

Navigating the Cultural Maze:

Validating the Douglasian Cultural Theory Measures

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Abstract: This study examines the cross-national validity of Cultural Theory (CT) by comparing CT measures developed by Jenkins-Smith *et al.* in Arkansas, USA, and Seoul, South Korea. CT explores how cultural biases shape decision-making, particularly regarding risk perception, environmental attitudes, and political behavior. While CT's main constructs – hierarchy, egalitarianism, individualism, and fatalism – are generally reliable, our findings indicate limitations in cross-cultural consistency. In the Seoul sample, hierarchy lacks consistency, suggesting that some CT constructs may not translate fully outside Western contexts. Our regression analysis shows that CT measures predict political ideology, perceptions of nature's fragility, and environmental concerns more strongly in Arkansas than in Seoul, highlighting cultural variations in CT's applicability. This study underscores the need to refine CT measures to enhance relevance across diverse cultural settings and informs future research on how cultural contexts influence attitudes toward public policy.

Keywords: Cultural Theory (CT), cultural biases, cross-national validity, political behavior

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Introduction

Inherent to public policy research is the desire to understand and predict individual behavior, including how individual actors develop their perceptions of policy issues and how these perceptions are then translated into political behavior. Douglasian Cultural Theory (CT) contributes to this conversation by arguing that how an individual perceives human and physical nature (i.e., how they construct meaning) is dependent upon the specific social relations, values, and beliefs to which they have been continuously exposed. CT furthers that social relations themselves can be classified by the level of autonomy that is held by individuals (known as their “grid” classification) along with the degree to which they view themselves as part of a collective (their “group” classification) (Douglas & Wildavsky, 1983; Mamadouh, 1999; Wildavsky, 1991).

Through this grid-group classification, CT then identifies four distinct patterns of social relations: hierarchism (high group, high grid), egalitarianism (high group, low grid), individualism (low group, low grid), and fatalism (low group, high grid) (Douglas & Wildavsky, 1983; Wildavsky, 1987). Individuals in hierarchical and egalitarian relations view themselves as being part of a collective undertaking (making them rank highly on the “group” dimension), but they differ from one another in that hierarchs have much less autonomy (as their relations rank highly on the “grid” dimension). On the other hand, neither those in individualistic nor fatalistic relations view themselves as part of a collective (with both ranking lowly on the “group” dimension), but unlike fatalists (who rank highly on the “grid” dimension), individualists arguably retain much more of their autonomy.

CT argues that each of these four patterns of social relations are justified by specific values and beliefs (or “biases”) that together form distinct political “cultures” (Schwartz, 1999; Schwarz & Thompson, 1990; Thompson et al., 1990). These four political cultures, or ways of life, thereby specify four distinct ways to approach and make decisions, establish authority, and exercise power (Swedlow, 2014). Hierarchs, for example, value *order* above all else, believing that everyone (and *everything*) has their organizational role, and that one’s position within a specific context determines the legitimacy of their decision-making (Coyle, 1994; Swedlow, 2008). Egalitarians, however, place the highest

value on *equality and fairness*, believing that everyone should have an equal role in decision-making. Individualists are argued to place the greatest value on *libertarian freedom*, or individual choice, which causes their relations to be characterized by power differences within a *laissez-faire* context. Finally, fatalists value *fate and destiny*, believing that relations are both tenuous and unreliable because they are driven by an unseen power that humans cannot control.

However, the efficacy of utilizing CT across cultural contexts (e.g., in different countries with different cultural contexts) has thus far been elusive, despite its proven effectiveness in “Western” (in particular, American) settings. Disagreements exist concerning the way cultural biases should be measured and, as a result, how those measures can be validated. Swedlow *et al.* (2020), for example, assess the construct validity of three common CT survey operationalizations, finding that each lacked the necessary face and content validity. Johnson and Swedlow (2023; 2024) further analyzed the impact of CT survey operationalization on the classification of individuals’ cultural identities, determining that different classification measures yield statistically significant differences in support of cultural biases even when most people are similarly classified.

In this paper, we explore this operationalization issue by investigating the validity of CT in two distinct contexts – the state of Arkansas in the United States and the city of Seoul in the Republic of Korea. Specifically, we examine the internal reliability of Jenkins-Smith *et al.*’s commonly utilized 12-statement CT measure, as well as its convergent validity in each of our two cultural contexts, with the state of Arkansas representing a Western, relatively individualistic, and heterogeneous culture, and the city of Seoul that of an Eastern, more collectivist, and homogeneous culture. Through this multifaceted validation process, we seek to understand the reliability, validity, and predictive power of this specific set of CT measures both in a combined cultural context and within distinct regional settings. Do these measures apply in both cultural contexts? If not, are they more conducive to understanding one cultural context over the other? And further, if differences in the utility of these CT measures exist across these two contexts, how can they be explained?

Cultural Theory and Its Operationalizations

Cultural Theory

Scholars developed Cultural Theory (CT) to explore how cultural attributes shape individuals' interpretations and responses to their sociopolitical environment (Douglas, 1970). This multidimensional framework, rooted in sociology and anthropology, suggests that individuals' cultural backgrounds are indeed crucial predictors of their worldviews, attitudes, and behaviors. Durkheim (1912), for example, argued that shared values and norms, referred to as collective representations, reinforce social bonds and create a sense of collective identity among individuals. Douglas and Wildavsky (1983) later proposed the cultural bias framework, arguing that individuals perceive *risks* in distinct ways based on their underlying cultural orientations. They identified four cultural biases – egalitarianism, individualism, hierarchism, and fatalism – that influence how individuals prioritize and manage risks. Thompson (2000) then expanded this framework to analyze how cultural patterns reflect underlying cultural biases. His work in systems theory sheds light on the interconnectedness of cultural norms and values within sociopolitical systems.

CT has evolved from its earlier foundation in risk perception and social structure, becoming a multidimensional framework that has underpinned various policy frameworks such as the Advocacy Coalition Framework (ACF), Punctuated Equilibrium Theory (PET), Policy Network Analysis (PNA), and the Narrative Policy Framework (NPF). These distinct political cultures, according to CT, lie at the foundation of how individuals both perceive policy issues and determine how to address them. For example, CT has frequently been used to expand upon the ACF's characterization and measurement of deep core beliefs within the ACF (e.g., see Jenkins-Smith et al., 2014; Ripberger et al., 2014); PET's depiction of change within the policy subsystem (Jones & Baumgartner, 2012; Robinson, 2014; Swedlow, 2011); PNA's identification of the cultural basis of policy coalitions (Peck & Perri, 2006; Weare et al., 2014); and the role and impact of narrative form, content, and framing within the NPF (e.g., Galloway et al., 2023; Jones, 2014; Jones & Song, 2014; Zanicco et al., 2018).

