The Role of Identification in the Privacy Decisions of Information System Students

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Abstract
This research is aimed at understanding the ethical decision making process of information systems students, particularly when those decisions involve online privacy. The research model on which the hypotheses are based includes both deontological and teleological factors, as well as something heretofore overlooked by IS ethics researchers. Organizational identification is hypothesized to serve a filtering role, to help the individual faced with an ethical decision to focus on those stakeholders that are most relevant. The research model was tested using survey methods with a sample of senior-level IS undergraduates. The main effects of the deontological and teleological factors explained 35% of the variance in an individual’s moral judgment about online privacy. Contrary to expectations, organizational identification did not moderate these two effects. However, the interaction of all three factors was significant, both practically and statistically.

1. Introduction
The Internet, and World Wide Web (Web) in particular, have made it easier than ever to collect and disseminate detailed information about individuals’ preferences and behaviors. Recent incidents involving RealNetworks and DoubleClick are evidence of this threat to individual privacy (see www.epic.org for a summary of these incidents). These cases underscore the power that organizations hold over information that is created and exchanged during computer-mediated behavior, both on- and offline.

Privacy is therefore an important and timely subject of study for researchers in a number of academic disciplines. Legal and public policy researchers consider privacy as a regulatory issue [1-3]. Computer scientists study privacy as a technical or security issue [4-7]. This study will examine privacy as an ethical issue, which centers the analysis on human conduct and judgments about right and wrong [8-10]. Gotterbarn argues that computer ethics research should focus on individuals making decisions within their organizational roles, which positions ethical issues within the field of professional ethics [11]. The central research question motivating this study is: How do IS students make moral judgments about online privacy?

Online privacy can be considered a special case of information privacy, which is an individual’s right to control his or her own personal information. In the United States, the right to privacy is not guaranteed by the Constitution but was instead established by a seminal article in the Harvard Law Review [12]. In the more than 100 years following the publication of this article, the right to privacy has yet to be widely controlled by government regulation or legislation, so in the United States it should be considered an ethical rather than legal issue. In other parts of the world the right to privacy and the corresponding duties required of organizations that handle personal information are more explicitly regulated by the government.

To differentiate online privacy from other aspects of privacy, this paper defines it as any situation in which personal information is collected from an individual as he or she is using the Internet. Behaviors that fall into this broad definition include: using email, reading and posting to newsgroups, using ICQ or other chatroom programs, and any use of the Web. Virtually every time an individual’s client computer sends an IP packet via the Internet the potential for a violation of privacy exists.

The next section will elaborate on the research model. Following this the literature supporting the model will be reviewed. The review closes with a statement of of the specific hypotheses tested in this study. In the fourth and fifth sections the research methods and results are presented, respectively. The final section discusses the conclusions and limitations of the study.
2. Research Model

The research model to be examined in this study is graphically depicted in Figure 1. The model proposes a positive relationship between Perceived Organizational Norms and Moral Judgment, and between Perceived Organizational Effect and Moral Judgment. Organizational Identification moderates these two relationships, so at higher levels of Identification these two relationships are proposed to be stronger. For Perceived Organizational Effect, this means at higher levels of Identification a positive relationship with Moral Judgment will be observed. Finally, the interaction of all three terms is hypothesized to have a positive relationship with Moral Judgment.

3. Literature Review

3.1. Moral Judgment

Three major themes are evident in the ethical decision making literature: defining moral judgment as a process, an evaluation, and a selection. The process perspective focuses on how the decision is made, while the evaluation and selection perspectives are concerned with the content of the decision.

As a process, moral judgment is the strategy used to determine what is right and wrong [13]. This research rests heavily on the work of Lawrence Kohlberg [14], who developed a six-stage/three-level model of cognitive moral development (CMD) that is widely cited in ethical decision making research.

Moral judgment is also considered a belief resulting from the evaluation of an action. This conceptualization of moral judgment can be seen in the following definition: “... an ethical judgment is the degree to which a behavior in question is considered morally acceptable by an individual” (p. 1164) [15]. The evaluation of actions leads to a selection, which is also a moral judgment. The essence of this perspective is captured succinctly by Hunt and Vitell, who define an ethical judgment as “the belief that a particular alternative is the most ethical alternative” (p. 9) [16].

