The Impact of Ethical Development and Cultural Constructs on Auditor Judgments:
A Study of Auditors in Taiwan


Cynthia Jeffrey
Associate Professor of Accounting
Iowa State University

William Dilla
Associate Professor of Accounting
Iowa State University

Nancy Weatherholt
Associate Professor of Accounting
University of Missouri-Kansas City
College of Business

Address Correspondence to:
Cynthia Jeffrey
396 Carver Hall
Iowa State University
Ames, IA 50011-2063
(515)294-9427
cjeffrey@iastate.edu
FAX: (515)294-3525

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Summary

This research examines in a collectivist culture the influence of cognitive moral development, attitudes toward rule-directed behavior, and the perceived importance of codes of conduct and professional standards on auditor judgments about ethical dilemmas. Taiwanese audit professionals were asked to respond to two ethical dilemmas. The first dilemma concerns a situation in which the auditor is asked to acquiesce to a controller’s request to conceal an irregularity. The probability that the auditor’s acquiescence is discovered (i.e., the threat of a sanction) was manipulated in this scenario. The second dilemma involves a case in which the auditor has information that a write-down of obsolete inventory will have a material effect on the earnings of a corporation, and must consider whether or not to inform an individual who is heavily invested in the corporation. The individual’s ingroup status (i.e., whether the individual was a relative or friend of the auditor) was manipulated in this scenario.

Auditors were more likely to agree with violations of ethical standards in the first scenario (concealing a client employee’s irregularity) than in the second (revealing confidential information to parties outside the client). In the first scenario, auditors with lower levels of cognitive moral development were less likely to agree with violations of ethical standards when the threat of a sanction was present, while the judgments of those with higher levels of cognitive moral development were not affected by the presence of sanctions. Contrary to expectations, auditors were more likely to agree with violations of ethical standards when the individual involved was a close friend, rather than a relative. In general, as the perceived importance of rules increased, the propensity to violate the Code of Conduct decreased.
A growing body of evidence suggests that moral development affects both sensitivity to ethical issues and auditor judgments with respect to work-related dilemmas (e.g., Sweeney and Roberts 1997, Ponemon 1992a, 1992b, Lampe and Finn 1992, Ponemon and Gabhart 1990, 1993, 1994). Scant research has examined these constructs for auditors who are not practicing in the United States. Two factors act to generate increased interest in this area: (1) the public's perception that audit performance is related to ethical values, and (2) the growth of international business and multinational corporations in which business associates with potentially different cultural values and views of ethical conduct may interact.

Prior literature has suggested links between professional judgment and cultural values. Radebaugh and Gray (1997, p. 73) state, “In accounting, the importance of culture and its historical roots is only just beginning to be recognized.” These authors also suggest (p. 76) relationships between cultural values and accounting values and possible implications for the practice of accounting and for professional conduct. A number of audit judgment studies have made cross-cultural studies, but there is little research examining the potential impact of cultural variables on auditor judgments in collectivist cultures. Studies in accounting that have considered cultural differences include Arnold et al. (1999), who used data aggregated at the country level and found that factors that influence independence vary across countries. Similarly, Agacer and Doupnik (1991) found that the potential for impairment of independence was perceived differentially across auditors from different countries. Lampe and Sutton (1992) found that country-specific factors affected the ability of internal auditors to achieve the level of audit quality desired. A study of accountants from the U.S. and the United Kingdom (Arnold
and Bernardi, 1992) found that auditors from these countries differed on their willingness to do additional audit work. Arnold et al. (2001) report that European materiality judgments are a function of Uncertainty Avoidance as defined by Hofstede (1980). Cohen et al. (1995) studied auditors from Latin America, Japan, and the United States and found that culture was related to subjects’ ethical evaluations of dilemmas and to their assessed likelihood that either they or their colleagues would perform a given action. Triandis (1990, p. 48) notes that almost all of the data from psychology studies come from individualist cultures even though about 70% of the world’s population lives in collectivist cultures (Bell 1987). Triandis therefore asserts that studying how social-psychology theories operate in the collectivist part of the world is a major extension of theory.

