

## **Political Culture and Attribution of Responsibility\***

**Kwang-II Yoon**

*The aim of this paper is to examine political psychological implications of individualism and collectivism among the citizens of thirty OECD countries in the domain of attribution of responsibility, utilizing the five waves of World Values Survey data. First, this paper will evaluate the effects of individualism and collectivism on the individual's feeling of freedom and control over his or her life in general. It will touch upon the question of agency, which should affect one's expectation for the role of the government among others. Second, it will take a close look into the effects of those cultural values and frames on the individual's opinion about government responsibility in general and her role in economy in particular.*

**Keywords: Political Culture, Individualism, Collectivism, Agency, Attribution of Responsibility**

### 1. INTRODUCTION

How does culture affect the citizens with a different value profile in their sense of agency and opinion about the role of the government? To answer this question, this paper attempts to analyze political psychological implications of individualism and collectivism in the domain of attribution of responsibility.

Individualism and collectivism have been proposed and studied as one of the most important dimensions of cultural differences (Triandis, 1995; Oyserman, Coon, and Kemmelmeier, 2002; Oyserman and Uskul, 2008). In addition, there has been a call for taking into account the fact that individuals with a different cultural value profile will think and act differently, even in the same culture (Yoon, 2010). In this perspective, cultural frames at the aggregate level are bipolar and opposite while cultural values at the individual level are at least domain specific (Oyserman et al., 2002). In other words, individuals would have a different cultural profile that consists of different degrees of individualistic and collectivistic values and they would think and act differently according to a situation where they find themselves, even in the same cultural context. Still, strong individualistic culture implies weak collectivistic culture, and vice versa.

Having said that, this paper will evaluate the effects of such cultural frames as individualism and collectivism on the individuals with a different cultural value profile, who would have different political preferences even in the same cultural context. First, it will touch upon the question of agency, which should affect one's expectation for the role of the government among others. Second, it will take a close look into the effects of those cultural values and frames on the individual's opinion about government responsibility in general and her role in economy in particular.<sup>1</sup>

---

\* This Research was supported by the Sookmyung Women's University Research Grants (1-1303-0159).

<sup>1</sup> This paper is a revised version of a part of the author's Ph. D. dissertation (Yoon, 2010).

### 1.1 Agency

One of the core concepts in cross-cultural psychological study of the interplay between the social environment and psychological functioning is agency that addresses the question of “what impels actions.” By logical extension, it addresses the question of who or what is responsible for an individual’s action and the answer has been suggested to lie on the dimension of personal (i.e., individual self) versus collective (i.e., others or group) agency. Menon et al. (1999) elaborated on the dichotomy. They advanced that not only an individual but also a collective can possess “the power of an agent to exert the law set forth by its internal will rather than that of external constraint,” which is Kantian notion of autonomy. In other words, the internal will that motivates an individual’s action could be originated from individual self or from collective.

The concept of agency is closely tied in with “locus of control,” one of the most studied concepts of personality attribute in psychology. According to Rotter who pioneered the study in the 1960s, an individual’s “generalized expectancies” of the locus of control vary on the dimension of internal versus external control. A belief in “internal control” refers to “the degree to which persons expect that a reinforcement or an outcome of their behavior is contingent on their own behavior or personal characteristics” while “external control” refers to “the degree to which persons expect that the reinforcement or outcome is a function of chance, luck, or fate, is under the control of powerful others, or is simply unpredictable.” The dimension of internal-external locus of control reflects the degree which individuals accept personal responsibility for what happens to them (1996, *italics added*) and thus conceptually overlaps significantly with that of personal versus collective agency.

As many issues in mainstream psychology that presuppose universality, however, the question of agency has preferred one particular answer, that is, personal agency. Psychologists have argued that “internal states, motives, and dispositions inside disjoint individuals” impel and hence, are responsible for, their actions. Indeed, there had not existed the notion of the dichotomy of personal versus collective agency in Western psychology. Yet as psychologists began to incorporate the concept of culture in the field of study, they realized that there exist other forms of agency, where actions are impelled by external forces that include “others, in relationship and interaction with others” (Markus and Kitayama, 1991). Thus, psychologists now conceptualize human agency in terms of personal versus collective or group agency, personal referring to the former, Western conception while collective or group to the latter, Eastern conception. In other words, they now consider others or collective as another unit of agency (Lehman, Chiu, and Schaller, 2004; Bandura, 2006).

The origin of the different approaches to agency in the context of different cultural environments can be explained by Nisbett and his colleagues’ sociocognitive system theory (Nisbett et al., 2001; Nisbett, 2003). According to the theory, social differences among different social environments or cultures affect not only individuals’ beliefs about specific aspects of the world but also “system of thought” that consists of metaphysics (i.e., beliefs of the nature of the world and causality), epistemology (i.e., beliefs about what is important to know and how knowledge can be obtained), and cognitive and perceptual habits. Historically, the social differences can be traced and classified into two major social organizations or cultures, one that emphasizes a sense of personal agency and the other a sense of collective agency or one with less and the other with more social relations and role constraints. Thus, people tend to regard themselves as free agents or as constrained by and as less agentic than,

social collective, depending on the type of cultures in which they were raised and live.

Theoretically, the concepts closely related to personal agency have frequently been suggested as one of the core attributes of individualism. For example, according to Lukes (1973, Chapter 8), autonomy or self-direction, one of the “basic ideas” of individualism, is the notion that an individual’s thought and action is his own, and not determined by causes outside his control. He elaborated on the term by contrasting it with what seems to constitute the notion of collective agency.

An individual is autonomous (at the social level) to the degree to which he subjects the pressures and norms with which he is confronted to conscious and critical evaluation, and form intentions and reaches practical decisions as the result of independent and rational reflection (Lukes, 1973: 52).

Hofstede (1980) explained that emphasis on personal autonomy and initiative characterized “high individualism.” Waterman (1984) suggested Rotter’s internal locus of control as one of the four personality qualities that individualism embodies.<sup>2</sup> One can also find the conceptual affinity of personal agency with Schwartz’ self-direction at the individual level (1990) and autonomy at the aggregate level (2004).

As opposed to the concept of personal agency, collective agency, as a relative newcomer to Western psychology, has not been extensively discussed as related to the attributes of collectivism except for contrasting purposes (e.g., Lukes, 1973; Menon et al., 1999; Schwartz, 1994, 2004). However, one can relate, without much difficulty, the notion of collective agency with relationship and group-centered elements of collectivism. In fact, cultural psychologists have attempted to demonstrate empirically that individualistic culture encourages personal agency while collectivistic culture collective agency (Menon et al., 1999; Choi, Nisbett, and Norenzayan, 1999; Choi et al., 2003).

In sum, the question of agency deals with an individual’s global, enduring beliefs or “generalized expectancies” to use Rotter’s term, about who or what motivates and thus is responsible for, his or her actions in general. Individualism and collectivism have been suggested to influence an individual’s beliefs in individual and collective agency, respectively, both theoretically and empirically. That being the case, it is reasonable to assume that those cultural, cross-situational beliefs about “who or what have control over life affairs” would influence attribution of responsibility, which is specific behavior. In politics, the relevant actors for the question of agency are the individual and the government, the pair of which is the focus in the analysis of attribution of responsibility.

