

# Factors Affecting How Individuals Explain Their Behavioral Intentions to Others

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Abstract

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This paper investigated the cultural differences in how individuals' attitudes toward behavior and perceived norms would influence their reasoning when explaining their behavioral intentions to others. The study found that US Americans indicated stronger intentions to use attitude-related reasons, and weaker intentions to use subjective norm-related reasons than Koreans did for explaining green product purchase and downloading media files online. The relationships that attitudinal and normative components had with behavioral intentions were not the same as the relationship that attitudinal and normative determinants had with intentions to use attitude-related reasons and norm-related ones. The behavior type and the norm type were important factors for the relationships among attitudes, norms, and various types of intentions.

**Key words:** *Attitudes, Norms, Explanation, Theory of reasoned action, Cross-cultural research, Korea, USA*

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## I. Introduction

Individuals often face situations wherein they need to explain to others why they have engaged in or are about to engage in a certain behavior. Some individuals may express to others what they have in mind as the main reasons for engaging in a behavior, whereas other individuals may opt to cite reasons that would help them receive a positive reaction from other people. For example, when a man comes home from a blind date and is asked whether he would ask her out again, he may tell to his friends what he has in his mind (e.g., he does not find her attractive), but he may tell to others (e.g., the person who arranged the blind date) that she is too good for him. When students are asked why they intend to study hard for an exam, some students may reply that they personally believe studying hard is good and useful, even though the more central reason for their diligence is that their parents expect them to study hard.

One main aim of the current paper is to investigate whether or not individuals' internal reasons for forming their behavioral intentions is consistent with the external reasons they offer to express their behavioral intentions to others. In this paper, internal reasons and external reasons are distinguished as follows. Internal reasons for forming behavioral intentions focus on what individuals may consider when deciding to engage in a behavior. Attitudinal components and normative components central to theories such as the Theory of Reasoned Action (TRA) are the main internal reasons. External reasons are the reasons individuals offer as explanations for their behavioral intentions; individuals may use reasons pertaining to their attitudes and/or their perceptions of norms. As a way to examine the consistency between internal and external reasons,

this study poses the following question: when individuals' attitudes are stronger reasons than norms for forming behavioral intentions, will these attitudes, rather than norms, also be more strongly related to intentions to externally cite their attitudes as the reasons for their behavioral intentions when asked to explain them?

Another main aim of the current paper is to examine cultural differences between Koreans and Americans regarding the relationship between internal reasons and external reasons. Korean culture has typically been characterized as being more collectivist and/or less individualist than that of America (Hofstede, 1980; Kim, 1994; Oyserman, Coon and Kimmelmeier, 2002). Individualism has been defined as being an emphasis on individuals' own attributes and their self-concepts independent of other people, whereas collectivism has been characterized as an emphasis on interpersonal harmony, fitting in with others, and self-concepts construed in relation to others (Triandis, 1995). An individualist culture stresses that individuals should have autonomy in their relationships with others (Markus and Kitayama, 1991), and that their personal goals should be respected over group goals (Triandis, McCusker and Hui, 1990). On the other hand, individuals in collectivist cultures consider themselves as an element of a whole group (Triandis, 1989; Markus and Kitayama, 1991). Face-saving and conformity can be important factors for Koreans' behavioral intentions (Na, 1997). Therefore, for these individuals, it is more important to achieve the group's goal and insure the group's survival than care for individuals' goals and survival. Considering such cultural differences, it is expected that Koreans and Americans might differ in the extent to which they are likely to use attitudes and norms as reasons when explaining their behaviors to others. The following sections provide a brief rationale, hypotheses, and research questions.

## **Determinants of Behavioral Intentions**

Among the various reasons why individuals intend to engage in a behavior, two major determinants have been examined: attitudinal and normative components. One of the theories that specify these attitudinal and normative components as determinants of behavioral intentions and behaviors is the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980). Attitudes toward behavior concern individuals' evaluation of performing the behavior (Ajzen and Fishbein, 1980). Individuals may consider engaging in the behavior as good and beneficial, possibly because engaging in the behavior leads to useful outcomes. Subjective norms pertain to individuals' perceptions of what other people think about individuals performing such behaviors (Ajzen and Fishbein, 1980). Individuals often consider the opinions of others who are important to them and want to comply with the wishes of those others. Attitudes toward behavior and subjective norms have been shown to be related to intentions to engage in various behaviors, such as consenting to organ donation (Weber et al., 2007) and participating in conference meetings (Lee and Back, 2008). Meta-analyses also show that attitudinal and normative components have significant correlations with behavior intentions (Sheppard, Hartwick and Warshaw, 1988; Sheeran and Talyor, 1999; Armitage and Conner, 2001). Research shows that TRA had strong validity in Korea for understanding purchasing intentions (Lee and Green, 1991; Lee, Qu and Kim, 2007), intentions to study for a final exam (Park and Levine, 1999), and intentions to share knowledge with co-workers (Bock et al., 2005).

Additionally, individuals' perceptions of descriptive and injunctive norms can be determinants of behavioral intentions. Descriptive

norms are defined as being what people commonly do, and injunctive norms are defined as being what people approve of and support (Cialdini, Reno and Kallgren, 1990). Studies have shown that descriptive norms explain additional variance in behavioral intentions beyond attitudes and subjective norms (Rivis and Sheeran, 2003). Injunctive norms are also related to behavioral intentions, such as alcohol consumption (Real and Rimal, 2007) and playing the lottery (Walker, Coumeya and Deng, 2006). Park and Smith (2007) provided empirical evidence that individuals' subjective norms, perceived descriptive norms, and perceived injunctive norms are distinguished from one another and differentially related to behavioral intentions.

### **Explaining One's Behavioral Intentions**

When there is no need for individuals to explain their behaviors to others, they may freely complete their own personal assessment of their behaviors and behavioral intentions. But to explain their behaviors to others, individuals may need to consider what those others might think about the reasons they offer for their behaviors. When there are multiple reasons for engaging in a behavior, each reason can vary in the extent to which it generates desirable impressions (Cooley, 1902). When explaining to others why they intend to engage in a certain behavior, individuals may not want to let others know the real reason and may prefer to offer other reasons. For example, with an increasing need for presidents to go public and communicate with voters in Korea (Park and Koo, 2007), a president may have his or her own selfish reason deep down for a certain behavior, but may avoid revealing it to the public, explaining instead that he or she simply wants to serve the country and honor what

their constituents expect him or her to do on their behalf.

When juxtaposing internal reasons for forming behavioral intentions with external justifications for forming behavioral intentions, two possible outcomes exist. One is that individuals are consistent in their internal thoughts and external justifications concerning their behaviors. In this view, when individuals internally weigh their attitudes, rather than perceived norms, as stronger factors for forming behavioral intentions, individuals may externally express those attitudes to others. Similarly, when individuals internally weigh their norm perceptions, rather than attitudes, as being stronger factors for forming behavioral intentions, individuals may externally express their perceived norms to others if asked to explain why they are about to engage in a certain behavior.

Another possibility for internal and external reasons is that individuals' internal thoughts are not consistent with their external justifications for behaviors. Individuals may externally express their perceived norms to others when asked to explain why they are about to engage in a behavior even if, internally, attitudes played a stronger role than norms in determining that behavioral intention. Similarly, individuals may externally express their attitudes to others when asked to explain why they are about to engage in the behavior even when norms were a stronger internal reason for behavioral intention.

Individuals may invoke different reasons when explaining a behavior to others. When individuals need to explain their behavioral intentions to others, they often consider what others would think about them as a result of the reasons they use to explain their behavior (Buss, 1980). Expressing a certain type of explanation for one's behavior can garner desirable or undesirable impressions (Leary and Kowalski, 1990). For one type of behaviors, individuals may think that expressing their attitudes as the reason for engaging in the be-

havior makes them look confident and self-assured. For another type of behaviors, individuals may think that expressing their perceived norms (e.g., “others who are important to me wanted me to do it,” as an example of subjective norms, “many people do it” as an example of perceived descriptive norms, and “people approve of the behavior” as an example of perceived injunctive norms) as the reasons for engaging in the behavior makes them look positive and sensitive.

