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인터넷 영역에서의 윤리적 의사결정에 대한 국가문화의 영향 : 탐색적 분석

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The Effects of National Culture on Ethical Decision-Making in the Internet Context : An Exploratory Analysis

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요 약 본 연구는 인터넷 영역에서 개인의 윤리적 의사결정에 대한 국가문화의 영향을 분석하였다. 본 연구를 위하여 다섯 개의 도덕철학 변수들인 정의주의, 상대주의, 이기주의, 공리주의, 그리고 의무론이 개인의 윤리적 판단에 영향을 미치며, 이 윤리적 판단은 행위의도에 영향을 미친다는 윤리적 의사결정 모형이 제시되었고, 이 윤리적 의사결정 모형에 대하여 홉스테드의 다섯 가지의 국가문화 차원들인 권력격차, 개인주의, 남성성, 불확실성 회피, 그리고 장기 지향성의 영향을 분석하였다. 연구결과 인터넷 영역에서 권력격차, 개인주의, 그리고 남성성은 의무론과 윤리적 판단 간의 관계에 영향이 있었으며, 개인주의, 남성성, 그리고 불확실성 회피는 정의주의와 윤리적 판단 간의 관계에 유의한 영향을 주는 것으로 나타났다. 또한 개인주의와 장기 지향성은 윤리적 판단과 행동의도 간의 관계에 유의한 영향이 있는 것을 보여 주었다.

주제어 : 인터넷 윤리, 도덕철학, 정의주의, 윤리적 판단, 국가문화

Abstract This paper analyzes the effects of national culture on an individual's ethical decision-making in the context of the Internet. An ethical decision-making model which posits that five moral philosophy variables— justice, relativism, egoism, utilitarianism, and deontology— affect ethical judgment; ethical judgment, in turn, affects behavioral intention was proposed and Hofstede's five cultural dimensions of power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation were used to analyze the effects of national culture on the model. The results showed that power distance, individualism, and masculinity had significant effects on the relationship between the deontology variable and ethical judgment, individualism, masculinity, and uncertainty avoidance had significant effects on the relationship between the justice variable and ethical judgment, and individualism and long-term orientation had significant effects on the relationship between ethical judgment and behavioral intention in the Internet context.

Key Words : Internet ethics, moral philosophy, justice, ethical judgment, national culture

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1. Introduction

Today, the Internet provides useful information and convenient functions to facilitate the affluent lifestyle of our era. On the other side lie as many adverse effects－unethical behaviors such as abuse of personal information, verbal violence, copyright infringement, and the distribution of unhealthy information. These negatives have emerged as a serious social issue[34]. Therefore, in an effort to reduce these unethical behaviors, the level of social attention on ethics in the context of the Internet is growing.

Although social awareness regarding Internet ethics has been enhanced, there is a lack of research. In particular, there are few studies analyzing the effects of culture on an individual's ethical decision-making regarding the Internet. According to ethics scholars, the individual′s ethical decision-making might be affected by social and cultural characteristics as well as individual factors. Ferrell and Gresham argued the ethical decision-making of an individual could be influenced by many factors like the individual's attributes and social and cultural environment[7]. Hunt and Vitell also incorporated cultural norms as one of the constructs that affect a person's perceptions of the ethics of a situation in their ethical decision model[16]. However, little is known about the effects of culture on ethical decision-making on the Internet.

For these reasons, this study′s purpose is to analyze the effects of national culture. To that end, this study will establish an ethical decision-making model for the Internet through a literature review. Then, this study will analyze the effects of national culture on the model, providing new research perspectives as an initial study.

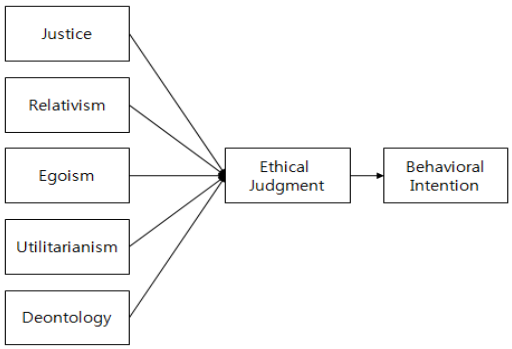
2. Ethical Decision-Making Model in the Internet Context