## **1.2 Attribution of Responsibility**

In psychology, how individuals assign responsibility for behaviors and events has often been studied in the context of attribution theory especially since Heider led the way in the late 1950s. According to social and political psychologists, attribution theory aspires to provide a systematic account of how ordinary people make sense of and explain social events. In other words, it attempts to explain how lay people understand causally or more

---

<sup>2</sup> The other personality qualities include Eriksonian sense of personal identity, Maslow’s self-actualization, and Kohlberg’s principled (post-conventional) moral reasoning (Waterman, 1984: Chapter 3).

specifically assign causes and effects to the world around them including themselves (Fincham and Jaspars, 1980; Kinder and Fiske, 1986; McGraw, 2001). This attribution process implicates responsibility attribution as the latter process also involves causality assignment or “imputation” as one of the “two facets” of responsibility. “Answerability,” which has been regarded as a synonym of responsibility, is the second facet and they have been theoretically distinguished in contemporary philosophy as well as in psychology. It focuses on “the liability for appropriate sanctions” (Schlenker, 1994) or accountability (Fincham and Jaspars, 1980).

Attribution theorists have sustained that Heider’s claim that the most important distinction made by observers in their explanations of social acts is between internal cause – the traits, abilities, intentions, and so on, of the actor – and external causes – the incentives, pressures, demands, and so on, of the situation (Kinder and Fiske, 1986). Thus, they have examined the degree to which and the conditions under which people rely on internal, dispositional or external, situational attribution.

The dichotomy of internal versus external casual attribution is also relevant to the dichotomy of agency, internal versus collective agency. Culture oriented psychologists have suggested that individualism and collectivism would encourage a particular form of agency would favor one way of causal attribution over the other. Indeed, they have advanced that individualism that encourages personal agency facilitates internal or dispositional attribution while collectivism that encourages collective agency facilitates external or contextual attribution. For example, Miller (1984), who first demonstrated the importance of culture in casual attribution, claimed that different “cultural meaning systems” would affect an individual’s development of everyday social explanation in the direction of dispositional or contextual emphasis, independent of his or her cognitive capacities and objective experiential conditions, both of which have been previously suggested as factors explaining cross-cultural attributional diversity. The author’s evidence suggests that contrasting cultural conceptions of the person, i.e., individualistic or holistic, entail these cross-cultural and developmental differences in social attribution. Morris and Peng (1994) showed that dispositional attribution for behavior was more widespread in individualistic culture of the United States than in collectivistic culture of China. According to these authors, the person-centered theory that social behavior reveals stable, global, internal dispositions is more prevalent in Judeo-Christian individualistic cultures while the situation-centered theory that social behavior is shaped by relationships, roles, and situational pressures is dominant in Confucian collectivistic cultures. Triandis (1995) also observed that individualists attribute events to internal individual causes more frequently than collectivists, who tend to attribute them to external causes probably because their perceptions and cognition are influenced by different cultural syndromes. Furthermore, as discussed above, Menon and her colleagues (1999) explicitly framed the issue of cultural differences in attribution as the question of agency. The authors proposed that cross-cultural, attributional divergences would arise from contrasting “implicit theories” or conceptions of which actors in society have agency, i.e., individual or collective, which they also traced to individualistic, Judeo-Christian tradition in the West and collectivistic, Confucian tradition in the East.

Recent studies have shown more nuanced cultural differences in attribution. According to extensive ethnographic and psychological data analysis by Choi et al. (1999), for example, internal attribution is a cross-culturally widespread mode of thinking. Yet they showed that East Asians, who represent collectivism, made more external attribution than their counterpart, Americans, who represent individualism. Choi and his colleagues (2003)

confirmed the finding.

### **1.3 Attribution of Responsibility in Political Science**

Political scientists in general as well as political psychologists have studied the attribution of responsibility extensively as the subject is particularly relevant to democracy, where citizens can hold their representatives accountable for their performances usually by electoral choices and not infrequently by public opinions. The significance of citizens' responsibility attribution for political issues is well supported by the empirical studies of voting and public opinion (McGraw, 2001). Rudolph (2003: 700) even claimed that the concept of responsibility lied "at the heart of theories of democratic accountability."

The majority of the political science literature on the subject has analyzed citizens' attributions of responsibility for broadly defined political and social problems, such as economic conditions, crime, terrorism, and racial inequality. In fact, we have learned a great deal about the political consequences of responsibility attributions – i.e., "throw the rascals out" – most likely based on citizens' retrospective, sociotropic voting behavior (Kinder and Kiewiet, 1979, 1981; Feldman, 1984; Lewis-Beck and Stegmaier, 2000). Yet, we have only limited knowledge about the factors that influence the formation of responsibility attribution in politics (Gibson and Gouws, 1999; McGraw, 2001; Rudolph, 2003). In a sense, political scientists have focused on the second facet of responsibility, accountability, rather than the first one, causal imputation, which is logically antecedent to accountability.

This paper proposes individualism and collectivism as cultural frames at the aggregate level and cultural values at the individual level should be considered as one of the important determinants of the individual's attribution of responsibility. In this paper, I will first examine the effects of individualism and collectivism on the question of agency in general, that is, without reference to the government. This will be the groundwork for the subsequent analyses of what factors influence who should be in charge of various policy issues. In addition, I will investigate the effects of individualism and collections on individual's political attitudes that would be formed via responsibility attributions.

## **2. MULTILEVEL MODELS OF AGENCY AND ATTRIBUTION OF RESPONSIBILITY**

### **2.1 Hypotheses**

The analysis focuses on (1) the statistical significance of slope and intercept variance estimates and (2) the effects of individualism and collectivism on agency and responsibility attribution variables while distinguishing their individual level effects as cultural values from the cultural level effects as cultural frames.

First, I hypothesize that slope and intercept variance estimates are statistically significant for all the models. In other words, I expect that across countries there exist differential effects of individualism and collectivism as the individual level cultural values. In addition, I expect that the mean of each dependent variable when all the independent variables are set to their means – 0 in this case because of grand mean centering – is different across countries. That is, I hypothesize that the variance estimates for the intercepts are statistically significant. Substantively, this hypothesis is about whether each country is a legitimate unit for cultural analysis as well as for multilevel modeling analysis in a sense that it has the different effects

of cultural values and a different baseline value for each dependent variable

Second, the effects of individualism both at the cultural level and at the individual level on “Freedom of Choice and Control” and “Fate vs. Control,” are hypothesized to be positive while the effects of collectivism on those agency variables negative. In other words, individualism and collectivism exert opposite influences along these dimensions of the agency variables.

As discussed above, individualism values personal agency and responsibility. It encourages people who live in individualistic culture or who are individualists to exercise control over their own action. Personal agency has been also associated with such values as autonomy and self-direction that emphasize independent thought and action, not swayed by external causes outside of one’s control. On the contrary, collectivism values belongingness, relationship, context, duty, group, hierarchy, and harmony, among others, (Oyserman et al., 2002) that promote external control and group or collective agency. Thus, it encourages people who live in collectivistic culture or who are collectivists to allow others or context to influence on themselves or their actions.

Third, I hypothesize that the effects of individualism and collectivism on attribution of responsibility variables are also bipolar opposite. In other words, I expect individualism exerts positive effect on personal responsibility while collectivism on government responsibility when it comes to the basic personal welfare question. In addition, individualism is hypothesized to facilitate support for private ownership of business and industry and income difference as incentives for individual effort while collectivism support for government ownership and income redistribution.