CT has also been integrated with social identity theory to illustrate

the interplay between individual and group identities in shaping cultural norms and practices. Tajfel (1982), a foundational scholar of social theory, emphasized the approach by which individuals categorize themselves and others into social groups, creating in-group and out-group distinctions that shape behavior and identity. Building on this, Hall (1997) expanded the discussion by examining the interconnection of power, ideology, and historical context in shaping cultural identity, arguing that social identities are influenced not only by internal perceptions but also by cultural representations and narratives propagated through media. Moreover, another notable perspective emerges from Collins (2000), known for their work on intersectionality. The research examines how cultural, social, and institutional dynamics shape identity, particularly race, gender, and class. This stance ultimately considers how intersecting social identities are influenced by cultural and social systems, offering a complex view of identity within CT.

Aside from theory development, CT measures have also been successfully applied across geographic boundaries and policy domains to understand, explain, and even predict policy development. Applications and topics vary widely, including campaign finance reform (Jorgensen et al., 2018), public companies (Malsch et al., 2012), public health (Siegrist & Bearth, 2021), financial regulation (Lodge & Wegrich, 2011), technology (Kahan et al., 2009), nuclear weapons and terrorism (Ripberger et al., 2011), climate change and adaptation (Jones, 2011; McNeeley & Lazrus, 2014; Rayner & Malone, 1998), firearms (Kahan et al., 2006; Kahan & Braman, 2006), and various environmental, health, and safety risks (e.g., Dimitrijevska-Markoski & Nukpezah, 2023; Halik et al., 2022; Jenkins-Smith et al., 2014; Jones & Song, 2014; McNeeley & Lazrus, 2014; Moyer & Song, 2016; Ripberger et al., 2014; Song, 2014; Song et al., 2014; Tumilson & Song, 2019). It has also been applied to organizational settings, such as diversity management (Ney & Verweij, 2014). In particular, it has been utilized in the study of environmental attitudes (Horndeski & Koontz, 2020; Jones, 2014). By leveraging the types of cultural biases identified in CT, previous studies have delved into why certain individuals or groups may be more or less supportive of environment protection efforts. These previous efforts have established a CT framework that provides a valuable lens through which scholars can analyze how individuals' cultural orientations shape their perceptions

of the environment and influence their attitudes toward environmental policies and interventions.

Despite its wide-ranging applications, however, critics raise questions about the generalizability of CT's cultural biases and the potential for oversimplification (Johnson et al., 2020; Johnson & Swedlow, 2021; Ripberger et al., 2014; Swedlow et al., 2020). Some argue that CT's application across diverse cultural contexts may overlook the nuances and variations within cultures, leading to oversimplified categorizations. Little is also known about the extent to which these biases can be universally applied, which requires cross-context validation of cultural bias measures within the CT (Baker, 2017; Brenot et al., 1998, Milner & Browitt, 2002; Yuan & Swedlow, 2022). Despite a growing interest in cultural differences and similarities across countries, however, few studies have analyzed related cross-cultural differences in attitudes, beliefs, and behaviors.

Operationalizations of Cultural Theory in Survey Research

Following the development of Cultural Theory (CT) as an approach tailored not only to anthropology, but to public policy, researchers were quick to adapt it across settings and applications as wide-ranging as African institutional variables and European risk perception (Douglas 1966; Thompson et al., 1990; Grendstad, 1999). As CT scholarship expanded, the need for consistent measurement of its main tenet – the distinction between cultural worldviews – became clear. Developed by Jenkins-Smith *et al.* (1994), one of the most popular approaches for measuring CT worldviews centers on the use of cultural statements in a survey context. Based in part on the previous work of Wildavsky and Dake (1990), the measure consists of a question battery wherein three cultural statements are prescribed per CT worldview (i.e., egalitarianism, individualism, hierarchism, fatalism), with respondents being asked to indicate their agreement or disagreement on a Likert scale from 1 (strongly disagree) to 7 (strongly agree) (see Table 1). This metric has been employed in a vast array of scholarship running the gamut of public policy and political science research (Song et al., 2014; Jones & Song, 2014; Zanicco et al., 2018; Galloway et al., 2023).

Several other approaches to operationalizing CT in survey research

exist in addition to the Jenkins-Smith *et al.*'s approach, such as the worldview measures of Dake and Wildavsky (Dake & Wildavsky, 1991; Dake, 1991; Dake, 1992), the "cultural cognition" measures of Kahan and his collaborators (Kahan & Braman, 2006; Kahan *et al.*, 2010), and the "relational grid-group" measures of Ripberger, Swedlow, and others (Swedlow *et al.*, 2014). However, the Jenkins-Smith *et al.*'s metrics have seen extensive application and have performed positively, both overall and in comparison to these other approaches, when tested for overall and specific subtypes of validity (Swedlow *et al.*, 2014).

Some of the most critical aspects of our analysis tie back into the use of CT measures to predict or discuss the concepts of the perceived fragility of nature, environmental concern, and political ideology. Each of these key measures has seen significant discussion and adaptation within the broader framework of CT scholarship. Resultantly, each of the four CT worldviews has a specific outlook on nature and its resiliency. Egalitarian-aligned individuals emphasize caution in human intervention in the natural world and tend to view nature as fragile. Individualist-aligned individuals tend towards the opposite end of the spectrum, believing in the durability of the natural world, and its capacity to recover from anthropogenic shocks. Hierarch-aligned individuals place their faith in social and institutional structures and associated experts to control and provide positive outcomes from environmental interventions, and fatalist-aligned individuals tend to view nature as unpredictable, uncontrollable, and untrustworthy (Galloway *et al.*, 2023; Jones & Song, 2014; Thompson, 2000).