According to Rest's study, the ethical decision-making process consists of four steps: 1) awareness, or the recognition of a moral issue, 2) judgment, the determination of an ethical judgment about the moral issue, 3) intention, or deciding upon an action in accordance with the ethical judgment, and 4) behavior, engaging in the action[27]. Most ethical decision-making models have focused on the judgment step and researchers have employed moral philosophies to explain judgment[18]. Ferrell and Gresham proposed a contingency model of ethical decision-making in a marketing area and argued that individuals may use a set of philosophical assumptions as a basis for making ethical decisions[7]. Hunt and Vitell also proposed a general theory of marketing ethics based on moral philosophies[16]. According to this theory, the ethical decision-making process begins with the environment (cultural, industry, organizational) and the intention and behavior are determined by the judgment based on the individual's philosophical evaluation (deontological and teleological evaluations). In proposing an integrated model that is a synthesis of the Ferrell and Gresham and the Hunt and Vitell models, as well as of Kohlberg's theory of cognitive moral development, Ferrell et al. argued that the rules individuals use in making decisions are determined in different ways, constitute a major construct in the ethical process, and are applied to the ethical decision-making process through moral philosophies[7,8,16,19]. Namely, moral philosophies provide standards to make a judgment about the behavior comprising an ethical problem. Yoon proposed an ethical decision-making model for the Internet based on the theories of moral philosophy, arguing that because the Internet is non-restrictive and has the characteristics of anonymity, ease of access, and ease of distribution, the personal normative beliefs derived from moral philosophies play an important role in driving decision-making on the Internet[34]. In his study, Yoon employed the five moral philosophies of justice, relativism, egoism, utilitarianism, and deontology, as classified in Reidenbach and Robin's study[25]. A brief overview of the five moral

philosophies follows.

Justice is a theory based on "fairness and equality." It emphasizes people to behave according to fair rules. Relativism is the theory based on "relative morality." According to relativists, all moral judgments are determined by individual, societal, or cultural standards. Egoism is the theory based on "long-term self-interest." It promotes one's well-being above all else's[2]. Utilitarianism is the theory based on the principal of "the greatest good for the greatest number of people." It forces people to consider all of the outcomes of an action in order to be best for society[26]. Deontology theory holds that acts are inherently right or wrong, regardless of the consequences of the acts. It emphasizes people to have duties to do those things that are inherently right.

Since a number of researchers have used moral philosophies to explain the judgment about a behavior involving an ethical problem, and which have been examined in the Internet context, we also employ the moral philosophies as the research framework for this study, namely as a basic ethical decision-making model which posits that five moral philosophy variables－justice, relativism, egoism, utilitarianism, and deontology－affect ethical judgment and ethical judgment, in turn, affects behavioral intention was proposed. [Fig. 1] represents this model.



[Fig. 1] Basic ethical decision-making model in the Internet context

3. National Culture and Ethical Decision-Making

Although little is known about the effects of national culture on individuals' ethical behaviors in the Internet context, a number of studies regarding the relationships between national culture and ethical behaviors have been performed in business ethics area. Vitell et al. argued that national culture had the effects on ethical decision-making process, and developed the propositions regarding the relationships between constructs of Hunt-Vitell's ethical decision model and Hofstede's cultural dimensions－power distance, individualism, masculinity, and uncertainty avoidance[13,16,32]. Lu et al. also analyzed the effects of Hofstede's cultural dimensions on sales agents' ethical decision making[20]. Nyaw and Ng showed that based on their national origin, students reacted differently to ethical dilemmas involving employees, supervisors, customers, suppliers, and business rivals[21]. Beeken et al. analyzed the differences in ethical decision-making within the context of business between an individualistic culture (the U.S.) and a collectivistic culture (Brazilian)[3]. Robertson and Crittenden offered propositions on the relationships between diverse moral philosophies, economic ideology, and culture[28]. Phau and Kea revealed attitudes toward business ethics to be significantly different among three countries: Australia, Singapore, and Hong Kong[22]. Husted and Allen also argued that the culture variables of individualism and collectivism had impacts on three basic aspects of ethical decision-making－the perception of moral problems, moral reasoning, and behavior[17].

As shown in the studies above, Hofstede cultural dimensions are frequently used to analyze the effects of national culture in business ethics area. <Table 1> represents the definition of the five cultural dimensions proposed by Hofstede[14].

〈Table 1〉 The definition of Hofstede's five cultural dimensions

Cultural Dimensions	Definition
Power distance	the extent to which the less powerful members of organizations and institutions accept that power is distributed unequally
Individualism	the extent to whether a society emphasizes individual's achievement (individualism) or organization's goals (collectivism).
Masculinity	the extent to whether people in a society prefer masculine values such as competitiveness, achievement, and ambition (masculinity) or feminine values such as nurturing, helping others, and valuing quality of life (femininity)
Uncertainty avoidance	the extent to which people feel threatened by uncertain, unstructured situations and ambiguity
Long-term orientation	the extent to which people in a society want to take future rewards in long-term or in short-term.