The expectation is consistent with the hypothesis proposed on the agency questions. Individualism that values personal agency or internal control should encourage the value of self-reliance when it comes to the basic personal welfare. By logical extension, individualism is expected to encourage the idea of “limited government” while collectivism to advocate or at least acknowledge the expanded role of modern government in macro-economic management. In fact, self-reliance, defined as “the idea that individuals should take care of their own well-being, particularly (but not only) their economic condition,” and limited government, defined as the belief that “the purpose of government is strictly to protect life, liberty, and property, and thereby provide a framework within which individuals may pursue their private interests” have been proposed as distinct aspects of American individualism, along with autonomy discussed above (Markus, 2001: 407). It is reasonable to assume that these aspects are relevant to individualism in general since the United States has been suggested to represent a prototypical individualist culture. For example, Hofstede (2001) rated her individualism (IDV) as 91 out of 100 and the most individualistic country out of fifty three nations and regions he evaluated. The country level measure of individualism by Suh et al. (1998) that this analysis draws on also rated her 9.55 out of 10 and the most individualistic country out of sixty nations they evaluated.

In addition, drawing on the empirical evidence supporting the hypothesis of “clarity of responsibility” that people tend to do better in attributional tasks when the cue of who is responsible is clear (Powell and Whitten, 1993; Anderson, 1995, 2000), I expect still opposite but smaller effect of those cultural frames and values on responsibility attribution when the question of who is in charge is not explicitly invoked but implied.<sup>3</sup> Thus, I

---

<sup>3</sup> Feldman (1984) made an even stronger case for the cultural effect on attribution of responsibility while denying the influence or clarity of government responsibility suggested by Kramer (1971 and

hypothesize that collectivism would exert positive effect while individualism negative effect, on income redistribution but their effects are weaker than in cases above where the government is explicitly invoked in the questions.

Lastly, I theorize the direction and statistical significance of cultural values at the individual level and cultural frames at the country level are aligned. In other words, the positive effect of individualism as a cultural value at the individual level (IND) on personal agency will be accompanied with positive effect of individualism as a cultural frame at the country level (IC). In other words, individualistic people who live in individualistic culture are expected to value personal agency most. In addition, I expect significant cross-level effects of the aligned cultural values and dominant cultural frames. That is, there would be synergistic, mutually reinforcing cultural effects from the individual and cultural level. For example, I hypothesize that a collectivist in collectivist culture would support government ownership of business and industry more than the sum of the coefficients of each cultural variable because of the additional cross-level effect.

## 2.2 Empirical Models

To empirically identify political cultural effects of individualism and collectivism on agency and attribution of responsibility, I ran four multilevel models that estimate the effects at the individual level and at the country level, with or without cross-level interaction and with or without the second macro-level variable, government size. Thus, there are four multilevel models to be estimated for each dependent variable.

The other parameter estimates of interest are variance components, the statistical significance of which is used to test the assumption that there exists differential contextual effect. The estimation of the multilevel models is based on the independently pooled cross-sectional data of 30 OECD member countries over the five waves (1981-2007) of the World Values Survey.

All the independent variables including the dichotomous ones are grand mean centered to facilitate substantively meaningful interpretation and to avoid multicollinearity in cross-level interactions.

Model 1

Level 1: Individual

Attributional Variables

$$= B_0 + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\ + B_5 \text{ L-R Ideology} + B_6 \text{ Individualism or Collectivism} + r_{ij}$$

Level 2: Country

$$B_0 = G_{00} + G_{01} \text{ Individualism Culture} + u_{0j}$$

$$B_6 = G_{10} + u_{1j}$$

Mixed Model

Attributional Variables

---

1983). According to the author, personal attribution is strongly related to people's belief in economic individualism that consists of the work ethic and equality of opportunity, not a matter of their failing to see government responsibility. Attribution of changing personal well-being to the wider societal context is only common among those who do not subscribe to both of these cultural beliefs.

$$\begin{aligned}
&= G_{00} + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
&+ B_5 \text{ L-R Ideology} + G_{10} \text{ Individualism or Collectivism} \\
&+ G_{01} \text{ Individualism Culture} + u_{1j} \text{ Individualism or Collectivism} + r_{ij} + u_{0j}
\end{aligned}$$

#### Model 2

##### Level 1: Individual

##### Attributional Variables

$$\begin{aligned}
&= B_0 + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
&+ B_5 \text{ L-R Ideology} + B_6 \text{ Individualism or Collectivism} + r_{ij}
\end{aligned}$$

##### Level 2: Country

$$B_0 = G_{00} + G_{01} \text{ Individualism Culture} + G_{02} \text{ Government Size} + u_{0j}$$

$$B_6 = G_{10} + u_{1j}$$

#### Mixed Model

##### Attributional Variables

$$\begin{aligned}
&= G_{00} + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
&+ B_5 \text{ L-R Ideology} + G_{10} \text{ Individualism or Collectivism} + G_{02} \text{ Government Size} \\
&+ G_{01} \text{ Individualism Culture} + u_{1j} \text{ Individualism or Collectivism} + r_{ij} + u_{0j}
\end{aligned}$$

#### Model 3

##### Level 1: Individual

##### Attributional Variables

##### Components of Civic Culture/Social Capital or Political Interest/Participation

$$\begin{aligned}
&= B_0 + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
&+ B_5 \text{ L-R Ideology} + B_6 \text{ Individualism or Collectivism} + r_{ij}
\end{aligned}$$

##### Level 2: Country

$$B_0 = G_{00} + G_{01} \text{ Individualism Culture} + u_{0j}$$

$$B_6 = G_{10} + G_{11} \text{ Individualism Culture} + u_{1j}$$

#### Mixed Model

##### Attributional Variables

$$\begin{aligned}
&= G_{00} + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
&+ B_5 \text{ L-R Ideology} + G_{10} \text{ Individualism or Collectivism} \\
&+ G_{01} \text{ Individualism Culture} \\
&+ G_{12} \text{ Individualism or Collectivism} * \text{Individualism Culture} \\
&+ u_{1j} \text{ Individualism or Collectivism} + r_{ij} + u_{0j}
\end{aligned}$$

#### Model 4

##### Level 1: Individual

##### Attributional Variables

$$\begin{aligned}
&= B_0 + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
&+ B_5 \text{ L-R Ideology} + B_6 \text{ Individualism or Collectivism} + r_{ij}
\end{aligned}$$

##### Level 2: Country

$$B_0 = G_{00} + G_{01} \text{ Individualism Culture} + G_{02} \text{ Government Size} + u_{0j}$$

$$B_6 = G_{10} + G_{11} \text{ Individualism Culture} + u_{1j}$$

Mixed Model

Attributional Variables

$$\begin{aligned}
 &= G_{00} + B_1 \text{ Employment Status} + B_2 \text{ Income} + B_3 \text{ Education} + B_4 \text{ Gender} \\
 &+ B_5 \text{ L-R Ideology} + G_{10} \text{ Individualism or Collectivism} \\
 &+ G_{01} \text{ Individualism Culture} + G_{02} \text{ Government Size} \\
 &+ G_{12} \text{ Individualism or Collectivism} * \text{Individualism Culture} \\
 &+ u_{1j} \text{ Individualism or Collectivism} + r_{ij} + u_{0j}
 \end{aligned}$$

A mixed model is a collapsed form of level 1 and level 2 models. B represents the fixed effect at the individual level except for the intercept ( $B_0$ ) and the slope of cultural values ( $B_6$ ), both of which are random, that is, vary over countries.  $G_{st}$  is the effect of the macro variable  $t$  (i.e., macro-level intercept, Individualism Culture, and Government Size) on the regression coefficient of micro variable  $s$  (i.e., micro-level intercept and Individualism or Culturalism index). It represents the fixed effect at the country level.  $r$  refers to level 1 error and  $u$  level 2 error. The subscript  $i$  indexes respondent and  $j$  country.

