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Perceived importance of an ethical situation (PIE) on ethical judgment and intention

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THE PERCEIVED IMPORTANCE OF AN ETHICAL SITUATION (PIE) ON ETHICAL JUDGMENT AND INTENTION: BEYOND MORAL INTENSITY

A Thesis or Project

Submitted

in Partial Fulfillment

of the Requirements for the Designation

University Honors

Monica Marie Johnston

University of Northern Iowa

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[1]
The Perceived Importance of an ethical situation (PIE) on Ethical Judgment and Intention: Beyond Moral Intensity

Introduction

The importance of ethics to the accounting profession is well established (Turpen and Witmer, 1997; Abdolmohammadi, Read, and Scarbrough, 2003; Guffey and McCartney, 2008). In accounting, a commitment to ethical behavior is regarded as the basis for all other performance standards, (Turpen et al., 1997), and historically most agree that accountants practice honest principles (Leitsch, 2006). However, business headlines such as those related to the collapse of Enron and its auditor, Arthur Andersen, raise concerns about ethical actions of accountants (Abdolmohammadi et al., 2003). Additionally, accountants and auditors have more recently come under fire due to issues related to the collapse of Lehman Brothers, Freddie Mac, and the business ventures of Bernie Madoff among others. In reaction to these and other issues, the American Institute of Certified Public Accountants (AICPA) and the Institute of Management Accountants (IMA) increased emphasis placed on ethics in their certification examinations and the AICPA updated their code of professional conduct (AICPA Code of Professional Conduct, Statement of Ethical Professional Practice).

Tangible costs related to unethical business behavior are often monetary in value. For example, Microwave Communications, Inc. (MCI) went bankrupt following accusations of falsified balance sheets resulting in shareholder losses close to $200 billion (Ho, 2003). Additionally, effects of unethical behavior on an organization can have intangible costs that far exceed monetary amounts. Consider the loss of credibility suffered by the Olympic movement due to the 2002 Salt Lake City bribery scandal that diminished confidence in the organization and endangered millions of corporate sponsorships (McMahon and Harvey, 2006).
Given its importance, it is crucial to the accounting profession that new entrants to the field possess an acceptable level of ethical sensitivity and understanding. Ethical college graduates likely become ethical professionals, and risks are great to firms that hire individuals with questionable professional values (Turpen et al., 1997). It follows that an integral part of an education in accounting involves fostering an environment where students are able to learn about ethics. In order to determine how to best educate students on ethics, it is necessary to be aware of the thought processes involved in ethical decision making (Guffey et al., 2008). Therefore, it is essential that factors affecting ethical decisions are understood and incorporated into the moral education of accountants (Barnett & Valentine, 2004). Understanding why and how individuals and groups make ethical decisions in a business context can improve ethical decisions made in an organizational context (Loe, et al., 2000). The purpose of this research is to explore the ethical decision-making construct by creating and testing a new ethical scenario. In doing so, it adds to previous business ethics research and provides a framework by which future research may be conducted. Additionally, it contributes to previous studies of the ethical decision-making process directed specifically at accounting students.

**Review of Literature**

Basic concepts and definitions related to ethical decision-making warrant discussion. Mappes (1988) identifies ethics as the philosophical study of morality and Yetmar and Eastman (2000) define ethical sensitivity as the ability to recognize or perceive ethical content in a situation prior to making a decision. More specifically, moral issues are present where a person’s actions, when freely performed, may harm or benefit others (Velasquez and Rostankowski, 1985). A moral agent is a person who makes a decision, even though he or she may not recognize moral issues are at stake (Jones, 1991). An ethical decision is defined as a decision that
is both legally and morally acceptable, and an unethical decision is either illegal or morally unacceptable to the larger community (Jones, 1991).

Early research related to accounting students and ethical decision-making by Cherrington and Cherrington (1979) finds that in decisions involving moral dilemmas, accounting students are more honest than students of other majors, and results reveal a tendency for accounting students to exhibit slightly more ethical behavior. Arlow and Ulrich (1980, 1983) find that accounting students have a higher level of personal business ethics than do non-accounting students. Further, Fulmer and Cargile (1987) find accounting students tend toward more ethical viewpoints concerning ethical issues than other business students. More recent research by Baird, Zelin, and Brennan (2006) also finds accounting majors exhibiting the most ethical choices as compared to individuals in other majors.

In contrast to these studies, Giacomino (1992), using the same questionnaire administered in Fulmer et al. (1987), finds no difference between accounting majors and non-accounting majors concerning ethical issues. Using a Defining Issues Test (DIT) developed by James Rest (1979), Lampe and Finn (1992), Armstrong (1987) and Abdolmohammadi et al. (2003) all find that accounting majors do not show a higher level of ethical reasoning than non-accounting majors.

Differential findings as to the ethicality of accounting majors among various researchers is the subject of much study, and many ethical decision making models have been developed to illustrate the ethical decision making process and the personal and situational characteristics involved (Ferrell and Gresham, 1985; Hunt and Vitell, 1986; Trevino, 1986; Rest, 1986; Dubinsky and Loken, 1989). These models are not normative and do not deal with determining
what a subject should do regarding ethics, but rather they describe what individuals do when
faced with an ethical dilemma.

