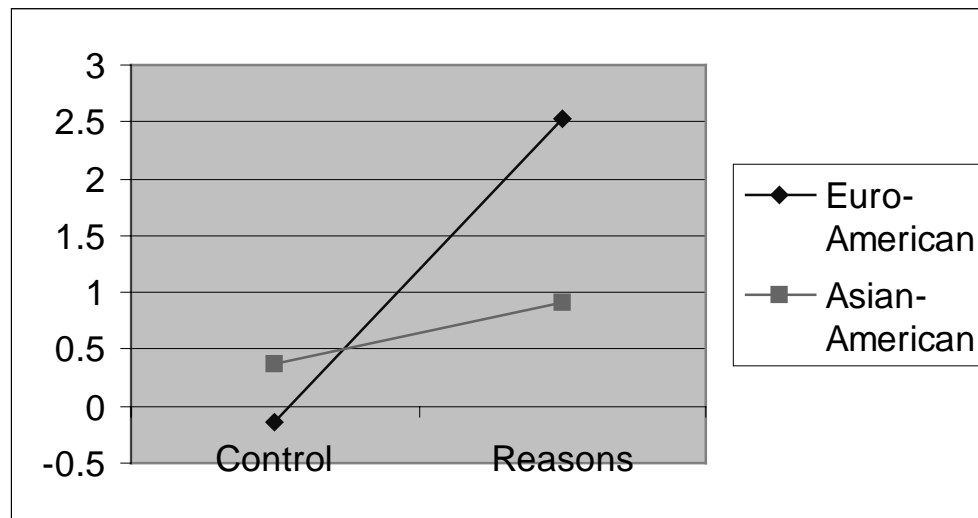


FIGURE 6

STUDY 4: ATTITUDES TOWARD AMERICAN PROVERBS

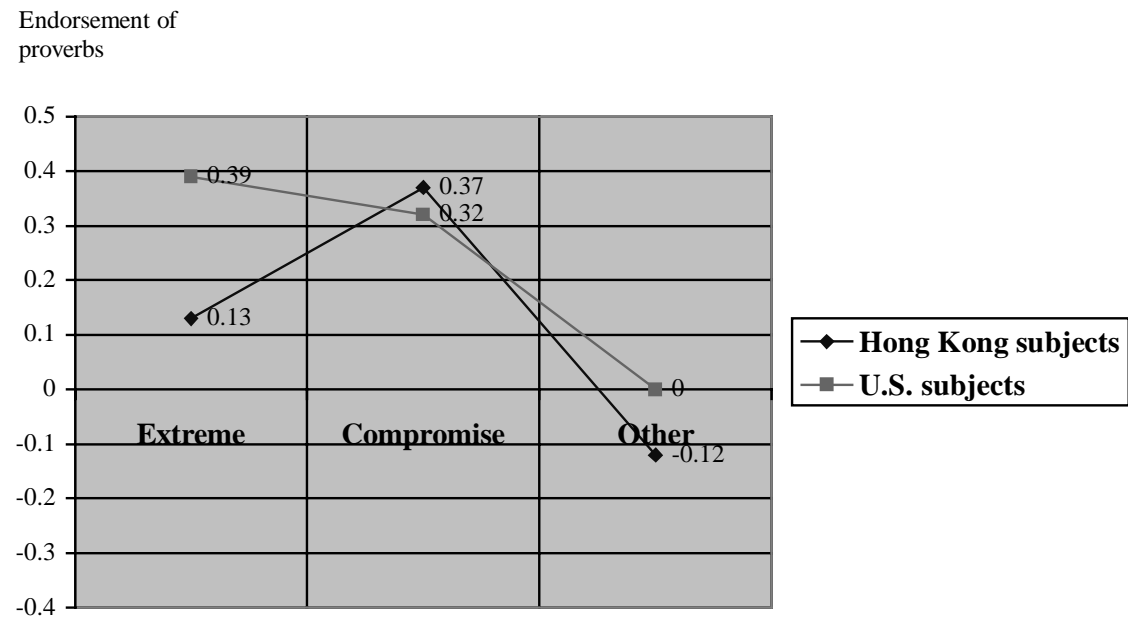


FIGURE 7

STUDY 4: ATTITUDES TOWARD CHINESE PROVERBS

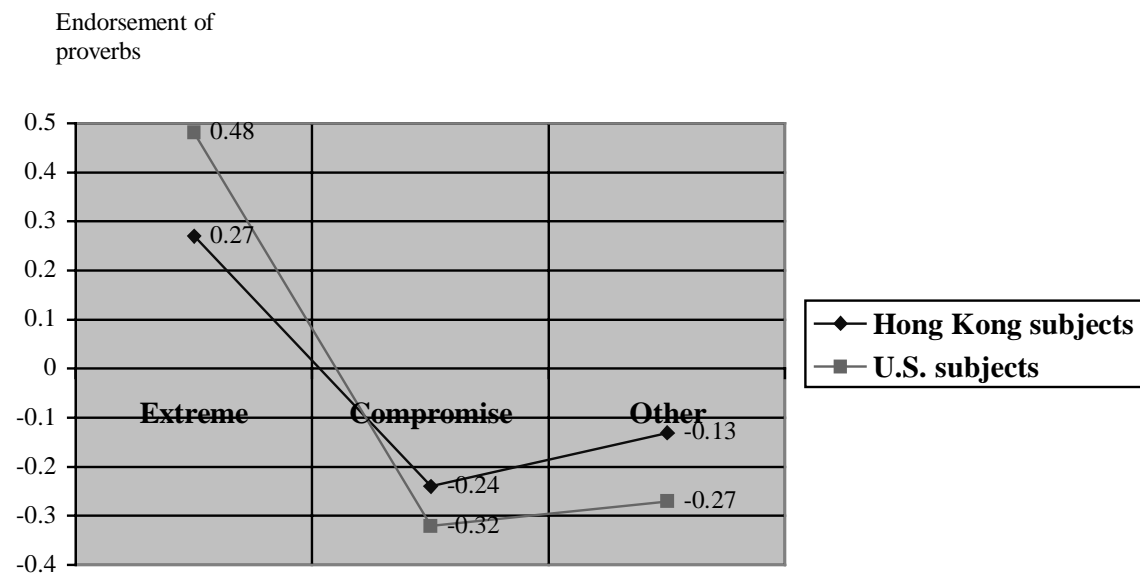


TABLE 1  
STUDY 1 CHOICES

Sample	Condition	Choice frequencies			Choice percentages		
		Extreme	Compromise	Total	Extreme	Compromise	Total
Hong Kong	Control	327	320	647	50.5%	49.5%	100.0%
	Reasons	255	329	584	43.7%	56.3%	100.0%
U.S.	Control	113	104	217	52.1%	47.9%	100.0%
	Reasons	288	185	473	60.9%	39.1%	100.0%

Note -- The interaction of sample and condition is significant (Wald chi-square = 11.06,  $p < .01$ ).

TABLE 2  
STUDY 1: CONTENT OF REASONS AND CONSEQUENT CHOICES

Sample	Reason content	Choice frequencies			Choice percentages		
		Extreme	Compromise	Total	Extreme	Compromise	Total
Hong Kong	Compromise	22	214	236	9.3%	90.7%	100%
	Extreme	224	83	307	73.0%	27.0%	100%
	Other	6	13	19	31.6%	68.4%	100%
	Total	252	310	562	44.8%	55.2%	100%
U.S.	Compromise	29	78	107	27.1%	72.9%	100%
	Extreme	231	82	313	73.8%	26.2%	100%
	Other	11	9	20	55.0%	45.0%	100%
	Total	271	169	440	61.6%	38.4%	100%

**TABLE 3**

**STUDY 4: PROVERB EXAMPLES**

**Examples of “No-Compromise” Proverbs**

<i>American</i>	<i>Chinese</i>
<i>4Nice guys finish last. (Winning requires toughness, even ruthlessness)</i>	<i>4Don't waste days in idleness; the bright spring will not come this way again. (Spend your time well now because time doesn't come back if you waste it)</i>
<i>4Don't hide your light under a bushel. (Do not conceal your talents and abilities)</i>	<i>4If you don't climb the high mountain, you can't see the plain. (If you don't take extreme challenges, you won't have exciting discoveries)</i>
