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Cultural differences in indecisiveness: The role of naïve dialecticism

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## Abstract

East Asians exhibit naïve dialecticism, a set of worldviews that tolerates contradictions. As influenced by naïve dialecticism, East Asians are more likely to hold and less likely to change ambivalent attitudes, compared with European North Americans. If East Asians have a heightened tendency to see both positive and negative aspects of an object or issue, but a lesser inclination to resolve these inconsistencies, East Asians (vs. European North Americans) may experience more difficulty in committing to an action, and thus be more indecisive. Consistent with this hypothesis, we found that East Asian Canadians scored higher on a measure of chronic indecisiveness than did European Canadians and South Asian Canadians, and that naïve dialecticism and need for cognition mediated the relationship between culture and indecisiveness. These results add to the extant literature on indecisiveness, demonstrating cultural variations in indecisiveness and an underlying cultural factor that is responsible for these cultural differences.

Word Count: 150

**KEYWORDS:** cross-cultural differences; dialecticism; indecisiveness; East Asian

## Cultural differences in indecisiveness: The role of naïve dialecticism

**1. Introduction**

It is not uncommon for people to encounter at least some difficulty or anxiety when a decision needs to be made. Some people, however, are more chronically indecisive than others. Indecisiveness is an individual difference variable that refers to the degree to which an individual experiences choice and decision difficulty across domains and situations (Germeijs & de Boeck, 2002; cf. van de Bos, 2009).<sup>1</sup> In the present paper we examine how indecisive tendencies might vary across cultural groups, in order to expand our understanding of the nature of indecisiveness. Specifically, we propose that the worldview of naïve dialecticism might explain why people from some cultures are more likely to experience decision difficulty than those from other cultures.

*1.1. Culture and indecisiveness*

A review of the literature revealed only a handful of studies in which researchers investigated cultural differences in informational uncertainty and indecisiveness. In an early study on marketing decision making with business executives from China, Hong Kong, and Canada using an alternative preference rating task, Tse, Lee, Vertinsky, and Wehrung (1988) found that mainland Chinese managers were less indecisive than both Hong Kong Chinese managers and Canadian managers, whereas the latter two groups did not differ from each other. In another study, the Melbourne Decision Making Questionnaire (Mann, Burnett, Radford, & Ford, 1997) was administered to university students from Japan, Hong Kong, Taiwan, Australia, New Zealand, and the United States (Mann et al., 1998). Based on this measure, East Asian participants were more likely to exhibit decision avoidance behaviors than their Western counterparts. More recently, researchers examined how thorough participants from different cultures were when deliberating between two alternatives on a general knowledge test (Yates, Ji,

Oka, Lee, Shinotsuka, & Sieck, 2010). Japanese participants spent more time on each item and generated more arguments for each item compared to Chinese and European American participants, indicating more indecisiveness.

As a whole, the results of these past studies are quite mixed and difficult to reconcile into a coherent picture of cultural differences in indecisiveness. Importantly, these seemingly discrepant findings are not amenable to direct comparison because each study tapped into a specific aspect of indecisiveness and within a specific domain (cf. Mann et al., 1998). Hence, it may be more fruitful to turn to studies in which researchers examined cultural differences in general indecisiveness using the same comprehensive measure of indecisiveness – the Indecisiveness Scale (IS; Frost & Shows, 1993). In a study conducted in the United States, Americans of East Asian cultural backgrounds scored higher on the IS than did Americans of European cultural backgrounds (Wengrovitz & Patalano, 2004, as cited in Patalano & Wengrovitz, 2006). However, when these same researchers conducted a cross-national study comparing Chinese participants with American ones, they did not find any cultural differences (Patalano & Wengrovitz, 2006). Also using the IS, Yates and colleagues (2010) found that Japanese participants were more indecisive than Chinese and American participants, with the Chinese no more indecisive than American participants. In sum, even when researchers use the same measure of general indecisiveness, the results remain inconsistent across studies. When interpreting these findings, however, there are certain issues that need to be considered.