Rest’s (1986) theory of ethical decision making is easily transmittable to an
organizational setting. Rest presents a four-component model of individual ethical decision
making and behavior. The four components of Rest’s (1986) model propose that a moral agent
must 1) recognize the moral issue, 2) make a moral judgment, 3) resolve to place moral concerns
above other concerns, and 4) act on the moral concerns. In the literature, these stages are
identified as 1) awareness, 2) judgment, 3) intention, and 4) action/behavior. According to Rest
(1986), each stage is independent, and success is one stage does not indicate success in any of
the others.

The main limitation of Rest (1986) is that he fails to consider characteristics of moral
issues themselves (Jones, 1991). Instead, he focuses primarily on individuals’ characteristics and
organizational, cultural, and situational influences. Jones’ (1991) model addresses this problem
and suggests that characteristics of issues themselves, collectively termed moral intensity, are
also important determinants of ethical decision-making and behavior. Jones (1991) argues that
moral intensity varies from issue to issue and has a significant impact on each of the four
components of ethical decision-making in Rest’s model. If Rest’s (1986) model is used with no
consideration given to moral intensity, the predictions for stealing a pack of paper clips may be
the same as stealing $1,000,000.

Jones’ moral intensity model also suggests ethical dilemmas are identified by their
saliency. Items are salient to the extent they stand out from their backgrounds. Saliency varies
substantially from issue to issue, and only a few issues achieve high levels of saliency (Sweeney
and Costello, 2009). Previous studies suggest that the dimensions of moral intensity significantly
influence the moral decision-making process of various respondents (Singhapakdi, 1996, 1999; Frey, 2000; May and Flannery, 2000).

One component of Jones’ (1991) model is *social consensus*, defined as the degree of social agreement that a proposed act is good or evil. Moral intensity increases as the agreement an act is wrong increases. If a person does not know what constitutes good quality ethics in a situation, it is difficult for them to act ethically (Jones, 1991). *Probability of effect*, another component of Jones’ model, is defined as the joint function of the probability that the act in question will actually take place and cause the harm or benefit predicted. For this component, the greater the likelihood of the act taking place and causing harm or benefit, the greater the moral intensity. The model additionally includes a component termed *temporal immediacy*, defined as the length of time between the present and the onset of the consequences of the moral act, where a shorter length of time implies greater immediacy and greater need for ethicality. The fourth element of Jones’ model is the *concentration of effect*, which is an inverse function of the number of people affected by an act of given magnitude. Jones’ argument is that as more individuals are affected by the moral decision, and therefore bear proportionately less loss, the more likely the agent is to engage in unethical behavior. Jones also recognizes *proximity* as a part of the moral intensity model, where proximity is defined as the feelings of nearness/closeness (social, cultural, psychological, or physical) an agent has for the victim(s) of the act in question. Here, Jones’ argument is that people care more about individuals that are closer to them than they do to people who are more physically or culturally distant. The final component of Jones’ (1991) model is termed *magnitude of consequence* and is defined as the sum of the harms or benefits done to others due to the moral act in question. Jones argues that serious consequences are more likely to prompt ethical behavior than modest consequences.
Previous studies find the six dimensions of moral intensity to significantly influence the moral decision-making process of various respondents (Singhapakdi, 1996, 1999; Frey, 2000; May and Flannery, 2000). Leitsch (2006) applies Jones’ (1991) model specifically to accounting students. Her research supports that of Jones’ and suggests that all of the dimensions of moral intensity significantly predict accounting students’ moral judgment and intentions. She finds that, overall, the perceived moral intensity seems to vary depending on the nature of the situation in the scenario and also that the moral intensity components have interaction effects (Leitsch, 2006).

While Jones (1991) believes that each component of moral intensity is distinct from the other five components, Jones also feels it may be appropriate to consider the components as a single construct for two reasons. First, Jones (1991) feels that “the six moral intensity components are all characteristics of the moral issue itself” and that “the components are expected to have interactive effects, at least at some levels” (p. 378). Second, Jones (1991) states that moral intensity is believed to have increased if there is an increase in any one of its components (assuming the other components remain constant). Additionally, each component may have a “threshold” that must be reached before it becomes significant in the moral intensity construct. Leitsch’s (2006) study of moral intensity components finds that the components do have correlated effects, which is consistent with the findings of Singhapakdi et al. (1996), Barnett (2001), and May and Flannery (2000). Therefore, for the purposes of this study, the components of moral intensity are considered together as one construct (high vs. low).

While Jones (1991) significantly improves the conceptualization of ethical decision-making beyond Rest’s (1986) model, it still does not address the saliency of the ethical issue itself to an individual. An individualistic characteristic of ethical decision-making discussed...
more recently in the literature is defined as the Perceived Importance of an Ethical issue to an individual (Robin, Reidenbach, and Forrest, 1996; Haines, Street, and Haines, 2008; Guffey et al., 2008). This theory considers “an individual’s values, beliefs, needs, perceptions, special characteristics of the situation, and the personal pressures existing” in an ethical decision-making situation. This focus is different from Jones’ (1991) model because Jones focuses on characteristics of the issue itself rather than individual perceptions of the issue.