The evaluation perspective is most appropriate if the unit of analysis is actions, rather than issues, so it will be followed in this research. A moral judgment is therefore defined as a belief of the degree to which an action is ethical or unethical.

There are two prevailing normative ethical theories that define how humans ought to form moral judgments: Deontology and Teleology. Normative ethical theories attempt to explain what is right and wrong, or good and bad, using logical philosophical arguments [8, 9].

Deontology involves the use of rules to determine if an action is right or wrong. These rules may come from a variety of sources. Kohlberg suggests they come from social norms, agreements, social contracts, and finally internally defined standards [14]. Deontological rules do not consider the effects of an action, but only consider the intrinsic nature of the action: “If an action is done from a sense of duty, if the principle of the action can be universalized, then the action is right” (p. 29) [17]. Within this perspective, an individual can be considered “ethical” the majority of the time if he or she conforms to society’s rules [10].

Teleology is based on the belief that good and bad are determined by the outcomes or consequences of an action [8]. Consequentialism and Utilitarianism are two forms of this philosophy [10, 18, 19], which agree that an action is ethical if it yields the greatest good to society: “Everyone ought to act so as to bring about the greatest amount of happiness for the greatest number of people” (p. 24) [17].

Deontological and teleological reasoning play a role in several descriptive models of ethical decision making. Fritzsche [20] defines five factors, called “decision dimensions,” that influence the evaluation of each alternative action. The five dimensions are economic, political, technological, social, and ethical. This model thus combines rational and ethical decision processes. Both deontological and teleological perspectives are included with the ethical dimension. Fritzsche does not specify how an individual’s moral standards form, but instead defines this dimension broadly. He thus looks at moral reasoning with a fairly weak lens, which does not allow him to see its details.

Hunt and Vitell [16] also define deontological and teleological evaluations in their model. The model does not specify how these evaluations take place, nor does it try to predict them. It does, however, identify the inputs to
the evaluation process. The deontological evaluation applies deontological norms to the set of perceived alternatives. The teleological evaluation combines the probabilities of the consequences of each alternative, the desirability of those consequences, and the importance of the stakeholders. It does not specify how these three factors are combined or processed to arrive at an evaluation of an action’s goodness or badness.

Both of these theories of ethical decision making take us closer to understanding the process, but both fall short by not specifying in sufficient detail the factors that predict an individual’s evaluation of an action. The research model tested by this study is an attempt to fill this gap. It does so by focusing on the role of “others” in predicting moral judgment. Others are the source of deontological rules defining duties and rights, and an action’s affects on others determine the teleological goodness or badness of the action. The research model will focus more closely on the moral agent’s organization as the “other” relevant in deontological and teleological reasoning.

### 3.2. Deontological Evaluation: Perceived Organizational Norms

To answer the question “What should I do?”, organization members look to their organization for guidance [21]. This guidance comes in a variety of forms, one of which is defined as organizational norms. Organizational and group norms have been framed in a variety of ways, but all generally agree that they are shared beliefs about conduct. For example, Social Consensus is “…the degree of social agreement that a proposed act is evil (or good)” (p. 375) [22]. This fits exactly the definition of moral judgment from the evaluation perspective, but it is at the group level of analysis.

Another example is the ethical work climate construct, which is “the prevailing perceptions of typical organizational practices and procedures that have ethical content” (p. 101) [23]. Ethical work climate is an aggregate perception, requiring a “measurable degree of consensus” (p. 103) [23] before the ethical work climate can be said to exist. This positions the construct at the organizational or group level of analysis. However, it also exists at the individual level [24], as an individual’s perception of the work climate. In the study of individual decision making, it is appropriate to use this individual-level conceptualization of ethical work climate.

The ethical work climate construct is consistent with deontological reasoning because it provides rules for its members. These rules can be “prescriptions, proscriptions, [or] permissions regarding moral obligations” (p. 101) [23].

Victor and Cullen [23] developed a scale to measure the type of Ethical Work Climate present in an organization or work group. This general categorization is too broad to fit the current research, which is instead focused on decision making about specific issues pertaining to privacy. Therefore, Perceived Organizational Norms (PON) will be defined as a perception of an individual about the shared beliefs of a group. The beliefs are about the degree to which an action is right or wrong. This definition leads to the following hypothesis:

**H1**: Perceived Organizational Norms will have a positive relationship with an individual’s Moral Judgment about actions relating to online privacy.