### **Cultural Differences**

Cultures vary in the extent to which individuals think, behave, and communicate because culture plays a large role in how individuals think of themselves in relation to others (Markus and Kitayama, 1991). For example, when compared to Hindus, Americans more frequently refer to general dispositions and less frequently refer to contextual factors when they have to explain the behavior of a third party (Miller, 1984). East Asians focus relatively more on the environment or context than do Americans (Masuda and Nisbett, 2001). A Chinese-language newspaper described more situational factors (e.g., time, place, social contexts) and fewer personal dispositions (e.g., personality traits, temperament, habits, physical characteristics) than an English-language newspaper (Morris and Peng, 1994). Although it is universal that individuals perceive a communicative behavior differently depending on the relationship involved (e.g., parents vs. strangers) (Knapp, Ellis and Williams, 1980), cultural differences exist in that, for example, Koreans, in contrast to Americans, are more likely to reveal personal information about themselves to the members of their in-group (Gudykunst, Yoon and Nishida, 1987). Americans believe that their behavior should be con-

sistent across situations, whereas the Japanese believe that they need to adjust their behavior to each situation type (e.g., public vs. private setting) (Doi, 1986). Briley, Morris and Simonson (2000) found that Chinese and Japanese individuals were more likely to change their decisions from extreme options to compromise-driven alternatives when they had to explain their decisions, while Americans were unlikely to change their decisions.

Meta-analyses and literature review articles have shown that attitudes toward behavior, rather than subjective norms, have a stronger relationship with behavioral intentions (Trafimow and Finlay, 1996; Sheppard, Hartwick and Warshaw, 1988; Sheeran and Taylor, 1999; Hausenblas, Carron and Mack, 1997; Hagger, Chatzisarantis and Biddle, 2002). It is more natural to expect such findings for people in America, where the culture is more individualistic. On the other hand, subjective norms have been often hypothesized to be a strong determinant of behavioral intentions among people in Asian cultures, many of which are collectivistic. Empirical findings, however, sometimes show that, even for Asian groups such as Koreans and Chinese, attitudes are the only significant factor or a stronger factor than subjective norms for explaining variance in behavioral intentions (Hamid and Cheng, 1995; Godin et al., 1996; Park and Levine, 1999; Shen et al., 2003; Eves and Cheng, 2007; Muk, 2007). One of the reasons for such findings could be that, although the characteristics of collectivism may lead individuals to take into full consideration what others think about their behavior, attitudes might be still a stronger determinant of behavioral intentions as long as individuals do not have to consider whether others would know about their behavioral intentions, and reasons for them. This may apply particularly in cases where respondents are giving reasons for behavioral intentions in surveys, and never expect to have to share those reasons with people they know personally. Thus, when in-



dividuals imagine a situation where they have to face others and explain their behaviors, what others would think about their behaviors and their explanations for those behaviors may understandably become more salient in the individuals' minds.

## **Hypotheses and Research Questions**

One set of the main variables in the current study pertains to internal reasons for behavioral intentions; namely, the two components of TRA (attitudes toward behavior and subjective norms) and individuals' perceptions of descriptive and injunctive norms. Another set of the main variables includes intentions to use attitude-related reasons and intentions to use subjective norm-, injunctive norm-, and descriptive norm-related reasons when explaining behavioral intentions. The paper first investigates whether or not attitudinal and normative components are significantly related to behavioral intentions. Then, the paper asks whether or not the attitudinal component and normative components (subjective norms, descriptive norms, and injunctive norms) as the internal reasons are significantly related to intentions to use attitude-related and norm-related reasons for explaining behavioral intentions to others. The research questions are posed as follows:

**Research Question 1:** Among attitudinal and normative components, which one will be more strongly related to behavioral intentions?

**Research Question 2:** Among attitudinal and normative components, which one will be more strongly related to intentions to use attitude-related reasons to explain behavioral intentions to others?

**Research Question 3:** Among attitudinal and normative components, which one will be more strongly related to intentions to use

norm-related reasons to explain behavioral intentions to others?

For each of the three questions above, the current study aims to further examine if there are differences between Koreans and Americans. Additionally, based on the aforementioned discussion of cultural differences, it is expected that the differences between Koreans and Americans may be more pronounced when they are supposed to explain their behavioral intentions to other people. Since a collectivistic culture tends to consider normative reasons as being more reasonable and appropriate, Koreans may prefer norm-related reasons more strongly than Americans. On the other hand, compared to Koreans, Americans may consider attitude-related reasons to be more reasonable as external justifications for their behaviors because of the individualistic characteristics emphasizing self attributes and personal goals. Thus, the following hypotheses are advanced:

**Hypothesis 1:** Americans will indicate stronger intentions to use attitude-related reasons than Koreans when explaining their behavioral intentions to others.

**Hypothesis 2:** Koreans will indicate stronger intentions to use norm-related reasons than Americans when explaining behavioral intentions to others.

## II. Method

### Overview of Design

Two versions of a questionnaire were prepared; one version con-

tained measurement items for purchasing green products and another version contained measurement items for downloading unauthorized media files via the Internet. Participants completed one of the two versions and indicated their intentions to engage in one of two behaviors, attitudes toward behavior, subjective norms, descriptive norms, and injunctive norms concerning one of the two behaviors. Participants also indicated the degree to which they would intend to employ each of the four different reason types (attitude-related reasons, subjective, descriptive, and injunctive norm-related reasons) when they would have to explain to others their behavioral intention to engage in one of the two behaviors.

## **Participants**

Participants were 174 undergraduates (42% males; age  $M = 21.06$ ,  $SD = 3.12$ ) enrolled in a large Midwestern University in the U.S. and 189 undergraduates (72% men; age  $M = 22.65$ ,  $SD = 3.00$ ) in large universities in Korea. Of the U.S. participants, 55.7% were Caucasian, 22.4% were African American, 0.6% were Native American, 6.9% were Asian American, 2.3% were Hispanic, 1.7% were Pacific Islander, 6.3% were mixed, and 4.0 % were unidentified. All participants in Korea had identical ethnicity.

## **Measurements**

Korean participants completed the questionnaire in Korean and American participants completed it in English. To ensure equivalent translations in the different languages, an individual fluent in Korean and English first translated the questionnaire from

English to Korean. Next, another individual fluent in Korean and English translated the Korean version back into English. Ultimately, the original English version and the back-translated English version were compared for consistency and any discrepancy was resolved considering both English and Korean meanings.

For the purpose of the current study, the two behaviors referenced in the questionnaires (purchasing green products and downloading unauthorized media files via the Internet) were chosen for a couple of reasons. For a proper cross-cultural comparison, it was necessary to select behaviors that would be commonly and prevalently performed in both countries. Downloading unauthorized media files from the Internet and purchasing green products were chosen because these two behaviors were gaining increasing attention from Korea and the U.S. for their popularity and potential costs and benefits to each country.

Based on a survey example provided by Ajzen and Fishbein (1980) and previous research by Park and Smith (2007), the questionnaire was designed to measure each participant's intention to engage in one of the behaviors, attitudes toward the behavior, and subjective, descriptive, and injunctive norms concerning each behavior. After responding to the scale for typical TRA components, each participant indicated the extent to which they would intend to use attitudinal and normative reasoning when explaining their behavioral intention to others. Appendix 1 shows the measurement items for purchasing green products. The measures for unauthorized downloading were highly similar to those for purchasing green products. The reliabilities (Cronbach's  $\alpha$ ) ranged from .80 to .96. Tables 1 and 2 display the reliabilities and the means and standard deviations of each variable and show correlations among the variables.