The analysis used STATA software and the restricted maximum likelihood (REML) method to estimate parameters

### 3. RESULTS

The results seem to support that culture matters. In general, the cultural effects of individualism and collectivism showed up at least at one level – either the individual or the cultural level – except for income redistribution. First, as illustrated from the variance component estimation parts of Table 1 – Table 10, all the variance with the sole exception of the slope variance of individualism for “Fate versus Control” are statistically significant, which suggests that there exists contextual effect in general. All the estimates except for the slope variances of that dependent variable are at least two times larger than their standard error.<sup>4</sup> Thus, it is highly likely that each country has different slopes or different effects of individualism and collectivism at the individual level in the domain of agency and government responsibility. In addition, considering that variance of intercept estimates are statistically significant, it is also highly likely that each country has a different mean for each dependent variable when other independent and control variables are set to zero, that is, their respective grand means. This should strengthen the case that each country is a legitimate unit of analysis in the study of culture as well as in multilevel modeling analysis.

For the agency questions, individualism both at the individual level (IND) and at the cultural level (IC) confirms the hypothesized positive effects on the “Freedom of Choice and Control.” In other words, individualists are more likely to “feel they have completely free choice and control over their lives” and individualistic culture adds a positive effect. In addition, the positive effects of IND and IC on the first agency variable strengthen the case that it is an intervening variable between culture and subjective well-being.

As Table 1 shows, cultural effects seem stronger at the national level considering 5-point scale of IND as opposed to 10-point scale of IC. The size of coefficients range from 0.11 to

---

<sup>4</sup> All the four slope variances of individualism at the cultural level for “Fate vs. Control” are about the same as their respective standard errors. See Table 3.

0.13 for IC and are close to 0.12 for IND. It is also interesting to note that Left-Right self-placement is also positive (0.3 to 0.4) and statistically significant.

According to Table 3, individualistic cultural value also leads people more likely to believe “people shape their fate themselves” although the cultural level effects on the same “Fate versus Control” variable are not statistically significant regardless of controlling for government size and cross-level effect. The individual level effects of IND in fact seem to be larger, ranging from 0.16 to 0.18, than those in “Freedom of Choice and Control.”

By contrast, collectivism does not show consistent effects across levels on the agency variables. For example, Table 2 shows that collectivistic culture (CI) discourages the feeling of free choice and control over life as expected but collectivistic value at the individual level (COL) does not. The individual level effects of COL are all statistically insignificant. In addition, collectivists are more likely to believe “everything in life is determined by fate” although collectivistic cultural frame does not appear to lead to the same belief. As shown in Table 4, all the coefficients for collectivism as a cultural frame are negative – meaning CI affects negatively the belief that “people shape their fate themselves” – as hypothesized but they all are highly statistically insignificant. The p-values are at least greater than .5.

For the attribution of responsibility variables, individualism and collectivism both at the individual level and at the cultural level demonstrate statistically significant effects as hypothesized when it comes to “Government versus Individual Responsibility.” That is, individualism tends to encourage the belief that “people should take more responsibility to provide for themselves” while collectivism the belief that “the government should take more responsibility to ensure that everyone is provided for.” Table 5 shows that the sizes of the effect of IND and COL are similar in absolute values, the former being close to 0.06 and the latter to 0.09. As shown in Table 5 and 6, the cultural level effects are the same in absolute values (0.33) and far greater than individual level effects. In addition, it is worthy of note that Left-Right self-placement is highly statistically significant and positive, 0.18 in both IND and COL models. Both cultural values and ideology have independent effects on citizens’ attitude toward government responsibility in the domain of basic personal welfare.

Collectivism at both levels also leads to the belief that “government ownership of business and industry should be increased” especially when the size of the government is controlled. Table 8 shows that the coefficients for COL are -0.04 (p-value = 0.03) for Model 2 and -0.05 (p-value = 0.02) for Model 4, meaning that collectivists are more likely to oppose private ownership. The coefficients for CI are all highly significant and negative, ranging from -0.17 to -0.20, smaller than those of “Government versus Individual Responsibility” but are still considered large.

In contrast to the collectivism effects, the effect of individualism on the same dependent variable is mixed. It seems that individualism leads to the belief that “private ownership of business and industry should be increased” only at the cultural level. As shown in Table 7, the size of the coefficients, ranging from 0.19 to 0.21 is comparable to those of collectivism as cultural frames, which implies that it has equally powerful effect on the ownership preference. However, the effects of IND are not statistically significant.

As in “Government versus Individual Responsibility,” Left-Right also seems to exert considerable effects in all the models for the ownership preference. The effects are highly statistically significant and close to 0.17 both for individualism and collectivism, almost equivalent in size to those of cultural frames. They are all measured on a 10-point scale.

Table 1. Effect of Individualism on Free Choice

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value	Coefficient	SE	p-value	Coefficient	SE	p-value	Coefficient	SE	p-value
				$N_1=88,272$ $N_2=30$	$N_1=85,623$ $N_2=29$	$N_1=88,272$ $N_2=30$	$N_1=85,623$ $N_2=29$					
<b>Individual Level</b>												
Employed	0.09	0.02	0.00	0.09	0.02	0.00	0.09	0.02	0.00	0.09	0.02	0.00
Income	0.04	0.00	0.00	0.05	0.00	0.00	0.04	0.00	0.00	0.05	0.00	0.00
Education	0.05	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00
Male	0.03	0.01	0.07	0.03	0.01	0.05	0.03	0.01	0.07	0.03	0.01	0.05
Individualism (IND)	0.12	0.03	0.00	0.12	0.03	0.00	0.12	0.03	0.00	0.12	0.03	0.00
Left-Right	0.04	0.00	0.00	0.03	0.00	0.00	0.04	0.00	0.00	0.03	0.00	0.00
Constant	6.89	0.08	0.00	6.89	0.08	0.00	6.89	0.08	0.00	6.89	0.08	0.00
<b>Cross-level Interaction</b>												
IND*IC							-0.01	0.02	0.43	-0.01	0.02	0.41
<b>Country Level</b>												
Individualism-Collectivism (IC)	0.11	0.04	0.02	0.11	0.04	0.01	0.12	0.05	0.01	0.13	0.05	0.01
Size of the Government				-0.03	0.01	0.09				-0.03	0.01	0.09
<b>Variance Component</b>												
Variance Slope Individualism	0.03	0.01		0.03	0.01		0.03	0.01		0.03	0.01	
Variance Intercept	0.20	0.05		0.19	0.05		0.20	0.05		0.19	0.05	
Covariance	-0.03	0.01		-0.03	0.01		-0.03	0.02		-0.03	0.02	
<b>Variance Residual</b>	4.32	0.02		4.32	0.02		4.32	0.02		4.32	0.02	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.

