

The effect of cultural differences in fear of isolation on dialectical reasoning

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Abstract

Previous research suggests that members of East Asian cultures show a greater preference for dialectical (vs. nondialectical) thinking than do members of Western Cultures. We suggest this difference is rooted in a greater chronic fear of isolation (FOI) in East Asians than in Westerners. To explain this hypothesis, we manipulated fear of isolation in a group of Western college students and assessed their preference for dialectical and nondialectical proverbs. Consistent with our proposal, High FOI students showed a greater relative preference for dialectical proverbs than did Low FOI students.

Introduction

There has been a sustained interest in research on cultural differences in reasoning and decision making, because of observations that members of different cultures may exhibit radically different behaviors in a number of tasks (Hsee & Weber, 1999; Nisbett, Peng, Choi, & Norenzayan, 2001; Peng & Nisbett, 1999). Clearly the study of cultural differences has practical implications for international commerce and theoretical implications for claims about the universality of cognitive processing. Nonetheless, a critical question is whether cultural and individual differences can be captured in terms of variations in the parameters of a single model or whether different theories are required to describe decision makers from different cultures. For example, Briley and Wyer (2002) found that calling Asian and Western participants' attention to their cultural identity induced feelings of being part of a group that had the same effect on decisions in both groups.

As this work suggests, research must focus on the underlying processes that explain cultural differences rather than merely describing group differences in overt behavior (Weber & Hsee, 2000). As one example of research in this spirit, Nisbett, Peng, Choi, and Norenzayan (2001) showed that East Asian and Western thought differ in style with East Asians having a more holistic style and Westerners having a more

analytic style. They suggested that members of East Asian culture are more dialectical, i.e., they retain basic elements of opposing perspectives by seeking a "middle way", and focus on relations. In contrast, Westerners are more comfortable with formal logic and focused on individuals. Generally speaking, East Asians tend to seek a compromise solution when reconcile conflicts and contradictions.

As another example, Briley, Morris, and Simonson (2000) examined the compromise effect in East Asians and European Americans. The compromise effect is a phenomenon in which people are more likely to select an option when it is the intermediate option in a choice set than when it is an extreme option (Simonson & Tversky, 1992). Briley et al. found that asking for justifications for choices increased compromise choices for East Asians but decreased them for European Americans. These examples suggest that cultural differences strongly influence patterns of judgment, decision making and thought. Thus, what we have considered to be cognitive universals in decision making may sometimes be specific to members of particular cultures.

Holistic reasoning is guided by the assumption that everything in the universe is related to everything else in some way, resulting in the belief that the slightest change in any element of the whole leads to substantial alterations in others (Choi & Nisbett, 2000). This assumption makes theories of the world based on a small number of facts seem inadequate, because such theories cannot simultaneously consider a multitude of interconnected factors and their complex interactions. In support of this view, there is some evidence that East Asians hold a more complex interactionist theory about behavior than do Americans. For example, Koreans made more situational inferences than did Americans in a behavioral prediction task as long as situational information was salient.¹ They were also more likely to

¹ A situational inference is one in which someone infers that people's behavior was caused by the interaction between a person and a situation rather than due to a characteristic trait of the actor.

endorse a situationist theory of behavior than were Americans (Norenzayan, Choi, & Nisbett, 2002).

In line with this explanation, Peng and Nisbett (1999) suggested that East Asians' relatively more dialectical thinking and Western Americans' nondialectical thinking is one of bases for these cultural differences. They argued that the dialectical approach has its roots in Eastern philosophy that is opposed to the formal logic tradition. Consistent with this proposal, Western reliance on dialectical principles is weaker than that of Easterners, and Western reliance on the foundational principles of formal logic, especially the principle of noncontradiction, is stronger (Nisbett et al., 2001; Peng & Nisbett, 1999).

These aspects can be treated as causal factors for observed cultural differences to date. We suggest, however, fear of isolation, which is a more basic factor that differs between cultures, better explains culture-specific patterns of behaviors and thinking. To motivate this idea, we first define fear of isolation (FOI), and discuss how it should influence reasoning. Then, we present a study in which experimentally induced differences in FOI lead to differences in the degree of dialectical reasoning.