Similarly, the relationship between CT worldviews and political ideology has been explored in detail over the past several decades. While acknowledging some dissenting opinions (e.g., Michaud, 2009), most research has indicated the capacity for CT to contribute to a deeper understanding of ideological alignments (Ripberger *et al.*, 2012; Jackson, 2011). Gastil *et al.* (2011) indicate, for example, that egalitarianism is both negatively and significantly correlated with conservatism. While political ideology, particularly in the American two-party system context, falls along a single dimension of competition and choice, CT worldviews can expand our understanding of motivations that are more nuanced by explaining a deeper level of individual motivations (Ripberger *et al.*, 2012). Essentially, while egalitarian-leaning individuals traditionally

align more so with liberal, Democratic Party values, and individualist-leaning individuals tend to align more so with conservative, Republican Party values, the increasing ideological consistency (especially in the American setting) is not mirrored within these worldviews or in the broader setting of CT, as hierarchs in particular are often described as one of the key groups alternating between support of liberal and conservative policies (Ripberger et al., 2012).

Finally, environmental concern (alternatively interpreted as environmental or climate change risk perception) is another concept often explored in CT research (Galloway et al., 2023; Tumilson & Song, 2019; Johnson & Swedlow, 2019; Zanoocco et al., 2018; Kiss et al., 2020). Specific literature on the environmental aspects of risk perception indicate that egalitarian-leaning individuals perceive relatively high levels of environmental risk when compared to individualist and hierarchy-leaning individuals (Xue et al., 2014). Fatalists, both broadly and in the context of environmental risk perception, tend to perceive even less risk due to both their external locus of control and their relatively high level of disengagement. Due to the connection between levels of environmental concern and behavioral intention (i.e., policy support), existing CT research strongly connects these risk perceptions to policy preferences as well (Saari et al., 2021; Xue et al., 2014).

Data, Variables, and Methods

Survey Data

Data for our analysis was compiled from two surveys: the Korea Environmental Policy Survey and the Arkansas Energy Policy Survey. We collected both data by administering an online survey through Qualtrics. Qualtrics allowed us to obtain a general public sample that closely aligns with the demographic characteristics of the broader population, including factors such as race, gender, age, and education. By matching these demographics, we tried to enhance the representativeness and generalizability of our findings. The Arkansas survey, fielded by Qualtrics survey research team between December 17, 2015 and January 4, 2016, asked questions regarding attitudes and preferences toward natural resources, energy, and related government policies within the

state ($n=558$). The South Korean survey, also administered by Qualtrics survey research team between July 18, 2019 and August 23, 2019, asked similar questions regarding attitudes and preferences towards various environmental issues and related national government policies. Following the second collection of survey responses, we created a subsample ($n=1,374$) focusing on participants located in the city of Seoul for further analysis.

Utilizing data from both the Korea Environmental Policy Survey and the Arkansas Energy Policy Survey allowed for the implementation of a comparative analysis of how CT measures operate within distinct cultural contexts.

Analytical Strategies

Our analysis proceeds in three steps using a three-sample approach that allows us to assess the reliability, validity, and predictive power of CT measures both in a combined cultural context and within distinct regional settings, providing a comprehensive understanding of how these measures work. We start conducting our analysis with a merged dataset comprising responses from both the Arkansas and Seoul samples; next, we focus on the Arkansas sample independently; and finally, we analyze the Seoul sample separately.

Step one: An internal consistency analysis was conducted to assess the reliability of the CT measures, beginning with the merged dataset. Cronbach's alpha coefficients were computed separately for each of the four cultural bias scales (egalitarianism, individualism, hierarchism, and fatalism). Afterward, the same analysis was performed for the Arkansas sample and then for the Seoul sample, allowing for comparisons of reliability within each dataset.

Step two: Principal Component Analysis (PCA) was utilized to uncover latent factors within the CT measures. This analysis was first applied to the merged dataset to identify the factor structure across both cultural contexts. A 4-factor solution was chosen, consistent with the CT framework that proposes four distinct cultural biases: egalitarianism, individualism, hierarchism, and fatalism. PCA was then conducted separately for the Arkansas sample and the Seoul sample to explore whether the factor structure held independently within each regional

context.

Step three: Regression analysis was performed to examine the relationships between cultural orientations and our dependent variables: political ideology, perceived nature fragility, and environmental concern. Regression models were first estimated using the merged sample, incorporating control variables such as age, gender, income level, and education level to account for potential confounding effects. Separate regression analyses were then conducted for the Arkansas sample and the Seoul sample, enabling us to isolate the effects of cultural orientations on the dependent variables within each distinct setting.

Variables and Measures

Independent variables

Following the traditional CT operationalization method developed by Jenkins-Smith *et al.* (1994), participants were presented with twelve statements, three corresponding to each of the four cultural worldviews (egalitarianism, individualism, hierarchism, and fatalism). These statements were designed to capture participants' societal values and beliefs, with responses recorded on a 7-point Likert scale, where "1" indicated "strongly disagree" and "7" indicated "strongly agree." To reduce potential response bias, the statements were presented in random order (see Table 1). Responses to these twelve statements were then subjected to factor analysis to verify the underlying structure of the four cultural biases. The resulting factor loadings provided a basis for constructing the primary independent variables representing each cultural worldview (egalitarianism, individualism, hierarchism, and fatalism).

The factor scores extracted from this factor analysis, representing each cultural worldview, were then later used as primary independent variables in the regression analysis, which aimed to explore their relationship with our key dependent variables.

Dependent and control variables

Our dependent variables included political ideology, perceived fragility of nature, and environmental concern, which were identically collected across both survey datasets. For ideology, participants were asked to self-identify their political ideology on a 7-point Likert scale

Table 1. Jenkins-Smith *et al.*'s Cultural Theory Measures

Egalitarianism	<i>Egalitarianism 1:</i> Society works best if power is shared equally.
	<i>Egalitarianism 2:</i> It is our responsibility to reduce differences in income between the rich and the poor.
	<i>Egalitarianism 3:</i> What society needs is a fairness revolution to make the distribution of goods more equal.
Individualism	<i>Individualism 1:</i> We are all better off when we compete as individuals.
	<i>Individualism 2:</i> Even the disadvantaged should have to make their own way in the world.
	<i>Individualism 3:</i> Even if some people are at a disadvantage, it is best for society to let people succeed or fail on their own.
Hierarchism	<i>Hierarchism 1:</i> Society is in trouble because people do not obey those in authority.
	<i>Hierarchism 2:</i> The best way to get ahead in life is to do what you are told to do to the best of your abilities.
	<i>Hierarchism 3:</i> Society would be much better off if we imposed strict and swift punishment on those who break the rules.
Fatalism	<i>Fatalism 1:</i> For the most part, succeeding in life is a matter of chance.
	<i>Fatalism 2:</i> No matter how hard we try, the course of our lives is largely determined by forces beyond our control.
	<i>Fatalism 3:</i> Most of the important things that take place in life happen by random chance.

ranging. Respondents were presented with seven options, labeled from one to seven, with “1” indicating “strongly liberal” and “7” indicating “strongly conservative.” In the perceived fragility of nature question, participants were asked to assess their perception of the resilience of nature on a scale from zero to ten, with “0” indicating the belief that “nature is robust and not easily damaged”, and “10” indicating the perception that “nature is fragile and easily damaged”. For the environmental concern question, participants were asked to rate their level of concern regarding the quality and stability of the environment on a scale from zero to ten, where “0” indicated “no concern at all” and “10” indicated “extreme concern.” We further controlled for several key demographic variables that could potentially confound the relationships between cultural worldviews and the dependent variables. These control variables included age, gender, income level, and education level.