**Table 2.** Effect of Collectivism on Free Choice

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value									
<b>Individual Level</b>												
Employed	0.11	0.02	0.00	0.11	0.02	0.00	0.11	0.02	0.00	0.11	0.02	0.00
Income	0.05	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00
Education	0.06	0.00	0.00	0.07	0.00	0.00	0.06	0.00	0.00	0.07	0.00	0.00
Male	0.03	0.01	0.08	0.03	0.01	0.06	0.03	0.01	0.08	0.03	0.01	0.06
Collectivism (COL)	0.03	0.02	0.12	0.03	0.02	0.15	0.03	0.02	0.13	0.03	0.02	0.16
Left-Right	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00
Constant	6.89	0.08	0.00	6.90	0.08	0.00	6.89	0.08	0.00	6.90	0.08	0.00
<b>Cross-level Interaction</b>												
COL*CI							-0.02	0.01	0.14	-0.02	0.01	0.14
<b>Country Level</b>												
Collectivism-Individualism (CI)	-0.10	0.05	0.03	-0.11	0.05	0.02	-0.12	0.05	0.02	-0.13	0.05	0.01
Size of the Government				-0.03	0.02	0.12				-0.03	0.02	0.12
<b>Variance Component</b>												
Variance Slope Individualism	0.01	0.00		0.01	0.00		0.01	0.00		0.01	0.00	
Variance Intercept	0.21	0.06		0.20	0.06		0.20	0.06		0.20	0.06	
Covariance	0.01	0.01		0.01	0.01		0.01	0.01		0.01	0.01	
<b>Variance Residual</b>	4.36	0.02		4.35	0.02		4.36	0.02		4.35	0.02	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.



**Table 4.** Effect of Collectivism on Fate vs. Control

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value									
<b>Individual Level</b>												
Employed	0.14	0.04	0.00	0.14	0.04	0.00	0.14	0.04	0.00	0.14	0.04	0.00
Income	0.07	0.01	0.00	0.07	0.01	0.00	0.07	0.01	0.00	0.07	0.01	0.00
Education	0.13	0.01	0.00	0.13	0.01	0.00	0.13	0.01	0.00	0.13	0.01	0.00
Male	0.26	0.04	0.00	0.27	0.04	0.00	0.27	0.04	0.00	0.27	0.04	0.00
Collectivism (COL)	-0.09	0.04	0.02	-0.09	0.04	0.03	-0.09	0.04	0.02	-0.09	0.04	0.04
Constant	6.79	0.11	0.00	6.83	0.14	0.00	6.79	0.11	0.00	6.83	0.14	0.00
<b>Cross-level Interaction</b>												
COL*CI							0.01	0.02	0.78	0.01	0.02	0.77
<b>Country Level</b>												
Collectivism-Individualism (CI)	-0.03	0.05	0.56	-0.03	0.06	0.64	-0.03	0.06	0.64	-0.02	0.06	0.72
Size of the Government				0.01	0.03	0.67				0.01	0.03	0.67
<b>Variance Component</b>												
Variance Slope Individualism	0.02	0.01		0.02	0.01		0.02	0.01		0.02	0.01	
Variance Intercept	0.19	0.07		0.22	0.09		0.19	0.08		0.22	0.09	
Covariance	0.02	0.02		0.02	0.02		0.02	0.02		0.02	0.02	
<b>Variance Residual</b>	5.40	0.06		5.37	0.06		5.40	0.06		5.37	0.06	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.



Table 6. Effect of Collectivism on Government Responsibility vs. Individual Responsibility

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value	Coefficient	SE	p-value	Coefficient	SE	p-value	Coefficient	SE	p-value
		$N_1=74,495$ $N_2=30$		$N_1=71,856$ $N_2=29$			$N_1=74,495$ $N_2=30$			$N_1=71,856$ $N_2=29$		
<b>Individual Level</b>												
Employed	0.09	0.02	0.00	0.04	0.02	0.07	0.09	0.02	0.00	0.04	0.02	0.07
Income	0.09	0.00	0.00	0.09	0.00	0.00	0.09	0.00	0.00	0.09	0.00	0.00
Education	0.01	0.00	0.04	0.01	0.00	0.02	0.01	0.00	0.04	0.01	0.00	0.03
Male	0.18	0.02	0.00	0.19	0.02	0.00	0.18	0.02	0.00	0.19	0.02	0.00
Collectivism (COL)	-0.08	0.02	0.00	-0.09	0.02	0.00	-0.08	0.02	0.00	-0.09	0.02	0.00
Left-Right	0.18	0.00	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.18	0.00	0.00
Constant	5.87	0.11	0.00	5.87	0.12	0.00	5.87	0.11	0.00	5.87	0.12	0.00
<b>Cross-level Interaction</b>												
COL*CI							-0.01	0.01	0.42	-0.01	0.01	0.25
<b>Country Level</b>												
Collectivism-Individualism (CI)	-0.33	0.07	0.00	-0.35	0.07	0.00	-0.33	0.07	0.00	-0.34	0.07	0.00
Size of the Government				-0.01	0.02	0.60				-0.01	0.02	0.60
<b>Variance Component</b>												
Variance Slope Individualism	0.01	0.00		0.01	0.00		0.01	0.00		0.01	0.00	
Variance Intercept	0.37	0.10		0.39	0.11		0.37	0.10		0.40	0.11	
Covariance	0.00	0.01		-0.01	0.01		0.00	0.01		-0.01	0.01	
<b>Variance Residual</b>	6.90	0.04		6.84	0.04		6.90	0.04		6.84	0.04	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.



**Table 8.** Effect of Collectivism on Government Ownership vs. Private Ownership of Business and Industry

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value									
<b>Individual Level</b>												
Employed	0.09	0.02	0.00	0.05	0.02	0.01	0.09	0.02	0.00	0.05	0.02	0.01
Income	0.07	0.00	0.00	0.07	0.00	0.00	0.07	0.00	0.00	0.07	0.00	0.00
Education	0.02	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.00
Male	0.30	0.02	0.00	0.32	0.02	0.00	0.30	0.02	0.00	0.32	0.02	0.00
Collectivism (COL)	-0.03	0.02	0.13	-0.04	0.02	0.03	-0.03	0.02	0.12	-0.05	0.02	0.02
Left-Right	0.17	0.00	0.00	0.17	0.00	0.00	0.17	0.00	0.00	0.17	0.00	0.00
Constant	6.58	0.09	0.00	6.55	0.09	0.00	6.58	0.09	0.00	6.55	0.09	0.00
<b>Cross-level Interaction</b>												
COL*CI							-0.01	0.01	0.39	-0.01	0.01	0.18
<b>Country Level</b>												
Collectivism-Individualism (CI)	-0.18	0.04	0.00	-0.17	0.05	0.00	-0.20	0.05	0.00	-0.20	0.05	0.00
Size of the Government				0.01	0.02	0.40				0.01	0.02	0.39
<b>Variance Component</b>												
Variance Slope Individualism	0.01	0.00		0.01	0.00		0.01	0.00		0.01	0.00	
Variance Intercept	0.21	0.06		0.21	0.06		0.21	0.06		0.21	0.06	
Covariance	0.02	0.01		0.02	0.01		0.02	0.01		0.02	0.01	
<b>Variance Residual</b>	5.58	0.03		5.56	0.03		5.58	0.03		5.56	0.03	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.