<i>4You cannot serve God and mammon.. (You cannot serve two masters; being virtuous is not compatible with being greedy)</i>	<i>4To go yourself is better than to send others; to do it yourself is better than to call upon others. (If you want something done right, it is better to accomplish it yourself than with others)</i>

**Examples of “Pro-Compromise” Proverbs**

<i>American</i>	<i>Chinese</i>
<i>4All work and no play makes Jack a dull boy. (A person who works all the time is boring)</i>	<i>4If you cannot catch fish, catch shrimp. (It's alright not to get what you really want, because you can get something else)</i>
<i>4The bigger they come the harder they fall. (The more successful people are, the more they suffer when they experience defeat)</i>	<i>4He who hurries cannot walk with dignity. (It is better not to hurry so as to appear dignified and respectable)</i>
<i>4There's more than one way to skin a cat. (If your approach to a problem fails, you should try a different one)</i>	<i>4One bamboo does not make a raft. (To achieve an important goal, one person must compromise and work with others)</i>



TABLE 4  
STUDY 4: CONTENT OF AMERICAN AND CHINESE PROVERBS

Content of Proverbs	Frequency by origin			Percentage by origin		
	America	China	Total	America	China	Total
Compromise orientation	53	112	165	45.3%	63.3%	56.1%
Extreme orientation	64	65	129	54.7%	36.7%	43.9%
Total	117	177	294	100%	100%	100%



TABLE 5  
STUDY 5: EVALUATION OF ANOTHER INDIVIDUAL'S REASONS

	HK Subjects		US Subjects		Difference
	Mean	S.D.	Mean	S.D.	
COMPROMISE REASONS	5.74	1.84	5.60	2.21	0.14
EXTREME REASONS	5.69	1.83	6.45	1.98	-0.76