The current research tests some of the relationships between culture and auditor judgments previously suggested, but not tested, in the extant literature. This research examines in a collectivist culture the influence of cognitive moral development, attitudes toward rule-directed behavior, and the perceived importance of codes of conduct and professional standards on Taiwanese auditor judgments about ethical dilemmas. Taiwan provides an interesting environment for the study of auditors’ ethical judgments because the profession in Taiwan is in some respects patterned after the profession in the United States, while the cultural constructs identified by Hofstede (1980) are significantly different on all dimensions than those prevalent in the United States.

This research builds on the work of Sweeney and Roberts (1997) by studying the judgments of Taiwanese auditors when faced by the same dilemma used in their research. It also extends their work by incorporating a second ethical dilemma, thus providing an examination of the effects of context on auditors’ ethical judgments. Sweeney and Roberts considered the
likelihood that an unethical act would be discovered and punished in a scenario where the unethical act did not affect the financial information provided to outside users. The current study examines a second scenario in which the unethical act has implications for external users of financial statement information. The potential punishment in the second scenario is significantly more severe than in the first scenario as it includes the potential for shareholder lawsuits and prosecution for securities violations.

**THEORY AND HYPOTHESES DEVELOPMENT**

*Moral Development and Auditor Judgments*

Kohlberg (1958, 1969) used general assumptions and methods that define moral judgments in terms of justice to extend Piaget's (e.g., 1965(1932); 1970) work with children to the study of cognitive moral development of humans throughout their lives. Kohlberg posited theories of lifelong cognitive development, and expanded the research on moral development to include the idea of progression through developmental stages. Kohlberg's stage-sequence model defines an hierarchical series of three qualitatively different levels of moral reasoning.

The first level is the preconventional level, where the focus is on self and the possibility of punishment. The second level is the conventional level, where the focus is on relationships and societal norms. Conventional moral reasoning is the level attained by the majority of adults in the United States and most other societies (Colby and Kohlberg, 1987). The highest level is postconventional, or principled reasoning, where the focus is on individually held principles of conscience. The principled level of moral reasoning is characterized by a decreased emphasis on rule-oriented behavior.

Progression through the levels of moral development is a monotonically increasing function; that is, for any individual, development is an invariant, sequential progression. Rest
(1979a) notes, however, that while one level may dominate an individual's reasoning, the individual is never simply at one level of cognition. Higher levels of moral development are characterized by improved conceptual tools for making sense out of the world and deriving guides for decision-making (Rest, 1994, p. 16). Higher levels are “more complex, take more things into account, and widen the scope of concerns and problems addressed” (Rest, 1994, p. 17). The improved conceptual tools enable decision-makers to solve more complex problems.

Ponemon and Gabhart (1993) state, “The concept of professional ethics . . . is a concept that implies a reasoning capability that permits the individual to render judgment unaltered by self-interest that could impair his or her professional responsibility” (p. 101). Ponemon and Gabhart (1993, pp. 105-109) note that based on their review of the extant literature, ethical reasoning is an important determinant of professional judgment in the audit setting. Gaa (1994, p. 76) suggests that auditors may be thought of as ethical in the sense that they have voluntarily agreed to be part of the profession, but that they may lack the ability to judge appropriately what action accords with the moral point of view, which would be a function of their moral development.

Ponemon and Gabhart (1994) suggested a theoretical link between moral development and an accountant’s compliance with professional standards. An accountant whose moral development is primarily at the preconventional level can be expected to follow professional standards when it is in the auditor's personal interest. Preconventional subjects will consider the nature, severity, and probability of punishment for violating rules when they evaluate a dilemma. At the conventional level, the importance of societal norms and rules for acceptable behavior, rather than the fear of punishment, will encourage adherence to professional standards and behavior consistent with the referent group. Ponemon and Gabhart (p. 105) suggest that at this
stage, “the rules of the profession tend to be upheld, except when they conflict with other social contracts that are believed to be more pressing or more important (such as family issues or the church)”.