To test a theory of perceived individual importance of an ethical situation (PIE), Robin et al. (1996) present fictional scenarios with various characters making unethical decisions. Robin et al. (1996) find that PIE has a significant impact on the ethical judgment and intentions of subjects. Individuals high in PIE are more critical of the ethical content of the scenarios than are those low in PIE, and high PIE individuals are less likely to engage in the same unethical behavior depicted in the scenarios than those low in PIE (Robin et al. 1996). However, Robin et al. (1996) acknowledge their study is only an initial test of PIE.

This augmentation of Jones’ (1991) focus on the impact of moral intensity on ethical decision-making is important because it suggests an individual’s ethical decision-making process can be influenced even when the ethical issue itself cannot (Guffey et al., 2008). As noted by Robin et al. (1996, p. 17), “Rewards and punishments, documents like codes of ethics, and values from the corporate culture can all be used to influence individual perceptions of the ethical issue’s importance on the job.” In a follow up to the initial research, Guffey et al. (2008) extend the study conducted by Robin et al. (1996) by applying similar ideals to accounting students. In the study by Guffey et al. (2008), the researchers hypothesize that high levels of PIE will result in greater condemnation of an unethical act and that, conversely, low levels of PIE will result in lesser condemnation of an unethical act. Their findings support this hypothesis.
Similarly, Haines et al. (2008) predict that PIE will be directly related to moral judgment, and their findings support this prediction. While the researchers discuss the potential implications of Jones’ (1991) moral intensity components as they relate to PIE, the study does not measure these components in an attempt to establish a relationship to PIE.

**Hypotheses**

My research explores the relationship of PIE and moral intensity on ethical judgment and intention. Specifically, it measures the incremental impact of PIE beyond the impact of moral intensity on ethical judgment and intention. Hypotheses 1 & 2 thus state:

\[ H1: \text{The perceived importance of an ethical situation (PIE) has a positive impact on ethical judgment above and beyond the impact of moral intensity on judgment.} \]

\[ H2: \text{The perceived importance of an ethical situation (PIE) has a positive impact on ethical intention above and beyond the impact of moral intensity.} \]

Previous ethics research involving accounting majors usually examines the relationship between gender and ethical decision-making. The results of these studies are inconclusive as there is research that find no significant gender related ethical differences (Giacomino, 1992; Abdolmohammadi, et al., 2003; Stanga and Turpen, 1991) as well as studies that find females to have higher ethics (Baird, et al., 2006; Sankaran and Bui, 2003; Ibrahim and Angelidis, 2009). With no a priori expectation of a gender difference, this thesis will also test for gender differences in ethical decision-making from the null hypothesis perspective. Hypothesis 3 is presented:

\[ H3: \text{There will be no difference in the ethical judgment or intention of females as compared to males.} \]
Methodology

Experimental Design

This research incorporates a 2x2 full-factorial design. Since scenarios have worked well in previous studies to create an experimental ethical dilemma (Rest, 1986; Flory et al., 1992; Robin et al., 1996; Guffey et al., 2008) they are also used in this study. PIE is manipulated between two scenarios (See Appendix A), one adapted from Flory et al. (1992) and one created specifically to appeal to subjects in this study. This second scenario was developed to proxy for a highly salient ethical situation (high PIE) (See Appendix B). The first scenario, adapted from Flory et al. (1992), involves a manager at a fictional company (Stern Electronics) facing an ethical business decision. This scenario was chosen with the belief that it would be less salient to the subjects and therefore elicit a lower PIE. The second scenario, developed specifically for this thesis, involves the social networking instrument Facebook® and involves an ethical employment recruiting situation regarding individuals connected within the electronic network. I believed initially that this would be a very salient ethical situation to student subjects and anticipated it to be higher in PIE than the Stern Electronics scenario because students have more experience with Facebook® than with management and would potentially relate more to the Facebook® scenario. Internal Review Board approval was gained, and their protocols were followed in the administration of the survey.

Moral intensity was manipulated by varying all components of Jones’ (1991) model to create high vs. low morally intense ethical scenarios. For example, half of the Stern Electronics scenarios indicate a loss of 70% of a potentially bad sale while the other half, indicate losses of only 20%. This manipulation addressed the magnitude of consequences component of moral intensity. Likewise, half of the Facebook® scenarios stated that revealing information to a
recruiter would cost an individual a full-time job while the other half of the Facebook® scenarios indicated the consequence would be the loss of a summer leadership program opportunity. This same concept is extended to all six of Jones’ (1991) dimensions of moral intensity (See Appendix C). Additionally, the scenarios randomly use a male or female actor to reduce the possibility of gender bias. Students were informed that their participation was voluntary and that any responses made would remain anonymous.

The experiment was conducted between subjects. Each student received one scenario to read and evaluate. The rationale was that including two scenarios may lead some students to identify that the scenarios had been manipulated, creating bias in the results if the experiment had been conducted within subjects.