The first issue concerns the potential confounding of culture-contingent internal and external factors. There are two sources of cultural influences on chronic indecisiveness – internal and external. First, people with certain cultural backgrounds may be more indecisive than people with other cultural backgrounds because of internalized cultural values or worldviews that can

affect the perceived difficulty of choice and decision making. Second, certain cultural contexts may create the experience of decision difficulty because of environmental inputs. One source of greater decision difficulty could come from the society's level of economic development.

Economic development typically increases the number of options that people in the society can have. A prototypical example is the United States, which is famous for the abundance of choices that are available in all parts of life (Schwartz, 2004). It is reasonable to expect that people in more affluent countries, especially those with more of a capitalist orientation (e.g., the United States, Japan) have to face a larger number of options when a choice needs to be made, and thus are more likely to be indecisive compared with people in less affluent countries, especially those with more of a socialist orientation (e.g., mainland China). Alternatively, it is possible that in environments in which frequent choices have to be made, people may become more experienced in decision making, and thus find it less demanding. In any case, an attempt to separate culture-contingent internal and external factors should be useful in gaining a more nuanced understanding of the relationship between culture and indecisiveness.

When taking into consideration these two distinct types of cultural influences on indecisiveness, some insights into the seemingly inconsistent results of past research become possible. In the only study in which the socio-cultural environment was kept constant (i.e., the United States), participants of East Asian cultural backgrounds experienced more indecisiveness than did participants of European cultural backgrounds. Hence, when the larger socio-economic environment is held relatively constant, the results seem to suggest that there are culture-contingent internal factors that make East Asian Americans more indecisive. Comparing this study with the cross-national study that tested Chinese and American participants but revealed no cultural differences in chronic indecisiveness, it implies the possibility that the Chinese (vs.

American) context may provide fewer choices and opportunities which makes decision-making less demanding. With regard to the previous cross-national study that found that Japanese participants were more indecisive than Chinese participants (Yates et al., 2010), this may reflect the higher level of economic development, in conjunction with a more capitalist system in Japan, compared with China. When economic development is similarly high in the two nations, as is the case of Japan and the United States, the Japanese are more indecisive than Americans. This is conceptually similar to the finding that East Asian Americans are more indecisive than European Americans. Taking these factors into account, it seems that East Asians may be more indecisive than Westerners when culture-contingent external factors are minimized.

The second issue is that most of these studies did not test for the mediating effect of a cultural factor, rendering the reason for cultural differences unclear. The only exception is one study by Yates and colleagues (2010, Study 2), who found that social values associated with indecisive behaviors mediated the cultural differences in indecisiveness. However, it remains unclear exactly what cultural antecedents give rise to these social values which in turn translate into indecisive behaviors.

The third limitation concerns potential measurement biases. To our knowledge, past cross-cultural studies on indecisiveness did not address measurement invariance. Without first ensuring that no measurement item is culturally biased, group mean differences or lack thereof cannot be meaningfully interpreted.

#### *1.1.1. Naïve dialecticism*

The culture-contingent internal factor that we have chosen to focus on in the present paper is naïve dialecticism (Peng & Nisbett, 1999). Grounded in East Asian philosophies, naïve dialecticism refers to a worldview that objects and events are inextricably interconnected and

constantly changing, and our world is full of contradictions. Guided by this set of lay beliefs, it has been found that East Asians are less inclined to resolve inconsistencies compared with Westerners. Instead, they are more likely to retain elements of opposing perspectives and adopt a compromising or “middle ground” approach to deal with contradictions (Peng & Nisbett, 1999). Furthermore, East Asians are more likely to hold conflicted evaluations toward the self (Spencer-Rodgers, Peng, Wang, & Hou, 2004) as well as everyday objects and events (Ng, Hynie, & McDonald, 2010), and are more inclined to experience positive and negative emotions concurrently, compared to Westerners (e.g., Bagozzi, Wong, & Yi, 1999). If East Asians are more likely to hold conflicted evaluations and see both positive and negative aspects of an issue, it may be more difficult for them to commit to an action making them more indecisive. Consistent with this idea, conflicted evaluations appear to induce psychological discomfort only when a decision needs to be made (van Harreveld, Rutjens, Rotteveel, Nordgren, & van der Pligt, 2009). We therefore propose that East Asians, due to their dialectical worldview, may experience more difficulty in decision-making, compared with Westerners.