Empirical Findings

Step One: Internal Consistency

For the merged dataset, the reliability analysis presented moderate reliability in the scales of egalitarianism ($\alpha=0.69$), individualism ($\alpha=0.69$), and fatalism ($\alpha=0.69$), but relatively weak internal consistency in the hierarchism scale ($\alpha=0.48$). In the Arkansas sample, the reliability analysis revealed good internal consistency in the egalitarianism ($\alpha=0.76$) and fatalism ($\alpha=0.74$) scales and moderate internal consistency in the scales of individualism ($\alpha=0.68$) and hierarchism ($\alpha=0.68$). The reliability analysis for the Seoul sample showed moderate internal consistency in the scales of egalitarianism ($\alpha=0.67$), individualism ($\alpha=0.69$), and fatalism ($\alpha=0.64$), similar to what we observed in the Arkansan sample. However, the reliability analysis on the hierarchism scale revealed weak internal consistency, with an associated Cronbach's alpha coefficient of 0.36.

When comparing the reliability analyses across the three samples, a few key differences emerge. In the merged sample, the egalitarianism scale demonstrated only moderate internal consistency ($\alpha=0.69$), aligning more closely with the Seoul rather than Arkansas findings. In the Arkansas sample, the egalitarianism scale demonstrated good internal consistency ($\alpha=0.76$), while it exhibited moderate internal consistency ($\alpha=0.67$) in the Seoul sample. A similar pattern was observed for the fatalism scale, with alpha coefficients being equal to 0.69, 0.74, and 0.64 in the merged, Arkansas, and Seoul samples, respectively. For individualism, all samples displayed moderate internal consistency (with alpha coefficients of 0.69, 0.68, and 0.69, respectively).

Out of the four scales, hierarchism showed the most substantial variability across the samples. In the Arkansas sample, it displayed a Cronbach's alpha coefficient of 0.68, indicating moderate internal consistency, while the Seoul sample yielded a considerably lower coefficient of 0.36, suggesting weak internal consistency. The merged sample fell between these two extremes, with a Cronbach's alpha coefficient of 0.48, though it still indicated an overall weak internal consistency.

Step Two: Principal Component Analysis

The PCA for the merged sample identified four principal components (RC1–RC4), which collectively explained 83% of the variance in survey responses, indicating a strong representation of the underlying data structure. The model fit was robust, with an RMSR of 0.09 and a chi-square value of 1919.06 ($p < 0.001$). In the Arkansas sample, the four components explained 77% of the total variance, capturing the key patterns in the data (RMSR = 0.08, $\chi^2 = 455.25$, $p < 3.1\text{e-}81$). For the Seoul sample, the four-component solution accounted for 83% of the variance, with a solid model fit (RMSR = 0.08, $\chi^2 = 1522.97$, $p < 2.5\text{e-}307$). Across all samples, the four-factor solution adequately explained the observed patterns in the data (see Table 2), except for the hierarchism1 measure not performing well in the merged and Seoul samples. Based on the overall factor solutions, four cultural worldview variables (egalitarianism, individualism, hierarchism, and fatalism) were created to represent the principal components across all samples, allowing us to proceed to the final step of our analysis. Although the chi-square tests indicated statistically significant differences, this result is likely due to the

Table 2. Principal Components Analysis Results

Variables	Merged Sample				Arkansas Sample				Seoul Sample			
	RC2	RC1	RC3	RC4	RC1	RC4	RC2	RC3	RC2	RC1	RC4	RC3
Egalitarianism 1	0.01	0.74	0.06	0.22	0.04	0.83	0.06	0.02	0.10	0.76	0.11	0.13
Egalitarianism 2	-0.25	0.57	0.23	0.43	0.15	0.75	-0.22	0.00	-0.02	0.71	0.13	0.34
Egalitarianism 3	-0.02	0.83	0.21	-0.08	0.19	0.82	-0.22	0.11	0.00	0.73	0.31	-0.25
Individualism 1	0.58	-0.13	0.12	0.34	0.07	-0.08	0.66	0.05	0.71	0.00	0.13	0.19
Individualism 2	0.72	-0.04	0.12	0.16	0.08	-0.08	0.77	0.15	0.75	0.04	0.11	-0.02
Individualism 3	0.81	-0.06	0.04	0.03	-0.01	-0.14	0.82	0.18	0.76	-0.05	0.17	-0.13
Hierarchism 1	0.58	0.47	0.04	-0.14	0.09	-0.03	0.08	0.83	0.42	0.44	0.20	-0.46
Hierarchism 2	0.44	0.17	0.08	0.56	0.31	0.08	0.13	0.69	0.66	0.28	-0.16	0.29
Hierarchism 3	0.12	0.07	0.04	0.77	-0.11	0.08	0.17	0.75	0.18	0.18	0.16	0.80
Fatalism 1	0.02	0.07	0.83	0.04	0.82	0.08	0.06	0.00	0.00	0.10	0.80	0.04
Fatalism 2	0.15	0.29	0.70	-0.10	0.78	0.12	-0.09	0.15	0.13	0.22	0.72	-0.10
Fatalism 3	0.12	0.06	0.75	0.24	0.77	0.15	0.19	0.07	0.21	0.15	0.62	0.21

large sample size, and the low RMSR values suggest that the model fit is adequate for capturing the main structure of the data.

Step Three: Regression Analysis

Our final stage of analysis involved six regression models for the merged sample: three without interaction terms (Models 1.1, 2.1, and 3.1) and three with a created interaction term “location” used to represent our two geographical locations sampled: Seoul and Arkansas (Models 1.2, 2.2, and 3.2) (see Table 3).