Since Hofstede's cultural dimensions are frequently used to analyze the effects of national culture in diverse literature, such as sociology, psychology, information technology, and business ethics, we also employ the cultural dimensions to analyze the effects of national culture on individual's ethical decision-making in the Internet context. Namely, the effects of each cultural dimension of power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation on the relationships between the moral philosophy variables and ethical judgment will be examined. Accordingly, we establish the following hypothesis.

Hypothesis 1. The national cultures of power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation have a significant impact on the relationships between moral philosophies −justice, relativism, egoism, utilitarianism, and deontology−and ethical judgment in the Internet context involving an ethical problem.

An individual's ethical behavior or intention to engage in the behavior may not be consistent with his or her judgment about the behavior because of the effects of individual or situational factors on their relationships[30]. According to Husted and Allen, national culture variables can moderate the relationship between ethical judgment and behavioral intention[17]. Therefore, we established the following hypothesis.

Hypothesis 2. The national cultures of power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation have a significant impact on the relationship between ethical judgment and behavioral intention in the context of an ethical problem involving the Internet.

4. Method

To analyze the effects of national culture, this study develops measurements on the cultural dimensions, incorporates the national culture constructs composed from the measurements as moderators into the ethical decision-making model, and empirically tests the model through moderator analyses. According to Srite and Karahanna, this approach helps to avoid the ecological fallacy of assessing cultural traits based on personality tests conducted at the individual level of analysis, even though national culture is a macro-level phenomenon [29].

4.1 Measurements

The measurements for moral philosophies of justice (JST), relativism (RTM), egoism (EGO), utilitarianism (UTM), deontology (DEO), and ethical judgment (EJ) were adapted from Yoon's study, which are developed based on Reidenbach and Robin's multidimensional ethics scale, which established the content validity through reviewing business ethics literature and the measurements for the national cultural dimensions of power distance (PD), individualism (IDV), masculinity (MAS), uncertainty avoidance (UA), and long-term

orientation (LTO) were adapted from Srite and Karahanna and Yoon's studies[29,33,34]. Some items were newly developed based on the Reidenbach and Robin and the Hofstede's studies in this study[14,25]. A seven-point Likert scale was used to measure the items. All the measurement items are shown in Appendix A.

4.2 Scenarios Used

In order to test the hypotheses, we employed the scenario approach. The scenario approach, widely used in ethics studies, is comprised of unbiased self-reports that provide accurate measurements and are appropriate when the issues being measured are sensitive[24]. A scenario relevant to "abuse of personal information" in the Internet context was adapted from Yoon's study[34]. As shown in Appendix B, the scenario was presented along with the action taken by a decision-maker; respondents were then asked a series of questions concerning the action, including its overall ethics (e.g., "Her behavior is ethical").

4.3 Survey Administration

The surveys were conducted in classes with a convenience sample of university students in South Korea, majoring in business administration. We explained the purpose of this survey and asked the students to take part in our study. In order to increase the students' participation, we promised to give extra credit to the student who participated in this study. An online survey based on the web-based questionnaire was performed. In total, 174 usable questionnaires from the students were collected and used in the analysis. Males represented 105 respondents and females 69 respondents, approximately 62 percent of the respondents were younger than 20 years of age, and 61 percent of the respondents did not follow a particular religion. Detailed descriptive statistics of the respondents' characteristics are shown in <Table 2>.

〈Table 2〉 Descriptive statistics of respondents' characteristics.

Measure	Value	Frequency (%)
Gender	Male	105 (60.3)
	Female	69 (39.7)
Age	Younger than 20	108 (62.1)
	20-24	63 (36.2)
	Older than 25	3 (1.7)
Religion	Christian	43(24.7)
	Catholic	17(9.8)
	Buddhist	6(3.4)
	Other	1(0.6)
	Atheist	107(61.5)

5. Results

The partial least squares (PLS-Graph Version 3.0) method was employed to perform the analysis, because this approach is suitable in an exploratory study and supports a useful analysis technique on moderators[5,6].

5.1 Reliability and Validity of Measurement Items

Partial Least Squares (PLS) can test the convergent and the discriminant validity of the scales.

In a Confirmatory Factor Analysis (CFA), by PLS, convergent validity is shown when each of the measurement items loads significantly, with the p-value of its t-value well within the 0.05 level, on its assigned construct[11].

<Table 3> represents the factor loadings of the measurement items and t-values. All t-values in the <Table 3> are above 1.96. The factor loadings of all items also loaded highly (above 0.60). This demonstrates convergent validity of all the measurement items for the constructs.