**Table 9.** Effect of Individualism on Income Redistribution

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value									
<b>Individual Level</b>												
Employed	-0.13	0.02	0.00	-0.08	0.02	0.00	-0.13	0.02	0.00	-0.08	0.02	0.00
Income	-0.14	0.00	0.00	-0.14	0.00	0.00	-0.14	0.00	0.00	-0.14	0.00	0.00
Education	-0.05	0.00	0.00	-0.05	0.00	0.00	-0.05	0.00	0.00	-0.05	0.00	0.00
Male	-0.19	0.02	0.00	-0.19	0.02	0.00	-0.19	0.02	0.00	-0.19	0.02	0.00
Individualism (IND)	-0.03	0.03	0.30	-0.04	0.03	0.25	-0.04	0.03	0.20	-0.04	0.03	0.14
Left-Right	-0.24	0.00	0.00	-0.23	0.01	0.00	-0.24	0.00	0.00	-0.23	0.01	0.00
Constant	5.23	0.12	0.00	5.27	0.12	0.00	5.23	0.12	0.00	5.27	0.12	0.00
<b>Cross-level Interaction</b>												
IND*IC							0.05	0.02	0.00	0.05	0.02	0.00
<b>Country Level</b>												
Individualism-Collectivism (IC)	0.01	0.07	0.87	0.07	0.07	0.29	0.01	0.07	0.90	0.03	0.07	0.71
Size of the Government				-0.06	0.02	0.01				-0.06	0.02	0.01
<b>Variance Component</b>												
Variance Slope Individualism	0.03	0.01		0.03	0.01		0.02	0.01		0.02	0.01	
Variance Intercept	0.44	0.12		0.39	0.12		0.44	0.12		0.39	0.11	
Covariance	0.00	0.03		-0.03	0.03		0.00	0.02		-0.02	0.02	
<b>Variance Residual</b>	7.00	0.04		6.94	0.04		7.00	0.04		6.94	0.04	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.

Table 10. Effect of Collectivism on Income Redistribution

	Model 1			Model 2			Model 3			Model 4		
	Coefficient	SE	p-value									
<b>Individual Level</b>												
Employed	-0.13	0.02	0.00	-0.08	0.02	0.00	-0.13	0.02	0.00	-0.08	0.02	0.00
Income	-0.14	0.00	0.00	-0.14	0.00	0.00	-0.14	0.00	0.00	-0.14	0.00	0.00
Education	-0.05	0.00	0.00	-0.05	0.00	0.00	-0.05	0.00	0.00	-0.05	0.00	0.00
Male	-0.19	0.02	0.00	-0.20	0.02	0.00	-0.19	0.02	0.00	-0.20	0.02	0.00
Collectivism (COL)	0.03	0.02	0.13	0.03	0.02	0.16	0.03	0.02	0.13	0.03	0.02	0.16
Left-Right	-0.24	0.00	0.00	-0.23	0.01	0.00	-0.24	0.00	0.00	-0.23	0.01	0.00
Constant	5.24	0.13	0.00	5.27	0.12	0.00	5.24	0.13	0.00	5.27	0.12	0.00
<b>Cross-level Interaction</b>												
COL*CI							0.00	0.01	1.00	0.00	0.01	0.97
<b>Country Level</b>												
Collectivism-Individualism (CI)	-0.02	0.07	0.77	-0.03	0.07	0.62	-0.02	0.07	0.78	-0.03	0.07	0.63
Size of the Government				-0.05	0.02	0.05				-0.05	0.02	0.05
<b>Variance Component</b>												
Variance Slope Individualism	0.01	0.00		0.01	0.00		0.01	0.00		0.01	0.00	
Variance Intercept	0.45	0.12		0.40	0.12		0.45	0.12		0.40	0.12	
Covariance	-0.02	0.02		-0.01	0.02		-0.02	0.02		-0.01	0.02	
<b>Variance Residual</b>	7.01	0.04		6.95	0.04		7.01	0.04		6.95	0.04	

Note:  $N_1$  is the number of level 1 observations and  $N_2$  is the number of level 2 observations.

For “Income Redistribution,” the last responsibility attribution variable, none of the hypotheses about the effects of individualism and collectivism were confirmed. Although the effects of both individualism and collectivism at the individual level are in the expected direction, that is, the former being against and the latter for income redistribution, their  $p$ -values are rather large as Table 9 and 10 illustrate. The  $p$ -value is 0.14 for individualism in Model 4 and the  $p$ -value is 0.13 for collectivism in Model 1 and 3.

As with the case of the ownership question for individualism, this may have to do with the fact that the effects of ideology, all of which are highly statistically significant and large, eclipse the cultural effect. The right are clearly against income redistribution and favor larger income differences as individual incentives. The sizes of the ideology effect are close to -0.24, larger than any other coefficients. Moreover, the absence of clear information about who or what is responsible for this policy may weaken the effects of individualism and collectivism, which exist in the other two responsibility attribution questions that involve “government.” In a sense, the results seem consistent with the clarity of responsibility hypothesis.

Lastly, despite grand mean centering, none of the cross-level interactions are statistically significant, which suggests that the current data do not support the hypothesis that cultural frame and values have synergistic effects. This may have to do with the fact that the inferential properties of cross-level interaction terms are still dubious (Bickel, 2007).

#### 4. DISCUSSION

The empirical analysis attempts to show that individualism and collectivism as cultural frames as well as cultural values matter when it comes to individuals’ attitude toward agency in general and political preference toward the issue related to individual versus government responsibility. A series of multilevel modeling that the analysis draws on to distinguish individual and aggregate level of the cultural effects seems to confirm that this is the case in general. The statistically significant independent effects of individualism and collectivism show up as hypothesized either at one level of analysis or at both.

In addition, the analysis shows that individualism and collectivism register independent effects as cultural values or as cultural frames, in the areas – i.e., government responsibility in basic personal welfare, ownership of business and industry, and income redistribution – where the left-right ideology has been suggested especially powerful. For “Government versus Individual Responsibility” in particular, individualism and collectivism at both levels as well as the ideological self-placement have significant effects on the individual’s attribution preference as hypothesized. An individualist in individualistic cultures who identifies with the ideology of the right is most likely to believe that “people should take more responsibility to provide for themselves.” In addition, for the ownership variable, collectivism at both levels as well as the ideology has independent effects on the individual’s preference as theorized. For example, a collectivist in collectivistic cultures who identifies with the left ideology is most likely to prefer government ownership of business and industry.

This alignment of the effects of culture and political ideology – i.e., individualism with the right and collectivism with the left – suggests a new area in cross-cultural psychological study where both theoretical and empirical relationship between these two constructs should be examined. As the results of this analysis in this paper show, the alignment is noticeable when it comes to economic policy preference. Yet there seem to exist other political

attitudinal objects where the effects of culture and ideology overlap but are underexplored. For example, personal agency has been positively associated with autonomy and self-reliance aspects of individualism, both of which are also consistent with the ideology of the right. According to the Kim and Fording (1998), negative attitude against “social services expansion” belong to the Rightist categories. In fact, the analysis shows that the effects of individualism at both levels and the ideology of the right on the “Freedom of Choice and Control,” an abstract agency variable, are in the same, positive direction while the effects of collectivism at the cultural level and the ideology of the left on the same variable are in the same, negative direction.

