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FAIRNESS, GUILT, AND PERCEIVED IMPORTANCE AS ANTECEDENTS OF INTELLECTUAL PROPERTY PIRACY INTENTIONS

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Abstract

We extend the moral approbation model of ethical decision-making, and suggest that establishing moral intention is influenced by perceptions of the fairness/justice of the act and by feelings of guilt for performing the act. Issues of high perceived importance of an ethical issue (PIE) are proposed to have stronger links from perceptions of fairness to moral intentions, while issues low in PIE have weaker links because of the influence of other factors. The results of a questionnaire experiment involving four intellectual property activities are presented. When establishing moral intent, individuals weighed the action's fairness/justice equally with whether it would make them feel guilty for the highest PIE issue, while guilt was the only significant influence on intent for issues lower in PIE. In light of the relatively low impact of fairness/justice on establishing moral intent, we conclude by analyzing strategies for reducing the unauthorized duplication of intellectual property.

Keywords: Ethical decision-making, perceived importance of an ethical issue, moral intensity, IT ethics

Introduction

Increasing attention has been focused on the ethical use of information and communication technologies (ICT) (Smith 2002). Researchers concerned with the ethical use of ICT have examined factors that lead to software piracy or “softlifting” (Moore and Dhillon 2000; Tan 2002; Limayem et al 2004; Siponen and Vartainen 2004; Tang and Farn 2005), purchasing pirated CDs (Kwong et al 2003), and music file sharing over peer-to-peer networks (Gopal et al 2006). All of these fit under the property category of Mason’s (Mason 1986) four ethical issues of the information age. However, each issue has been studied separately and not been integrated with broader ethical decision-making theories. Thus, the results of these studies possibly reflect idiosyncrasies of particular ethical scenarios (Haines and Leonard 2007). The purpose of this paper is to examine the ethical decision making processes that precede the establishment of moral intent, focusing in particular on perceptions of fairness and guilt when engaging in an ethically questionable activity.

We examine decision-making about a variety of intellectual property issues in an attempt to assess the degree to which decision-making processes vary among them and gain some understanding about why. The central construct used to tie the various issues together is *perceived importance of an ethical issue* (PIE). PIE is the degree to which a decision maker feels that an issue is personally relevant and important (Robin et al 1996). By including perceptions of issue-based characteristics, the results of this study are less likely to be idiosyncratic to the particular scenario and/or issue being studied. Some prior ICT ethical decision-making research has considered how PIE affects the ethical decision-making process (Haines and Leonard 2007; Leonard et al 2004); however, these studies used single item measures and examined a set of scenarios in which the respondents reacted to the behavior of third parties rather than their own potential participation in the questionable behavior. In the field of business, this is recognized as a significant limitation because the responses to third party behaviors are normative rather than behavioral (Randall 1989; Greenberg and Eskew 1993). We used a web-based experimental survey to gather perceptions of college students about the unauthorized duplication of intellectual property. We compare their decision making processes across four different ethical scenarios involving intellectual property issues in an effort to better understand how processes differ when an action is considered less or more important.

Theoretical Foundation

The central model of this study is Rest’s (Rest 1986) four-component model of ethical decision-making. While the theory of planned behavior has been used as a decision making model to describe ethical decision making involving ICT (Leonard et al 2004; Peace et al 2003; Lin et al 1999), its shortcomings in ethical decision making contexts have been noted (Randall 1989; Loch and Conger 1996; Limayem et al 2004). The four-component model is predominant in studies of business ethics (Treviño et al 2006), and has seen increasing use in the ICT area (Wagner and Sanders 2001; Tan 2002; Goles et al 2006).

The four-component model “depicts the ensemble of processes that go into the production of moral behavior in a specific situation” (Rest 1986, p. 5). The first component, *recognize moral issue*, is a realization in the person that they could do something that affects the interests of other people. The second component, *make moral judgment*, is deciding which among the possible courses of action is morally right. The third component, *establish moral intent*, involves establishing a priority of values, whether moral or not (e.g. economic interest), and choosing a course of action that may compromise the moral ideal. The fourth component, *engage in moral behavior*, involves implementing the plan of action. Ethics scholars have suggested “developing and/or moving beyond Rest’s framework, conceiving and testing additional individual, situational, and issue-related influences, and considering potential moderators of the ethical decision-making process” (O’Fallon and Butterfield 2005, p. 399). We focus on the third stage of Rest’s model by examining the effect of perceived importance of an ethical issue (Robin et al 1996) and obtaining a desired level of moral approbation (Jones and Ryan 1997) on the establishment of moral intent.

Jones integrated the four-component model and other models of ethical decision-making into an “issue contingent model” (Jones 1991). In his model, an ethical decision is characterized by “the extent of issue-related moral imperative in a situation” (p. 372). Jones proposed that this affects all stages of ethical decision-making, and situations with higher moral imperative will generally lead one to acknowledge and implement a moral course of action. Jones’ integrative model has become the basis for comparing empirical studies of ethical decision-making (Loe et al 2000; O’Fallon and Butterfield 2005; Treviño et al 2006).

Although the concept of situational moral imperative is an intriguing concept for examining ethical decision-making, there has been some difficulty measuring it. Jones conceived of it as primarily externally derived, meaning its dimensions can be objectively measured (e.g., Dukerich et al 2000), which has been criticized by some who support a more perceptual view (Morris and McDonald 1995; Robin et al 1996; Singhapakdi et al 1996; Singhapakdi et al 1999; Frey 2000).