Non-Interaction Models

In Model 1.1, the results indicate that egalitarianism has a statistically significant positive effect on the dependent variable (coefficient = 0.372, $p < 0.001$), suggesting that individuals with stronger egalitarian beliefs are more likely to exhibit the outcome measured in this model (more strongly believe that nature is fragile). Individualism, on the other hand, has a significant negative effect (coefficient = -0.149, $p = 0.005$), indicating that higher individualistic values are associated with lower levels of the outcome (more strongly believe that nature is resilient). Additionally, hierarchism shows a significant positive effect (coefficient = 0.220, $p < 0.001$), reflecting its association with the dependent variable. Notably, fatalism does not have a significant effect in this model, and demographic control variables such as age, gender, education, and income also exhibit significant relationships with the dependent variable.

In Model 2.1, egalitarianism continues to show a strong positive influence on the dependent variable (coefficient = 0.484, $p < 0.001$), further supporting the idea that egalitarian beliefs play a crucial role in shaping attitudes or behaviors related to the outcome. Specifically, those who score highly on the egalitarian orientation were more likely to have a high concern for the current state of the environment. Hierarchism also demonstrates a significant positive effect (coefficient = 0.377, $p < 0.001$), emphasizing the relationship between those who score highly on this orientation and a higher concern for the stability of the environment and thereby reinforcing its importance in this context. In contrast, both individualism and fatalism do not have significant effects in this model. Among the control variables, age (coefficient = 0.025, $p < 0.001$), gender

(coefficient = -0.334, $p = 0.001$), and education (coefficient = 0.112, $p = 0.002$) all show significant associations with the outcome, while income is not significant.

In Model 3.1, individualism stands out with a significant positive effect on ideological orientation (coefficient = 0.340, $p < 0.001$), indicating that more individualistic individuals tend to have higher levels of ideological commitment or orientation. Conversely, egalitarianism has a significant negative effect on ideology (coefficient = -0.225, $p < 0.001$), suggesting that more egalitarian individuals lean toward less rigid ideological positions. Neither hierarchism nor fatalism exhibit significant effects in this model. Among the control variables, age (coefficient = 0.007, $p < 0.001$) and income (coefficient = -0.032, $p < 0.001$) are significant predictors, showing that older individuals and those with lower incomes are more likely to adopt specific ideological orientations.

Interaction Models

In Model 1.2, egalitarianism maintains a strong positive effect on respondents' perceptions of the fragility of nature (coefficient = 0.581, $p < 0.001$), and individualism retains its negative association (coefficient = -0.269, $p = 0.002$). However, the interaction between our location variable (Arkansas (=0) vs. Seoul (=1)) and egalitarianism is significant (coefficient = -0.400, $p = 0.0004$), suggesting that the positive influence of egalitarianism is weaker in Seoul compared to Arkansas. Similarly, the interaction between location and individualism is significant (coefficient = 0.230, $p = 0.039$), indicating that individualism's negative effect on the dependent variable is less pronounced in Seoul. Among the control variables, age (coefficient = 0.008, $p = 0.041$) and gender (coefficient = -0.194, $p = 0.062$) approach significance, reinforcing their relevance in this model.

In Model 2.2, egalitarianism has an even stronger positive effect on respondents' level of concern for the state of the environment (coefficient = 0.793, $p < 0.001$), demonstrating its robust influence across locations. Individualism continues to show a negative association (coefficient = -0.177, $p = 0.029$). Interaction terms for location with egalitarianism, individualism, and hierarchism are all significant, indicating that the effects of these cultural orientations differ significantly between Arkansas and Seoul. Control variables such as age (coefficient = 0.023, $p <$

0.001) and gender (coefficient = -0.315, $p = 0.001$) remain significant, underscoring their impact on the dependent variable.

In Model 3.2, individualism displays a strong positive effect on ideological orientation (coefficient = 0.443, $p < 0.001$), while egalitarianism continues to exhibit a negative effect (coefficient = -0.300, $p < 0.001$). The interaction between location and individualism, hierarchism, and fatalism highlights that these cultural orientations influence ideological positions differently depending on whether the individual is from Arkansas or Seoul. Specifically, individualism has a more pronounced positive effect on ideology in Arkansas, while hierarchism and fatalism show context-dependent effects. Demographic variables like age and income also play a significant role in this model, contributing to the variations in ideological orientations.

We continued our analysis using three regression models with the same dependent variables that we ran separately for the Arkansas and the Seoul samples. Table 4 presents the results of regression analysis, using the Arkansan sample, to examine the relationship between cultural biases and individuals' perceptions on: nature fragility (Model 4), environmental concern (Model 5), and ideology (Model 6). In Model 4, egalitarianism shows a statistically significant positive coefficient of 0.640 ($p < 0.01$). Conversely, individualism demonstrates a statistically significant negative coefficient of -0.375 ($p < 0.01$). However, hierarchism and fatalism do not show statistically significant associations with perceptions of nature. In Model 5, egalitarianism continues to exhibit a significant positive coefficient of 0.810 ($p < 0.01$), and individualism shows a significant negative coefficient of -0.364 ($p < 0.01$). Similar to Model 4, hierarchism and fatalism do not demonstrate significant influence on the dependent variable. In Model 6, contrary to the findings in previous models, egalitarianism displays a significant negative coefficient of -0.528 ($p < 0.01$), whilst individualism exhibits a significant positive coefficient of 0.387 ($p < 0.01$). Additionally, hierarchism shows a significant positive coefficient of 0.402 ($p < 0.01$), and fatalism demonstrates a statistically significant negative coefficient of -0.124 ($p < 0.1$).

Finally, Table 5 presents the results of the regression analysis using the same model specification as in Table 4 but applied to the Seoul sample. In Model 7, noteworthy coefficients for the CT variables are observed for both egalitarianism (0.221, $p < 0.01$) and hierarchism