Perceived Organizational Norms provide the structure from which legitimate behaviors and rules are appropriated. In this way an individual’s moral judgment is a manifestation of the group’s norms, and the judgment (and resulting behaviors) serve to reinforce and redefine the norms.

The Cognitive Moral Development [14] construct also lends support to this hypothesis. In the second level of CMD individuals consider social norms when making ethical decisions. H1 is simply arguing that the organization is an important and relevant part of this “social” source of rules.

### 3.3. Teleological Evaluation: Perceived Organizational Effect

Perceived Organizational Effect (POE) is the term used here to encapsulate elements from two related constructs: Magnitude of Consequences and Desirability of Consequences. These concepts address consequences for all stakeholders. POE is defined as a perception of the degree to which an action harms or benefits an organization.

Magnitude of Consequences is one of the dimensions of the moral intensity construct, which is defined as the “extent of issue-related moral imperative in a situation” (p. 372) [22]. It is “the sum of the harms (or benefits) done to victims (or beneficiaries) of the moral act in question” (p. 374). The desirability of consequences is consistent with this definition. It plays a role in the teleological evaluation in Hunt & Vitell’s [16] general theory of marketing ethics. Other factors in these evaluations include: perceived consequences, probabilities of consequences, and the importance of stakeholders. The combination of these factors results in “beliefs about the relative goodness or badness brought about by each alternative” (p. 9).

**H2**: The Perceived Organizational Effect of an online privacy action on an individual’s employing organization is positively related to the individual’s Moral Judgment about that action.
Although the organization is simply one of many stakeholders affected by an action, it is one close to the individual. A teleological evaluation should involve consideration of all stakeholders. No one stakeholder should be given any preference over another, at least from a normative ethical philosophy perspective [9]. However, if one’s organization is harmed by an action, that action might also be considered to harm the individual. Therefore, actions harming an individual’s organization will be judged to be wrong, while those that help the organization will be judged to be right.

### 3.4. Moderator Variable: Identification

The consistent theme throughout identification literature is the focus on an individual’s perception of self-concept based on his or her relationship with a group, often one’s organization. Within this theme lies a great deal of variation, as Table 1 demonstrates.

**Table 1. Organizational Identification Definitions**

<table>
<thead>
<tr>
<th>Definition</th>
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<tbody>
<tr>
<td>Linked to social scene</td>
<td>[25]</td>
</tr>
<tr>
<td>Membership, belonging in group</td>
<td>[26, 27]</td>
</tr>
<tr>
<td>Common qualities, faults, successes, behaviors</td>
<td>[28]</td>
</tr>
<tr>
<td>Oneness with group</td>
<td>[29]</td>
</tr>
<tr>
<td>Define self with same attributes as group</td>
<td>[30]</td>
</tr>
<tr>
<td>Beliefs about group become self-defining</td>
<td>[31]</td>
</tr>
<tr>
<td>Active connection between own and group’s identities</td>
<td>[32]</td>
</tr>
<tr>
<td>Joint interests are considered</td>
<td>[33]</td>
</tr>
<tr>
<td>Group goals considered own</td>
<td>[34]</td>
</tr>
<tr>
<td>Group interests substituted for individual</td>
<td>[35]</td>
</tr>
<tr>
<td>Desire to choose alternative that best promotes group interests</td>
<td>[36]</td>
</tr>
</tbody>
</table>

This study will consider organizational identification as a belief, rather than a behavior. The behavioral definitions listed in the last four rows of Table 1 support the hypotheses described below, but they will not be the basis for the definition and measurement of the construct. Instead, organizational identification will be defined as the degree to which an individual perceives a connection between his or her own and an organization’s identities.

**H3**: Organizational identification positively moderates the relationship between Perceived Organizational Norms and Moral Judgment about actions relating to online privacy.

**H4**: Organizational Identification positively moderates the relationship between Perceived Organizational Effects and Moral Judgment about an action relating to online privacy.