Singapakdi et al. (Singhapakdi et al 1996) developed a measure of situational moral imperative that has been employed in several studies (Singhapakdi et al 1996; Singhapakdi et al 1999; Paolillo and Vitell 2002). Singapakdi et al.'s analysis of their measure suggested that their measure actually only had two dimensions: perceived social pressure and perceived potential harm/no harm (Singhapakdi et al 1996). These two dimensions accounted for between 23 and 52 percent of the variation in recognition of a moral issue, and between 6 and 41 percent of the variation in moral intentions. However, the structure of their measure has been criticized (Frey 2000; McMahon and Harvey 2006), and other factor structures and measures for moral intensity suggested (Singhapakdi et al 1999; Frey 2000; McMahon and Harvey 2006). Furthermore, the role of this measure in the ethical decision making process is unclear. It has been shown linking to recognition of a moral issue (Singhapakdi et al 1996; Frey 2000; Goles et al 2006), moral judgment (Morris and McDonald 1995; Frey 2000; Shaw 2003), and moral intent (Singhapakdi et al 1996; Frey 2000; Paolillo and Vitell 2002; Tan 2002; Goles et al 2006). Ultimately, empirical research has not suggested an unambiguous location for Singhapakdi's measure in the decision making process, only supporting the basic underlying concept that "the decision making process is influenced by the individual's perception of situation-specific issues" (Goles et al 2006, p. 91), and neglected an examination of the moderating effect noted by Jones: "it is likely that moral agents will economize on efforts devoted to moral reasoning when moral stakes are low" (Jones 1991, p. 384).

Robin et al's (Robin et al 1996) measure of situational moral imperative, *perceived importance of an ethical issue* (PIE), while receiving less attention in the ethical decision making literature, has proved far less problematic. PIE uses items derived from the consumer involvement literature (Zaichkowsky 1985). Involvement motivates differences in a consumer's decision making processes including the extensiveness of their information search and their willingness to put additional effort into identification and consideration of alternatives to ultimately attain satisfaction (Laurent and Kapferer 1985). For example, in a low involvement purchase decision situation, a consumer will be more likely to rely on their own internally accessible information and developed judgment (Kotler 1994). Consistent with the consumer involvement literature, individuals are expected to change their ethical decision-making processes when they feel a situation is more or less important (Robin et al 1996). Robin et al.'s survey of ad managers concerning choices of television commercials found that PIE influenced individuals' perceptions of moral equity about an action (i.e., its fairness and justice) but not moral intent. Furthermore, by comparing the results of the two ethical scenarios included in their survey, they suggested that the link between an individual's perceptions of moral equity and moral intent would be higher for activities considered very important (high PIE). Robin et al. concluded their paper with two propositions that suggest an unambiguous role for PIE in the process of decision-making: 1) that PIE precedes an individual's determination of an action's moral equity but not moral intent and 2) that PIE moderates the link between moral equity and moral intent. However, they offered no theoretical justification for why this would be the case.

Their first proposition has been empirically tested with mixed results. One study, in a linear regression analysis, found that perceived importance had a significant direct influence on moral intent across five third party scenarios, even when controlling for a moral equity measure (a dichotomous measure of was the action acceptable/unacceptable) (Leonard et al 2004). A second study, using the same scenarios as the first, supported the proposition using structural equation modeling: PIE preceded moral equity (acceptable/unacceptable on a seven point scale) but did not impact moral intent (Haines and Leonard 2007).

The second proposition has only been tested in the second study noted earlier (Haines and Leonard 2007). They compared the link between their measure of moral equity and moral intent across their scenarios and did not find that PIE moderated the impact of moral judgment on moral intent. They suggested that the relationship between perceived importance and the link between moral equity and moral intent was U-shaped, with both high and low PIE scenarios having the strongest links between equity and intent. However, both of these studies were limited because they used a single-item measure of moral equity, which was not the same as the validated four-item measure of moral equity employed by Robin et al (Robin et al 1996). Furthermore, their surveys involved subjects judging the use of ICT by third parties rather than behaviors that their student subjects might actually engage in, which is a significant limitation (Randall 1989; Greenberg and Eskew 1993).

PIE and Ethical Decision Making Process

Jones contends that decision makers “will economize on efforts devoted to moral reasoning when moral stakes are low” (Jones 1991, p. 384). This, along with the moral approbation model (Jones and Ryan 1997) and the cognitive elaboration model (Street et al 2001) could add a theoretical justification for Robin et al.’s propositions and elaborate the processes that immediately precede the establishment of moral intent. This integration offers a potential theoretical explanation of why issues of more importance would have higher links from moral equity to moral intent and offers another determinant of behavior that may impact the establishment of moral intent (Robin et al 1996).