**Table 1.** Reliabilities, Correlations, Means, and Standard Deviations for Purchasing Green Products.

	1	2	3	4	5	6	7	8	9	
Koreans ( <i>df</i> = 83)										
1. Attitudes	.94									
2. Subjective norms	.73***	.93								
3. Descriptive norms	.59***	.71***	.94							
4. Injunctive norms	.70***	.79***	.78***	.92						
5. Behavioral intention to purchase green products	.62***	.63***	.57***	.59***	.97					
6. Intentions to use attitude-related reasons	.84***	.71***	.59***	.70***	.57***	.96				
7. Intentions to use subjective norm-related reasons	.73***	.82***	.59***	.70***	.59***	.70***	.94			
8. Intentions to use descriptive norm-related reasons	.71***	.76***	.74***	.68***	.65***	.64***	.86***	.92		
9. Intentions to use injunctive norm-related reasons	.72***	.74***	.61***	.74***	.63***	.66***	.83***	.87***	.92	
	<i>M</i>	4.75	4.11	4.24	4.39	4.17	4.86	4.20	4.25	4.36
	<i>SD</i>	(0.96)	(1.07)	(1.18)	(1.08)	(1.30)	(0.98)	(1.07)	(1.18)	(1.10)
Americans ( <i>df</i> = 78)										
1. Attitudes	.91									
2. Subjective norms	.31**	.85								
3. Descriptive norms	.21	.26*	.89							
4. Injunctive norms	.39***	.23*	.40***	.83						
5. Behavioral intentions to purchase green products	.66***	.44***	.12	.30**	.96					
6. Intentions to use attitude-related reasons	.68***	.05	.12	.48***	.42***	.94				
7. Intentions to use subjective norm-related reasons	.18	.73***	.23*	.09	.28*	.01	.88			
8. Intentions to use descriptive norm-related reasons	.24*	.24*	.62***	.24*	.09	.26*	.40***	.91		
9. Intentions to use injunctive norm-related reasons	.34**	.15	.30**	.46***	.23*	.51***	.19	.55***	.89	
	<i>M</i>	5.49	3.05	4.25	4.95	4.26	5.54	3.12	4.21	4.63
	<i>SD</i>	(0.92)	(1.21)	(1.30)	(1.02)	(1.67)	(0.87)	(1.23)	(1.40)	(1.29)

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Reliabilities (Cronbach's  $\alpha$ ) are reported on the diagonal.

**Table 2.** Reliabilities, Correlations, Means, and Standard Deviations for Downloading Unauthorized Media Files Online.

	1	2	3	4	5	6	7	8	9	
Koreans ( <i>df</i> = 111)										
1. Attitudes	.95									
2. Subjective norms	.70***	.80								
3. Descriptive norms	.36***	.48***	.89							
4. Injunctive norms	.54***	.66***	.48***	.81						
5. Behavioral intentions to download	.77***	.74***	.47***	.54***	.88					
6. Intentions to use attitude-related reasons	.80***	.67***	.32**	.43***	.61***	.96				
7. Intentions to use subjective norm-related reasons	.71***	.71***	.30**	.53***	.57***	.79***	.90			
8. Intentions to use descriptive norm-related reasons	.51***	.54***	.56***	.44***	.52***	.60***	.65***	.90		
9. Intentions to use injunctive norm-related reasons	.64***	.57***	.30***	.54***	.58***	.55***	.67***	.61***	.89	
	<i>M</i>	3.82	3.59	4.78	3.66	3.93	3.88	3.56	4.23	3.78
	<i>SD</i>	(1.23)	(1.21)	(1.48)	(1.15)	(1.30)	(1.26)	(1.25)	(1.38)	(1.28)
Americans ( <i>df</i> = 92)										
1. Attitudes	.93									
2. Subjective norms	.59***	.87								
3. Descriptive norms	.21*	.07	.81							
4. Injunctive norms	.53***	.50***	.35**	.87						
5. Behavioral intentions to download	.75***	.58***	.29**	.48***	.89					
6. Intentions to use attitude-related reasons	.80***	.57***	.30**	.56***	.69***	.94				
7. Intentions to use subjective norm-related reasons	.46***	.74***	.17	.48***	.40***	.51***	.88			
8. Intentions to use descriptive norm-related reasons	.41***	.28**	.50***	.34**	.40***	.55***	.34**	.83		
9. Intentions to use injunctive norm-related reasons	.50***	.45***	.30**	.66***	.42***	.50***	.55***	.57***	.88	
	<i>M</i>	4.07	2.99	5.96	4.30	3.72	4.25	2.99	5.01	4.10
	<i>SD</i>	(1.24)	(1.38)	(0.99)	(1.36)	(1.68)	(1.28)	(1.32)	(1.36)	(1.37)

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Reliabilities (Cronbach's  $\alpha$ ) are reported on the diagonal.

*Behavioral intentions.* The measurement for behavioral intentions included five items for unauthorized downloading and five items for purchasing green products with a 7-point response format (e.g., 1 = strongly disagree, 7 = strongly agree). An example item was, “I intend to download unauthorized media files via the Internet.”

*Perceived norms.* Subjective norms, descriptive norms, and injunctive norms were separately measured with four items utilizing a 7-point response format (1 = strongly disagree, 7 = strongly agree). These items were modified from the scales used in Park and Smith (2007). For example, “Many people have illegally downloaded media files online” was used to measure individuals’ perceptions of descriptive norms.

*Attitudes toward behavior.* The measurement for attitudes toward behavior included nine 7-point semantic differential scales. A higher score indicated more positive attitudes (e.g., 1 = extremely bad, 7 = extremely good). An example item was, “Downloading unauthorized media files via the Internet is \_\_\_\_.”

*Intentions to use attitude-related reasons.* The items to measure intentions to use attitude-related reason were similar to the items used to measure attitudes toward behavior. Participants were asked to evaluate each statement about attitude-related reasons as a way to explain their behavior. Participants responded on semantic differential scales (e.g., 1 = extremely useless, 7 = extremely useful) to the following statement: “When I have to explain why I have illegally downloaded unauthorized copyright-protected media files via the Internet, I intend to say to other people that downloading unauthorized copyright protected media files via the Internet is \_\_\_\_\_”

*Intentions to use norm-related reasons.* The items to measure

intentions to use norm-related reasons were similar to the items used to measure individuals' perceptions of subjective norms, injunctive norms, and descriptive norms. Participants indicated the extent to which they agreed with each statement about norm-related reasons as a way to explain their behavior (e.g., "When I have to explain why I have illegally downloaded unauthorized copyright-protected media files via the Internet, I intend to say to other people that many people would endorse my downloading unauthorized media files online."). All the measures used a 7-point response format (1 = strongly disagree, 7 = strongly agree).

It may be questioned whether the measures for attitudes toward behavior are separate from those for intentions to express attitude-related reasons and whether the measures for each type of perceived norms are distinct from the measures for intentions to express each type of norm-related reasons. Confirmatory factor analysis (CFA) was performed to examine if the eight-factor model consisting of attitudes toward behavior (the first factor), intentions to express attitude-related reasons (the second factor), three types of perceived norms (the third, the fourth, and the fifth factors), and intentions to express each of three norm-related reasons (the sixth, the seventh, and the eighth factors) would fit the data better than a four-factor model, which combined 1) attitudes toward behavior and intentions to express attitude-related reasons into the first factor, 2) subjective norms and intentions to express subjective norm-related reasons into the second factor, 3) descriptive norms and intentions to express descriptive norm-related reasons into the third factor, and 4) injunctive norms and intentions to express injunctive norm-related reasons into the fourth factor. For purchasing green products, CFA showed that the eight-factor model was superior to the four-factor model,  $\Delta\chi^2(22) =$



2044.21,  $p < .001$ . The eight-factor model fit the data well (CFI [Comparative Fit Index] = .97, NFI [Normed Fit Index] = .95, Standardized RMR [Root Mean Square Residual] = .06). For downloading, CFA showed that the eight-factor model was superior to the four-factor model,  $\Delta\chi^2(22) = 1296.00$ ,  $p < .001$ . The eight-factor model fit the data well (CFI = .95, NFI = .93, Standardized RMR = .08).

### III. Results

#### Overview

Before testing hypotheses and answering research questions, various measures were taken to check the data. For example, scatterplots did not show any considerable curvilinear relationships between independent and dependent variables. When gender was included as a variable in all analyses, it did not substantially influence the overall findings concerning the hypotheses and research questions. Thus, gender difference will not be further discussed.