### *1.1.2. Need for cognition*

Need for cognition refers to the “tendency to engage in and enjoy effortful cognitive endeavors” (Cacioppo & Petty, 1982). People who are high in need for cognition expend more effort to process issue-relevant information, and their attitudes toward an issue are more predictive of their issue relevant behavior at a later time (Cacioppo, Petty, Kao, & Rodriguez, 1986). Moreover, Weary and Edwards (1994) found that people who are intrinsically motivated to expend cognitive effort are less likely to have a feeling of uncertainty. As feeling uncertain about an issue can be conceived of as an aspect of indecisiveness, it is reasonable to expect that people who are relatively high in need for cognition would also be relatively low in



indecisiveness. Indeed, more recent research did find a negative correlation between need for cognition and indecisiveness (Curşeu, 2006). Hence, it is also important to explore potential cultural differences in need for cognition and how these might also contribute to cultural variations in indecisiveness. Furthermore, as people who are more (vs. less) intrinsically motivated to engage in cognitive activities may be more inclined to resolve opposing or seemingly contradictory viewpoints, they may be less likely to endorse both of these contradictory beliefs. Thus, we also expected that need for cognition might be negatively associated with naïve dialecticism.

### *1.2. The present research*

In the present research we investigated cultural differences in indecisiveness and how naïve dialecticism may contribute to these differences. To control for the potential effects of culture-contingent external factors, such as the abundance of choices available in the environment, we conducted this study in one location (i.e., Toronto, Canada) and compared general indecisiveness among three different ethnocultural groups: European Canadians, East Asian Canadians, and South Asian Canadians. Moreover, measurement invariance was tested on all relevant scales.

To our knowledge, there is no prior research examining cultural differences in naïve dialecticism between East Asians and South Asians. However, because we expect that naïve dialecticism is grounded in East Asian philosophies (Peng & Nisbett, 1999), we predicted that East Asian Canadians would be more dialectical and thus more indecisive, compared with South Asian Canadians. Hence, we made the following hypotheses: (H1) East Asian Canadians would exhibit more naïve dialecticism than European Canadians and South Asian Canadians; (H2) East Asian Canadians would exhibit more chronic indecisiveness than European Canadians and South

Asian Canadians; and (H3) naïve dialecticism would mediate the relationship between culture and indecisiveness.

## **2. Method**

### *2.1. Measures*

#### *2.1.1. Naïve dialecticism*

Individual differences in naïve dialecticism were assessed using the 32-item Dialectical Self Scale (DSS; Spencer-Rodgers, Srivastava, & Peng, 2001, as cited in Spencer-Rodgers et al., 2004), which uses a 7-point response scale (1 = *strongly disagree*; 7 = *strongly agree*). Sample items include: “When I hear two sides of an argument, I often agree with both” and “There are always two sides to everything, depending on how you look at it.” The DSS has been demonstrated to possess good reliability ( $\alpha$ s ranged from .69 to .87; Spencer-Rodgers, Boucher, Peng, & Wang, 2009) and predictive validity (Spencer-Rodgers et al., 2004).