Included with each scenario was a set of thirteen action statements that prompted students to evaluate different ethical components of the scenario. Two statements addressed Rest’s (1986) stages of ethical judgment and intention. Statements used are adapted from previous research conducted by May and Pauli (2002) and Singhapakdi et al. (1996) and asked students to rank their agreement/disagreement on a Likert-type scale with a (7) indicating Strongly Agree and a (1) indicating Strongly Disagree. A number of the statements were reverse scored in order to discourage response bias. Students were also asked to rank their agreement/disagreement (using the same Likert-type scale) as it related to each of Jones’ (1991) moral intensity components. These six statements originate from Singhapakdi et al. (1996) and are also used by May et al. (2000) and Leitsch (2006). It should be noted that an error occurred when structuring the statement relating to Jones’ (1991) fifth component of moral intensity (proximity). This error was not discovered until after the administration of survey, and therefore the component for proximity is not included in the statistical analysis. The statements developed and implemented
to measure PIE are adapted from Robin et al. (1996) and are based on earlier measures by
Zaichkowsky (1985). A similar instrument is also employed by Haines et al. (2008) and
McGuffey et al. (2008) which requires students to rank, on a seven-point scale, the
importance/unimportance of an issue, the significance/insignificance of an issue, whether an
issue is of concern/no concern, and whether an issue is fundamental or trivial. The same 7-point
Likert type scale is employed in these measurements of PIE. Additionally, students provided
demographic information including gender, major, and grade point average. (See Appendix B).

Participants

Participants were undergraduate accounting majors from a mid-sized Midwestern
university enrolled in Intermediate Accounting II or Governmental Not-For-Profit. A total of 89
students participated in the study. The sample was comprised of 40 males, 46 females, and 3
students who did not disclose their gender. The sample population was made up completely of
accounting majors, though some students indicated that they were also pursuing an additional
degree.

Results

Construct Validity

The components of moral intensity are integral to the outcome of this study. Therefore, it
is important to determine if these components can be accurately and effectively combined into
one construct. As mentioned above, responses relating to the fifth moral intensity component
(proximity) are left out of the statistical analysis. For the other components, the Cronbach’s
coefficient alpha, a common measure used to test the consistency among scales, is used to
determine their inter-correlation. The Cronbach’s coefficient alpha for the combined components
comes to $\alpha = .65$. The widely-accepted social science cut-off is that alpha should be .70 or higher.
However, in exploratory research, such as this study, an alpha as lenient as .60 is acceptable (Garson, 2010). These results are consistent with the findings of Singhapakdi et al. (1996), Barnett (2001) and Leitsch (2006) and suggest that the components of moral intensity, for the most part, are highly correlated.

As discussed earlier in the paper, PIE is manipulated in this thesis to be either high (Facebook® scenario) or low (Stern Electronics scenario). Unexpectedly, however, most students found both scenarios to be high in ethicality. It appears that, even without technical analysis of this data, accounting majors perceive ethically charged decision-making situations to be personally, ethically important. For this reason the data is partitioned into either high PIE or lower PIE as represented by responses to question 11 on the survey, which states, “I believe Paul’s behavior in the above scenario is…” High PIE respondents answered either (7) Extremely Significant or (6) Significant (after adjustment for reverse scoring). Lower PIE subjects answered either (5) Somewhat Significant, (4) Neutral, (3) Somewhat Insignificant, (2) Insignificant, or (1) Highly Insignificant. Question 11 is selected because of the relative balance of subjects in High PIE (48) vs. Lower PIE (41) and because the statement itself is a good representation of PIE.

Tests of Hypotheses

Hypothesis one states that perceived importance of an ethical situation (PIE) has an impact on ethical judgment over and above the effect of moral intensity. That is, the more ethically salient an individual perceives the experimental scenario to be (PIE) the more ethical a judgment he/she will make in the process, beyond that explained by moral intensity. An ANOVA using statement number 11 (PERPIE3) and moral intensity (MIHILOW) as independent variables is used. Both moral intensity (F=3.42, p<.07) and PIE (F=5.04, p<.03)
have an impact on ethical judgment at p<.10. Further, contrast analyses indicate that PIE has an impact on moral judgment (REST2) when moral intensity is high (t=2.23, p<.02). These results show that PIE has an effect on ethical judgment over and above the impact of moral intensity on judgment. However, when moral intensity is low, the impact of PIE is not significant (t=.50, p<.31, see Table 4). A possible explanation for these results may be that an individual’s perception of the importance of an ethical scenario (PIE) does not become a factor for making ethical judgments until the issue becomes morally intense enough to be recognized as significant or insignificant to the individual.

Hypothesis two states the perceived importance of an ethical situation (PIE) has an impact on ethical intention over and above the impact of moral intensity. An ANOVA using MIHILOW as an independent variable along with PIE indicates a positive effect for moral intensity (MIHILOW F=10.1, p<.00) but no effect for PIE (PERPIE3 F=.07, p<.8, see Table 5). Contrast analyses indicate that PIE has no impact on moral intention (REST3) when moral intensity is high (t=.19, p<.43) or low (t=.19, p<.42). These results indicate that PIE has no effect on ethical intentions, and therefore Hypothesis two is not supported. A possible reason for PIE not having an impact on ethical intention may be found in the relationship of ethical judgment and intention. As mentioned earlier, Rest (1986) feels that each stage of the decision-making process is distinct and that a person with a well-developed sense of reasoning or judgment may not necessarily intend to act morally. Jones (1991) postulates that a decision about what is morally “correct” (judgment) is not the same as a decision to act (intent) based on the judgment. Further, Haines et al. (2008) provide support that PIE is a causal variable preceding moral judgment rather than directly influencing moral intent. After making an ethical judgment, one must balance competing factors when determining intent (Guffey, et al. 2008). This means that
one may be willing to act unethically despite a personal judgment that an act is unethical. As evidenced by the accounting frauds mentioned earlier, one may know that it is wrong to overstate assets on a balance sheet, but may choose to overstate them despite this acknowledgment.