The moral approbation model (Jones and Ryan 1997) proposes that obtaining a desired level of *moral approbation* or “moral approval from oneself and others” (p. 664) mediates in the process between making a moral judgment and establishing moral intent. Individuals look to specific referents when seeking approval for moral decision-making, including themselves, moral/spiritual referent groups (e.g., mother, pastor), and work-related groups (Ryan and Ciavarella 2002). We suggest that this theory may aid in the empirical identification of the processes that precede the establishment of moral intent as suggested by Robin et al.: the sources of approval (self, moral/spiritual reference groups, work-related groups) represent separate sources of influence on the establishment of moral intent in the decision-making process. Specifically, individuals desire “to be seen as moral by themselves, and/or by others” (Jones and Ryan 1997, p. 667). By dividing the sources of approval into external and internal sources, the sources can be tied to existing empirical measures. First, we suggest that the moral equity scale employed by Robin et al. is analogous to the desired level of approval from others – its items measure fairness, justice, moral rightness, and acceptability to one’s family. Thus, perceptions of moral equity reflect a desired level of approval from others and thus influence the establishment of moral intent.

H1: Perceptions of moral equity about a questionable behavior will positively influence moral intent.

Referring back to Robin et al.’s results, the low influence of moral equity on moral intent when PIE was low was thought to arise from the increasing impact of “other determinants of behavior,” specifically “personal and organizational objectives” (Robin et al. 1996, p. 25). As noted earlier, the moral approbation model (Jones and Ryan 1997) suggests that an individual’s sense of moral approbation about an action influences the establishment of moral intent. Specifically, individuals judge whether or not they will feel guilty about performing an action before deciding whether they will attempt to engage in the action. We suggest that the moral obligation instrument, which measures “personal feelings of moral obligation or responsibility to perform, or refuse to perform, a certain behavior” (Beck and Ajzen 1991, p. 289) is analogous to achieving a desired level of personal moral approbation – its items measure the extent to which an action is perceived to be morally wrong, goes against a person’s principles, and would make them feel guilty performing the action. Moral obligation was shown to influence moral intent in some ethical situations (Beck and Ajzen 1991). Thus, perceptions of moral obligation reflect an individual’s sense of guilt for performing or not performing an act and influence the establishment of moral intent.

H2: Perceptions of moral obligation about a questionable behavior will positively influence moral intent.

We further suggest that Robin et al.’s finding that moral equity had a strong influence on moral intent when PIE was high and a lower influence when PIE was low indicates that the two sources of approval may be weighed differently depending on how important the issue is perceived to be. As a reflection of situational involvement, low PIE suggests that people will economize on their cognition efforts, emphasize internal sources of information and have less concern about how what others think of their decision (Zaichkowsky 1985; Hawkins et al 2001) Weighing whether one would need approval from others relies on recognizing that an issue has a moral component (Rest 1986), has severe consequences, and/or is “morally unambiguous” (Jones and Ryan 1997, p. 674), which is reflected by higher PIE. Weighing whether one would need approval from oneself is most likely to dominate the process when stakes are low (cf. Jones 1991; Street et al 2001), which is reflected by lower PIE. The cognitive elaboration model (Street et al 2001) offers further theoretical support for this reasoning by suggesting that a situation’s moral imperative influences whether an ethical decision making process is followed. Specifically, individuals will follow the four-component model for issues of high moral intensity, while less intense issues would be made using non-ethical considerations. We suggest that what the cognitive elaboration model terms “non-ethical considerations” means decision-making processes that are personally rather than socially influenced.

In essence, we are suggesting that moral equity, which represents a process of determining whether an action will receive approval from others (i.e., whether it is fair and just), will be weighed more in determining moral intent when an issue is perceived of as more important (high PIE). When an issue is perceived of as less important (low

PIE), individuals will economize on cognition about others and rely more on obtaining approval from him or her self (i.e., whether it would make them feel guilty) when determining moral intent.

Our study empirically links the four-component model, which has been prominent in business ethics (Treviño et al 2006), with one study of ethical decision-making using the theory of planned behavior (Beck and Ajzen 1991). They found that feelings that an action went against one's principles and attitude toward the behavior (e.g., good/bad) were weighed roughly equally by college students for cheating on an exam and shoplifting, while feelings that an action went against one's principles were weighed highest (and attitude was insignificant) for lying to get out of a test or turn in an assignment on time. Although they did not report descriptive statistics, the PIE of lying to get out of a test or turn in an assignment late is likely to be much less than cheating or shoplifting, which suggests that Robin et al.'s second proposition can be confirmed if subjects are asked their beliefs, judgments, and intentions about behaviors involving ICT that they might actually engage in.

H3a: Scenarios with low PIE will have weaker links from moral equity to moral intent than scenarios with high PIE.

H3b: Scenarios with low PIE will have stronger links from moral obligation to moral intent than scenarios with high PIE.

Information Technology Ethics

As Mason notes, "information has the illusive quality of being easy to reproduce and share with others" (Mason 1986, p. 9). While the copying of intellectual property may be tacitly encouraged in some situations (Liebowitz 2006), the impact of copying becomes more serious as the quality of counterfeits rises (Hilton et al 2004; Gopal et al 2006). When acquiring intellectual property via ICT (e.g., music, movies, or software), such copies can potentially be perfect versions of the digital originals. Thus, the distribution of music, movies, and software via means not approved by the creator of the property can be in direct competition and may even have a significant lead in the marketplace on the more legitimate sources of the property (e.g., when music albums, movies, or software are released on the Internet before becoming available for purchase) (Hilton et al 2004; Gopal et al 2006). Furthermore, when a peer-to-peer distribution channel offers property at no charge, it avoids customer inconveniences and costs of receiving and processing payment – a potentially significant competitive advantage.