#### *2.1.2. Need for cognition*

Need for cognition was measured by the Need for Cognition scale (NFC; Cacioppo & Petty, 1982), consisting of 18 items rated on a 5-point response scale (1 = *strongly disagree*; 5 = *strongly agree*). Sample items include: “I find satisfaction in deliberating hard and for long hours” and “I only think as hard as I have to” (reverse-scored). The NFC has been shown to have good reliability ( $\alpha$ s ranged from .74 to .97), and convergent and discriminant validity (Cacioppo, Petty, Feinstein, & Jarvis, 1996).

#### *2.1.3. Indecisiveness*

Consistent with most prior research, we used the Indecisiveness Scale (IS; Frost & Shows, 1993) to assess individual differences in general indecisiveness. The IS consists of 15 items, rated on a 7-point response scale (1 = *strongly disagree*; 7 = *strongly agree*). Sample items

include: “I become anxious when making a decision” and “I try to put off making decisions.”

The IS has been demonstrated to possess good reliability ( $\alpha = .87$ , Frost & Shows, 1993;  $\alpha = .86$ , Rassin & Muris, 2005) and predictive validity (Frost & Shows, 1993).

## *2.2. Participants and Procedure*

Two hundred and three European Canadian participants (147 female;  $M_{\text{age}} = 19.9$ ), 209 East Asian Canadian participants (120 female;  $M_{\text{age}} = 19.1$ ), and 99 South Asian Canadian participants (69 female;  $M_{\text{age}} = 18.8$ ) participated in this study. Both gender composition and age differed among the three cultural groups, Gender:  $\chi^2(df = 2) = 11.13, p < .01$ ; Age:  $F(2, 493) = 6.76, p < .01$ . The effects of gender and age were therefore estimated in all analyses. All participants were recruited from the undergraduate psychology participant pool of a university in Toronto, Canada. Consenting participants completed an online survey including a brief demographics questionnaire (e.g., gender, age, racial background), the DSS, the NFC, and the IS (see Table 1 for  $\alpha$ s) for course credit. All materials were presented in English.

## **3. Results**

### *3.1. Differential Item Functioning Analyses*

We assessed measurement invariance through differential item functioning (DIF) analysis using ordinal logistic regression; an item is classified as displaying DIF when  $p < .01$  and pseudo- $R^2 > .13$  (Zumbo, 1999). DIF results indicated that none of the items of any one of the three scales (DSS, NFC, IS) functions differentially across any two of the three cultural groups (all pseudo- $R^2 < .06$ ) or the two gender groups (all pseudo- $R^2 < .04$ ). Thus, group mean differences in naïve dialecticism, need for cognition, and indecisiveness can be meaningfully compared.

### *3.2. Group Differences in Naïve Dialecticism*

We conducted a 3 (culture: European Canadian vs. East Asian Canadian vs. South Asian Canadian) X 2 (gender: male vs. female) between-subjects ANCOVA on naïve dialecticism with age as the covariate. Age was a significant covariate, such that younger participants exhibited higher levels of naïve dialecticism,  $F(1, 488) = 6.64, p = .01, \eta_p^2 = .01$ . More importantly, our predicted main effect of culture emerged,  $F(2, 488) = 10.21, p < .001, \eta_p^2 = .04$ . Post hoc analyses with p-values adjusted using Bonferroni correction revealed that East Asian Canadian participants exhibited higher levels of dialectical thinking than did European Canadian,  $F(1, 394) = 20.86, p < .001, \eta_p^2 = .05$ , and South Asian Canadian participants,  $F(1, 290) = 6.46, p = .04, \eta_p^2 = .02$ , while the latter two groups did not differ from each other,  $F(1, 291) = 2.96, p = .26, \eta_p^2 = .01$  (see Table 1 for *Ms* and *SDs*), supporting H1. No other effects reached statistical significance,  $F_s < 3.57, p_s > .05$ .