Hypothesis three states there is no difference in the ethical decision-making of female accounting majors versus male accounting majors. As predicted, gender has no relationship on either of the two stages of ethical decision-making presented in this study (ethical judgment or intention). An ANOVA analysis of gender shows that no relationship exists between gender and ethical judgment (F=.075, p<.785) or intentions (F=.494, p<.484). An additional ANOVA analysis suggests that gender has no influence related to moral intensity (F=1.13, p<.30) or PIE (F=.02, p<.90, see Table 10). These results indicate that the differences in the average of answers given by males and females are not significant.

Conclusions, Limitations, and Implications for Future Research

The purpose of this study is to test the incremental impact of PIE on ethical judgment and intention beyond that explained by moral intensity. In doing so it creates and tests a new ethical scenario representing an ethical decision-making situation high in perceived importance to college-aged subjects. PIE’s impact on ethical judgment, beyond the impact of moral intensity on ethical judgment, is as hypothesized. However, the impact of PIE on ethical intentions does not produce the anticipated results. As mentioned earlier, the manipulation of PIE in this research is challenged. Accounting major subjects in this study considered both scenarios (high PIE vs. low PIE) to be ethically salient. Pretesting would have allowed for the Facebook® scenario to be retooled presenting an ethical dilemma higher in ethicality than the Stern Electronics scenario. Thus it is possible that even though the data was partitioned into high PIE vs. lower PIE, that difference was not substantial enough to correctly identify an impact of PIE on ethical intention.
It is interesting, however, that the partitioning into high vs. lower PIE was different enough to discern the incremental impact of PIE on ethical judgment.

Another limitation is the lack of control over referent comparisons students’ might be making in evaluating the ethical scenarios. As discussed, each student received only one scenario, and therefore could not weight the severity or importance of their particular issue against any of the other manipulated scenarios when responding. Providing a base-line neutral ethical situation might have helped align respondents reactions to the subsequent high (Facebook®) vs. low (Stern Electronics) ethical situations.

This study is admittedly limited in terms of scope. The sample population includes only subjects from one Midwestern university and includes mostly subjects of Caucasian descent raised in the Midwest. It is possible that students with different backgrounds and cultural upbringings would view the scenarios in different ways. Additionally, there is a possibility that a difference in ethical decision-making will be found when using professionals, whether they are in the accounting field or not. It may also be interesting to include individuals with no college degree at all. Similarly, analyzing differences in age may highlight any generational differences that exist between subjects. An additional item that could prove useful in an analysis is whether or not the student has any prior exposure to an ethics education course, as this may provide insight into the effectiveness of classroom ethics training.

As with all behavioral research using experimentation, the subjects are acting within an artificial setting. Many of the situational pressures and distractions present in a real world context are not present. Responses may also be influenced by social desirability, meaning that subjects respond in a manner to which they might be expected. There is also no attempt to measure actual ethical behavior/action. To do so might encourage an individual to act in an
unethical manner. A presumption made in this research, in line with previous ethics research, is that ethical judgment and intent are significant to the determination of appropriate behavior (Jones, 1991; Robin et al. 1996; Guffey, et al. 2008; Haines et al. 2008). Additional research that investigates actual behavior would make significant contributions to this area. It is difficult to determine how an individual will act without allowing them to actually do so.

Additionally, statements or questions could be added at the end of the scenarios that ask the subjects to make decisions about moral intensity components. For example, the statement “How likely would you be to refrain from the action if the expected losses were only 5% instead of 10%” would be a possible way of exploring the variation of a moral intensity component in place of manipulating a number in the scenario itself. The same could be done for the PIE parameters. For example, the statement “I believe Paul’s behavior in the above scenario would be more important if…” would allow the researcher to insert an additional situation, thereby allowing the individual to make a comparison.

The findings above add to existing business ethics literature. Specifically, the Facebook® scenario and the manipulations of moral intensity components within all scenarios are unique to this study. Though previous studies consider both moral intensity and PIE, actual testing considers only PIE or moral intensity. This study tests moral intensity and PIE together for the first time. Additionally, the findings contribute to previous studies of the ethical decision-making process directed specifically at accounting students as very few previous studies focus on PIE and moral intensity as related to accounting students. Ethical accounting professionals are significant to accurate financial reporting, and failure in this area leads to significant financial and other losses. The only way to improve understanding of why and how accountants make
ethical decisions in a business context is by continued research, and this study provides a framework by which future research may be conducted.
### Appendix A

**Table 1: Moral Intensity Components**

**Reliability Statistics**

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.650</td>
<td>5</td>
</tr>
</tbody>
</table>
Table 2: PERPIE3 and MIHILOW for Ethical Judgment

Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>26.976*</td>
<td>3</td>
<td>8.992</td>
<td>4.109</td>
<td>.009</td>
</tr>
<tr>
<td>Intercept</td>
<td>2045.763</td>
<td>1</td>
<td>2045.763</td>
<td>934.826</td>
<td>.000</td>
</tr>
<tr>
<td>PERPIE3</td>
<td>7.472</td>
<td>1</td>
<td>7.472</td>
<td>3.415</td>
<td>.068</td>
</tr>
<tr>
<td>MIHILOW</td>
<td>11.041</td>
<td>1</td>
<td>11.041</td>
<td>5.045</td>
<td>.027</td>
</tr>
<tr>
<td>PERPIE3 * MIHILOW</td>
<td>2.598</td>
<td>1</td>
<td>2.598</td>
<td>1.187</td>
<td>.279</td>
</tr>
<tr>
<td>Error</td>
<td>186.013</td>
<td>85</td>
<td>2.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2428.000</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>212.989</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .127 (Adjusted R Squared = .096)
Table 3: High Moral Intensity and PERPIE3 for Ethical Judgment

Independent Samples Test

<table>
<thead>
<tr>
<th>Ethical Judgment</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>4.418</td>
<td>.041</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.060</td>
<td>24.708</td>
</tr>
<tr>
<td>Ethical Judgment</td>
<td>Levene's Test for Equality of Variances</td>
<td>t-test for Equality of Means</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.407</td>
<td>.128</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.491</td>
<td>34.333</td>
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</tbody>
</table>

**Table 4: Low Moral Intensity and PERPIE3 for Ethical Judgment**

**Independent Samples Test**
Table 5: PERPIE3 and MIHILOW for Ethical Intention
Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>30.083a</td>
<td>3</td>
<td>10.028</td>
<td>3.711</td>
<td>.015</td>
</tr>
<tr>
<td>Intercept</td>
<td>1646.041</td>
<td>1</td>
<td>1646.041</td>
<td>609.134</td>
<td>.000</td>
</tr>
<tr>
<td>PERPIE3</td>
<td>.194</td>
<td>1</td>
<td>.194</td>
<td>.072</td>
<td>.789</td>
</tr>
<tr>
<td>MIHILOW</td>
<td>27.349</td>
<td>1</td>
<td>27.349</td>
<td>10.121</td>
<td>.002</td>
</tr>
<tr>
<td>PERPIE3 * MIHILOW</td>
<td>2.660E-5</td>
<td>1</td>
<td>2.660E-5</td>
<td>.000</td>
<td>.998</td>
</tr>
<tr>
<td>Error</td>
<td>229.692</td>
<td>85</td>
<td>2.702</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2004.000</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>259.775</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .116 (Adjusted R Squared = .085)
<table>
<thead>
<tr>
<th>Ethical Intentions</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.441</td>
<td>.510</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.199</td>
<td>37.011</td>
</tr>
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</table>
### Table 7: Low Moral Intensity and PERPIE3 for Ethical Intention

**Independent Samples Test**

<table>
<thead>
<tr>
<th>Ethical Intentions</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
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</table>
Table 8: Ethical Judgment and Intention by Gender

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Judgment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.187</td>
<td>1</td>
<td>.187</td>
<td>.075</td>
<td>.785</td>
</tr>
<tr>
<td>Within Groups</td>
<td>209.813</td>
<td>84</td>
<td>2.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>210.000</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.505</td>
<td>1</td>
<td>1.505</td>
<td>.494</td>
<td>.484</td>
</tr>
<tr>
<td>Within Groups</td>
<td>255.704</td>
<td>84</td>
<td>3.044</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>257.209</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
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</table>
Table 9: MIHILOW by Gender

ANOVA

<table>
<thead>
<tr>
<th>Moral intensity high/low</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.284</td>
<td>1</td>
<td>.284</td>
<td>1.125</td>
<td>.292</td>
</tr>
<tr>
<td>Within Groups</td>
<td>21.204</td>
<td>84</td>
<td>.252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21.488</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10: PERPIE3 by Gender

ANOVA

<table>
<thead>
<tr>
<th>Perceived Importance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.013</td>
<td>1</td>
<td>.013</td>
<td>.016</td>
<td>.899</td>
</tr>
<tr>
<td>Within Groups</td>
<td>69.475</td>
<td>84</td>
<td>.827</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69.488</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

The following instructions preceded each scenario:

Please read the following brief scenario and then answer the questions which follow. Thank you for your participation. You should circle the answer you feel most appropriately represents your feelings about the statement. Some brief demographic questions are presented at the end of the instrument.

Stern Electronics Scenario – Low Moral Intensity

Paul Tate is the assistant controller at Stern Electronics, a medium-sized manufacturer of electrical equipment, wholly owned by a parent corporation based in the Netherlands (multiple shareholders). Paul is in his late fifties and plans to retire soon. His daughter has been accepted into medical school, and financial concerns are weighing heavily on his mind. Paul’s boss (Controller) is out of the office recuperating from health problems, and in his absence Paul is making all decisions for the department.