From the user side, there can be an ethically distancing effect when technology is used to obtain property virtually that would ordinarily have to be obtained in person. There is an inherent gap between technological development and the development of ethical guidelines for their use – as new technologies are introduced, they are socially and geographically diffused throughout society, and cultural systems must adapt to the new conditions imposed by the invention (Marshall 1999). Newly introduced technologies for distributing intellectual property enable individuals to engage in behaviors "at a distance" that they would not engage in "up close." For example, movie hopping or "plexing" (illicitly attending more than one movie at a multiplex after only buying one ticket) is likely to be perceived of as more risky than downloading the same movie and viewing it for free on one's personal computer; likewise, shoplifting a CD is more risky than downloading the same songs for free off of a peer-to-peer file sharing network.

We expect that the distancing will be captured in the PIE measurement because individuals would think the virtual behavior was less important than its face-to-face analog. For example, 78% of respondents in a 2006 survey felt that taking a CD or DVD from a store without paying was a "very serious offense," while 40% believed downloading copyrighted movies off the Internet was serious (Ackerman and Yigit 2007). We chose a mixture of ethical scenarios that vary both in their virtualness and in the value of the item duplicated. However, we note that norms for using these technologies may evolve over time that could alter individuals' ethical decision-making processes. For example, individual music file sharers currently face the possibility of a civil lawsuit, while the lawsuit target was the company offering the services when peer-to-peer file sharing was first introduced. Thus, the PIE of music file sharing should increase as the level of risk of engaging in the activity increases. Given the expectation of evolving norms, we emphasize that our empirical results should be generalized for their measurement of how PIE influences the basic psychological processes that precede the establishment of moral intent, and not as a reflection of a rigid ethical decision making model engaged in by junior level college students when considering a particular intellectual property issue or questionable behavior (Greenberg and Eskew 1993).

Referring to the consumer involvement literature, Robin et al.'s PIE construct potentially measures two aspects of involvement. First, decision makers in a purchasing decision have a sense of how important the product is to them,

and – perhaps more important to the ethical decision making process – the importance of the consequences of a mis-purchase (i.e., the importance of making an ethically incorrect decision) (Laurent and Kapferer 1985). Second, involvement also suggests that the sign value of a product (i.e., the purchase is expressive of the person’s self image) could also vary in its importance (Laurent and Kapferer 1985). In an ethical decision-making context, this would indicate the importance that the individual ascribes the good or bad “label” of their decision (i.e., the importance of the desirable or undesirable light that the decision places them under).

Similar to our arguments with respect to sources of moral approbation, we suggest that PIE, as a general measure of involvement, affects individual decision making in two ways. First, the perceived importance of an ethical issue will reflect the degree to which individuals feel that desirable or undesirable social effects will occur if they engage in the activity (Lamb et al 2006). Similar to the moral approbation model’s proposition that achieving a desired level of approbation from others mediates the link between making a moral judgment and establishing moral intent (Jones and Ryan 1997), we suggest that individuals account for the degree to which there is a risk in making a socially undesirable decision when they ascribe the degree to which a decision would be perceived to be morally fair and/or just.

H4: Perceptions of PIE will vary positively with moral equity.

Second, the perceived importance of an ethical issue will reflect the degree to which individuals assess the risk to themselves and their own self-image (i.e., the risk of making a bad decision) (Laurent and Kapferer 1985). Thus, we suggest that individuals account for the degree to which there is a risk that a decision could place their own self-image in an undesirable light when they ascribe the degree to which the decision is morally correct and/or would make them feel guilty.

H5: Perceptions of PIE will vary positively with moral obligation.

Robin et al.’s empirical results and their first proposition suggested that moral intent would not vary with PIE. Referring again to the consumer involvement literature, involvement affects the degree to which selected aspects of the particular processes are followed, and not generally the actual purchase decision (Laurent and Kapferer 1985). Generally, involvement is only used to predict the type (e.g., complexity, effort) of decision behavior and doesn’t directly affect the final decision (Kotler 1994). This notion is consistent with the moral approbation model’s (Jones and Ryan 1997) contention that achieving a desired level of moral approbation *mediates* in determining moral intent, and echoes the cognitive elaboration model (Street et al 2001).

H6: Perceptions of moral intent will not vary with PIE.

Research Model

Our research model is summarized graphically in Figure 1. Dotted lines in the figure indicate links that are expected to be low or non-significant.