Table 3. Merged Sample – Regression Results

	Dependent variables					
	<i>“Perceived nature fragility”</i>		<i>“Environmental concern”</i>		<i>“Ideology”</i>	
	Model 1.1	Model 1.2	Model 2.1	Model 2.2	Model 3.1	Model 3.2
Egalitarianism	0.372*** (0.053)	0.581*** (0.090)	0.484*** (0.048)	0.793*** (0.082)	-0.225*** (0.028)	-0.300*** (0.048)
Individualism	-0.149*** (0.053)	-0.269*** (0.089)	-0.069 (0.048)	-0.177** (0.081)	0.340*** (0.028)	0.443*** (0.047)
Hierarchism	0.220*** (0.054)	-0.008 (0.112)	0.377*** (0.050)	-0.021 (0.102)	-0.025 (0.029)	0.149** (0.060)
Fatalism	0.043 (0.053)	0.116 (0.081)	-0.025 (0.048)	0.100 (0.074)	-0.110*** (0.028)	-0.126*** (0.043)
Age	0.011*** (0.004)	0.008** (0.004)	0.025*** (0.003)	0.023*** (0.003)	0.007*** (0.002)	0.004** (0.002)
Gender	-0.220** (0.105)	-0.194* (0.104)	-0.334*** (0.096)	-0.315*** (0.095)	0.104* (0.057)	0.131** (0.056)
Education	0.052 (0.039)	0.013 (0.040)	0.112*** (0.036)	0.089** (0.037)	0.012 (0.021)	-0.023 (0.021)
Income	-0.036** (0.014)	0.004 (0.016)	0.013 (0.013)	0.041*** (0.015)	-0.032*** (0.008)	0.001 (0.009)
Location (Arkansas vs. Seoul (=1))		-0.661*** (0.160)		-0.393*** (0.146)		-0.595*** (0.086)
Location x Egalitarianism		-0.400*** (0.113)		-0.535*** (0.103)		0.110* (0.060)
Location x Individualism		0.230** (0.112)		0.261** (0.102)		-0.238*** (0.060)
Location x Hierarchism		0.370*** (0.128)		0.570*** (0.116)		-0.186*** (0.068)
Location x Fatalism		-0.015 (0.108)		-0.132 (0.098)		0.112* (0.057)
Constant	7.143*** (0.241)	7.523*** (0.274)	7.107*** (0.220)	7.254*** (0.249)	3.707*** (0.129)	4.115*** (0.146)
Observations	1,930	1,930	1,930	1,930	1,930	1,930
Adjusted R ²	0.047	0.073	0.118	0.154	0.125	0.159
F Statistic	12.768***	12.616***	33.301***	27.951***	35.429***	29.106***

Note: *p<0.1; **p<0.05; ***p<0.01

Table 4. Arkansas Sample – Regression Results

	Dependent variables		
	<i>“Perceived nature fragility”</i>	<i>“Environmental concern”</i>	<i>“Ideology”</i>
	Model 4	Model 5	Model 6
Egalitarianism	0.640*** (0.103)	0.810*** (0.102)	-0.528*** (0.063)
Individualism	-0.375*** (0.102)	-0.364*** (0.101)	0.387*** (0.063)
Hierarchism	-0.027 (0.103)	0.130 (0.102)	0.402*** (0.063)
Fatalism	0.065 (0.103)	0.042 (0.102)	-0.124* (0.064)
Age	-0.001 (0.006)	0.013** (0.006)	0.006 (0.004)
Gender	-0.833*** (0.203)	-0.396* (0.202)	0.327*** (0.125)
Education	-0.049 (0.080)	-0.051 (0.079)	-0.065 (0.049)
Income	0.006 (0.067)	0.024 (0.066)	-0.028 (0.041)
Constant	9.110*** (0.506)	8.535*** (0.503)	3.979*** (0.312)
Observations	558	558	556
Adjusted R ²	0.119	0.134	0.228
F Statistic	10.362***	11.801***	21.526***

Note: *p<0.1; **p<0.05; ***p<0.01

(0.328, $p < 0.01$). In Model 8, significant coefficients are observed for egalitarianism (0.322, $p < 0.01$), individualism (0.210, $p < 0.01$), and hierarchism (0.439, $p < 0.01$). Model 9 revealed significant coefficients for egalitarianism (-0.167, $p < 0.01$), individualism (0.172, $p < 0.01$), and hierarchism (-0.052, $p < 0.1$).

Table 5. Seoul Sample – Regression Results

	Dependent variables		
	<i>“Perceived nature fragility”</i>	<i>“Environmental concern”</i>	<i>“Ideology”</i>
	Model 7	Model 8	Model 9
Egalitarianism	0.221*** (0.060)	0.322*** (0.052)	-0.167*** (0.029)
Individualism	0.044 (0.061)	0.210*** (0.053)	0.172*** (0.030)
Hierarchism	0.328*** (0.060)	0.439*** (0.052)	-0.052* (0.029)
Fatalism	0.083 (0.060)	-0.061 (0.052)	-0.016 (0.029)
Age	0.010** (0.005)	0.027*** (0.004)	0.003 (0.002)
Gender	0.042 (0.121)	-0.319*** (0.106)	0.078 (0.059)
Education	0.031 (0.047)	0.138*** (0.041)	0.004 (0.023)
Income	0.004 (0.017)	0.037** (0.015)	0.0005 (0.008)
Constant	6.425*** (0.270)	6.653*** (0.235)	3.558*** (0.131)
Observations	1,374	1,374	1,374
Adjusted R ²	0.034	0.151	0.050
F Statistic	7.120***	31.595***	10.118***

Note: *p<0.1; **p<0.05; ***p<0.01

Discussion

This analysis examines the nuances of the validity of CT measurement in a cross-national setting. In doing so, we examine and compare the internal consistency of measurement of cultural worldviews, the factor structure of our CT measures, as well as the relationships between these worldviews and three different dependent variables in a sample from the United States (i.e., Arkansas) and South Korea (i.e.,

Seoul). Broadly, the findings indicate that 1) the CT measures utilized are, for the most part, reliable across both samples and 2) there are meaningful distinctions between the two samples in terms of both the CT measurements internal operations (i.e., internal consistency and factor loadings) and their relationships with the three dependent variables used in our analyses.

In step one of our analysis, we examined the internal consistency of our CT measures in our full (merged) sample, as well as in our Arkansas and Seoul samples separately. In examining the merged sample, all CT scales demonstrated a fairly high level of internal reliability except for the hierarchism scale, which demonstrated weak internal consistency. In examining the Arkansas sample, Cronbach's alpha scores indicate that the sub-scales to measure each of the four cultural worldviews are all sufficiently internally consistent, including the hierarchism sub-scale. In the Seoul sample we found generally similar patterns in terms of internal consistency of the four CT sub-scales, with the exception of the hierarchism sub-scale in the Seoul sample being found to be internally inconsistent.