Postconventional reasoning "implies the ability to move beyond the rules to decide when rules ought to be broken, e.g., for the welfare of society or because justice demands it" (Gaa 1992, p. 35). Ponemon (1993, p. 7) contends that, “Progression to higher stages of ethical reasoning fosters an individual’s sensitivity to critical events, issues, and conflicts.” Ponemon and Gabhart (1994) suggest that the postconventional auditor will follow “self-chosen ethical principles, in which case particular laws or social agreements are usually valid because they rest on such principles” (p. 105). At the highest level of moral reasoning, accountants have “learned to balance moral principles with the rules and expectations of their profession” (p. 107).

Research has documented a link between moral development and auditor judgments. The moral development of public accountants in the United States has been associated with underreporting behavior (Ponemon 1992a), hiring and promotion decisions in public accounting firms (Ponemon 1992b), selection of recognized alternative actions when making ethical judgments (Lampe and Finn, 1992), perceptions of client audit risk, competence, and integrity (Ponemon 1993), and auditor sensitivity to ethical issues and independence judgments (Sweeney and Roberts, 1997). Further, Ponemon and Gabhart (1990) found a relationship between the level of moral development and the propensity to violate independence rules. Windsor and Ashkanasy (1995) present results that the level of moral reasoning of Australian accountants is related to how resistant auditors are to client economic bargaining power.

*Effect of Sanctions*
Sanctions, or punishment, may be imposed to the extent that professionals do not follow the mandates of the profession or the laws of the country. The effectiveness of rules and punishments will depend on both the individual and the situation. An individual’s attitude toward sanctions, which varies across individuals, may affect judgments when sanctions are present. Moral development theory predicts the presence of sanctions will differentially influence people at different levels of moral reasoning. Additionally, the nature and severity of sanctions that may be imposed across different situations are likely to affect judgments (Jones 1991).

Moral development theory suggests that at the preconventional stage, judgments are conditioned on perceived penalties resulting from misconduct (Ponemon and Gabhart 1990). Auditors at the preconventional level should adhere to professional standards when the potential sanctions that might be imposed for nonindependent behavior exceed the potential benefits. Auditors at the conventional level are accepting of societal norms and laws, and conforming behavior would avoid punishment for violations of these laws. Therefore, Ponemon and Gabhart (1990) suggest that judgments of both preconventional and conventional level auditors’ judgments will affected by sanctions. However, judgments of auditors at the postconventional stage are instead expected to be influenced by individual perceptions of justice rather than the presence of potential sanctions. Also, Sweeney and Roberts’ (1997) present results indicating that as a professional’s level of moral reasoning increases, their judgments will be less likely to be affected by the presence of potential sanctions. This suggests the following hypotheses:

H1a: Auditors reasoning at the preconventional and conventional level will display a lower propensity to violate professional standards when it is likely the violation will be detected and that sanctions will be imposed.
H1b: Judgments of auditors reasoning at the postconventional level will not be affected by the probability that sanctions will be imposed.

Jones (1991, 372) posits that characteristics of the moral issue itself, collectively referred to as moral intensity, affect moral judgments and behavior. These specific characteristics include (among others) magnitude of the consequences and the probability of a particular outcome. Jones (p. 372) cites Fritzsche and Becker (1983, p. 297) who found that subjects “would act more ethically in the dilemmas posing serious consequences than they would in less risky situations.

Sanctions that might be imposed on an auditor for engaging in the unethical act in the scenario developed by Sweeney and Roberts (1997) include the potential for a client lawsuit and possible disciplinary actions within the profession. We extend this research to include harsher sanctions by examining auditor judgments when faced with a situation where there is potential for legal sanctions imposed by a federal court system, including investor lawsuits and penalties for securities violations. Auditor responsibilities in this situation include not only compliance with the Code of Conduct, but also with the relevant securities laws.