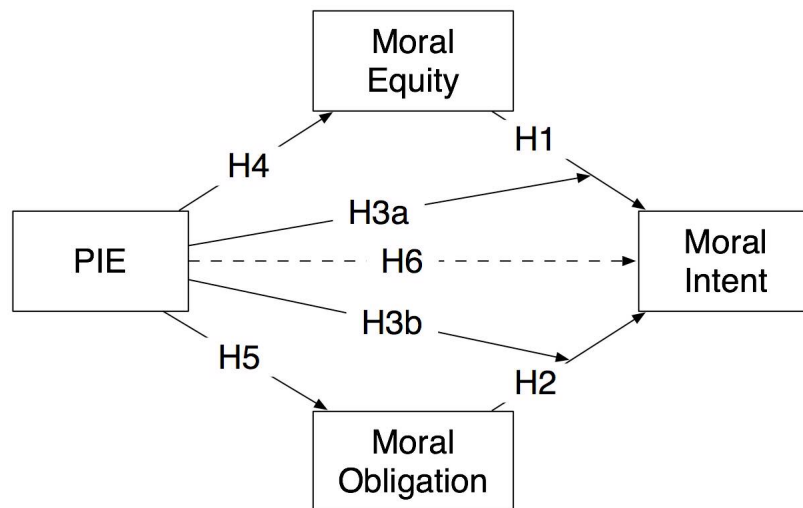


Figure 1: Research Model

Again, the purpose of this study was to test Robin et al.'s propositions. We examine how PIE affects the ethical decision making processes preceding the establishment of moral intent when considering ethical dilemmas involving the digital duplication of intellectual property. We also provided theoretical support for their model by incorporating the moral approbation model (Jones and Ryan 1997) into the process and drawing from the consumer involvement literature. The hypotheses were examined using multiple scenarios with varying PIE to protect against idiosyncrasies of particular ethical issues and in an attempt to advance the research about PIE by including both issues that would be perceived of as low importance and issues perceived of as high importance.

Methods

Subjects

The subjects that participated in this study were enrolled in a junior level information systems course required of all business students at a large eastern university (n=170). 53.6 percent indicated that they were male (46.4 percent female). Mean reported age was 23.43 years, and mean reported work experience was 3.76 years.

Procedures

Surveys were completed on-line in a classroom-style computer laboratory during normal class periods. The stated pedagogical purpose of the exercise was to "enable a discussion of the ethical decision making process." After the session, the students were shown the results of the survey and discussed their responses. All sessions received the same, scripted instructions. Subjects first completed a demographic questionnaire; then completed the survey items about the four scenarios, which were presented in a different, random order to each subject. The demographic variables did not affect the results of our hypotheses, so these were left off of the final models.

Variables

The complete text of the questionnaire is given in the Appendix. All items were measured on seven-point scales with the anchors as end points. Perceived importance of an ethical issue (*PIE*) is measured using Robin et al.'s (Robin et al 1996) items, but modified so that the items could be administered along with the moral equity items. The modification was simply to move the article from the initial statement to the anchors (the initial statement for *PIE* was originally "To [behavior] is a(n):", and the anchors for *PII* were originally "Unimportant Issue-Extremely Important Issue"). *Moral equity* is measured using the moral equity items from the multidimensional ethics scale (Reidenbach et al 1991), consistent with Robin et al.'s usage of the same items. *Moral obligation* and *moral intent* are measured using the items developed by Beck and Ajzen (Beck and Ajzen 1991).

The items on the questionnaire were randomized by scenario for each subject according to the following scheme. The semantic differential items (*PIE* and moral equity) and the Likert-type items (moral obligation and moral intent) were each displayed as a group. First, a random number was chosen that determined the ordering of the sections. Next, the items within each section were randomized. Thus, if the semantic scales were chosen to appear first, the fragment "To [behavior] is:" was at the top of the web page with the semantic items in random order, followed by the Likert-type items in random order.

Scenarios

The scenarios were developed as representative decisions about intellectual property use (Mason 1986) that might be faced by junior-level business students. The text of the scenarios is in the Appendix. A variety of scenarios was chosen so that these results would not be idiosyncratic to a particular topic or level of perceived importance. In choosing the scenarios for the study, a large set of intellectual property scenarios was developed. A pre-study group responded to the *PIE* items about this larger set of scenarios on a paper and pencil questionnaire and provided feedback about whether they felt they would actually be able to engage in the activity. From this larger set, two were chosen representing the lowest and highest values *PIE*, and three others were chosen that had the highest amount of discussion potential (i.e., variance in *PIE*). A pilot study tested five scenarios in the same setting and using the same application as this study and indicated that the overall length of the questionnaire was too long. One of the middle scenarios was then removed from the study, leaving the four listed in the Appendix. Again, scenarios were presented in a different, random order to each participant – the numbering throughout this paper is by the computer's identifier.

Results

Table 1 summarizes the means of all of the study variables by scenario. In summary, scenario one (copying a CD and returning it to the store) was perceived of as significantly more important, less just/fair, would make the person feel the most guilty for performing the action, and would be least likely to engage in the behavior than the other scenarios ($p < .05$, after a bonferroni adjustment for four statistical tests). Scenarios two (making a movie file from a DVD for personal use) and three (downloading a pirated version of Photoshop) were significantly different from each other except on perceived importance and moral intent. Scenario four (making a mix CD for a friend) was perceived of as significantly less important, more just/fair, resulting in less guilt, and individuals were more likely to engage in the behavior than all the other scenarios.

Table 1: Means (Standard Deviations) of Questionnaire Variables by Scenario

Item	Scenario			
	One	Two	Three	Four
PIE**	4.77 (1.72)	3.68 (1.79)	4.00 (1.73)	2.74 (1.62)
Equity*	5.98 (1.28)	4.14 (1.84)	4.81 (1.50)	3.06 (1.56)
Obligation*	5.89 (1.57)	3.49 (2.10)	4.21 (1.91)	2.55 (1.71)
Intent**	6.06 (1.56)	3.52 (2.24)	4.05 (2.13)	2.18 (1.77)

* All scenarios are significantly different from each other ($p < .05$, after a Bonferroni adjustment)

** Scenarios Two and Three are not significantly different from each other ($p < .05$)

The hypotheses and psychometric properties of the scales were tested using partial least squares (PLS) structural equation modeling (SEM). PLS is desirable over covariance-based SEM when sample sizes are low, requiring at least ten observations per path leading to a construct (Chin 1988). In our models, the construct with the most paths leading to it is moral intent, with three paths (from PIE, equity, and obligation); thus, at 170 observations our statistical analysis has sufficient power. The PLS analysis indicated that the scales had adequate composite reliability across all four scenarios, and discriminant and convergent validity were supported. Detailed psychometric information is not included with this paper due to space constraints. Summary psychometric information is given with the questionnaires in the Appendix.