### 3.3. Group Differences in Indecisiveness

We conducted a 3 (culture: European Canadian vs. East Asian Canadian vs. South Asian Canadian) X 2 (gender: male vs. female) between-subjects ANCOVA on indecisiveness with age as the covariate. Age was a significant covariate, such that younger participants exhibited higher levels of indecisiveness,  $F(1, 488) = 4.26, p = .04, \eta_p^2 = .01$ . More importantly, our predicted main effect of culture emerged,  $F(2, 488) = 7.27, p = .001, \eta_p^2 = .04$ . Post hoc analyses with p-values adjusted using Bonferroni correction revealed that East Asian Canadian participants exhibited higher levels of indecisiveness than did European Canadian,  $F(1, 394) = 12.58, p = .001, \eta_p^2 = .03$ , and South Asian Canadian participants,  $F(1, 290) = 7.86, p = .02, \eta_p^2 = .03$ , while the latter two groups did not differ from each other,  $F(1, 291) = 0.11, p > .99, \eta_p^2 < .01$  (see Table 1 for *Ms* and *SDs*), supporting H2. No other effects reached statistical significance,  $F_s < 0.57, p_s$

> .56.

### 3.4. Group Differences in Need for Cognition

We conducted a 3 (culture: European Canadian vs. East Asian Canadian vs. South Asian Canadian) X 2 (gender: male vs. female) between-subjects ANCOVA on need for cognition with age as the covariate. Age was a significant covariate, such that older participants exhibited higher levels of need for cognition,  $F(1, 489) = 11.91, p = .001, \eta_p^2 = .02$ . In addition, there was a main effect of gender,  $F(1, 489) = 5.51, p = .019, \eta_p^2 = .01$ , such that male participants ( $M = 3.19, SD = 0.54$ ) exhibited higher levels of need for cognition than did female participants ( $M = 3.10, SD = 0.57$ ). Finally, there was also a main effect of culture,  $F(2, 489) = 8.02, p < .001, \eta_p^2 = .03$ . Post hoc analyses with p-values adjusted using Bonferroni correction revealed that East Asian Canadian participants exhibited lower levels of need for cognition than did European Canadian,  $F(1, 395) = 12.39, p = .001, \eta_p^2 = .03$ , and South Asian Canadian participants,  $F(1, 291) = 9.87, p = .01, \eta_p^2 = .03$ , while the latter two groups did not differ from each other,  $F(1, 291) = 0.01, p > .99, \eta_p^2 < .01$  (see Table 1 for  $M$ s and  $SD$ s). The interaction effect was not significant,  $F(2, 489) = 1.41, p = .24, \eta_p^2 < .01$ .

### 3.5. Mediation Analyses

As East Asian Canadians were more dialectical, had less need for cognition, and were more indecisive, compared with both European Canadians and South Asian Canadians, we performed mediation analyses to test whether naïve dialecticism and need for cognition could explain this cultural difference in indecisiveness (see Table 2 for correlations among variables). A multiple mediation model was tested using a bootstrapping technique with 5000 resamples with age and gender as the covariates, culture (East Asian Canadian vs. European Canadian and South

Asian Canadian) as the independent variable, naïve dialecticism and need for cognition as the mediators, and indecisiveness as the dependent variable (see Figure 1). Both mediators were significant predictors of indecisiveness (naïve dialecticism:  $t(489) = 10.60, p < .001$ ; need for cognition:  $t(489) = -5.78, p < .001$ ). Importantly, the indirect effects of culture on indecisiveness, mediated through the effect of each of the two mediators were significant (naïve dialecticism: point estimate = .11; 95% biased-corrected confidence interval of .06 to .16, supporting H3; need for cognition: point estimate = .05, 95% biased-corrected confidence interval of .02 to .09).<sup>2</sup>