Hierarchical multiple regression analyses were conducted to answer the research questions. One dummy variable labeled as culture was created with Koreans as the reference group coded with 0 and Americans as the comparison group coded with 1. All continuous independent variables were transformed by the method of mean-centering (i.e., subtracting the mean from each variable). Mean-centering has the benefit of avoiding unessential multicollinearity when testing interactions among the

variables. Attitudinal and normative components (i.e., the first-order effect predictors) were entered in the first block, along with culture (i.e., the dummy variable representing the national group). The interaction term of the attitudinal component by culture and the interaction terms of each of the normative components by culture (i.e., the second-order effect predictors) were entered in the second block. For any significant interactions, simple regression analyses were conducted to examine the patterns of the interactions.

Hypotheses were tested with a 3-way mixed ANOVA. The within-subject factor consisted of 4 types of reasons (intentions to use attitude-related reasons, subjective norm-related reasons, descriptive norm-related reasons, or injunctive norm-related reasons). The between-subject factors included 2 types of behaviors (purchasing green products and downloading unauthorized media files via the Internet) and 2 cultures (Korea and the U.S.).

### **Research Question 1**

RQ1 asked which of the attitudinal and normative components would be more strongly related to behavioral intentions. Table 3 shows the multiple regression analysis results.

**Table 3.** Multiple Regression Analysis Results for Intentions to Purchase Green Products and to Download Unauthorized Media Files Online.

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>sr</i>
Purchasing green products					
First block					
Intercept	4.29	0.14		29.78***	
ATT	0.77	0.12	.52	6.45***	.38
SN	0.34	0.10	.29	3.57***	.21
DN	-0.02	0.09	-.01	-0.18	-.01
IN	0.08	0.12	.05	0.64	.04
Culture <sup>1</sup>	-0.19	0.24	-.06	-0.79	-.05
$F(5, 158) = 26.28, p < .001, adj.R^2 = .44$					
Second block					
ATT × Culture	0.65	0.24	.28	2.68**	.15
SN × Culture	0.11	0.23	.06	0.48	.03
DN × Culture	-0.27	0.20	-.16	-1.36	-.08
IN × Culture	0.06	0.26	.03	0.23	.01
$F_{change}(4, 154) = 3.08, p < .05, R^2_{change} = .04$					
The overall model: $F(9, 154) = 16.73, p < .001, adj. R^2 = .47$					
Downloading unauthorized files online					
First block					
Intercept	4.01	0.96		41.83***	
ATT	0.66	0.07	.54	9.30***	.40
SN	0.29	0.07	.26	4.11***	.18
DN	0.15	0.06	.14	2.67**	.12
IN	0.02	0.07	.02	0.34	.02
Culture <sup>1</sup>	-0.38	0.16	-.13	-2.42*	-.10
$F(5, 201) = 57.34, p < .001, adj.R^2 = .62$					
Second block					
ATT × Culture	0.27	0.14	.15	1.88	.08
SN × Culture	-0.09	0.15	-.06	-0.60	-.03
DN × Culture	0.12	0.12	.06	1.00	.04
IN × Culture	0.03	0.14	.02	0.24	.01
$F_{change}(4, 197) = 1.84, p = .12, R^2_{change} = .01$					
The overall model: $F(9, 197) = 39.26, p < .001, adj. R^2 = .63$					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*sr*: semipartial correlation

ATT: Attitudes toward behavior

SN: Subjective norms

DN: Descriptive norms

IN: Injunctive norms

<sup>1</sup> dummy-coded with Americans = 1 and Koreans = 0

*Purchasing Green Products.* The overall model, including the first-order effect and second-order effect predictors for behavioral intention to purchase green products, was significant,  $F(9, 154) = 16.73$   $p < .001$ , *adjusted R*<sup>2</sup> = .47. Among the five first-order effect predictors, attitudes and subjective norms were significant for intentions to purchase green products in the future. Culture and descriptive and injunctive norms were not statistically significant. Among the four second-order effect predictors, the interaction of attitudes by culture was significant. The significant interaction indicated that attitudes were more strongly related to behavioral intention for Americans ( $B = 1.06$ ,  $SE = 0.17$ ,  $\beta = .31$ ,  $p < .001$ ) than for Koreans ( $B = 0.41$ ,  $SE = 0.17$ ,  $\beta = .56$ ,  $p < .05$ ).

*Downloading Unauthorized Media Files via the Internet.* The overall model was significant,  $F(9, 197) = 39.26$ ,  $p < .001$ , *adjusted R*<sup>2</sup> = .63. Among the five first-order effect predictors, attitudes, subjective norms, descriptive norms, and culture were significant, while injunctive norms were not significant. None of the interaction terms were statistically significant. The results showed that Koreans had stronger intentions to download media files than Americans had and that individuals who had more positive attitudes toward the behavior and stronger subjective and descriptive norms strongly intended to download unauthorized media files online both in Korea and the U.S.

## Research Question 2

RQ2 asked whether attitudinal or normative components would be more strongly related to intentions to use attitude-related reasons (the dependent variable) when individuals needed to explain their behavioral intention to others. Table 4 presents the multiple regression analysis results.

**Table 4.** Multiple Regression Analysis Results for Intentions to Use Attitude-Related Reasons for Explaining Purchasing Green Products and Downloading Unauthorized Media Files Online.

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>sr</i>
Purchasing green products					
First block					
Intercept	5.20	0.73		71.19***	
ATT	0.65	0.06	.66	10.78***	.48
SN	-0.70	0.05	-.09	-0.60	-.06
DN	-0.03	0.05	-.03	-0.18	-.03
IN	0.27	0.06	.30	4.56***	.21
Culture <sup>1</sup>	-0.02	0.12	-.01	-0.14	-.01
$F(5, 159) = 68.51, p < .001, adj. R^2 = .67$					
Second block					
ATT × Culture	-0.05	0.12	-.04	-0.43	-.02
SN × Culture	-0.25	0.12	-.23	-2.16*	-.10
DN × Culture	-0.07	0.10	-.07	-0.73	-.03
IN × Culture	0.14	0.13	.10	1.06	.05
$F_{change}(4, 155) = 2.34, p = .058, R^2_{change} = .02$					
The overall model: $F(9, 155) = 40.38, p < .001, adj. R^2 = .68$					
Downloading unauthorized files online					
First block					
Intercept	3.95	0.78		51.06***	
ATT	0.69	0.06	.67	12.16***	.49
SN	0.15	0.06	.15	2.64**	.11
DN	0.04	0.05	.05	0.99	.04
IN	0.03	0.06	.30	0.59	.02
Culture <sup>1</sup>	0.22	0.13	.09	1.71	.07
$F(5, 201) = 82.02, p < .001, adj. R^2 = .66$					
Second block					
ATT × Culture	-0.03	0.11	-.02	-0.28	-.01
SN × Culture	-0.15	0.12	-.11	-1.30	-.05
DN × Culture	0.15	0.10	.08	1.45	.06
IN × Culture	0.23	0.11	.17	2.05*	.08
$F_{change}(4, 197) = 2.21, p = .12, R^2_{change} = .01$					
The overall model: $F(9, 197) = 47.65, p < .001, adj. R^2 = .67$					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*sr*: semipartial correlation

ATT: Attitudes toward behavior

SN: Subjective norms

DN: Descriptive norms

IN: Injunctive norms

<sup>1</sup> dummy-coded with Americans = 1 and Koreans = 0

*Intentions to Use Attitude-related Reasons for Purchasing Green Products.* The overall model was significant,  $F(9, 155) = 40.38, p < .001$ , *adjusted R*<sup>2</sup> = .68. Among the five predictors in the first block, attitudes and injunctive norms were statistically significant predictors of intentions to use attitude-related reasons, whereas descriptive and injunctive norms and culture were not significant. The results showed that individuals with more positive attitudes toward the behavior and stronger injunctive norms corresponded with higher intentions to use attitudinal reasoning. Among the four second-order effect predictors, the interaction of subjective norms by culture was significant. The significant interaction indicated that subjective norms were negatively related to intentions to use attitude-related reasons for Americans ( $B = -0.14, SE = 0.06, \beta = -.19, p < .05$ ), but not for Koreans ( $B = 0.12, SE = 0.10, \beta = .13, p = .24$ ).