Discriminant validity is shown when the following two things occur: (1) measurement items load more strongly on their assigned construct than on the other constructs in a CFA, and (2) when the square root of

〈Table 3〉 Results of confirmatory factor analysis

Construct		Construct loading scores											t-value
		1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	
JST	JST1	**0.95**	0.55	0.60	0.32	0.27	0.52	0.24	0.15	0.13	-0.07	0.15	67.94
	JST2	**0.95**	0.50	0.59	0.34	0.29	0.56	0.22	0.14	0.12	-0.03	0.08	80.14
RTM	RTM1	0.37	**0.82**	0.27	0.25	0.11	0.45	0.10	0.12	-0.08	0.10	0.01	26.15
	RTM2	0.46	**0.78**	0.43	0.20	0.22	0.38	0.19	0.15	-0.03	-0.09	-0.03	15.47
	RTM3	0.52	**0.87**	0.49	0.44	0.27	0.60	0.32	0.16	0.01	0.03	0.05	46.60
EGO	EGO1	0.59	0.36	**0.79**	0.31	0.27	0.49	0.32	0.05	0.13	-0.07	0.06	18.70
	EGO2	0.45	0.40	**0.77**	0.33	0.17	0.39	0.24	0.16	0.12	0.01	0.18	13.06
	EGO3	0.35	0.27	**0.75**	0.38	0.14	0.36	0.29	0.21	0.15	0.02	0.08	10.90
	EGO4	0.47	0.43	**0.73**	0.58	0.22	0.48	0.21	0.21	0.14	-0.03	0.07	13.11
UTM	UTM1	0.35	0.44	0.55	**0.88**	0.10	0.49	0.32	0.31	0.12	0.01	0.10	53.17
	UTM2	0.32	0.28	0.44	**0.86**	-0.01	0.35	0.23	0.27	0.16	0.04	0.14	25.63
	UTM3	0.30	0.27	0.38	**0.86**	-0.02	0.35	0.24	0.22	0.18	0.06	0.17	27.06
	UTM4	0.14	0.23	0.36	**0.76**	-0.12	0.26	0.09	0.20	0.17	0.18	0.19	16.41
DEO	DEO1	0.17	0.23	0.17	-0.05	**0.81**	0.19	0.03	-0.08	-0.13	-0.24	-0.16	15.10
	DEO1	0.33	0.25	0.28	-0.01	**0.90**	0.27	0.06	-0.08	-0.17	-0.28	-0.23	28.56
	DEO3	0.29	0.17	0.24	0.01	**0.89**	0.25	0.05	-0.03	-0.24	-0.25	-0.25	34.24
	DEO4	0.22	0.21	0.24	0.05	**0.87**	0.26	0.03	-0.07	-0.17	-0.25	-0.15	20.86
EJ	EJ1	0.41	0.57	0.45	0.50	0.17	**0.89**	0.18	0.14	0.14	0.14	0.13	49.40
	EJ2	0.60	0.47	0.56	0.28	0.33	**0.86**	0.28	0.11	0.17	-0.01	0.11	40.37
PD	PD1	0.17	0.22	0.19	0.27	-0.03	0.19	**0.69**	0.18	0.16	0.11	0.16	7.44
	PD2	0.11	0.14	0.22	0.12	0.03	0.16	**0.70**	0.22	0.08	0.04	-0.09	5.72
	PD3	0.18	0.19	0.25	0.20	0.08	0.13	**0.76**	0.25	0.14	0.10	-0.07	6.65
	PD4	0.22	0.20	0.33	0.21	0.07	0.25	**0.78**	0.29	0.21	-0.02	-0.13	11.67
IDV	IDV1	0.12	0.11	0.20	0.27	-0.06	0.12	0.32	**0.84**	0.26	0.10	0.03	5.66
	IDV2	0.09	0.15	0.12	0.24	-0.03	0.11	0.31	**0.87**	0.24	0.22	-0.03	7.69
	IDV4	0.17	0.18	0.19	0.28	-0.11	0.15	0.23	**0.89**	0.26	0.10	0.02	9.90
MAS	MAS1	0.06	-0.04	0.11	0.13	-0.16	0.10	0.24	0.28	**0.61**	0.02	0.06	3.43
	MAS3	0.04	-0.10	0.04	0.10	-0.19	0.09	0.02	0.23	**0.68**	0.08	0.07	3.32
	MAS4	0.15	0.02	0.20	0.15	-0.13	0.17	0.19	0.18	**0.87**	0.08	0.16	5.09
UA	UA1	-0.06	0.01	-0.04	0.04	-0.25	0.09	0.05	0.09	0.09	**0.95**	0.17	3.71
	UA2	-0.03	0.04	-0.01	0.10	-0.31	0.05	0.08	0.24	0.05	**0.85**	0.22	3.49
LTO	LTO1	0.14	0.04	0.14	0.17	-0.16	0.15	-0.07	0.01	0.13	0.16	**0.95**	2.70
	LTO3	0.05	-0.02	0.05	0.08	-0.21	0.06	0.04	-0.05	0.09	0.16	**0.61**	2.08
	LTO4	-0.05	0.06	0.03	0.14	-0.24	0.01	-0.07	0.07	0.04	0.23	**0.64**	2.23
	LTO5	0.02	-0.03	0.03	0.10	-0.27	0.04	-0.06	0.08	0.17	0.22	**0.73**	2.51