Fear of isolation

The notion of "fear of isolation (FOI)" can be defined in two ways. First, social psychologically, "isolation" is defined as negative and unwanted collective experiences including loneliness, a lack of community, solitary, confinement, or a quarantine (Gilbert, Fiske, & Lindzey, 1998). FOI is a basic emotional response to the described isolation that includes a strong need/goal to avoid those negative experiences. Second, communication theories define FOI as a centrifugal force, i.e., a pressure from society, that accelerates the spiral of silence (Noelle-Neumann, 1984). That is, people feel increasing pressure to conceal their views when they believe they are in a minority. This pressure is assumed to be related to their fears of being negatively evaluated by others. The theory maintains that mass media work simultaneously with majority public opinion to silence minority beliefs on cultural issues. Therefore, FOI prompts those with minority views to examine the beliefs of others. Individuals who fear being socially isolated are prone to conform to what they perceive to be a majority view.

In sum, FOI seems to be a basic motivational factor that can direct people's actions toward desired states of the world by moving people's viewpoints and interests to social situations and others around them from inside of them.

Different sensitivities to FOI between East Asian and Western culture

Before discussing how a difference in degree of FOI can influence judgment and decision making, we must first show that members of different cultures are likely to differ in their chronic level of FOI. This possibility is consistent with observed collectivism in East Asian culture and individualism among Western populations (Nisbett et al., 2001). Similarly, Hsee and Weber (1999) presented a *cushion hypothesis* in which they suggested that members of socially collectivist cultures, such as the Chinese culture can afford to take greater financial risks because their social networks protect them against catastrophic outcomes. The social network serves as a "cushion" that protects people if they take risks and fail. Assuming that the notion of FOI, at least in this study, reflects interactions with the social environment and with others, it would be reasonable to say that members of a collectivist culture would show more FOI than would those in individualist cultures.

Our research focuses on the relationship between different degrees of FOI and their effect on judgment and decision making. We think that members of East Asian culture have a higher chronic FOI than do members of Western culture. If so, then experimental manipulation of this factor even within a single culture should induce similar reasoning differences observed so far between Western and East Asian cultures. To test this hypothesis, we developed a manipulation of FOI and explored whether Western students with a high level of FOI would be more like Eastern Asians than would Western students with a low level of FOI. Following Peng and Nisbett (1999), we examined people's preferences for dialectical and nondialectical proverbs. In their research, Chinese participants showed a greater relative preference for dialectical proverbs over nondialectical proverbs than did American undergraduates.

If a high level of FOI indeed makes people attend to interpersonal relationships, then inducing a high level of FOI should make Americans less likely to think by formal logic, which in turn should increase their preferences for dialectical vs. nondialectical proverbs. In sum, a high level of FOI should result in a relatively greater preference for dialectical reasoning than should a low level of FOI.

Manipulation and measurement of FOI

In our study, FOI was manipulated as an independent variable. Participants were asked to describe their previous experiences relative to one of the following two situations: a) experiences of being socially isolated from others (High FOI group), e.g., "you might have been anxious once when your friends

were not talking to you at all, or when you went to a new place where you didn't know anyone and had difficulty meeting new people.", or b) experiences of socially isolating others from them or other people (Low FOI group), e.g., "you might have been at a party and you didn't talk to one of your friends who did not know many people at the party and you felt bad about it later." Many clinical techniques such as prolonged exposure treatment which is aimed at treating post-traumatic stress disorder are based on the premise that asking a patient to recall and describe their previous experiences of certain events and associated emotions can activate and retrieve relevant feelings and memories, and put the person into that state again (Foa, Cashman, Jaycox, & Perry, 1997).

To measure a person's FOI, we adopted the Fear of Negative Evaluation (FNE) scale (Watson & Friend, 1969). This 30-item instrument was designed to measure one aspect of social anxiety, the fear of receiving negative evaluations from others. Scores on this scale essentially reflect a fear of the loss of social approval. Items on the measure include signs of anxiety and ineffective social behaviors that would lead to disapproval by others.

We adopted this scale, because we had to measure the degree to which participants were concerned with social and relational matters, e.g., their tendency to seek approval and to avoid disapproval from others. There are other scales that have been used to measure FOI, but these scales also ask questions about physical isolation which is not of interest in this study. A large part of FOI may be likely to arise from a fear of negative evaluation.