*Intentions to Use Attitude-related Reasons for Downloading.* The overall model was significant,  $F(9, 197) = 47.65, p < .001$ , *adjusted R*<sup>2</sup> = .67. Among the five predictors in the first block, attitudes and injunctive norms were significant predictors of intentions to use attitude-related reasons, whereas descriptive norms, injunctive norms, and culture were not significant. Among the four predictors in the second block, the interaction of injunctive norms by culture was significant. The significant interaction indicated that injunctive norms were negatively related to intentions to use attitude-related reasons for Americans ( $B = -0.11, SE = 0.08, \beta = -.10, p = .18$ ), but positively related to intentions to use attitude-related reasons for Koreans ( $B = 0.11, SE = 0.07, \beta = .12, p = .12$ ).

### Research Question 3

RQ3 asked which of the attitudinal and normative components would be more strongly related to intentions to use norm-related

reasons when explaining one's behavioral intentions. Tables 5, 6, and 7 show the multiple regression analysis results.

**Table 5.** Multiple Regression Analysis Results for Intentions to Use Subjective Norm-Related Reasons for Explaining Purchasing Green Products and Downloading Unauthorized Media Files Online.

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>sr</i>
Purchasing green products					
First block					
Intercept	3.84	0.10		40.21***	
ATT	0.11	0.08	.09	1.41	.06
SN	0.74	0.06	.73	11.50***	.52
DN	0.05	0.06	.05	0.88	.04
IN	-0.07	0.08	-.06	-0.87	-.04
Culture <sup>1</sup>	-0.34	0.16	-.13	-2.16*	-.10
$F(5, 159) = 64.65, p < .001, adj.R^2 = .66$					
Second block					
ATT × Culture	-0.35	0.16	-.18	-2.18*	-.10
SN × Culture	0.15	0.16	.10	-0.96	.04
DN × Culture	0.13	0.13	.10	1.00	.05
IN × Culture	-0.20	0.17	-.11	-1.15	-.05
$F_{change}(4, 155) = 2.14, p = .079, R^2_{change} = .02$					
The overall model: $F(9, 155) = 37.89, p < .001, adj.R^2 = .70$					
Downloading unauthorized files online					
First block					
Intercept	3.45	0.09		38.30***	
ATT	0.20	0.07	.19	2.99**	.14
SN	0.55	0.07	.55	8.34***	.38
DN	-0.20	0.05	-.02	-0.36	-.02
IN	0.10	0.06	.10	1.53	.07
Culture <sup>1</sup>	-0.32	0.15	-.12	-2.17*	-.10
$F(5, 200) = 54.55, p < .001, adj.R^2 = .57$					
Second block					
ATT × Culture	-0.46	0.13	-.29	-3.52**	-.16
SN × Culture	0.24	0.13	.17	1.79	.08
DN × Culture	0.19	0.12	.11	1.62	.07
IN × Culture	0.03	0.13	.02	0.24	.01
$F_{change}(4, 196) = 3.60, p = .007, R^2_{change} = .03$					
The overall model: $F(9, 196) = 33.48, p < .001, adj.R^2 = .59$					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*sr*: semipartial correlation

ATT: Attitudes toward behavior

SN: Subjective norms

DN: Descriptive norms

IN: Injunctive norms

<sup>1</sup> dummy-coded with Americans = 1 and Koreans = 0

**Table 6.** Multiple Regression Analysis Results for Intentions to Use Descriptive Norm-Related Reasons for Explaining Purchasing Green Products and Downloading Unauthorized Media Files Online.

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>sr</i>
Purchasing green products					
First block					
Intercept	4.26	0.12		36.12***	
ATT	0.29	0.10	.23	3.00**	.17
SN	0.14	0.08	.14	1.83	.10
DN	0.60	0.10	.57	8.10***	.45
IN	-0.09	0.19	-.07	-0.90	-.05
Culture <sup>1</sup>	-0.06	0.17	-.03	-0.33	-.02
$F(5, 159) = 33.42, p < .001, adj. R^2 = .50$					
Second block					
ATT × Culture	-0.18	0.20	-.09	-0.90	-.05
SN × Culture	-0.32	0.19	-.22	-1.67	-.09
DN × Culture	0.24	0.16	.17	1.46	.08
IN × Culture	0.05	0.22	.03	0.21	.01
$F_{change}(4, 155) = 1.61, p = .175, R^2_{change} = .02$					
The overall Model: $F(9,155) = 19.56, p < .001, adj. R^2 = .51$					
Downloading unauthorized files online					
First block					
Intercept	4.47	0.11		39.68***	
ATT	0.30	0.08	.26	3.65***	.19
SN	0.11	0.08	.10	1.32	.07
DN	0.44	0.07	.44	6.74***	.36
IN	0.01	0.08	.01	0.18	.01
Culture <sup>1</sup>	0.25	0.19	.09	1.33	.07
$F(5, 200) = 31.23, p < .001, adj. R^2 = .42$					
Second block					
ATT × Culture	0.02	0.17	.01	-0.11	.01
SN × Culture	-0.13	0.17	-.08	-0.74	-.04
DN × Culture	0.23	0.15	.12	1.59	.08
IN × Culture	0.00	0.16	.00	0.03	.00
$F_{change}(4, 196) = 0.78, p = .538, R^2_{change} = .01$					
The overall model: $F(9, 196) = 17.62, p < .001, adj. R^2 = .42$					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*sr*: semipartial correlation

ATT: Attitudes toward behavior

SN: Subjective norms

DN: Descriptive norms

IN: Injunctive norms

<sup>1</sup> dummy-coded with Americans = 1 and Koreans = 0



**Table 7.** Multiple Regression Analysis Results for Intentions to Use Injunctive Norm-Related Reasons for Explaining Purchasing Green Products and Downloading Unauthorized Media Files Online.

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>sr</i>
Purchasing green products					
First block					
Intercept	4.57	0.12		38.21***	
ATT	0.33	0.10	.27	3.32**	.20
SN	0.05	0.08	.05	0.58	.04
DN	0.09	0.08	.10	1.24	.08
IN	0.43	0.10	.39	4.40***	.27
Culture <sup>1</sup>	-0.16	0.20	-.07	-0.84	-.05
$F(5, 159) = 23.34, p < .001, adj.R^2 = .41$					
Second block					
ATT × Culture	-0.09	0.21	-.05	-0.42	-.03
SN × Culture	-0.29	0.20	-.22	-1.48	-.09
DN × Culture	0.14	0.17	.10	0.83	.05
IN × Culture	0.09	0.22	.05	0.40	.02
$F_{change}(4, 155) = 0.85, p = .496, R^2_{change} = .01$					
The overall model: $F(9, 155) = 13.30, p < .001, adj. R^2 = .40$					
Downloading unauthorized files online					
First block					
Intercept	3.91	0.10		37.55***	
ATT	0.28	0.08	.26	3.67***	.19
SN	0.11	0.08	.11	1.43	.08
DN	0.02	0.06	.02	0.28	.02
IN	0.41	0.07	.40	5.63***	.30
Culture <sup>1</sup>	0.03	0.17	.01	0.15	.01
$F(5, 200) = 32.39, p < .001, adj.R^2 = .43$					
Second block					
ATT × Culture	-0.37	0.15	-.23	-2.41*	-.13
SN × Culture	0.02	0.16	.01	0.11	.01
DN × Culture	0.17	0.13	.09	1.26	.07
IN × Culture	0.24	0.15	.17	1.59	.08
$F_{change}(4, 196) = 2.39, p = .053, R^2_{change} = .03$					
The overall model: $F(9, 196) = 19.55, p < .001, adj. R^2 = .45$					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*sr*: semipartial correlation

ATT: Attitudes toward behavior

SN: Subjective norms

DN: Descriptive norms

IN: Injunctive norms

<sup>1</sup> dummy-coded with Americans = 1 and Koreans = 0

*Intentions to Use Subjective Norm-related Reasons for Purchasing Green Products.* The overall model was significant,  $F(9, 155) = 37.89, p < .001, adjusted R^2 = .70$ . Among the five predictors in the first block (see Table 5), subjective norms and culture were significant predictors of intentions to offer subjective norm-related reasons. The results showed that Koreans had stronger intentions to provide subjective norm-related reasons than Americans and that subjective norms were positively related to intentions to offer subjective norm-related reasons. On the other hand, attitudes, descriptive norms, and injunctive norms were not significant. Among the predictors in the second block, the interaction of attitudes toward behavior by culture was significant, indicating that attitudes toward purchasing green products were more strongly related to intentions to use subjective norm-related reasons for Koreans ( $B = 0.32, SE = 0.10, \beta = .28, p < .01$ ) than for Americans ( $B = -0.03, SE = 0.12, \beta = -.03, p = .77$ ).