Paul receives a phone call from an old friend requesting a sizable amount of equipment on credit for a new business. Paul is sympathetic but cognizant of the risk of extending credit to a new company, especially under Stern’s parent company’s strict new credit policies. When Paul mentions this conversation to the Director of Finance, the Director is immediately interested. The Finance Director notes that the company needs an additional $250,000 in sales to meet the quarterly budget and thus ensure bonuses for management, including Paul. The Finance Director also notes that if the new company defaults on payment of the equipment, it’s likely to be over a year before the problem is uncovered by Stern’s auditors. After some analysis, Paul determines there is only a 10% chance that extending credit to his friend will result in a default on payment. If it does happen, however, it’s predicted that bad debt will amount to 20% of the total sale. After discretely asking around, Paul finds about other individuals in the firm that have extended credit to risky customers to ensure short-term sales.

Stern Electronics Scenario – High Moral Intensity

Paul Tate is the assistant controller at Stern Electronics, a medium-sized manufacturer of electrical equipment, owned locally and solely by its Chief Operating Officer (COO). Paul is in his late fifties and plans to retire soon. His daughter has been accepted into medical school, and financial concerns are weighing heavily on his mind. Paul’s boss (Controller) is out of the office recuperating from health problems, and in his absence Paul is making all decisions for the department.

Paul receives a phone call from an old friend requesting a sizable amount of equipment on credit for a new business. Paul is sympathetic but cognizant of the risk of extending credit to a new company, especially under their owner/COO’s strict new credit policies. When Paul mentions this conversation to the Director of Finance, the Director is immediately interested. The Finance Director notes that the company needs an additional $250,000 in sales to meet the quarterly budget and thus ensure bonuses for management, including Paul. The Finance Director also notes that if the new company defaults on payment of the equipment, it’s likely to be in the next quarter before the problem is uncovered by Stern’s auditors. After some analysis, Paul determines there is a 60% chance that extending credit to his friend will result in a default on payment. If it does happen, however, it’s predicted that bad debt will amount to 70% of the total sale. After discretely asking around, Paul finds out that no other individuals in the firm have extended credit to risky customers to ensure short-term sales.
Action: Paul decides to make the sale to his friend's new business. Please evaluate his actions.

1. Paul should not do the proposed action.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

2. If I were Paul, I would make the same decision.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

3. I believe Paul’s behavior in the above scenario is:
   - Extremely Important
   - Somewhat Important
   - Neutral
   - Somewhat Unimportant
   - Extremely Unimportant

4. The overall harm (if any) done as a result of Paul’s action would be very small.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

5. Most people would agree that Paul’s action is wrong.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

6. There is a very small likelihood that Paul’s action will actually cause any harm.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

7. To me, the issue discussed in the above scenario is:
   - Considerable Concern
   - Somewhat of concern
   - Neutral
   - Somewhat of no concern
   - No Concern
   - Considerably of no concern

8. Paul’s action will not cause any harm in the immediate future.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

9. The distance between Paul and the owner of Stern Electronics is close.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

10. Paul’s action will harm very few people (if any)
    - Strongly disagree
    - Slightly disagree
    - Neither agree/disagree
    - Slightly agree
    - Agree
    - Strongly agree

11. I believe Paul’s behavior in the above scenario is:
    - Highly Insignificant
    - Somewhat Insignificant
    - Neutral
    - Somewhat Significant
    - Significant
    - Extremely Significant
12. To me, the issue discussed in the above scenario is of:
   | Fundamentally of No Issue | No Issue | Somewhat of no issue | Neutral | Somewhat of issue | Issue | Fundamental Issue
   | Strongly disagree | Disagree | Slightly disagree | Neither agree/disagree | Slightly agree | Agree | Strongly agree |

13. The situation above involves an ethical dilemma.

14. I am: (circle one)
   - Male
   - Female

15. My major is: (circle one)
   - Accounting
   - Finance
   - Other business
   - Other non-business

16. My overall GPA is:
   - 3.5-4.0
   - 3.0-3.49
   - 2.5-2.99
   - 2.0-2.49
   - Lower than a 2.0
Facebook® Scenario – Low Moral Intensity

Nate Johnson is an intern at Lawson, Fredericks & Anderson LLP, a medium-sized CPA firm. Nate is nearing the end of a four-month, positive internship experience and is enjoying a moment, after a hard days work, with various senior staff and managers from his firm. Nate is aware that his ability to interact socially with his future co-workers is as important to them as his knowledge of accounting. At the conclusion of the internship, fulltime offers will be made to top performers who fit in well with the firm.

Soon, the lighthearted talk turns to a discussion of a post busy season office party last year where members of a university’s student accounting organization from another state had interacted with some individuals from the firm. Apparently things had gotten a little wild which always seems to be the case with this school’s accounting student group. Nate actually is aware of this school’s accounting group’s reputation, and knows that the group’s official Facebook® profile holds a number of incriminating and potentially damaging pictures of its members. Nate knows this because he is an official Facebook® ‘friend’ of this group which allows him access to their postings.

Unexpectedly, one of the senior managers tells Nate that if the questionable moral allegations against the school’s accounting group are true, the firm is going to cease recruiting at that university. A number of this school’s group members are up for consideration for the firm’s Summer Leadership Program in the following school year.