In sum, the goal of this study is to determine whether FOI is a candidate to be a causal factor underlying cultural difference in judgment and decision making. As a first step in this project, we adopted one elementary task studied by previous researchers, i.e., preferences for different types of proverbs.

Experiment

Our experiment was based on a study (Peng & Nisbett, 1999) that examined East Asians' and Westerners' dialectical reasoning. In their study, Chinese populations who are supposed to maintain the tradition of dialecticism preferred dialectical proverbs that accept rather than deny a contradiction (e.g., "Sorrow is born of excessive joy") to nondialectical proverbs that reflect the rule of non-contradiction (e.g., "Half a loaf is better than none"). Analyses of national proverbs provide some insight into the sources of cross-cultural differences, because proverbs can be construed as embodiments of folk wisdom. Proverbs are defined as short expressions of cultural wisdom, truth, morals and norms in a "metaphorical, fixed and memorable form" which are "handed down from generation to

generation" (Mieder, 1993). Many researchers have analyzed national proverbs to study cross-cultural differences. For example, Weber, Hsee, and Sokolowska (1998) supported their cushion hypothesis by showing that Chinese raters perceived the same proverbs as providing significantly more risk-seeking advice in the context of financial risk than social risk, whereas American raters did not show this sensitivity to the decision domain.

As discussed above, we manipulated participants' level of FOI. After this priming task, participants were given "Fear of Negative Evaluation Scale (FNE)" (Watson & Friend, 1969) as a manipulation check. Then we explored whether a person's preference for dialectical proverbs would be influenced by those levels of FOI. We expected that the High FOI group would show a greater relative preference for dialectical proverbs than would the Low FOI group. In order to ensure that these results are not due to a particular style of proverb, we selected dialectical and nondialectical proverbs from three cultures; American, Chinese, and Yiddish. This followed the work by Peng and Nisbett (1999).

Method

Design

The study used a 2 (FOI: High vs. Low) \times 2 (proverb type: Dialectical vs. Nondialectical) \times 3 (proverb nationality: American, Chinese, and Yiddish) design. FOI was manipulated between subjects. Proverb type and proverb nationality were within subjects.

Subjects

One hundred American undergraduate students of the University of Texas participated in the study. Half of participants were randomly assigned to the High FOI condition and the other half were to the Low FOI condition.

Materials

Two types of proverbs from three nationalities were randomly presented to participants; dialectical proverbs (eight American, eight Chinese, and eight Yiddish) and nondialectical proverbs (five American, five Chinese, and eight Yiddish). All of these proverbs were used in Peng and Nisbett's (1999) study.

Procedure

Participants were asked to describe their previous experiences relating to an anxiety producing situation. In the High FOI condition, participants wrote about being socially isolated from others. In the Low FOI condition, participants wrote about socially isolating someone else from them or other people. After completing this self-descriptive priming task, participants in both conditions responded to the Fear of Negative Evaluation scale as a manipulation check. Then the 42 proverbs were presented randomly to

participants and they answered four questions per proverb: (a) How familiar is this proverb to you in exact words? (b) How well do you think you understand this proverb? (c) How much do you like this proverb? (d) How often do you use this proverb? Participants rated their responses on a 7-point scale ranging from 1 (not at all) to 7 (very much).

Results

First, we checked the effectiveness of our FOI manipulation. Average values on the Fear of Negative Evaluation scale were significantly higher in the High FOI condition ($M = 15.82$) than in the Low FOI condition ($M = 12.40$), $t = 6.17$, $p < .05$.

To explore preferences for proverbs, we followed the method used by Peng and Nisbett (1999), an intermediate index of preference by taking the mean of the four judgments participant made for each proverb. A reliability analysis indicated that the four judgments were consistent enough to be summed into one index (Cronbach's $\alpha = .78$). For each participant we subtracted his or her average rating for the nondialectical proverbs from his or her ratings of the dialectical proverbs for each nationality of proverb. This difference score provides a measure of the participant's relative preference for dialectical proverbs in which positive values reflect a greater overall preference for dialectical proverbs and negative values reflect a greater overall preference for nondialectical proverbs. A two-way ANOVA of FOI (High FOI condition vs. Low FOI condition) \times proverb nationality (American, Chinese, and Yiddish) produced a significant main effect of FOI in participants' relative preferences for dialectical proverbs (see Figure 1). There was a significant main effect of proverb nationality, $F(1, 98) = 18.34$, $p < .01$, that reflects relatively stronger preference for dialectical proverbs for the American proverbs than for the Chinese or Yiddish proverbs. This effect is not germane to the aim of this study, so we will not discuss it further. Participants in the High FOI condition showed a relatively higher preference for dialectical proverbs ($M = -0.49$) than did those in the Low FOI condition ($M = -1.04$), $F(1, 98) = 5.41$, $p < .05$. Interestingly, all participants showed a relatively greater preference on average for nondialectical proverbs (i.e., the average mean scores are negative), which is consistent with other studies showing that members of Western cultures prefer nondialectical thinking. Our main interest was that a manipulation of FOI influences this chronic difference.