JST: Justice, RTM: Relativism, EGO: Egoism, UTM: Utilitarianism, DEO: Deontology,
EJ: Ethical Judgment, PD: Power Distance, IDV: Individualism, MAS: Masculinity,
UA: Uncertainty Avoidance, LTO: Long-term Orientation

〈Table 4〉 Average Variance Extracted and Correlation Matrix

Construct	CCR*	AVE**	Factor										
			1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
JST	0.95	0.90	(0.95)										
RTM	0.87	0.68	0.55	(0.83)									
EGO	0.85	0.58	0.62	0.49	(0.76)								
UTM	0.91	0.71	0.35	0.38	0.53	(0.84)							
DEO	0.92	0.75	0.30	0.25	0.27	0.00	(0.87)						
EJ	0.87	0.77	0.57	0.60	0.58	0.45	0.28	(0.87)					
PD	0.82	0.54	0.24	0.26	0.35	0.28	0.05	0.26	(0.73)				
IDV	0.90	0.75	0.15	0.17	0.20	0.31	-0.08	0.14	0.32	(0.87)			
MAS	0.77	0.53	0.13	-0.03	0.18	0.18	-0.21	0.18	0.21	0.29	(0.73)		
UA	0.90	0.81	-0.05	0.02	-0.03	0.07	-0.29	0.08	0.07	0.16	0.09	(0.90)	
LTO	0.83	0.56	0.12	0.02	0.12	0.17	-0.23	0.13	-0.05	0.01	0.15	0.20	(0.75)

JST: Justice, RTM: Relativism, EGO: Egoism, UTM: Utilitarianism, DEO: Deontology,
EJ: Ethical Judgment, PD: Power Distance, IDV: Individualism, MAS: Masculinity, UA: Uncertainty Avoidance, LTO: Long-term Orientation
( ) : Square root of AVE
*CCR : Composite Construct Reliability
** AVE: Average Variance Extracted

the Average Variance Extracted (AVE) of each construct is larger than its correlations with the other constructs[11]. As shown in <Table 3>, all the measurement items loaded considerably stronger on their respective factor than on the other constructs. <Table 4> represents the square roots of AVE and the inter-construct correlations. Comparisons of the correlation with the square root of AVE indicate that all correlations between the two constructs are less than the square root of AVE of both constructs.

To assess the reliability of measurement items, we computed the composite construct reliability coefficient. Composite reliabilities ranged from 0.77 (for masculinity) to 0.95 (for justice), which exceeded the recommended level of 0.60[1]. The AVE ranged from 0.53 (for masculinity) to 0.90 (for justice), which exceeded the recommended level of 0.50[9]. The results, therefore, demonstrate a reasonable reliability level of the measured items. Also, to overcome the concern of common method bias in this study, we performed Harman's one-factor test. In this test using an Exploratory Factor Analysis (EFA), evidence for common method bias exists when a single factor emerges from the analysis or when one general factor accounts for the majority of the covariance among the measurements [23]. The EFA showed that ten factors came from the analysis and the first factor explained 21.4%. The result does not indicate substantial common method bias.

5.2 Hypothesis Testing Results

Before the hypotheses testing regarding the effects of national culture on ethical decision-making in the Internet context, the ethical decision-making model, a base model for the hypotheses testing, was tested using an analysis of the structural equation model. In order to test the ethical decision-making model, we developed a structural model that posits that the moral philosophy variables– justice, relativism, egoism, utilitarianism, and deontology–affect ethical judgment and the ethical judgment affects behavioral intention, including three control variables: gender, age, and religion, which could have a significant effect on the ethical judgment and the behavioral intention, and examined the coefficients of the causal relationships between constructs, which would validate the effects.