The senior manager then asks Nate if he could pull up the group’s Facebook® profile so they could check out the pictures and postings of the group. There is about a 10% chance the pictures from the Facebook® profile will have a negative impact on the reputation of the school’s program. But if they do, members of the school will not be considered for next year’s Summer Leadership Program. Nate remembers conversations with friends who have told him they have been asked to show friends’ Facebook® profiles many times for firms they’ve worked for, and they’ve done it.

Facebook® Scenario – High Moral Intensity

Nate Johnson is an intern at Lawson, Fredericks & Anderson LLP, a medium-sized CPA firm. Nate is nearing the end of a four-month, positive internship experience and is enjoying a moment, after a hard days work, with various senior staff and managers from his firm. Nate is aware that his ability to interact socially with his future co-workers is as important to them as his knowledge of accounting. At the conclusion of the internship, fulltime offers will be made to top performers who fit in well with the firm.

Soon, the lighthearted talk turns to a discussion of a recent evening after work, when a friend of Nate’s from his school, also serving as an intern, got pretty wild with some members of the firm. Nate actually is aware of his friend’s wild reputation and knows that her official Facebook® profile holds a number of incriminating and potentially damaging pictures of her. Nate knows this because he is an official Facebook® ‘friend’ of this young woman, which allows him access to her postings.

Unexpectedly, one of the senior managers tells Nate that if questionable moral allegations made against this young woman are true, the firm is not going to hire her for a fulltime position. The senior manager then asks Nate if he could pull up the individual’s Facebook® profile so they could check out her pictures and postings. There is about a 60% chance the pictures from Facebook® will have a negative impact on Nate’s friend. If they do, she will not be offered a fulltime position with the firm which is to start next month. Nate remembers conversations with friends who have told him they have been asked to show friends’ Facebook® profiles many times for firms they’ve worked for, and they’ve never done it.
Action: Nate decides to show the Facebook® profile to his senior manager. Please evaluate his actions.

1. Nate should not do the proposed action.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

2. If I were Nate, I would make the same decision.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

3. I believe Nate’s behavior in the above scenario is:
   - Extremely Important
   - Somewhat Neutral
   - Unimportant

4. The overall harm (if any) done as a result of Nate’s action would be very small.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

5. Most people would agree that Nate’s action is wrong.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

6. There is a very small likelihood that Nate’s action will actually cause any harm.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

7. To me, the issue discussed in the above scenario is:
   - Considerable Concern
   - Somewhat of concern
   - No Concern

8. Nate’s action will not cause any harm in the immediate future.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

9. The distance between Nate and the owner of Stern Electronics is close.
   - Strongly disagree
   - Slightly disagree
   - Neither agree/disagree
   - Slightly agree
   - Agree
   - Strongly agree

10. Nate’s action will harm very few people (if any)
    - Strongly disagree
    - Slightly disagree
    - Neither agree/disagree
    - Slightly agree
    - Agree
    - Strongly agree

11. I believe Nate’s behavior in the above scenario is:
    - Highly Insignificant
    - Somewhat Insignificant
    - Neutral
    - Significant
    - Extremely Significant

[33]
12. To me, the issue discussed in the above scenario is of:

- Fundamentally No Issue
- Somewhat Neutral
- Somewhat Issue
- Fundamental Issue

13. The situation above involves an ethical dilemma.

- Strongly Disagree
- Slightly Disagree
- Neither agree/disagree
- Slightly Agree
- Strongly Agree

14. I am: (circle one)
   - Male
   - Female

15. My major is: (circle one)
   a. Accounting
   b. Finance
   c. Other business
   d. Other non-business

16. My overall GPA is:
   a. 3.5-4.0
   b. 3.0-3.49
   c. 2.5-2.99
   d. 2.0-2.49
   e. Lower than a 2.0
## Appendix C
### Moral Intensity Manipulations

<table>
<thead>
<tr>
<th></th>
<th><strong>Stern Electronics</strong></th>
<th><strong>Facebook®</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>High</strong></td>
<td><strong>Low</strong></td>
</tr>
<tr>
<td><strong>Magnitude of Consequences</strong></td>
<td>Bad debts from default are 70% of sale</td>
<td>Bad debts from default are 20% of sale</td>
</tr>
<tr>
<td><strong>Social Consensus</strong></td>
<td>No other individuals in the firm have extended credit to risky customers to ensure short-term sales</td>
<td>Other individuals in the firm have extended credit to risky customers to ensure short-term sales</td>
</tr>
<tr>
<td><strong>Probability of Effect</strong></td>
<td>60% chance of default on payment</td>
<td>10% chance of default on payment</td>
</tr>
<tr>
<td><strong>Temporal Immediacy</strong></td>
<td>Default likely to be discovered next quarter</td>
<td>Default likely to be discovered in over a year</td>
</tr>
<tr>
<td>*<em>Proximity</em> **</td>
<td>Victim is COO of Stern, located in town</td>
<td>Victim is parent company, located in Netherlands</td>
</tr>
<tr>
<td><strong>Concentration of Effect</strong></td>
<td>Victim is sole owner</td>
<td>Victims are multiple shareholders</td>
</tr>
</tbody>
</table>

*Proximity was excluded from the interpretation of the results due to error discovered after administration.*
References