The possibility of multiple identifications [37, 38] suggests that multiple referent groups may influence an individual. That is, multiple groups can be sources of rules about ethical behavior, and multiple groups can be affected by the outcomes of an action. This creates a potentially significant information processing task, to sort and prioritize and consider multiple (and possibly conflicting) norms, and multiple outcomes on multiple stakeholders. These two hypotheses are based on the argument that this cognitive load can be overwhelming, and humans look for ways to simplify the decision process.

Individual decision makers are not able to consider all available information [39], and they try to conserve cognitive resources [40]. The concepts of bounded rationality and satisficing [35] also explain how humans make decisions with incomplete information.

When faced with multiple referent groups and multiple stakeholders, how might an individual reduce the decision set and focus on a smaller number of groups? Identification is a logical answer to this question. It can explain how a decision maker chooses which referent groups are relevant to a particular decision. Identification, our ever-changing sense of self based on membership in groups, tells us in which group we are a member at any given point in time. So it tells us to which group we should look to draw rules, guidelines, standards, and norms when making decisions. And it tells us which group’s stake we should consider most when evaluating an action’s effects.

Given this role of identification as a means to simplify the decision process, hypotheses three and four emerge. An individual will appropriate a group’s norms in making a moral judgment only to the degree that he or she identifies with that group. So at low levels of identification, a group’s norms are not relevant. The decision maker will instead look to another group, one in which his or her identification is higher. And an individual will give preference to a group with which he or she identifies highly when evaluating the effects of an action. If he or she does not identify with a particular group, then the effects on that group are irrelevant. In contrast, if he or she identifies highly, then the outcome is not only affecting the group but also the decision maker. In this case, the effects will have a significant impact on the utilitarian calculus required to judge an action’s goodness or badness.

The organization is the sole identification target in this study, because it is the target studied most by organization and communication scholars. Also, in the context of decisions about privacy, the organization is very likely a target of the student’s identification, and a stakeholder in actions relating to online privacy.

The four hypotheses presented above share an underlying assumption that individuals make ethical decisions following either a deontological or teleological process. That is, these two approaches are mutually exclusive. This assumption is questioned by several scholars [10, 16, 41], who recognize that the evaluations
resulting from both processes need to be reconciled when a “final” judgment is made regarding the ethics of an action. Given the possibility that both decision processes may be in effect simultaneously, the following hypothesis is offered:

**H5: The interaction of Perceived Organizational Norms, Perceived Organizational Effect, and Organizational Identification will predict Moral Judgment about actions relating to online privacy.**

Identification remains in this hypothesis for the same reasons outlined above. Individuals will be more sensitive to norms if they come from a source with which they identify highly, and they will be more sensitive to outcomes that occur to these same groups. In lay terms, this hypothesis says that an individual will consider an action right if the norm in his or her organization also judges it to be right, and the organization is helped by the action, and the individual identifies highly with the organization.

This hypothesis proposes a multiplicative combination of these three dimensions of moral intensity, rather than the additive combination assumed by Jones [22] and used by other researchers [42-45]. The multiplicative combination heightens the effects of high or low values on any one of these three dimensions.

4. **Methods**

4.1. **Subjects**

The subjects were students at a large Southeastern public university in the United States. They were senior Information Systems majors taking a course in Systems Analysis and Design. They had already completed coursework in Visual Basic, Database Design, Telecommunications, and various other business areas.

4.2. **Measures**

4.2.1. **Moral Judgment.** The moral judgment scale was adapted from an eight-item semantic differential scale [46-50]. The scale was modified in several ways. Several items were omitted based on the use of an abbreviated form of this scale [51]. The Morally Right-Not Morally Right pair was changed to Right-Wrong following the recommendation of Skipper and Hyman [52], who noted that the original item did not present semantic opposites. A Good-Bad item was also added to this scale based on marketing research about attitudes towards acts [53]. The respondents were presented with an action taken by a company, and each of the semantic differential pairs were then listed with the following instruction: “I feel this company is...” A six point scale was used for each pair, with higher values indicating more unethical.

4.2.2. **Perceived Organizational Norms.** The moral judgment scale was also used to measure perceived group norms. Following each action, the instructions asked the respondents: “I believe other employees at my company feel this is...” The four semantic differential pairs were then presented. The moral judgment and perceived organizational norms items were at the beginning and end of the survey, respectively, to minimize the risk that responses on the first set of items would influence responses on the second.