〈Table 5〉 Testing results of the ethical decision-making model in the Internet

Path		Path coefficient (t-value)	R^2	Path	Path coefficient (t-value)	R^2
JST -> EJ		0.19(1.62)+	0.512	EJ -> BI	0.62(10.33)**	0.388
RTM -> EJ		0.31(4.01)**				
EGO -> EJ		0.19(1.70)*				
UTM -> EJ		0.17(2.11)*				
DEO -> EJ		0.10(1.73)*				
Control Values	Gender -> EJ	-0.04(0.84)		Gender -> BI	-0.04(0.62)	
	Age -> EJ	0.06(1.15)		Age -> BI	0.00(0.05)	
	Religion ->EJ	-0.02(0.29)		Religion ->BI	-0.01(0.14)	

JST: Justice, RTM: Relativism, EGO: Egoism, UTM: Utilitarianism, DEO: Deontology,
EJ: Ethical Judgment, BI: Behavioral Intention
+ Significant at the 0.1 level, * Significant at the 0.05 level, ** Significant at the 0.01 level

The coefficients, their t-value on the structural model, and the coefficients of determination (R^2)for the dependent construct are shown in <Table 5>.

As indicated in <Table 5>, all the moral philosophy variables, except the justice variable, have a significant impact on ethical judgment with α = 0.05, and ethical judgment have a significant impact on behavioral intention with α = 0.01. Although the significance of the effect of the justice variable on ethical judgment (t = 1.62) is slightly over 0.05 levels, we thought the ethical decision-making model could be applied as a base model for testing these hypotheses.

To test them, we established the national culture variables as the moderators of the model and employed the product term approach, using interaction effects to analyze the effects of the moderators on the model because the national culture values in this study were measured as continuous variables[12]. To analyze the interaction effects with PLS, the Chin et al. approach was employed, with an interaction construct created by multiplying indicators of each of the interacting constructs[6]. In total, 30 moderator analyses were performed. The results of the interaction effects are summarized in <Table 6>.

As indicated in <Table 6>, in hypothesis testing regarding the effects of national culture on the relationships between the moral philosophy variables and ethical judgment, the interaction effect of DEO x PD (t-value = 1.32), the interaction effect of JST x IDV (t-value = 1.41), the interaction effect of UTM x IDV (t-value = 1.53), and the interaction effect of DEO x IDV (t-value = 1.38) have significant effects on ethical judgment at the 0.1 levels, and the interaction effect of JST x MAS (t-value = 2.12), DEO x MAS (t-value = 2.04), and JST x UA (t-value = 1.74) have a significant effect on ethical judgment with α = 0.05. In hypothesis testing regarding the effects of national culture on the relationship between ethical judgment and behavioral intention, the interaction effects of EJ x IDV (t-value = 2.58) and EJ x LTO (t-value = 1.54) have a significant effect on behavioral intention at the 0.01 and 0.1 levels, respectively.

6. Discussion and Conclusion

Little is known about the effects of an individual's social and cultural characteristics on ethical decision-making in the Internet context. This study analyzed the effects of national culture on this process, using Hofstede's cultural dimensions[14].

〈Table 6〉 Hypothesis testing results

Hypothesis 1			Hypothesis 2	
Moderator	Path	Path coefficient (t-value)	Path	Path coefficient (t-value)
PD	JST x PD -> EJ	-0.11(0.50)	EJ x PD -> BI	-0.14(0.79)
	RTM x PD -> EJ	-0.10(0.47)		
	EGO x PD -> EJ	-0.19(0.98)		
	UTM x PD -> EJ	-0.19(1.19)		
	DEO x PD -> EJ	0.22(1.32)+		
IDV	JST x IDV -> EJ	0.24(1.41)+	EJ x IDV -> BI	0.51(2.58)**
	RTM x IDV -> EJ	-0.10(0.59)		
	EGO x IDV -> EJ	0.10(0.66)		
	UTM x IDV -> EJ	-0.24(1.53)+		
	DEO x IDV -> EJ	0.15(1.38)+		
MAS	JST x MAS -> EJ	0.41(2.12)*	EJ x MAS -> BI	0.34(1.08)
	RTM x MAS -> EJ	0.05(0.33)		
	EGO x MAS -> EJ	0.22(0.21)		
	UTM x MAS -> EJ	-0.02(0.08)		
	DEO x MAS -> EJ	0.22(2.04)*		
UA	JST x UA -> EJ	0.40(1.74)*	EJ x UA -> BI	-0.01(0.06)
	RTM x UA -> EJ	-0.04(0.19)		
	EGO x UA -> EJ	-0.29(1.06)		
	UTM x UA -> EJ	-0.04(0.20)		
	DEO x UA -> EJ	-0.08(0.75)		
LTO	JST x LTO -> EJ	-0.26(0.76)	EJ x LTO -> BI	-0.45(1.54)+
	RTM x LTO -> EJ	-0.15(0.67)		
	EGO x LTO -> EJ	-0.27(0.87)		
	UTM x LTO -> EJ	-0.22(0.78)		
	DEO x LTO -> EJ	-0.04(0.25)		