*Intentions to Use Subjective Norm-related Reasons for Downloading Unauthorized Media Files.* The overall model was significant,  $F(9, 196) = 33.48, p < .001, adjusted R^2 = .59$ . Among the five predictors in the first block (see Table 5), attitudes, subjective norms, and culture were significant for intentions to offer subjective norm-related reasons, while descriptive norms and injunctive norms were not significant. Among the four predictors in the second block, the interaction of attitudes toward behavior by culture was significant, indicating that the relationship between attitudes and intentions to use subjective norm-related reasons was not significant for Americans ( $B = -0.04, SE = 0.10, \beta = -.04, p = .68$ ), but was relatively large and significant for Koreans ( $B = 0.42, SE = 0.09, \beta = .41, p < .001$ ).

*Intentions to Use Descriptive Norm-related Reasons for*

*Purchasing Green Products.* As shown in Table 6, the overall model was significant,  $F(9, 155) = 19.56$ ,  $p < .001$ , *adjusted R*<sup>2</sup> = .51. Among the five predictors in the first block, attitudes and descriptive norms were significant predictors of intentions to utilize descriptive norm-related reasons, but subjective norms, injunctive norms, and culture were not significant. When the interaction terms were entered into the second block, however, interaction terms did not explain any additional variance in intentions to use descriptive norm-related reasons.

*Intentions to Use Descriptive Norm-related Reasons for Downloading.* Table 6 presents the multiple regression analysis results. The overall model was significant,  $F(9, 196) = 17.62$ ,  $p < .001$ , *adjusted R*<sup>2</sup> = .42. Among the five predictors in the first block, attitudes and descriptive norms were significant, while subjective norms, injunctive norms, and culture were not significant. When the interaction terms were entered into the second block, they failed to explain an additional variance in intentions to use descriptive norm-related reasons.

*Intentions to Use Injunctive Norm-related Reasons for Purchasing Green Products.* As depicted in Table 7, the overall model was significant,  $F(9, 155) = 13.30$ ,  $p < .001$ , *adjusted R*<sup>2</sup> = .40. Among the five predictors in the first block, attitudes and injunctive norms were significant, but subjective norms, descriptive norms, and culture were not significant. The interaction terms in the second block did not explain significant variance in intentions to use injunctive norm-related reasons.

*Intentions to Use Injunctive Norm-related Reasons for Downloading.* The overall model was significant,  $F(9, 196) = 19.55$ ,  $p < .001$ , *adjusted R*<sup>2</sup> = .45. Among the five predictors in the first block, attitudes and injunctive norms were significant, while sub-

jective norms, descriptive norms, and culture were not significant (see Table 7). Among the predictors in the second block, the significant interaction of attitudes by culture revealed that the relationship between attitudes and intentions to offer injunctive norm-related reasons was not significant for Americans ( $B = 0.08$ ,  $SE = 0.11$ ,  $\beta = .07$ ,  $p = .50$ ), but it was relatively large and significant for Koreans ( $B = 0.45$ ,  $SE = 0.10$ ,  $\beta = .43$ ,  $p < .001$ ).

### Hypotheses 1 and 2

H1 predicted that Americans would have stronger intentions to use attitude-related reasons than Koreans when prompted to explain behavioral intentions to others. H2 predicted that Koreans would have stronger intentions to employ norm-related reasons than Americans. The hypotheses were tested with a 4 (reason type: attitude-related reasons vs. subjective norm-related reasons vs. descriptive norm-related reasons vs. injunctive norm-related reasons) x 2 (behavior type: purchasing green products vs. downloading unauthorized media files) x 2 (culture: the U.S. vs. Korea) mixed ANOVA and reason type was the within-subject factor.

The analysis did not reveal a significant main effect for culture,  $F(1, 366) = 0.75$ ,  $p = .39$ ,  $\eta^2 = .00$ . However, there was a significant main effect for behavior type,  $F(1, 366) = 15.66$ ,  $p < .001$ ,  $\eta^2 = .04$ . Intentions to offer reasons in general were higher for purchasing green products ( $M = 4.49$ ,  $SD = 1.19$ ) than for downloading unauthorized media files online ( $M = 3.91$ ,  $SD = 1.68$ ). In addition, the ANOVA yielded a significant main effect for the reason type,  $F(3, 1098) = 136.55$ ,  $p < .001$ ,  $\eta^2 = .22$ . To further examine the difference among reason types, two complex comparisons (-3, 1, 1, 1 and 0, 1,

-2, 1) and one pair-wise comparison (0, -1, 0, 1) were conducted. This analysis yielded that intentions to use attitude-related reasons ( $M = 4.56$ ,  $SD = 1.29$ ) were higher than intentions to use norm-related reasons ( $M = 4.02$ ,  $SD = 1.32$ ),  $t(369) = -9.31$ ,  $p < .001$ . Among intentions to offer the norm-related reasons, intentions to use descriptive norm-related reasons ( $M = 4.42$ ,  $SD = 1.37$ ) were higher than both intentions to use subjective norm-related reasons ( $M = 3.47$ ,  $SD = 1.30$ ) and intentions to use injunctive norm-related reasons ( $M = 4.17$ ,  $SD = 1.30$ ),  $t(369) = 10.05$ ,  $p < .001$ . Finally, intentions to use subjective norm-related reasons were lower than intentions to use injunctive norm-related reasons,  $t(369) = -10.38$ ,  $p < .001$ . Interaction between reason type and culture was significant,  $F(2.95, 1079.45) = 52.77$ ,  $p < .001$ ,  $\eta^2 = .09$ , and interaction between reason type and behavior type was significant,  $F(2.95, 1079.45) = 49.694$ ,  $p < .001$ ,  $\eta^2 = .08$  whereas interaction between culture and behavior type was not significant,  $F(1, 366) = 1.61$ ,  $p = .21$ ,  $\eta^2 = .00$ .

These was a significant 3-way interaction among culture, reason type, and behavior type,  $F(2.95, 1079.45) = 8.62$ ,  $p < .001$ ,  $\eta^2 = .01$ . In order to probe the interaction patterns, t-tests were conducted within and between cultures as explained below.

### **Between-Culture Comparisons**

H1 predicted that Americans would indicate stronger intentions to use attitude-related reasons than Koreans. For purchasing green products, Americans had stronger intentions to use attitude-related reasons ( $M = 5.54$ ,  $SD = 0.87$ ) than Koreans had ( $M = 4.86$ ,  $SD = 0.98$ ),  $t(163) = -4.72$ ,  $p < .001$ . For downloading, Americans also had stronger intentions to use attitude-related reasons ( $M = 4.25$ ,  $SD = 1.28$ ) than Koreans had ( $M = 3.88$ ,  $SD = 1.26$ ),  $t(205) = -2.11$ ,

$p < .05$ . Thus, the data were consistent with H1.