Securities laws in Taiwan forbid insider trading. Taiwan was long considered one of the worst markets in Asia for rigged trading (Cheesman, 1997). During the 1990s, the Ministry of Justice began prosecuting insider trading, and in 1997 the penalties increased to a maximum of seven years in prison from two years, in addition to monetary penalties (Dow Jones, 1997). During 1996 at least 80 companies—nearly a quarter of the Taiwan bourse—were being investigated for insider trading violations (Cheesman, 1997). As a result, Taiwan has been hypersensitive to charges of insider trading during the 1990s (Cheesman, 1997).
The economic incentives to violate the Code and the resulting legal repercussions may be the driving forces in judgments by auditors reasoning at lower levels. The salience of the insider trading regulations in Taiwan during the 1990s, coupled with the increased penalties for violating the law, should deter violations. At the preconventional and conventional level of moral reasoning, concern about potential punishment and negative consequences for the stature of the profession should discourage violation of the Code. At the postconventional level of moral reasoning, the unfair advantage to a person receiving insider information would be contrary to adherence to the principles of justice and fairness. This emphasis on fairness, not the presence of sanctions, is expected to drive judgments of auditors reasoning at higher levels.

Because of the differential nature of the potential punishment for sanctions imposed by the profession, which are limited to expulsion from the profession and fines, versus sanctions to be imposed by the legal system, which include both imprisonment and fines, context is expected to affect auditor judgments. Judgments of auditors reasoning at the preconventional or conventional levels of moral development are likely to be influenced by the nature of sanctions. Conversely, auditors reasoning at the postconventional stage should not be affected by the nature sanctions as their judgments are expected to be motivated by principles of justice and fairness.

This suggests the following hypotheses:

H2a: Auditors reasoning at the preconventional or conventional levels will display a lower propensity to violate professional standards when the potential sanction includes both civil and criminal penalties.

H2b: The propensity to violate professional standards for auditors reasoning at the postconventional level will not be affected by the nature and severity of potential sanctions.
Trevino (1986, p. 602) suggests that ethical decision making in organizations is driven by an interaction between individual and situational components. Individual cognitions of right and wrong are mediated by variables specific to the organization to determine an individual’s response to an ethical dilemma. We posit that situational variables that Trevino relates to organizational culture extend to environmental cultural variables. Hofstede (1980, 1991) identified constructs that vary across cultures and help to define the norms for behavior within different countries. These cultural norms will influence the judgments and behaviors of individuals. The extent to which cultural norms influence behavior is expected to vary with moral development, with judgments of preconventional and conventional auditors being the most strongly influenced by cultural values.

**Individualism/Collectivism**

Perhaps the most important dimension of a culture is the relative emphasis on individualism versus collectivism (Triandis, 1990, p. 42). Much of the Asian-Pacific region, including Taiwan, is collectivist in orientation (Hofstede, 1980; 1991). Members of collectivist societies tend to emphasize people more than task, have strong family attachments, and feel deep family obligations (Triandis, 1990). Ingroup goals strongly influence behavior, and if there is conflict between one’s personal goals and the goals of the group, personal goals are less important than collective goals in the resolution of the conflict (Triandis, 1990, p. 4). Members of collectivist cultures have high loyalty to their ingroups, and dislike interpersonal competition within their group. The accounting profession is an ingroup, but its role in a collectivist society may be subordinate to other ingroups.
While Taiwan is strongly collectivist, accounting researchers have suggested that the notion of an autonomous profession appears to be based on individualist, rather than collectivist, values (Cohen et al., 1992; McKinnon, 1984; Bollom, 1988; Gaa, 1990). Professionals in an individualist society are expected to make judgments based on professional guidelines; professional judgments are expected to result in the best long-term outcome for the professional and for the society. According to Cohen et al. (1992, p. 692) the “notion of a self-regulated profession appears to be based on an individualist value that its members should not identify with the organization. . . Instead, professionals should maintain their allegiance to the code of a more abstract, more distant profession. . . The profession requires its members to use independent judgment to determine whether a situation has an ethical component and what the appropriate response is.”