#### 4. Discussions

Decision-making is a big part of human experience. Although there is substantial scholarship on *how* people make decisions, relatively less research has been conducted on *why* some people fail to make decisions or otherwise find decision-making difficult. In the present research we contribute to the literature of indecisiveness by showing that chronic indecisiveness varies as a function of culture. As hypothesized, East Asian Canadians endorsed dialectical worldview to a greater extent than members of the other groups and showed a higher degree of chronic indecisiveness, with naïve dialecticism partially accounting for these cultural differences in chronic indecisiveness. This replicates the past work of Wengrovitz and Patalano (2004, as cited in Patalano & Wengrovitz, 2006), which found that when the broader societal context is kept as a constant people of East Asian (vs. European) cultural backgrounds tend to experience more decision difficulty, and extends their study by including a South Asian sample as a second comparison group. Importantly, our study shows why this might be the case, with the East Asian cultural tradition of dialectical thinking giving rise to general indecisiveness (see also Li, Masuda, & Russell, 2014).

In addition, we found that East Asian Canadians (vs. European Canadians and South

Asian Canadians) are lower in need for cognition and this also helps to explain the cultural differences in chronic indecisiveness observed. East Asian cultures have a history of focusing on practicality in their ways of thinking and in scientific investigations, in contrast to a quest for knowledge for knowledge's sake or pure theoretical advancement (Nakamura, 1964). We believe that the lower levels of need for cognition in contemporary East Asians might reflect this tradition of practicality. Moreover, we also obtained a negative correlation between need for cognition and naïve dialecticism among European Canadian and East Asian Canadian participants. As people who are high (vs. low) in need for cognition might be more motivated to think through seemingly contradictory arguments, they might be less likely to simultaneously accept them. Future research should further explore cultural differences in need for cognition as well as its relationship to dialectical thinking.

The present study contributes to the culture and indecisiveness literature by showing that when holding constant the social environment, there are important cultural differences in chronic indecisiveness that are driven by a culture-contingent internal factor (i.e., naïve dialecticism). We believe that some of the inconsistencies in past research may be a result of confounding culture-contingent internal and external factors. Our results therefore highlight the importance of separating culture-contingent internal and external factors when examining cultural differences in chronic indecisiveness as well as other personality variables.

Despite the cultural focus of the present paper, our results nevertheless suggest a new antecedent of indecisiveness that may be applicable to non-East-Asian cultures. Although the construct of dialectical thinking was initially developed in the context of cultural research (Peng & Nisbett, 1999), this form of thinking also varies within cultures (e.g., Choi, Koo, & Choi, 2007; Spencer-Rodgers et al., 2004). Moreover, individual differences in dialectical thinking

have been found to have the same predictive relationships within cultures as those found between cultures, with respect to self-esteem and life satisfaction for example (Spencer-Rodgers et al., 2004). In the present study, we also found a similar pattern, with positive associations between dialectical thinking and indecisiveness within all our groups (all  $r$ s > .37, all  $p$ s < .001). Not only do dialectical cultures foster decision difficulty, but individuals who tend to think dialectically within any culture are also more likely to exhibit indecisiveness.

Future research should investigate whether other culture factors would also contribute to indecisiveness. For example, seemingly personal decisions, such as choosing a career or deciding whether or not to marry, may actually be a group decision for people with a collectivistic (vs. individualistic) cultural orientation. For this reason, decision making may be perceived as more difficult for collectivists (vs. individualists) because they feel that they need to consider the opinions of others to a greater extent. Although we did not find any difference in indecisiveness between participants of collectivistic (i.e., South Asian; Hofstede, 1980) cultural backgrounds and participants of individualistic (i.e., European; Hofstede, 1980) cultural backgrounds in the present study, it is still worthwhile to test this hypothesis in some specific decision domains that may be more amenable to this kind of social normative influences.



### **Footnotes**

1. This general indecisiveness should not be confused with anxious uncertainty, the anxiety induced by uncertainty about the self (van den Bos, 2009), which often results in uncertainty reduction behaviors, such as ideological convictions and religious extremism (McGregor, Nash, & Prentice, 2010).

2. We also tested these effects while keeping European Canadians and South Asian Canadians as separate groups. Both mediators were significant for the contrast between East Asian Canadians and European Canadians as well as the contrast between East Asian Canadians and South Asian Canadians.