4.2.3. **Perceived Effect of Organization.** The perceived effect measure was based on Culnan and Milberg’s [54] conceptual work on privacy and the exchange of information between consumers and companies. The items attempt to capture what outcomes may occur if a company handles this exchange in a way that offends consumers. Privacy is therefore framed as a marketing issue relevant to a company’s relationship with its customers. Examples of the outcomes include: “the company will lose existing customers” and “the company will face greater governmental regulation.” A five-point Likert scale was used to measure each item. Higher values indicate the individual believes the organization is harmed by the action. Respondents were asked to consider the university as the “company” if they were not currently employed. The term “company” is used in this instrument in anticipation of its use with IS professionals. By standardizing the wording of questions, the results from student and professional samples can be combined more legitimately.

4.2.4. **Organizational Identification.** Organizational identification is measured using seven items from the Organizational Identification Questionnaire [55]. The subset chosen for this study were selected from those used by Scott in his study of multiple identifications [37]. Examples of the items include: “My company is like a family to me,” and “I am proud to be a member of my company.” A five-point Likert scale followed each item, with higher values representing a higher degree of identification. Respondents were asked to consider their university as the “company” if they were not currently employed.

4.2.5. **Social Desirability.** Twelve items from Crowne and Marlowe [56] were used to measure social desirability, so any effects of a social desirability bias could be assessed. Items included: “I never hesitate to go out of my way to help someone in trouble” and “I sometimes feel resentful when I don't get my way.” A five-point Likert scale followed each item.
4.3. Procedures

The survey was administered on paper, and again twelve days later on the Web. The students were invited to participate in both forms of the survey in exchange for extra credit (2 percentage points on the midterm examination for each form). The responses to the paper-based survey were used to assess the test-retest reliability of the instruments. The responses to the web-based survey are used in all other analyses.

Two actions relating to online privacy were chosen for this study. They fall into the Choice and Access categories of the Fair Information Practices [57]. Violations of both of these Fair Information Practices are legal in the United States, but they are considered unethical. These two actions were also chosen for practical reasons. In pilot studies using a wider range of actions, there was minimal variation in responses for actions related to the other Fair Information Practices. Also, in the Georgetown Internet Privacy Policy Survey [58], only 60 and 40% of sites surveyed had policies that addressed Choice and Access, respectively. The relevance of Choice is evident in the recent situation involving Toysmart.com, which attempted to sell its customer list after the company filed for bankruptcy, despite its stated policy against such action. Access is also relevant, as the Federal Trade Commission (www.ftc.gov) recently issued a report to Congress that focused on security and access. The two actions used in this study were stated as follows: “A company denies individuals access to their own personal information collected through its Web site,” and “A company sells personal information collected through its Web site to other companies without the knowledge or consent of the individuals who provided it.”

5. Results

Of the 98 students invited to participate in the survey, 68 completed both paper and web forms, 14 completed only the paper form, 11 completed only the web form, and 5 chose not to participate. Using the 68 who completed both, the test-retest reliability was assessed by correlating the paper and web responses for each of the 48 items. Forty seven of the correlations are statistically significant, all but one in the positive direction. Only one item’s responses were not correlated between the paper and web forms. This is taken as modest support of the test-retest reliability of the survey. The 79 web-based responses are used for the remaining analyses.

Item correlations are in a pattern that supports proceeding to factor analysis procedures. The low ratio of respondents to items makes factor analysis problematic, resulting in perhaps unreliable results [59, 60]. To increase the respondent-to-item ratio, and hopefully increase the reliability of the results, an alternative procedure was improvised for this study. The factor analysis was conducted on subsets of items. Every item was given the opportunity to load on its predicted factor, or on some other factor. For example, the four items proposed to measure moral judgment were processed together, to determine if all four items loaded as expected. This procedure assessed the convergent validity of the constructs. The procedure was repeated for the sets of items for each construct in the model. For each subset, items were removed from the analysis if their factor loadings were below .50.