This reliance on an individual’s professional judgment is contrary to attitudes in collectivist cultures, where the expectation is that “group decisions are of higher quality than individual ones” (Hofstede, 1980, p. 224; Cohen, et al., 1992).

Further, Hofstede (1991, p. 157) suggested that in an individualist society, the information generated by the accounting system is likely to be taken more seriously and will be considered to be more indispensable than in a collectivist culture. In collectivist cultures, context is critical for interpretation of information, and many other more subtle cues are available to assess the well-being of an organization. Hofstede (1991, p. 157) suggested that this may result in decreased reliance on accounting information relative to other information cues, and decreased stature of the professional affiliation.

Cohen, et al. (1992, p. 691) suggest that pressure on a subordinate to cover up an illegal action might be viewed differently in a collectivist culture relative to an individualist culture.
While a person from an individualist culture might interpret such pressure as coercion, a 
collectivist might willingly participate to protect the reputation of the group. Therefore, when a 
dilemma requires an individual from a collectivist society to choose between the well-being of an 
ingroup member and allegiance to the profession, there may be an increased willingness on that 
individual’s part to agree with a violation of professional standards.

Triandis (1990) defines an ingroup as one whose norms, goals and values shape the 
behavior of its members. Both actual groups (e.g., family) and reference groups (e.g., social 
groups) can be ingroups for a particular individual. Hsu (1981) examined numerous contrasts 
between China and the United States that reflect the individualism/collectivism constructs. 
Collectivism includes a very positive attitude toward ancestors, elders, and respect for the past, 
while individualism values most strongly youth and the future. Triandis (1990) posits that 
individualists are socialized largely by peers and the collectivist largely by elders. Vertical 
relationships (i.e., relationships with those of differential ages) are generally more important for 
collectivists than horizontal relationships (i.e., relationships with peers). Triandis found that, 
when comparing China to the US, Chinese subjects were closer to their parents than were US 
subjects, but the US subjects were closer to their closest friends and their roommates than were 
the Chinese subjects.

These characteristics of the collectivist culture seem to indicate that various ingroups 
would be perceived as differentially important. Family groups, including extended family, seem 
to be more important ingroups than peers. This differential importance suggests that responses 

to an ethical dilemma may therefore depending on the nature of the ingroup involved. 
This leads to the following hypothesis:
H3: Taiwanese auditors will demonstrate a stronger propensity to violate professional standards when loyalty to a family member, as opposed to another ingroup, would encourage such a violation.

Uncertainty Avoidance

The accounting profession is often characterized as placing a strong emphasis on rule-directed behavior. In Taiwan, the accounting profession is subject to a code of professional conduct that requires adherence to technical standards and provides a framework for professional behavior. Many of the values of the accounting profession are included in this code. The accounting profession also emphasizes techniques and tools. Arlow and Ulrich (1980) posited that accountants are trained in "hard and fast rules." They further believe (Arlow and Ulrich, 1983) that exposure to "hard and fast" rules of behavior, including professional codes of conduct, is an important component of an accountant's training and socialization into the accounting profession. Recently, the SEC has suggested that in the United States, a problem with FASB standards and implementation guidance is that it is rule-based and focuses on a "check-the-box" mentality that inhibits transparency (Herdman, 2002).

The individual's general attitude towards rules is an important dimension of cultural differences. In addition to individualism/collectivism, Hofstede (1980) identified uncertainty avoidance as an important determinant of culture. In uncertainty-avoiding societies, there are many formal laws and/or informal rules controlling the rights and duties of employers and employees. In a high uncertainty-avoidance society, there is a strong emotional need for rules. This emotional need for rules is independent of concepts of justice or the perceived fairness of the rules. Strong uncertainty avoidance is a characteristic of the culture of Taiwan (Hofstede, 1991). Accountants in Taiwan are likely to have strong positive attitudes toward rule
observance, and rule observance attitudes should influence judgments when auditors are faced with professional ethical dilemmas. This leads to the following hypothesis:

H4: The stronger the perceived importance of rule directed behavior, the lower the propensity to violate professional standards.