The results of the PLS analysis are summarized below by scenario. Significant paths ($p < .05$, after a Bonferroni adjustment for four statistical tests) determined using the bootstrapping technique are indicated by an asterisk. In the models, all of the significant path coefficients are above the level that would be considered “useful” (Chin 1998).

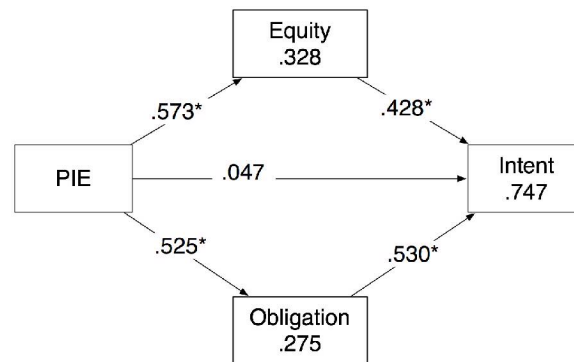


Figure 2: PLS Results for Scenario 1 (copy a CD and return it to the store)

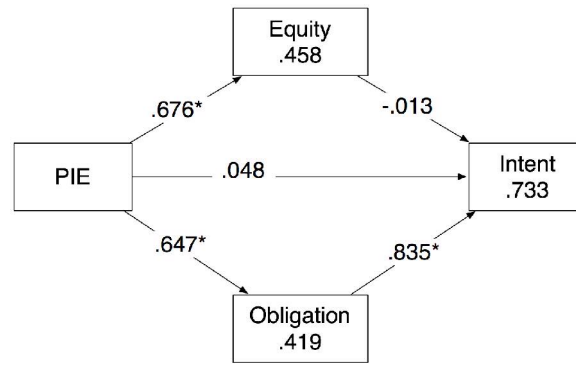


Figure 3: PLS Results for Scenario 2 (make a movie file from a DVD for personal use)

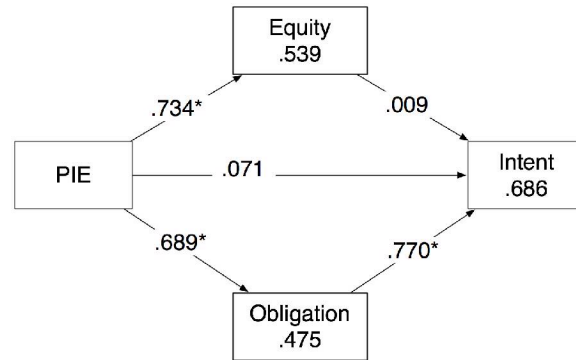


Figure 4: PLS Results for Scenario 3 (download a pirated version of Photoshop)

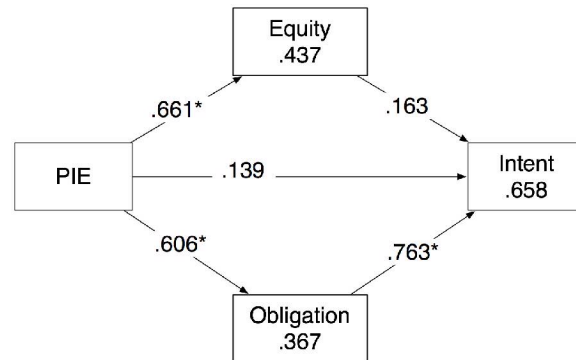


Figure 5: PLS Results for Scenario 4 (make a mix CD for a friend)

Hypothesis One Hypothesis one suggested that moral intent would vary positively with feelings of moral equity. The link between moral equity and moral intent was only significant for scenario one ($p < .05$). Thus, hypothesis one was only partially supported.

Hypothesis Two Hypothesis two suggested that moral intent would vary positively with feelings of moral obligation. The link between moral obligation and moral intent was significant for all scenarios ($p < .05$). Thus, hypothesis two was supported.

Hypothesis Three Hypothesis three (a) suggested that the link between moral equity and moral intent would be weaker or insignificant for scenarios with low PIE. The link between moral equity and moral intent was only significant for scenario one ($p < .05$), which lends some support for this hypothesis. Given that the links from moral equity to moral intent are very low for the other scenarios (near zero), there could be a ceiling effect to PIE that limits further support for this hypothesis.

Hypothesis three (b) suggested that the link between moral obligation and moral intent would be higher for scenarios with low PIE. The link between moral obligation and moral intent is lower for scenario one than the other scenarios,

which lends some support for this hypothesis. Given that the links from moral obligation to moral intent are very high for the other scenarios, there may also be a ceiling effect at work.

Hypothesis Four Hypothesis four suggested that moral equity would vary positively with PIE. The link between PIE and moral equity was significant for all scenarios ($p < .05$). Thus, hypothesis four was supported.