After each individual factor was identified, pairs of related factors were combined to ensure they separated into two. For example, the four items for Moral Judgment-Choice were combined with Moral Judgment-Access. Using an oblique rotation extraction method, these two factors separated as proposed. This technique was used to assess the divergent validity of the constructs. This technique was used to analyze items for every relevant pair of factors. Also, the sixteen items comprising Moral Judgment and Perceived Organizational Norms for both actions were combined, and the four proposed factors emerged from the analysis. This technique was also used to assess the presence of a method effect. Items from the paper and web forms were combined for various factors, and in each case the paper and web items loaded separately on their proposed factors.

All sets of items except those for Perceived Organizational Effects items loaded as expected. After further consideration, the results for the POE items were neither surprising nor problematic. The eight items were designed to maximize content validity by covering the full range of effects an organization might experience if it violates the privacy of its customers. It is reasonable for these effects to be correlated only moderately, if at all. Therefore, factor analysis is not necessarily the appropriate procedure to use for these items.

Cronbach’s alpha was computed for each set of items, including those for POE. These values ranged from 0.82 to 0.91. The high alpha for the POE items supports collapsing these eight items into a single measure. The reliabilities, descriptive statistics, and correlations for the factors in the model are listed in Table 2.
interaction without Identification explains more variance for Access than Choice, and the two-way interaction is supported for both Access and Choice actions. It is proposed in H3 and H4. Table 3 shows that Hypothesis 5 is supported for both Access and Choice actions. The results are summarized in Table 3. Hypotheses 1 and 2 are therefore supported.

To test for the moderating effect of identification, the interaction term should be entered into the regression with the two main effect variables. This model explains 35% of the variance in moral judgment, and standardized betas for both PON and POE are positive and statistically significant for both actions. The results are summarized in Table 3.

Multiple regression procedures were used to test the five hypotheses. For hypotheses 1 and 2, both PON and POE were analyzed as independent variables against Moral Judgment. This model explains 35% of the variance in Moral Judgment, and standardized betas for both PON and POE are positive and statistically significant for both actions. The results are summarized in Table 3. Hypotheses 1 and 2 are therefore supported.

To test for the moderating effect of identification, the interaction term should be entered into the regression with the two main effect variables [61]. However, this results in a significant multicollinearity problem, with tolerances below 0.1 and variance inflation factors ranging from 12 to 76. Therefore, only the interaction terms were included in the model for the tests of hypotheses 3 and 4. As Table 3 shows, neither of the hypotheses are supported (assuming an adjusted alpha of .006 to account for the eight regression tests performed in this section).

The same multicollinearity problem is evident in the model for Hypothesis 5, so again only the interaction term is analyzed as the predictor. While it was not part of this hypothesis, this model was repeated with the POE x PON interaction, without Identification. This was done to determine if Identification moderated this relationship as proposed in H3 and H4. Table 3 shows that Hypothesis 5 is supported for both Access and Choice actions. It is interesting to note that the three-way interaction explains more variance for Access than Choice, and the two-way interaction without Identification explains more variance for the Choice action than does the three-way interaction term.

6. Discussion

The main effects of Perceived Organizational Norms and Perceived Organizational Effect are strong, which supports two hypothesized relationships in this model. The congruence between individual and organizational moral judgment shows that organizations and their members can have a powerful effect on each other.

Hypothesis 2 argues that the organization is an important stakeholder considered when individuals engage in teleological (i.e., utilitarian) reasoning. This study was limited in its ability to fully test the role of other stakeholders. The positive relationship does not necessarily mean the respondents weighed the organization more heavily than other stakeholders. It may be these other stakeholders were affected in a direction and magnitude similar to the organization, leading the respondents to judge the actions as if the organization mattered most. A better test of this hypothesis should recognize and measure the perceived effects on multiple stakeholders.

The moderating effect of identification was not supported as expected. The role of organizational norms may influence individual attitudes for other reasons. For example, Kelman [62] argues there are three forces that explain why people respond to social influence: compliance, identification, and internalization. Compliance is most evident in observable behavior, so it is not a feasible explanation for the results in this study. However, it may be that the individual respondents internalized the values (i.e., norms) of their organization. That is, the individual accepts the influence of the organization because it is consistent with his or her value system.

The analysis of hypothesis 5 suggests identification may still play a role in ethical decision making about privacy, but these results more strongly support the claim that both deontological and teleological evaluations occur simultaneously. The interaction of POE and PON alone explained 55% of the variance in moral judgment for the choice action. Only for the access action did the inclusion of identification increase the $r^2$ of the model. The results of this three-way interaction lend support to the claim that at least some of the dimensions of the moral intensity construct should be combined multiplicatively, rather than additively. It would be interested to re-analyze the data in moral intensity studies to test this claim further.