H2 predicted that Koreans would indicate stronger intentions to use norm-related reasons than Americans. For purchasing green products, Koreans had stronger intentions to use subjective norm-related reasons ( $M = 4.20$ ,  $SD = 1.07$ ) than Americans had ( $M = 3.12$ ,  $SD = 1.23$ ),  $t(163) = 6.00$ ,  $p < .001$ . For downloading, Koreans also had stronger intentions to use subjective norm-related reasons ( $M = 3.56$ ,  $SD = 1.25$ ) than Americans had ( $M = 2.99$ ,  $SD = 1.32$ ),  $t(204) = 3.14$ ,  $p = .002$ . For purchasing green products, Americans ( $M = 4.21$ ,  $SD = 1.40$ ) and Koreans ( $M = 4.25$ ,  $SD = 1.18$ ) did not differ in their intentions to use descriptive norm-related reasons,  $t(163) = .23$ ,  $p = .82$ . For downloading, Americans also had stronger intentions to use descriptive norm-related reasons ( $M = 5.01$ ,  $SD = 1.36$ ) than Koreans had ( $M = 4.23$ ,  $SD = 1.38$ ),  $t(204) = -4.08$ ,  $p < .001$ . For purchasing green products, Americans ( $M = 4.63$ ,  $SD = 1.29$ ) and Koreans ( $M = 4.36$ ,  $SD = 1.10$ ) did not differ in their intentions to use injunctive norm-related reasons,  $t(163) = -1.45$ ,  $p = .16$ . For downloading, Americans ( $M = 4.10$ ,  $SD = 1.37$ ) and Koreans ( $M = 3.78$ ,  $SD = 1.28$ ) did not differ in their intentions to use injunctive norm-related reasons,  $t(204) = -1.72$ ,  $p = .09$ . Thus, the data were consistent with H2 for subjective norm-related reasons, but inconsistent with H2 for intentions to use descriptive norm-related reasons and injunctive norm-related reasons.

### **Within-Culture Comparisons**

Post hoc comparisons were conducted to compare intentions to use attitude-related reasons, subjective norm-related reasons, descriptive norm-related reasons, and injunctive norm-related reasons for each behavior. Means that differed from one another at  $p < .05$

were noted with different subscripts (e.g., 5.00<sub>a</sub> and 4.00<sub>b</sub>).

*Korea.* For purchasing green products among Korean participants, intentions to utilize attitude-related reasons ( $M = 4.86_a$ ,  $SD = 0.98$ ) received the highest score, when compared to intentions to offer subjective norm-related reasons ( $M = 4.20_b$ ,  $SD = 1.07$ ), descriptive norm-related reasons ( $M = 4.25_b$ ,  $SD = 1.18$ ), and injunctive norm-related reasons ( $M = 4.36_b$ ,  $SD = 1.10$ ). When Koreans had to explain their intentions to download unauthorized media files via the Internet, they intended to use descriptive norm-related reasons ( $M = 4.23_a$ ,  $SD = 1.38$ ) more strongly than attitude-related reasons ( $M = 3.88_b$ ,  $SD = 1.26$ ), subjective norm-related reasons ( $M = 3.56_c$ ,  $SD = 1.25$ ), and injunctive norm-related reasons ( $M = 3.78_b$ ,  $SD = 0.94$ ).

*The U.S.* For purchasing green products, Americans intended to use attitude-related reasons ( $M = 5.54_a$ ,  $SD = 0.87$ ) more strongly than subjective norm-related reasons ( $M = 3.12_d$ ,  $SD = 1.23$ ), descriptive norm-related reasons ( $M = 4.21_c$ ,  $SD = 1.40$ ), and injunctive norm-related reasons ( $M = 4.63_b$ ,  $SD = 1.29$ ). For unauthorized downloading of media files online, Americans' intentions to utilize descriptive norm-related reasons ( $M = 5.01_a$ ,  $SD = 1.37$ ) were higher than intentions to utilize attitude-related reason ( $M = 4.25_b$ ,  $SD = 1.29$ ), injunctive norm-related reasons ( $M = 4.10_b$ ,  $SD = 1.37$ ), or subjective norm-related reasons ( $M = 2.99_c$ ,  $SD = 1.32$ ).

## IV. Discussion

The current study aimed to examine consistency between internal reasons and external reasons by investigating how attitudes

toward a behavior and norms would differently relate to behavioral intentions to engage in behaviors, intentions to use attitude-related reasons, and intentions to use norm-related reasons. In the case of attitudes, consistency was examined by assessing whether attitudinal or normative components were more or less strongly related to intentions to use attitude-related reasons to explain behavioral intentions to others. If attitudinal components (i.e., internal reasons) are consistent with intentions to use attitude-related reasons to explain behavioral intentions to others (i.e., external reasons), attitudinal components rather than normative components should be more strongly related to intentions to use attitude-related reasons to explain behavioral intentions to others. For cultural differences, the current study compared Koreans and Americans regarding whether attitude and norms relevant for behavioral intentions would also be relevant to intentions to use attitude-related and norm-related reasons. In other words, it was expected that the consistency between internal reasons and external reasons would be different for individuals from the different cultures.

The findings indicated that Koreans would use different types of reasons, depending on the type of behavior being explained. Overall, Koreans' intentions to use norm-related reasons were higher than intentions to use attitude-related reasons for downloading, whereas their intentions to use attitude-related reasons were higher than intentions to use norm-related reasons for purchasing green products. Similarly, Americans intended to provide different reasons depending on the behavior type. When they had to explain their behavioral intentions to purchase green products, Americans were more likely to employ attitude-related reasons over norm-related reasons. On the other hand, when they had to explain their behavioral intentions to download unauthorized media files online,



they were more likely to use descriptive norm-related reasons than attitude-related reasons.

## **Implications**

One way to interpret the current findings may involve characterizing the purchase of green products as a socially desirable behavior and unauthorized downloading of media files as a socially undesirable behavior. The results showed that attitude-related reasons for purchasing green products were rated more highly than any other type of reasons. When individuals needed to explain to others their intentions to engage in a socially desirable behavior, individuals' perceived injunctive norms were a significant predictor of intentions to use attitude-related reasons, although individuals' perceived injunctive norms as not being a significant predictor of intentions to engage in the behavior. It is possible that individuals intended to use attitude-related reasons due to the socially positive aspects of buying green products, even though injunctive norms were not the reason why they intended to perform the behavior in the first place. Even when individuals intended to use attitude-related reasons as external justification, they might have thought about social approval of the behavior, likely because desire for belonging in society is such a fundamental motivation for individuals (Baumeister and Leary, 1995). Leary et al. (2003) showed that social approval or disapproval could affect self-esteem because of people's beliefs that they were constantly being evaluated by others in the immediate social context. As suggested by Goffman (1959), people may adjust their behaviors in order to give a good impression to others regardless of their internal true self-image. Thus, in-

dividuals might have intended to use attitude-related reasons more confidently because they believed that others would approve of their behavior.

Subjective norms were a significant predictor of intentions to provide attitude-related reasons for downloading unauthorized media files via the internet (i.e., socially undesirable behavior) when individuals had to explain their behavioral intentions. This finding may indicate that individuals might still be concerned with how their behavioral intentions would be seen by those closely connected to them. If individuals' preferred way to explain their behavioral intentions is inconsistent with popular ideas in a particular society, the explanation may not be well-received by others in that society (Scott and Lyman, 1968). Possibly then, individuals may need to make a balanced choice between attitude-related reasons and norm-related reasons in order to manage their impressions in the eyes of others who might pay attention to their behaviors.

Attitudes toward behavior were related to intentions to employ injunctive norm-related reasons for explaining the purchase of green products and downloading unauthorized media files. People would use norm-related reasons for such behavior possibly because they wish to appear as being socially acceptable. For example, people might think that an individual is not ethical if he or she says how much he or she loves to download unauthorized media files online and explains unauthorized downloading behavior only with attitude-related reasons. Thus, people may use norm-related reasons in order to avoid a risk or in order to demonstrate their modesty, despite their own favorable attitudes toward the behavior.