Hypothesis Five Hypothesis five suggested that moral obligation would vary positively with PIE. The link between PIE and moral obligation was significant for all scenarios ($p < .05$). Thus, hypothesis five was supported.

Hypothesis Six Hypothesis six suggested that moral intent would not vary with PIE. The link between PIE and moral intent was not significant for all scenarios. Thus, hypothesis six was supported.

Discussion

We found that moral intent was influenced by both moral equity and moral obligation for the scenario where PIE was high (Copy a CD and return it to the store), while moral intent was only influenced by moral obligation for scenarios where PIE was moderate or low. Thus, when faced with an ethically important issue, respondents appear to consider both the moral equity of the behavior (is this fair/just?) and their moral obligation (would I feel guilty for doing this?). During the class discussions, students consistently noted that the returning a CD scenario was morally unambiguous and that the CD scenario involved an act against a known person as opposed acts against large organizations.

Thus, we suggest that when individuals feel a situation is not extremely important, they are presented with an “ethical dilemma” in which the rightness or wrongness can be questioned (as opposed to the ethical certainty of a high PIE situation). In morally ambiguous situations, they weigh their moral obligation (whether they would feel guilty) more than their perceptions of moral equity when determining their moral intent. For example, when faced with returning a CD to a store, junior level business students seem to feel that it is clearly unethical, and therefore their feelings of whether it is fair and/or just drives whether or not they would engage in the activity. When something is of less importance, they weigh whether or not they would feel guilty almost entirely when determining whether they would engage in it.

We offered PIE as a potential reason that influences on moral intent would vary; however, the PIE construct itself does not seem to be a complete predictor of the decision making process. It may be that the “virtualness” of the activity is as strong as PIE in determining which sources of moral approbation are weighed most in establishing moral intent. Scenarios two, three, and four all involved activities that were completely virtual in nature – the questionable activity took place on the computer, and when a physical item was necessary for engaging in the behavior, the person would already possess the item. We note here that the virtualness of an activity may be a situational determinant of involvement, so this may reflect incompleteness in the PIE measurement. Before being able to make definitive statements, a wider mix of physical and virtual behaviors should be examined. For example, how would the influences on intent for scenario two (making a movie file from a DVD) vary if the behavior involved making the file using a DVD rented from a video store rather than using an already purchased DVD. Scenario one may also be thought of differently if the activity was to rip the contents of a CD borrowed from a friend rather than one purchased from a store.

We found that PIE had a strong influence on the factors that influenced the establishment of moral intent. In spite of the ambiguous results with respect to its influence on the weighing of factors in the decision making process, it appears to be an important construct in the ethical decision making process that deserves further investigation.

Implications for Practitioners

Other researchers have noted that educational and legal campaigns are more economically effective for intellectual property owners than technology that is used to make copying difficult (Gopal and Sanders 1997; Gopal et al 2006). Based on the results of this study, we can offer guidance about the content and approach of educational and legal campaigns. Intellectual property owners and/or managers that wish to deter the unauthorized use of intellectual property should understand that individuals weigh their feelings of guilt most highly when making decisions about engaging in the duplication of intellectual property over the Internet. Because PIE has a strong effect on both moral equity and moral obligation, those that wish to decrease the duplication of intellectual property could start by increasing the perceived importance of it.

The Recording Industry Association of America (RIAA), Motion Picture Association of America (MPAA), and Business Software Alliance (BSA) emphasize the unfairness of participating in the unauthorized duplication of property in their educational campaigns, suggesting on their web sites that piracy affects the producers of the content, and explicitly suggest that unauthorized duplication affects the quality and variety of content available. We suggest that this message is ineffective in reducing infringement because fairness is not considered when individuals make the choice to infringe. Thus, the “Robin Hood Effect,” which suggests that people perceive owners of intellectual property to already be rich and not affected by illegal downloading (Ackerman and Yigit 2007) probably bears much of the responsibility for the lack of a link between moral equity and moral intent for the low PIE scenarios. Clearly an individual downloader understands that his or her actions do not have a noticeable effect on the availability of quality intellectual property in the short run and continues to infringe. However, the quality and availability of intellectual property will eventually be diminished as a result of the cumulative effect of millions of downloaders, in a typical “tragedy of the commons” effect (Gopal et al 2006). Thus, producers of digitally reproducible intellectual property have a vested interest in limiting unauthorized duplication.

The RIAA’s current strategy also includes civil actions against individual infringers. This might affect the level of PIE if the publicity surrounding the lawsuits serves to increase the perceived risk of engaging in the behavior and thereby increase its PIE. However, increasing perceived risk would only have an indirect impact on moral intent because suing individual infringers increases the risk of engaging in an activity but may not necessarily make individuals feel more guilty for engaging in it, and increasing perceived risk is likely to have diminishing effects on behavior as adolescents move into young adulthood (Millstein and Halpern-Felsher 2002).

The MPAA’s strategy attempts to focus on how piracy impacts lower profile movie industry employees such as drivers, food personnel, carpenters, and electricians. Without commenting on the effectiveness of their marketing, personalizing infringement is probably more effective than suggesting that the availability and quality of content will diminish because it could make individuals feel more guilty about engaging in the activity and/or make them feel that the unfairness of it is important in the decision making process. However, we would expect rampant infringement to continue as long as the Robin Hood Effect dominates the beliefs of downloaders (Ackerman and Yigit 2007).