JST: justice, RTM: Relativism, EGO: Egoism, UTM: Utilitarianism, DEO: Deontology,
EJ: Ethical Judgment, BI: Behavioral Intention,
PD: Power Distance, IDV: Individualism, MAS: Masculinity,
UA: Uncertainty Avoidance, LTO: Long-term Orientation
+ Significant at the 0.1 level, * Significant at the 0.05 level, ** Significant at the 0.01 level

The findings of this study were as follows. First, the results showed that power distance, individualism, and masculinity had positive effects on the relationship between the deontology variable and ethical judgment. These results might appear to reveal that deontology values such as moral principles or social rules play an important role in forming ethical judgments in these cultures. But, in fact, the results of this study imply that people in high power distance cultures, people in individualistic cultures, and people in masculinity societies have lower moral standards on unethical behaviors than their counterparts. People in these cultures are less sensitive to moral principles and social rules, thus they would be inclined to be more tolerant of immoral behaviors on the Internet than their counterparts. According to Tsui and Windsor, power distance is connected with Kohlberg's level of ethical reasoning, which focuses on personally held principles[31]. Studies in business ethics have indicated that high power distance was compatible with lower ethical reasoning scores[10]. Also, since individualistic societies emphasize the achievements of personal goals and masculine societies encourage individuals to be ambitious and competitive and to strive for material success, these factors may contribute significantly to reduce levels of moral standards and to ignore social rules for their goals[32]. Therefore, the interpretation seems appropriate. Second, the results showed that

individualism, masculinity, and uncertainty avoidance had positive effects on the relationship between the justice variable and ethical judgment. These results imply that people from individualistic cultures, people from masculinity cultures, and people from high uncertainty avoidance cultures would be more likely to emphasize equity and fairness in making ethical judgments than their counterparts. Husted and Allen argued that people from individualist cultures are likely to use justice-based reasoning when they make an ethical judgment because their personal identity is based on the independent self[17]. Beekun et al. empirically tested that the theory that justice had a more impact on ethical decision-making in individualistic countries[4]. In addition, masculinity cultures emphasize competitiveness and achievement rather than caring for others. Thus, these cultural traits may make people consider justice—distributive and procedural standards—as a basis to evaluate competitiveness and achievements. Since people in high uncertainty avoidance cultures rely on laws and regulations as a way to reduce uncertainty, and the principle of justice is the basis of the laws and regulations, justice plays an important role in making an ethical judgment in these cultures. Third, the results showed that individualism had a positive effect on the relationship between the ethical judgment and behavioral intention, whereas long-term orientation had a negative effect on the relationship. According to Husted and Allen, decision makers in individualist cultures are likely to exhibit great consistency between their moral judgments and their behavior because 1) people in individualist cultures think personal beliefs are important in decision-making, 2) individualists are lower in field dependence, which is employed when individuals utilize external social referents to guide their behavior[17]. Husted and Allen's assertion can apply in the internet ethics context. High long-term orientation societies emphasizes more pragmatic values for the future rewards than the virtues related to the past and the present, such as one's steadiness and stability[15]. This implies that in high long-term orientation cultures, individuals would not insist upon their judgment if they thought that another behavior inconsistent with the judgment could bring more significant rewards in the future. Therefore, the results seem quite reasonable. Lastly, the results showed that individualism had a negative effect on the relationship between utilitarianism variable and ethical judgment in the context of the Internet. Since individualistic societies emphasize personal achievement, whereas utilitarianism focuses on happiness for a great number of people, the higher the individualism, the lower the impact of the utilitarianism variable on ethical judgment in the online context.

Since this study empirically analyzed relationships between Internet ethics and national culture, it is expected that the results may be utilized as objective comparison data for similar studies.

6.1 Implications for Practitioners

This study provides the strategic implications of reducing an individual's unethical behaviors in the context of the Internet. The results showed that power distance, individualism, and masculinity are closely related to deontology values. These findings suggest that in high power distance countries, in individualistic countries, and in masculinity countries, establishing specific moral standards on unethical behaviors conducted on the Internet may play an important role in deceasing unethical behaviors in these countries. Individualism, masculinity, and uncertainty avoidance were shown to have a close relationship with the idea of justice. This finding suggests that emphasizing that unethical behaviors are unjust, unfair acts can be an effective way to reduce unethical behaviors on the Internet in these cultures. This study also showed that long-term orientation has a negative effect on the relationship between ethical judgment and behavioral intention in the context of the Internet. This finding

provides a good way to reduce unethical behaviors online, namely fostering long-term orientation values, such as virtues oriented toward future rewards could help individuals to behave more ethically.

To sum up, this study may be utilized as basic data in establishing effective laws and regulations suitable to the characteristics of national culture.