There also exists the result that needs further elaboration. The fact that individualism and collectivism as cultural frames do not affect “Fate versus Control” as theorized appears to have to do with the question wordings loaded with religious connotation as opposed to the other agency variable, “Freedom of Choice and Control.” For example, the leading sentence of the item read as “some people believe that individuals can decide their own *destiny*, while others think that it is impossible to escape a *predetermined fate*.” Thus, at the individual level it could sufficiently invoke the question of agency but at the cultural level the relationship might vanish because individualism and collectivism at the national level is not dominated by religious component. Furthermore, when the similar concept is framed in a way that emphasizes individual level values, it might depress the corresponding cultural level effects if there is any. Indeed, the coefficients of individualism and collectivism at the individual level for “Fate versus Control” are larger than those for “Freedom of Choice and Control.”

## APPENDIX

### Dependent Variables

#### Agency

All the five waves of the World Values Survey have the same question that asks “how much freedom of choice and control you feel you have over the way your life turns out” on a scale of 1 (“no choice at all”) to 10 (“a great deal of choice”). This item is used to construct “Freedom of Choice and Control,” the first dependent variable for the agency question. As discussed above, personal versus collective agency has been conceptualized as binary opposite as internal versus external locus of control. Thus, the higher the score for this variable is, the more personal agency a respondent feels to have.

The fifth wave (2005–2007) also has a similar question of agency. It asks to what degree a respondent’s view come closer to either “everything in life is determined by fate” or “people shape their fate themselves” on a 10-point scale. It is used to make “Fate versus Control,” the second dependent variable for the agency question.<sup>5</sup> Similarly as in “Freedom of Choice and Control,” the higher the score for this variable is, the more personal agency a respondent believes to have.

#### Government versus Individual Responsibility

Since the second wave (1989–1993), the World Values Survey has had a battery of items that tap citizens’ attitudes in economic self-reliance issues. In the first part of attribution of responsibility analysis, three items that measure an individual’s preference for government

---

<sup>5</sup> According to Rotter (1996), fate is one of the external controls along with chance, luck, and others.

responsibility in the domain of basic personal welfare, ownership, and income redistribution are selected.

The first dependent variable for responsibility attribution is “Government versus Individual Responsibility.” It is constructed based on the question that asks whether citizens agree with the statement “the government should take more responsibility to ensure that everyone is provided for” or “people should take more responsibility to provide for themselves” on a 10-point scale. The higher the score is, the more a respondent agrees with individual responsibility for the basic personal welfare. In contrast with the agency questions, the item directly invokes who or what is responsible for sustenance – i.e., the government or the individual.

#### **Government versus Private Ownership of Business and Industry**

The second dependent variable for attribution of responsibility is more specific in terms of the area the government is responsible for, ownership of business and industry. “Government versus Private Ownership of Business and Industry” is constructed based on the item that asks respondents whether their views are close to “private ownership of business and industry should be increased” or “government ownership of business and industry should be increased” on a 10-point scale. The more a respondent prefers private ownership, the higher score he or she will mark.

#### **Income Redistribution**

The third dependent variable for attribution of responsibility is also about specific economic policy. Respondents are asked to reveal their preference on the issue of income redistribution – “we need larger income differences as incentives for individual effort” or “incomes should be made more equal” – again on a 10-point scale. The question is used to make the variable “Income Redistribution.” The higher score means a respondent’s view prefers income equality rather than more incentives for individual effort. Although this variable is not as explicit as the ownership variable in terms of who is in charge of this policy, it is included in the analysis of government responsibility because one can reasonably infer that the government is most responsible for the policy through a progressive tax system.

### **Independent Variables**

#### **Level 1: Individual Level**

##### **Individualism**

This is an additive measure that consists of four individualistic cultural values: independence, feeling of responsibility, imagination, and determination and perseverance. It ranges from 0 (least individualistic) to 4 (most individualistic).

##### **Collectivism**

This is an additive measure that consists of four collectivistic cultural values: tolerance and respect for other people, religious faith, unselfishness, and obedience. It ranges from 0 (least collectivistic) to 4 (most collectivistic).

##### **Left-Right**

This is a 10-category measure for ideological self-identification, 1 being left and 10 being right. This variable is included in all the models except for “Fate versus Control,” for which ideology does not seem to be relevant.<sup>6</sup>

---

<sup>6</sup> In fact, the ideology variable was not statistically significant when included in “Fate versus Control.”

**Employed**

This is a dichotomous variable that collapse full time (thirty hours a week or more), part time (less than thirty hours a week), and self-employed into “employed” category while retired/pensioned, housewife not otherwise employed, student, and unemployed into “unemployed.”

**Income**

Income is measured on a 10-point scale, where 1 indicates the lowest income decile and 10 the highest income decile. It measures household income that includes all wages, salaries, pensions and other incomes that come in.

**Education**

Education is a 10 category variable that classifies the groups a respondent belongs to based on the age when he or she completed education.<sup>7</sup>

**Gender**

This is a binary variable that classifies the gender of a respondent.

**Level 2: Country Level****Individualism-Collectivism Ratings at the Country Level (IND-COL)**

This analysis utilizes an independent measure of individualism and collectivism at the country level instead of using the country means of those cultural values at the individual level in order to avoid the problem of serious multicollinearity. It relies primarily on the measure by Suh and his colleagues (1998). They averaged the country level measures by the two leading experts on the cultural frames, Hofstede (1980) and Triandis (1990). As opposed to the corresponding individual level values, this country level variable is considered unidimensional. In other words, the higher the rating of IND-COL, the higher individualistic culture a country has.

**Government size**

Government size is measured by government share of real gross domestic product per capita in % in 2000 Laspeyres constant prices (Penn World Table 6.2).<sup>8</sup> This is an institutional proxy variable that is assumed to represent the degree of collectivism at the macro-level. East Germany is the only country that does not have the measure and is not included in the multilevel analysis.

**Cross-level Interaction**

There is one cross-level interaction variable in the analysis: individualism or collectivism at the individual level (level 1) multiplied by individualism-collectivism at the country level (level 2). The cross-level interaction variable is included in the models to determine whether cultural effects interact to amplify or dampen corresponding cultural values at the individual level beyond the sum of the effects from both levels.

**Article Received: 11-24-2015 Revised: 12-16-2015 Accepted: 12-29-2015**

---

<sup>7</sup> The variable is missing for New Zealand, making the maximum number of level 2 observations thirty in the multilevel models.

<sup>8</sup> East Germany is the only country that does not have the measure and is excluded in Model 2 and Model 4 in the multilevel analyses.