Importantly, for the egalitarianism, individualism, and fatalism sub-scales, internal consistency results were similar across all three samples (merged, Arkansas, Seoul), with the Arkansas sample having the highest Cronbach's alpha scores and the Seoul sample having slightly lower scores for the egalitarianism and fatalism sub-scales while the individualism sub-scale's Cronbach alpha scores were virtually identical across the three samples. For the hierarchism sub-scale, the Arkansas sample had an acceptable level of internal consistency whereas the merged and Seoul samples demonstrated a low level of internal consistency. Together, these results demonstrate that the egalitarianism, individualism, and fatalism sub-scales of our CT measure are valid across cultural contexts in terms of internal consistency, whereas the hierarchism sub-scale only demonstrates acceptable levels of internal consistency in the Arkansas (Western) context.

In step two of our analysis, we utilized Principal Component Analysis (PCA) to examine the factor structure of our CT measures in each of our three samples. In each of our three samples (merged, Arkansas, Seoul) the factor analysis identified four principal components, with the four-factor solution adequately explaining the data. In the

merged sample, the egalitarianism, individualism, and fatalism factors all had “clean” loadings, with no items for any of these factors cross-loading onto any other factors. However, the hierarchism factor had one item (hierarchism1) that loaded more strongly onto the individualism and egalitarianism factor than the hierarchism factor. In the Arkansas sample, all four factors (egalitarianism, individualism, hierarchism, fatalism) had clean item loadings, with no items cross-loading onto any other factors. The Seoul sample operated similarly to the merged sample, with the egalitarianism, individualism, and fatalism factors loading cleanly (i.e., no meaningful cross-loadings of items). However, the hierarchism factor was “messy” with item one in the hierarchism factor being negatively loaded onto the hierarchism factor as well as cross-loading onto the egalitarianism and individualism factors. Further, the second item in the hierarchism factor loaded most strongly onto the individualism factor (see Table 2). This indicates that the sub-scales representing the factors of egalitarianism, individualism, and fatalism largely operate similarly, and as intended, across cultural contexts whereas our measurement of hierarchism works in the Arkansas (Western) context but not in the Seoul (non-Western) context.

In step three of our analysis, we conducted a series of regressions to examine the relationships between our CT variables and three dependent variables – ideology, perceived nature fragility, and environmental concern – to examine the convergent validity of our CT measures. In the merged sample, egalitarianism demonstrated a statistically significant relationship with all three dependent variables, whereas individualism demonstrated a statistically significant relationship with our perceived nature fragility and ideology variables. Hierarchism was statistically significant in predicting the perceived nature fragility and environmental concern variables while fatalism was only statistically significant in predicting the ideology variable (see Table 3). When we added an interaction term to our models for each of the four cultural values measures and the location (i.e., Arkansas vs Seoul), we found that the CT measures broadly have different impacts on our dependent variables based on the sample (see Table 3).

We next examined these same regression models separately for our Arkansas and Seoul samples (see Table 4 and Table 5). In the Arkansas sample, egalitarianism and individualism was statistically significant

in predicting all three of our dependent variables, whereas hierarchism was only statistically significant in predicting our ideology variable and fatalism did not reach statistical significance for any of the dependent variables. In the Seoul sample, egalitarianism was statistically significant in predicting all three dependent variables, similar to the Arkansas sample. Individualism was statistically significant in predicting environmental concern and ideology, similar to the Arkansas sample, however, unlike in the Arkansas sample, individualism was not a statistically significant predictor of perceived nature's fragility. Hierarchism in the Seoul sample functioned almost perfectly opposite compared to the Arkansas sample in terms of statistical significance, with hierarchism in the Seoul sample being statistically significant in predicting perceived nature fragility and environmental concern, but only approaching statistical significance in predicting ideology.

Importantly, the estimated effects of our CT measures were almost universally larger in the Arkansas sample as compared to the Seoul sample. Together, these results further demonstrate that the main distinction in the utilization of CT across cultural contexts is driven by the hierarchism sub-scale. This finding is particularly relevant and important as hierarchism was the only sub-scale of the cultural theory measures that did not have clean factor loadings, yet the hierarchism factor score maintains significant predictive power, albeit differently between the two samples.

Another important distinction between the two samples derived from our regression analysis can be found in the overall explanatory power of the models between the two samples. As seen in Tables 4 and 5, the Adjusted R² was approximately four times higher in the Arkansas sample as compared to the Seoul sample in predicting our perceived nature fragility and ideology variables, but approximately equal in predicting our environmental concern variable, indicating that not only are the overall patterns of relationships different between the two samples, but the extent to which the cultural theory measures explain variation in other variables may also be somewhat culturally bound.

Conclusion

These findings have several implications for Cultural Theory and/or its measurement and understandings across cultural contexts. The current study indicates that further work is needed to examine whether the disparities found between the two broader cultural contexts (i.e. United States vs. the Republic of Korea) in the current results represent an issue with 1) the generalizability of Cultural Theory itself across cultural contexts, particularly non-Western cultural contexts, or 2) the *measurement* of Cultural Theory concepts across cultures. While not examined currently, the findings here also raise questions about the utilization of CT and/or its measurement *within* cultural contexts as well. For example, in geographically large countries such as the United States there can be meaningful cultural differences between different regions of the country.

Considering the first question of the generalizability of Cultural Theory itself, the current analyses indicate that, while there are differences in the operation of our CT measures between the western and non-western contexts, CT remains efficacious across contexts as results between the Arkansas and Seoul samples were largely similar despite demonstrating some meaningful differences in our analyses. However, the distinctions between the two contexts do suggest some further theoretical development of CT would be beneficial in order to better situate the role of cultural value predispositions at the individual level within the cultural context that individuals find themselves. Addressing the second question regarding the measurement of CT across cultural contexts, our analyses indicate that how CT should be measured may be at least somewhat dependent on the broader cultural environment respondents exist in.

In our analyses, the consistent distinction between the Arkansas and Seoul samples revolved around the hierarchism sub-scale. In the Arkansas (Western) sample, the hierarchism sub-scale items loaded cleanly onto the appropriate factor without cross-loadings, whereas in the Seoul sample (non-Western), the factor loadings were not clean. The fact that the greatest distinctions between the datasets was associated with the concept of hierarchism is perhaps unsurprising, upon further consideration. Previous work focusing on individualism versus collectivism at the societal level has demonstrated that national culture meaningfully impacts

individual level attitudes, beliefs, and behaviors. Triandis and Gelfand (1998) introduced and validated a measurement – somewhat similar to CT – that provides for the classification of differences not only between individualism/collectivism, but also a horizontal/vertical distinction within the individualism/collectivism classification (Torelli et al., 2012; Triandis & Gelfand 1998).