To further examine the effect of FOI, we did an ANCOVA that included the Fear of Negative Evaluation scale value as a covariate. If level of FOI influenced participants' ratings, then the differences among FOI groups should decrease when the scale values are added as a covariate. Consistent with this

logic, the effect of the Fear of Negative Evaluation scale score was significant, $F(1, 97) = 4.51$, $p < .05$, and the effect of FOI was reduced to marginal significance, $F(1, 97) = 3.16$, $p = .08$. These results indicate that levels of FOI are positively related to the degree of dialectical thinking.

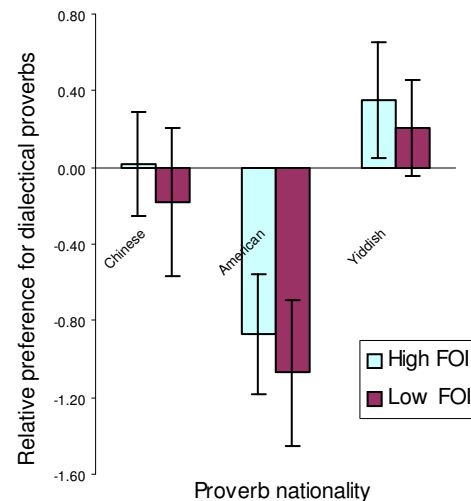


Figure 1. Participants' relative preferences for dialectical proverbs by nationality

Discussion

We suggested that East Asians and Western populations differ in their chronic levels of FOI and that this factor influences the degree of dialectical and nondialectical thinking in members of these cultures.

The results of our experiment support this hypothesis. Participants in the High FOI group exhibited a relatively greater preference for dialectical proverbs than did those in the Low FOI group. Furthermore when Fear of Negative Evaluation scale values were involved into the analysis as a covariate they were significantly related to the relative preference for dialectical proverbs and the effect of the FOI manipulation decreased.

Given these findings, we should consider whether FOI is a real causal factor in dialectical thinking and cultural differences in judgment between East Asian and Western culture. We cannot deny the possibility that FOI is an intermediate rather than a basic factor. FOI may be one of many intermediate factors between observed differences in overt behaviors such as dialectical reasoning and in culturally accessible concepts such as collectivism and individualism. Alternatively FOI might be a result from either

collectivism-individualism or from other culture-specific factors.

This issue has been much discussed in communication theories, which have yielded no clear consensus on whether FOI is an antecedent or an intervening variable. For example, Shoemaker, Breen, and Stamper (2000) tested whether FOI is antecedent to opinion formation or an intervening variable between opinion formation and willingness to voice the opinion. Their path analysis suggested that FOI is an antecedent variable, but they could not exclude possibility that it is an intervening variable.

Nonetheless, the results of this study indicate that FOI is causal even if there are other factors that differ between cultures that cause FOI. We manipulated a candidate causal variable, i.e., FOI, and observed how it influenced people's thinking and reasoning. This is a reasonable method for exploring causal mechanisms in a domain of interest, but only a few studies in cross-cultural research have manipulated causal variables in studies (e.g., Briley & Wyer, 2002). Thus, the results from this study strengthen the argument that FOI is an important factor in the causal chain for culture-specific behaviors because a difference in FOI produced a difference in the relative degree of dialectical reasoning. Clearly, much more research remains to be done to examine the range of reasoning tasks that are influenced by level of FOI.

As discussed in the introduction, there are likely to be several common modes of thinking that cause cultural differences in reasoning. We suggest that more studies should explore manipulations that will allow us to further understand the causal mechanisms underlying culture-specific thinking and behaviors.

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