Another interesting implication of this study stems from the comparison of the two actions. If we consider the “best” model to be that which explains the most variance in the dependent variable, then the best model...
for the access action is not the best model for the choice action. This suggests the ethical decision making process may vary from one issue to the next. It must be left for future research to uncover why some factors are more or less relevant for some issues. Jones’ research on moral intensity [22] is a step in this direction.

Table 3. Multiple Regression Analyses

<table>
<thead>
<tr>
<th>H1 &amp; H2: Access</th>
<th>r²</th>
<th>F</th>
<th>b</th>
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<tr>
<td>Overall model</td>
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<td>***20.79</td>
<td></td>
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<td>Perceived Organizational Norms</td>
<td>0.41</td>
<td>***4.135</td>
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<tr>
<td>Perceived Organizational Effect</td>
<td>0.31</td>
<td>**3.186</td>
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<table>
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<tr>
<th>H1 &amp; H2: Choice</th>
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<td>Overall model</td>
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<tr>
<td>Perceived Organizational Norms</td>
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<tr>
<td>Perceived Organizational Effect</td>
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<table>
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<td>ID x PON</td>
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<table>
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<tr>
<td>ID x PON</td>
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<tr>
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<td>1.50</td>
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<th>H5: Access</th>
<th>r²</th>
<th>F</th>
<th>b</th>
<th>t</th>
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<tbody>
<tr>
<td>Overall model</td>
<td>0.33</td>
<td>***37.497</td>
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<tr>
<td>ID x PON x POE</td>
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<td>***6.122</td>
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<tr>
<td>Overall model</td>
<td>0.21</td>
<td>***20.038</td>
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<tr>
<td>ID x PON x POE</td>
<td>0.45</td>
<td>***4.476</td>
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| Overall model   | 0.55 | ***23.166 |      |      |
| PON x POE       | 0.74 | ***4.813 |      |      |

* p < .05
** p < .01
*** p < .001

This study makes several contributions to the privacy and ethical decision making literature. First, it provides empirical evidence supporting the relationships among several constructs from ethical decision making models. It provides empirical evidence supporting a redefinition of the moral intensity construct, based on the product of its dimensions rather than the sum. It provides empirical evidence supporting the claim that judgments about different aspects of privacy are best predicted by different models, which also supports the several issue- or situation-contingent models of ethical decision making. The study also makes a practical contribution to the issue of privacy. Its findings suggest a means for consumers to use persuasion to help protect their privacy. If the three-way interaction of effects, norms, and identification can consistently predict moral judgment about privacy, then consumers should try to explain to IS professionals, such as webmasters, that the professionals are members of the consumer community, that this community is harmed by violations of its privacy, and this community considers violations of privacy to be wrong and bad. This same approach may be effective in teaching IS students about the ethical issues they face. It may be an interesting research question to study the effects of this type of persuasive message on the judgments of IS students and professionals.

There are at least two limitations that warrant discussion here. One constraint resulted from the research methods. A survey limits the ability to demonstrate causality, so the results only show that a statistically significant relationship exists for parts of the research model. Also, a survey only allows the researcher to see what he or she is looking for, and cognitive limits constrain the number of questions that can be included. Future studies would benefit from an analysis of multiple stakeholders (and thus multiple identification targets), and multiple actions. Qualitative methods that allow the decision makers to identify the stakeholders they feel are relevant would also provide valuable insight into this phenomena.

The use of student subjects is another limitation. This study should be replicated using actual IS professionals, for it is their judgments about privacy that have the greatest impact on users of the web. The subjects were two to four months away from full-time employment in the IS field, so the use of students does not necessarily invalidate the findings in this study, it simply means the results should be interpreted and extrapolated with caution. Another limitation related to the subjects is the external validity of the results. Students in the particular university and geographic region may not be like other students at other universities, so the findings should again be generalized with caution. It remains for future studies to establish the generalizable limits of these results and conclusions. This study makes a reasonable claim that the research model is interesting enough to warrant further attention, so hopefully these future studies will be forthcoming.

7. References