## **Implications for Theory of Reasoned Action**

The current study has three implications for TRA. First, the current research shows that TRA can be used to explain intentions pertaining to communicative behaviors. Considering that TRA has normative components addressing a person's concern about what others would think about the person's behavior, applying TRA to intentions to explain the person's behavior to others can be a natural extension of TRA. Second, some previous research equated subjective norm with injunctive norms (Rivis and Sheeran, 2003; Lapinski and Rimal, 2005; Boer and Westhoff, 2006) and added descriptive norm measurements to subjective norm measures simply to increase the explanatory power of subjective norms (Ajzen, 2006). The current findings showed distinctiveness of the three perceived norms and their different utilities in predicting behavioral intentions and intentions to use attitude-related reasons and also norm-related reasons. Third, the current findings may imply usefulness of specifying behavior types and contexts where internal reasons are consistent or inconsistent with external reasons. The current research suggests cultural characteristics as another factor that sheds light on internal and external reasons.

## **Cross-Cultural Differences**

Koreans and Americans differed in how attitudinal and normative predictors of behavioral intentions were related to intentions to use attitude-related and norm-related reasons. First, the relationship between subjective norms (or injunctive norms) and attitude-related reasons varied between cultures. When individuals had to

explain their intentions to purchase green products, Koreans, who had stronger subjective norms, were more likely to give attitude-related reasons, while Americans, who had less strong subjective norms, were more likely to give attitude-related reasons. Also, Koreans with less strong injunctive norms were more likely to give attitude-related reasons when they had to explain their intentions to download unauthorized media files online, while Americans with stronger injunctive norms were much more likely to give attitude-related reasons when they had to explain their intentions to download unauthorized media files. In other words, in the case of purchasing green products, when Americans intended to use attitude-related reasons to explain their behavioral intentions to others, they were more concerned with how much they liked the behavior and how much they believed many people in general would support the behavior, but less concerned with how much others would approve of the behavior. Furthermore, when Americans intended to use attitude-related reasons to explain their intentions to download unauthorized media files online, they were more concerned with how they felt about the behavior and how much they believed many people, including those closest to them, would support the behavior. However, when Koreans intended to use attitude-related reasons to justify their behavioral intentions to purchase green products, they were more concerned with how much they liked the behavior and how much many people, including those closest to them, would support the behavior. On the other hand, in order to justify their behavioral intentions to download unauthorized media files via the Internet with attitude-related reasons, Koreans were more concerned with how much they liked the behavior and how much those closest to them would approve of it, but less concerned with how much people in general would approve of their actions. In sum,

Koreans and Americans indicated different relationships between normative components and intentions to use attitude-related reasons, depending on the type of behaviors.

Second, attitudes toward behavior were also significantly related to intentions to use norm-related reasons, depending on the culture, across the type of behavior. For example, Koreans who had more positive attitudes toward purchasing green products or downloading unauthorized media files indicated stronger intentions to use norm-related reasons. On the other hand, Americans with less positive attitudes (or even negative attitudes) were more likely to explain their behavioral intentions with norm-related reasons. In general, despite positive attitudes toward behavior, Koreans were more likely to use norm-related reasons than Americans.

Cautions may need to be taken, however, when interpreting the cultural differences regarding the current findings. Although the current study found some differences between Koreans and Americans, there were similarities as well. For example, the positive relationship between attitudes and intentions to download unauthorized files online did not vary across cultures. Compared to norms, attitudes had a stronger relationship with intentions in general. Although Korea is often characterized as collectivistic, Korean society has been changing from vertical collectivism toward horizontal individualism (Han and Shin, 2000). Thus, it could be possible that the lack of cultural differences in the relationships among some variables of the current study could be due to changes in Koreans' cultural values.

## **Limitations and Directions for Future Studies**

First, this study examined message senders' perspectives but not receivers' perspectives in terms of how people in different cultures would respond to and evaluate different reasons used to explain behaviors. A future study may be needed to examine if Koreans and Americans differently evaluate an individual who uses attitude-related reasons versus norm-related reasons. Second, the current study used only two behaviors; purchasing green products and unauthorized downloading of media files online. With changes in technologies, legal rules, and social policies about green products and the use of media files on the Internet, individual attitudes and cultural norms may change over time. Future studies need to examine if the current findings can be generalized to any other types of behaviors. Third, this study did not specify the types of "others" to whom individuals imagined themselves explaining their behavioral intentions. One possibility is that when people explain to their close reference groups, friends or family, they may be more (or less) likely to offer the real reasons behind their behavioral intentions. Additionally, given the limitations of the self-reports used in the current study, it would be informative if future studies investigate how people actually explain their behaviors or intentions to their closest others versus strangers in face-to-face situations versus other types of settings.

## **V. Conclusion**

An important aspect of the current findings is that attitudes toward behavior and norms as internal reasons for individuals' be-

havioral intentions can also be external reasons and justification for individuals to explain their behavioral intentions to others. Furthermore, examination of cultural similarities and differences about internal and external reasons can be a way to better understand cultural characteristics in communication behaviors. As discovered in the current study, however, the influence of culture for different behavioral intentions does not seem constant across behavior types. An effort to examine moderating effects of behavior types may increase our understanding of how people in different cultures form intentions and explain their behaviors and intentions when interacting with others.

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<Appendix 1> Measurement Items

Behavioral intentions on purchasing green products

1. I intend to purchase green products even though they are expensive.
2. I plan to buy green products although they are expensive.
3. I will try to purchase green products although the price is high.
4. I will purchase green products even though they are costly.
5. I have it in my mind to buy green products even though the price is high.

Attitudes toward purchasing green products

Even though they are expensive, purchasing green products is \_\_\_\_\_.

1. Bad-Good
2. Unpleasant-Pleasant
3. Inconsiderate-Considerate
4. Unfavorable-Favorable
5. Negative-Positive
6. Pointless-Worthwhile
7. Unenjoyable-Enjoyable
8. Unsatisfying-Satisfying
9. Useless-Useful

### Subjective norms

1. Most people who are important to me think that I should purchase green products even though they are expensive.
2. Most people whose opinion I value consider that I should buy green products although they are expensive.
3. It is expected of me that I purchase green products even though they are expensive.
4. Most people who are significant to me consider that I buy green products even though they are costly.

### Descriptive norms

1. Many people have purchased green products even when they are expensive.
2. Many people buy green products even when they are costly.
3. Although green products can be pricey, they are popularly sold.
4. Buying green products even when the price is high is a common behavior that many people do.

### Injunctive norms

1. Many people would approve of my purchasing green products even though they are costly.
2. Many people would endorse my buying green products even though they are expensive.
3. Many people would support that he purchases green products

even though they are expensive.

4. Buying green products even though the price is high is a socially approved behavior.

### Attitude-related reasons

When I have to explain why I will purchase green products despite the fact that they are costly, I intend to say to other people “Even though they are expensive, purchasing green products is \_\_\_\_\_”

1. Bad-Good
2. Unpleasant-Pleasant
3. Inconsiderate-Considerate
4. Unfavorable-Favorable
5. Negative-Positive
6. Pointless-Worthwhile
7. Unenjoyable-Enjoyable
8. Unsatisfying-Satisfying
9. Useless-Useful

### Subjective norm-related reasons

When I have to explain why I will purchase green products despite the fact that they are costly, I intend to say to other people “Even though they are expensive, purchasing green products is \_\_\_\_\_”

1. Most people who are important to me think that I should pur-



- chase green products even though they are expensive.
2. Most people whose opinion I value consider that I should buy green products although they are expensive.
  3. It is expected of me that I purchase green products even though they are expensive.
  4. Most people who are significant to me consider that I buy green products even though they are costly.

### Descriptive norm-related reasons

When I have to explain why I will purchase green products despite the fact that they are costly, I intend to say to other people “Even though they are expensive, purchasing green products is \_\_\_\_\_”

1. Many people have purchased green products even when they are expensive.
2. Many people buy green products even when they are costly.
3. Although green products can be pricey, they are popularly sold.
4. Buying green products even when the price is high is a common behavior that many people do.

### Injunctive norm-related reasons

When I have to explain why I have illegally downloaded copyright protected media files via the Internet, I intend to say to other people that \_\_\_\_\_

- 1 Many people would approve of my purchasing green products even though they are costly.
2. Many people would endorse my buying green products even though they are expensive.
3. Many people would support that he purchases green products even though they are expensive.
4. Buying green products even though the price is high is a socially approved behavior.