Referring back to the involvement literature, we suggest the potential to increase or decrease PIE through the five factors that influence the level of involvement – *previous experience, interest, perceived risk of negative consequences, situation, and social visibility* (Lamb et al 2006). It would likely be ineffective to emphasize *previous experience* unless the infringers can somehow be encouraged to think of infringement as an ethical dilemma and then remember how they felt the last time they made an ethical decision, and remind them how their prior ethical decisions have impacted others. Frequent infringers have probably already decided that infringing is not an ethical dilemma, so this strategy would probably do little to eliminate the current infringement problem.

Level of interest varies by each person and would be tough to work on except by raising the level/frequency of the exposure to the dialogue on the issue. This could increase their interest level. However, increasing the exposure to dialog risks exposing noninfringers to arguments supportive of infringement, which would increase the likelihood that they would become infringers (Haines et al 2006).

Intellectual property owners could encourage emphasis on *risks of negative consequences*, but try to be more creative than public relations efforts around arrests and lawsuits. Such campaigns could emphasize the relatively low cost of acquiring intellectual property; however, this may not be effective on younger consumers and/or those that have limited discretionary funds.

For *situation*, intellectual property owners could reward people when they engage in legitimate transactions or give them a way to tell their friends that they made an ethical decision. Content consumers could be encouraged to factor in the reactions of others when they make their decisions; hoping that, like a wine purchase decision, consumers would be more careful if they were making a decision that could potentially impress or turn off relevant others. For example, artists could provide a personalized message for consumers that legally share with others: “Here is a download of my song that ‘Jane’ was sure you’d like. She bought it and forwarded to you because she knows you don’t participate in music pirating.” Thus, legitimate buyers could impress others with both their great taste in music and their ethical decision-making. Situational incentives at the time of purchase could also include customized artwork, lyrics, biographies, poster downloads, etc.

Social visibility is clearly an important component in the suggestions above. Instead of looking for ways to punish infringers or attempting to make the activity seem unfair, we suggest that intellectual property owners should work

on ways of increasing the visibility of ethical behavior, such as providing a legitimate, high profile means for embedding legally downloaded songs on social networking sites. Other suggestions include: 1) creating ethical music downloader pledges by artists that can be embedded on social networking sites, and 2) giving away tchotchkes (t-shirts, key rings, etc.) that say “I pay for my downloads” either randomly after purchases or after someone has paid for a specific number of downloads.

Ultimately, if intellectual property owners want to establish norms that will make individuals feel guilty about illegally duplicating property created by wealthy individuals and/or relatively faceless organizations, they have to work with the community that develops the norms, lives under the norms, and develops and enforces sanctions for the norms.

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Appendix

Ethical Scenarios

1. Compact Discs are factory sealed and wrapped with shrink wrap. However, shrink wrapping is available for purchase at some office supply stores. By opening the case of a Compact Disc from the bottom, it is possible to get the disc out without removing the security seal. Thus, it is possible to purchase a CD from a retailer, copy the music to your computer, and return the CD to the store for a refund or exchange.

behavior= “copy a CD and then return it to the store”

2. DVDs have copy protection built in to prevent duplication. However, there are many tools available for circumventing the copy protection on DVDs. Using this software, you can make movie files that are compatible with a PDA, PSP, or iPod.

behavior= “make a movie file from a purchased DVD for use with a PDA, PSP, or iPod”

3. You need to retouch a photograph of a group of your friends because one of the “friends” needs to be taken out of the picture. The image utilities that were pre-installed on your computer will give unconvincing results; however, Adobe Photoshop will enable you to retouch in a way that no one will notice the difference. It costs about \$300 for a student version of Adobe Photoshop, but pirated copies of it can be found on the Internet and downloaded for free.

behavior= “download a pirated version of Photoshop for personal use”

4. Most computers have the capability to burn audio CDs. Most PC audio software, including iTunes and Windows Media Player, allow you to rip tracks from an already purchased CD. You can use these files to create a custom “mix” CD with only the tracks you want on it and give it to a friend.

behavior= “create a mix CD and give it to a friend”

Questionnaire

Moral equity (composite reliability >.921, AVE >.746):

To [behavior] is:

- ME1. Fair-Unfair
- ME2. Just-Unjust
- ME3. Morally Right-Not Morally Right
- ME4. Acceptable to My Family-Not Acceptable to My Family

Perceived importance (composite reliability >.931, AVE >.774):

To [behavior] is:

- PI1. An Unimportant Issue-An Extremely Important Issue
- PI2. An Insignificant Issue-A Highly Significant Issue
- PI3. An Issue of no Concern-An Issue of Considerable Concern
- PI4. A Trivial Issue-A Fundamental Issue

Moral intent (composite reliability >.940, AVE >.839)

- BEH1. I may [behavior] in the future. True-False
- BEH2. If I had the opportunity, I would [behavior]. Likely-Unlikely
- BEH3. I would never [behavior]. True-False (rev)

Moral obligation (composite reliability >.883, AVE >.716)

- MO1. I would *not* feel guilty if I [behavior]. True-False
- MO2. To [behavior] goes against my principles. Likely-Unlikely (rev)
- MO3. It would be morally wrong for me to [behavior]. Likely-Unlikely (rev)