**Table 1.** Descriptive Statistics

	<u>European Canadians</u>			<u>East Asian Canadians</u>			<u>South Asian Canadians</u>		
	$\alpha$	$M$	$SD$	$\alpha$	$M$	$SD$	$\alpha$	$M$	$SD$
NFC	.89	3.21	0.64	.82	3.02	0.50	.78	3.20	0.46
DSS	.74	3.70	0.51	.77	3.95	0.49	.80	3.78	0.56
IS	.87	2.93	0.68	.84	3.18	0.60	.85	2.95	0.63

Note: NFC = Need for Cognition scale; DSS = Dialectical Self Scale; IS = Indecisiveness Scale

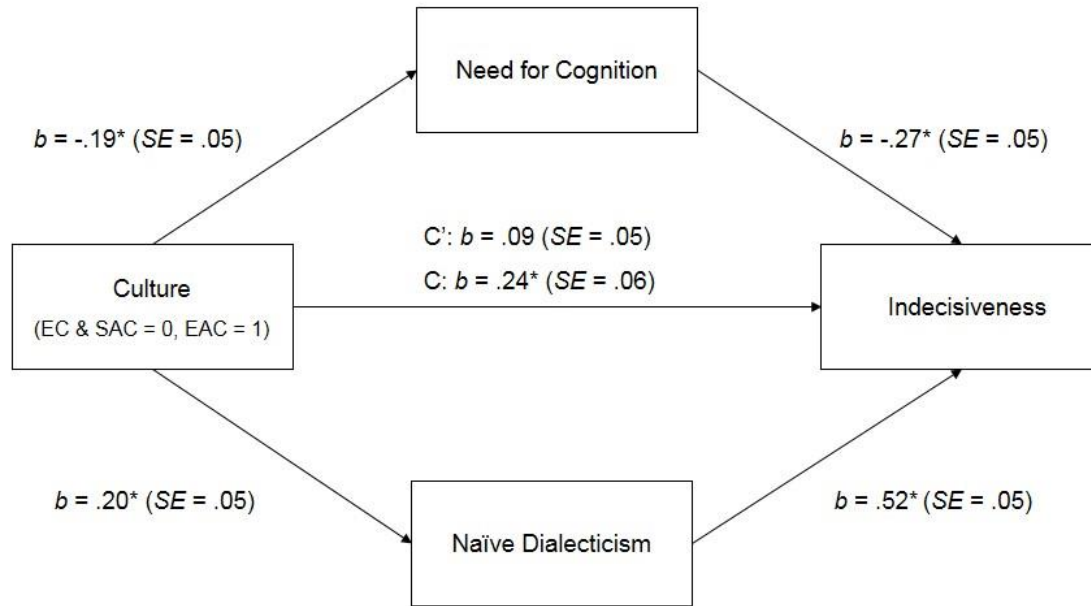
**Table 2.** Correlations among Variables

	<u>European Canadians</u>		<u>East Asian Canadians</u>		<u>South Asian Canadians</u>	
	NFC	DSS	NFC	DSS	NFC	DSS
DSS	-.21**		-.15*		-.14	
IS	-.36**	.47**	-.29**	.37**	-.12	.57**

\*  $p < .05$  (two-tailed).

\*\*  $p < .01$  (two-tailed).

Note: NFC = Need for Cognition scale; DSS = Dialectical Self Scale;  
IS = Indecisiveness Scale



**Figure 1.** Multiple Mediation Model

Model Summary:  $F(5, 489) = 39.90, p < .001, R^2 = .29$

Age and gender were used as covariates (not shown in the figure).

Age:  $b = -.002, SE = .01, t(489) = -.19, p = .85$

Gender (male = 0, female = 1):  $b = .08, SE = .05, t(489) = 1.42, p = .16$

EC = European Canadians; SAC = South Asian Canadians; EAC = East Asian Canadians

\* $p < .001$

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