In this conceptualization, the United States represents a Vertical Individualist society in which individuals tend to focus on individual status via power, achievement, and competition, whereas South Korea represents a Vertical Collectivist society in which individuals tend to focus on the goals of their in-groups, compete between in-groups and out-groups, and to accept or submit to authority (Shavitt et al., 2006; Torelli et al., 2012). These classifications may be further ingrained into individual-level behavior and attitudes via the extent to which the individual exists in a culturally homogeneous or heterogeneous environment. The United States is highly culturally heterogeneous, in part due to its racial and ethnic diversity as well as regional cultural differences (Perez & Hirschman, 2009; Kim et al., 2022) whereas the Republic of Korea is a relatively culturally homogeneous nation, with the vast majority of citizens having shared heritage, traditions, and history (Cumings 2005; Kim & Kim, 2012; Kim et al., 2022). As such, it is common for Koreans to approach individual differences negatively and conformity positively (Kim-Rupnow, 2005; Kim et al., 2022), ultimately reinforcing the Vertical Collectivist society.

In consumer research, this conceptualization has demonstrated value in brands developing abstract meanings for their brand in ways that are culturally congruent in new markets, as well as determining what markets could be successfully targeted based on cultural congruence with current brand messaging (Torelli et al., 2012). Similarly, a meta-analysis examining Leader-Member Exchange (LMX) and culture found that in horizontal-individualistic contexts (e.g. United States) the relationships of LMX and job satisfaction, justice perceptions, leader trust, and organizational citizenship behaviors are stronger as compared to vertical-collective (e.g. the Republic of Korea) contexts, indicating that while individuals are responsive to how they are treated by leaders across contexts, role-based obligations and collective interests may be stronger drivers of individual attitudes in vertical-collective contexts (Rockstuhl

et al., 2012). In our data, Table 3 provides some evidence in support of these distinctions, with our location variable (representing the Arkansas versus Seoul samples) is statistically significant in all three regression models. As such, our results provide support for the idea that while there may be a need for further theoretical development of CT to address cross-cultural differences, developing more precise measures of CT that are contextualized to the societal-level culture that individuals are nested in would provide for greater efficacy of utilizing CT to examine and explain human decision-making across cultures.

Taken together, the current findings represent a foundational point from which to begin more deeply examining Cultural Theory from both a theoretical and methodological standpoint so as to better elucidate the current generalizability of CT across cultural contexts, as well as its measurement. The findings here indicate that, while CT “works” across cultural contexts, there is a need for further elaboration and investigation on how CT manifests across and between contexts.

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穿越文化迷宫：道格拉斯文化理论量表之检验

摘要：本研究通过比较Jenkins-Smith等开发的文化理论量表在美国阿肯色州和韩国首尔的应用，来检验文化理论(CT)的跨国有效性。文化理论探讨了文化偏见如何影响决策，特别是风险感知、环境态度和政治行为方面的决策。虽然文化理论的主要结构——等级主义、平等主义、个人主义和宿命论——通常具有可靠性，但我们的研究表明，这些结构在跨文化一致性方面存在局限性。在首尔样本中，等级主义缺乏一致性，这表明某些文化理论结构在西方文化以外的环境中可能无法完全适用。我们的回归分析显示，与首尔相比，文化理论量表在阿肯色州对政治意识形态、对自然脆弱性的认知以及对环境问题的关注方面的预测力更强，这凸显了文化理论在不同文化背景下适用性的文化差异。本研究强调了完善文化理论量表以提高其在不同文化环境中的相关性的必要性，并为未来研究文化背景如何影响公众对公共政策的态度提供了信息。

关键词：文化理论(CT)、文化偏见、跨国有效性、政治行为

문화 미로 탐색 : 더글라스 문화 이론 측정치 검증

초록 : 본 연구는 Jenkins-Smith 등이 개발한 문화 이론(Cultural Theory, CT) 측정요소의 국가 간 검증을 위해 미국 아칸소와 한국 서울을 비교 분석하였다. CT는 문화적 편견이 위험 인식, 환경적 태도, 정치적 행동과 관련하여 의사 결정에 어떠한 영향을 미치는지 모색한다. 계층주의, 평등주의, 개인주의, 운명론 등 CT의 주요 구성요소는 일반적으로 신뢰할 수 있지만, 본 연구 결과 문화 간 일관성에 있어 한계가 있었다. 서울 표본에서 계층주의는 일관성이 부족했으며, 이는 일부 CT 구성요소가 서구적 맥락 밖에서는 완전히 적용되지 않을 수 있음을 시사한다. 회귀 분석 결과 CT 측정요소는 정치적인 이데올로기, 자연의 취약성에 대한 인식, 환경에 대한 관심은 서울보다 아칸소에서 강하게 예측되는 것으로 나타났으며, CT의 적용 가능성에 있어 문화적 차이가 있음을 보여주었다. 본 연구는 CT 측정요소를 각기 다른 문화적 환경에서 관련성을 높이기 위해 개선해야 한다는 점을 강조하고, 문화적 맥락이 공공 정책에 대한 태도에 미치는 영향에 대한 향후 연구에 기초 자료를 제공한다.

주요어 : 문화 이론(CT), 문화적 편견, 국가 간 검증, 정치적 행동

文化迷路のナビゲーション：ダグラス文化理論基準の検証

概要：本研究では、米国アーカンソー州と韓国ソウルでJenkins-Smithらが開発した文化理論(Cultural Theory、以後CT)測定法を比較することにより、CTの国際的妥当性を検証する。CTは、特にリスク認知、環境態度、政治的行動に関し、文化的バイアスがどのように意思決定を形成するかを探索するものである。CTの主要な構成概念である階層主義、平等主義、個人主義、運命論は一般的に信頼できるものであるが、我々の研究結果は異文化間の一貫性には限界があることを示している。ソウルのサンプルでは、階層主義は一貫性を欠いており、一部のCT構成概念は西洋の文脈外では完全に翻訳されない可能性があることを示唆している。回帰分析によれば、CT測定法では、ソウルよりアーカンソー州で政治的イデオロギー、自然の脆弱性に対する認識、および環境問題をより強く予測し、CTの適用性における文化的差異を浮き彫りにしている。本研究は、多様な文化的環境にわたる関連性を高めるためにCT測定法を改良する必要性を強調し、文化的背景が公共政策に対する態度にどのような影響を及ぼすかについて、今後の研究に情報を提供するものである。

キーワード：文化理論(CT)、文化的バイアス、国境を越えた妥当性、政治的行動

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