## REFERENCES

- Anderson, Christopher J. 1995. *Blaming the Government: Citizens and the Economy in Five European Democracies*. Armonk, N.Y.: M.E. Sharpe.
- Anderson, Christopher J. 2000. "Economic Voting and Political Context: A Comparative Perspective." *Electoral Studies* 19(2-3):151-70.
- Bandura, Albert. 2006. "Toward a Psychology of Human Agency." *Perspectives on Psychological Science* 1(2):164-80.
- Bickel, Robert. 2007. *Multilevel Analysis for Applied Research: It's Just Regression*. New York: Guilford Press.
- Choi, Incheol, Reeshad Dalal, Chu Kim-Prieto, and Hyekyung Park. 2003. "Culture and Judgement of Causal Relevance." *Journal of Personality and Social Psychology* 84(1):46-59.
- Choi, Incheol, Richard E. Nisbett, and Ara Norenzayan. 1999. "Causal Attribution across Cultures: Variation and Universality." *Psychological Bulletin* 125(1):47-63.
- Feldman, Stanley. 1984. "Economic Self-Interest and the Vote: Evidence and Meaning." *Political Behavior* 6(3):229-51.
- Fincham, Frank D., and Joseph M. Jaspars. 1980. "Attribution of Responsibility: From Man the Scientist to Man as Lawyer." In *Advances in Experimental Social Psychology*, ed. L. Berkowitz and ScienceDirect. New York: Academic Press.
- Gibson, James L., and Amanda Gouws. 1999. "Truth and Reconciliation in South Africa: Attributions of Blame and the Struggle over Apartheid." *The American Political Science Review* 93(3):501-17.
- Hofstede, Geert H. 2001. *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*. 2nd ed. Thousand Oaks, Calif.: Sage Publications.
- Kim, Heemin, and Fording Richard C. 1998. "Voter Ideology in Western Democracies, 1946-1989." *European Journal of Political Research* 33(1):73-97.
- Kinder, Donald R., and Susan T. Fiske. 1986. "Presidents in the Public Mind." In *Jossey-Bass Social and Behavioral Science Series*, ed. M. G. Hermann. San Francisco: Jossey-Bass Publishers.
- Kinder, Donald R., and D. Roderick Kiewiet. 1979. "Economic Discontent and Political Behavior: The Role of Personal Grievances and Collective Economic Judgments in Congressional Voting." *American Journal of Political Science* 23(3):495-527.
- Kramer, Gerald H. 1971. "Short-Term Fluctuations in U.S. Voting Behavior, 1896-1964." *The American Political Science Review* 65(1):131-43.
- Kramer, Gerald H. 1983. "The Ecological Fallacy Revisited: Aggregate- Versus Individual-Level Findings on Economics and Elections, and Sociotropic Voting." *The American Political Science Review* 77(1):92-111.
- Lehman, Darrin R., Chi-yue Chiu, and Mark Schaller. 2004. "Psychology and Culture." *Annual Review of Psychology* 55(1):689-714.
- Lewis-Beck, Michael S., and Mary Stegmaier. 2000. "Economic Determinants of Electoral Outcomes." *Annual Review of Political Science* 3(1):183-219.
- Lukes, Steven. 1973. *Individualism*. Oxford: Blackwell.
- Markus, Gregory B. 2001. "American Individualism Reconsidered." In *Citizens and Politics: Perspectives from Political Psychology*, ed. J. H. Kuklinski. Cambridge; New York:

- Cambridge University Press.
- Markus, Hazel R., and Shinobu Kitayama. 1991. "Culture and the Self: Implications for Cognition, Emotion, and Motivation." *Psychological Review* 98(2):224-53.
- McGraw, Kathleen M. 1991. "Managing Blame: An Experimental Test of the Effects of Political Accounts." *The American Political Science Review* 85(4):1133-57.
- McGraw, Kathleen M. 2001. "Political Accounts and Attribution Processes." In *Citizens and Politics: Perspectives from Political Psychology*, ed. J. H. Kuklinski. Cambridge; New York: Cambridge University Press.
- Menon, Tanya, Michael W. Morris, Chi-yue Chiu, and Ying-yi Hong. 1999. "Culture and the Construal of Agency: Attribution to Individual Versus Group Dispositions." *Journal of Personality and Social Psychology* 76(5):701-17.
- Miller, Joan G. 1984. "Culture and the Development of Everyday Social Explanation." *Journal of Personality and Social Psychology* 46(5):961-78.
- Morris, Michael W., and Kaiping Peng. 1994. "Culture and Cause: American and Chinese Attributions for Social and Physical Events." *Journal of Personality and Social Psychology* 67(6):949-71.
- Nisbett, Richard E. 2003. *The Geography of Thought: How Asians and Westerners Think Differently — and Why*. New York: Free Press.
- Nisbett, Richard E., Kaiping Peng, Incheol Choi, and Ara Norenzayan. 2001. "Culture and Systems of Thought: Holistic Versus Analytic Cognition." *Psychological Review* 108(2):291-310.
- Oyserman, Daphna, Heather M. Coon, and Markus Kimmelmeier. 2002. "Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analyses." *Psychological Bulletin* 128(1):3-72.
- Oyserman, Daphna, and Ayse K. Uskul. 2008. "Individualism and Collectivism: Societal-Level Processes with Implications for Individual-Level and Society-Level Outcomes." In *Multilevel Analysis of Individuals and Cultures*, ed. F. J. R. v. d. Vijver, D. A. v. Hemert and Y. H. Poortinga. New York: Lawrence Erlbaum Associates.
- Powell, G. Bingham, Jr., and Guy D. Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37(2):391-414.
- Rotter, Julian B. 1990. "Internal Versus External Control of Reinforcement: A Case History of a Variable." *American Psychologist* 45(4):489-93.
- Rudolph, Thomas J. 2003. "Who's Responsible for the Economy? The Formation and Consequences of Responsibility Attributions." *American Journal of Political Science* 47(4):698-713.
- Schlenker, Barry R., Thomas W. Britt, John Pennington, Rodolfo Murphy, and Kevin Doherty. 1994. "The Triangle Model of Responsibility." *Psychological Review* 101(4):632-52.
- Schwartz, Shalom H. 1990. "Individualism-Collectivism: Critique and Proposed Refinements." *Journal of Cross-Cultural Psychology* 21(2):139-57.
- Schwartz, Shalom H. 1994. "Beyond Individualism/Collectivism: New Cultural Dimensions of Values." In *Individualism and Collectivism: Theory, Method, and Applications*, ed. U. Kim, H. C. Triandis, Ç. Kâğıtçibasi, S.-C. Choi and G. Yoon. Thousand Oaks, Calif.: Sage Publications.
- Schwartz, Shalom H. 2004. "Mapping and Interpreting Cultural Differences around the World." In *Comparing Cultures: Dimensions of Culture in a Comparative*

- Perspective*, ed. H. Vinken, J. Soeters and P. Ester. Leiden; Boston: Brill.
- Suh, Eunkook, Ed Diener, Shigehiro Oishi, and Harry C. Triandis. 1998. "The Shifting Basis of Life Satisfaction Judgments across Cultures: Emotions Versus Norms." *Journal of Personality and Social Psychology* 74(2):482-93.
- Triandis, Harry C. 1995. *Individualism & Collectivism*. Boulder: Westview Press.
- Waterman, Alan S. 1984. *The Psychology of Individualism*. New York, NY: Praeger.
- Yoon, Kwang-Il. 2010. "Political Culture of Individualism and Collectivism." PhD diss., University of Michigan, Ann Arbor.