6.2 Limitations and Further Research Issues

Although our findings provide meaningful implications for researchers and practitioners, this study has some limitations. First, this study was conducted in exploratory research because little has been known about the effects of national culture on ethical decision-making in the Internet context; hence the hypotheses in this study were widely established. Future studies should establish the hypotheses in detail with reference to the results of this study and compare their results with the results of this study. Second, there are a variety of ethical issues on the Internet. However, the results were analyzed with respect to a scenario of personal information. In order to verify the results, the study should be conducted with a wide range of scenarios related to Internet ethics. Finally, this study was conducted in South Korea. South Korea exhibits high uncertainty avoidance and highly long-term orientation and can be regarded as a collectivistic society[14]. These cultural traits might have impacted some of our findings. Also, data were collected from university students, student samples can be a major threat to generalizability. Therefore, in order to verify the results, the study should be conducted in other countries and tested with samples from a wider range of populations.

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Appendix A

Perception of Justice: Seven-point Likert-type scale from strongly disagree to strongly agree

JST1. His/her behavior is just.
JST2. His/her behavior is fair.

Perception of Relativism: Seven-point Likert-type scale from strongly disagree to strongly agree

RTM1. Her behavior is culturally acceptable.
RTM2. Her behavior is traditionally acceptable.
RTM3. Her behavior is acceptable to my family.

Perception of Egoism: Seven-point Likert-type scale from strongly disagree to strongly agree

EGO1. Her behavior is self-sacrificing.
EGO2. Her behavior is prudent.
EGO3. Her behavior is profitable in the long run.
EGO4. Her behavior is satisfactory.

Perception of Utilitarianism: Seven-point Likert-type scale from strongly disagree to strongly agree

UTM1. Her behavior is efficient.
UTM2. Her behavior maximizes benefits while minimizing harm.
UTM3. Her behavior results in a positive cost-benefit ratio.
UTM4. Her behavior maximizes pleasure.

Perception of Deontology: Seven-point Likert-type scale from strongly disagree to strongly agree

DEO1. Her behavior does not violate an unwritten contract.
DEO2. Her behavior does not violate my ideas of fairness.
DEO3. Her behavior is morally right.
DEO4. Her behavior does not violate an unspoken promise.

Perception of Ethical Judgment: Seven-point Likert-type scale from strongly disagree to strongly agree

EJ1. Her behavior is acceptable.
EJ2. Her behavior is ethical.

Perception of Behavioral Intention: Seven-point Likert-type scale from strongly disagree to strongly agree

BI1. I intend to do as she did.

Power Distance: Seven-point Likert-type scale from strongly disagree to strongly agree

PD1. Subordinates should follow their superior's decisions unconditionally.
PD2. Managers should make most decisions by

themselves without consulting subordinates.

PD3. Subordinates should not question their superior's decisions.

PD4. By asking subordinates for advice, managers might appear less powerful.

Individualism: Seven-point Likert-type scale from strongly disagree to strongly agree

IDV1. Individual rewards are more important than group welfare.

IDV2. Individual success is more important than group success.

IDV3. Having autonomy and independence is more important than being accepted as a member of a group (dropped).

IDV4. Individual gain is more important than being loyal to a group.

Masculinity: Seven-point Likert-type scale from strongly disagree to strongly agree

MAS1. The fulfillment of tasks is more important than caring for others.

MAS2. A job with high earnings is better than a job with quality of life (dropped).

MAS3. In an organization, being self-assertive is more important than being modest.

MAS4. Being strong is more important than being tender.

Uncertainty Avoidance: Seven-point Likert-type scale from strongly disagree to strongly agree

UA1. When starting a new job, I worry about it.

UA2. I fear uncertainty about the future.

UA3. I fear ambiguous situations (dropped).

UA4. I fear unfamiliar adventures (dropped).

Long-Term Orientation: Seven-point Likert-type scale from strongly disagree to strongly agree

LOT1. Thriftiness

LOT2. Persistence/perseverance (dropped)

LOT3. Ordering and observing relationships by status

LOT4. Having a sense of shame

LOT5. Saving money

Appendix B

Scenario

One day, Tina received an e-mail from a famous online game company. According to the mail, the company was willing to offer her a coupon to play one of the company's well-known games for free when she simply registered on the company's website. Tina, who likes playing online games, visited the site, registered as a member, and enjoyed the game for a month. After a month, the game company sent another e-mail to Tina to make a suggestion: the company asked her to give the list of names and mail addresses of her friends in exchange of free game for another month.

Action: Although knowing that offering names and addresses might infringe on the privacy of others, Tina believed that it would benefit both company and the friends since the friends would be able to enjoy the game for free as well. Therefore, Tina finally gave the list to the company.