**METHOD**

*Subjects and Materials*

A CPA practicing in the Midwest who is a native of Taiwan obtained agreements from several public accounting firm partners in Taipei to provide subjects for the experiments. One hundred and five experimental instruments were mailed to a contact person in Taiwan, who distributed them to the participating auditors, collected completed forms, and returned the forms to the researchers in the United States. Seventy-five completed instruments were returned, for a response rate of 71%. A second Taiwanese CPA obtained data directly from another 25 subjects during office visits in Taiwan, for a total of 100 subjects in the sample.

The materials were composed of (1) an instruction set, (2) the six-story Defining Issues Test (DIT), (3) an instrument to measure rule observance attitudes, (4) two vignettes that detailed professional ethical dilemmas, (5) a set of questions designed to elicit the importance of the *Code of Professional Conduct* in responding to each vignette, and (6) questions eliciting demographic data. The instructions outlined the scope of the task and indicated to participants that their participation was voluntary, their responses would be confidential, and the results would be presented in the aggregate. The DIT (Rest, 1979a) is an objective test of ethical development based on the six stages defined by Kohlberg. The rule observance instrument (see Appendix 1) is the same as that used by Jeffrey and Weatherholt (1996), which in turn was adapted from a scale used by Bacharach and Aiken (1976). The two vignettes and questions eliciting the importance
of the Code with respect to the subjects’ responses are in Appendix 2. Subjects indicated their agreement with the auditor’s actions in each vignette on a 1000-point scale, consistent with earlier research on auditors’ moral judgments (e.g., Arnold and Ponemon, 1991; Ponemon and Gabhart, 1990; Ponemon, 1993; Sweeney and Roberts, 1997). The demographic data questions elicited information regarding involvement in professional organizations, job title, age, and educational background.

Data from 50 auditors were available for analysis in this study\(^1\). These remaining participants were primarily at the staff, senior, and manager ranks; only two of the 50 were senior managers or partners. Years of experience ranged from 1 to 12, with a mean of 3.91 and standard deviation of 2.63. Twenty-nine participants were male and 21 were female.

All materials were written in Chinese. This study used a Chinese translation of the six-story form of the DIT. This translation has been used in previous research in Taiwan, including use in a graduate thesis chaired by James Rest (Rest, personal communication). Various studies using the DIT have been conducted in countries outside the United States (see Rest, 1986, for a review). The evidence from these studies is that results parallel the original reliability and validity studies performed on United States samples with the original DIT. At no time were the "critical data trends non-significant or of a direction different from the data trends in the United States samples . . . While non-Western samples tend to show a flatter rate of developmental

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\(^1\) Data from 26 participants in the portion of the sample that was gathered by mail were missing because pages were missing from their instruments. In the cases where pages were missing, a contact in Taiwan who was collecting and returning some of the instruments did not realize that responses were interspersed throughout the instrument and did not return all of the necessary information. Four of the remaining 74 participants (5.4%) failed consistency checks on the DIT and were eliminated from the sample. Rest (1990, p. 15) indicates that in studies using this instrument, 5 to 15 percent of the sample is usually invalidated. Data from 14 subjects were eliminated because the auditors did not indicate their agreement with the auditor’s actions in one or both of the ethical dilemma vignettes. Another 6 subjects were eliminated because they either did not respond to one or more of the questions designed to elicit the importance of the Code of Professional Conduct in responding to each vignette or were missing responses to demographic data items used as control variables.
increase than Western samples, all samples showed increasing levels of moral judgment in higher age/educational levels" (Rest, 1986, p. 107-109).

The remainder of the instrument was translated into Chinese by bilingual Taiwanese graduate students who were studying accounting or law. Two of the Taiwanese students individually prepared a translation of the experimental materials and then compared their translations and discussed all discrepancies. Additional Taiwanese students then looked at these discrepancies in the translation and mediated the wording. The instrument was then translated back into English. Again, discrepancies were identified and resolved through discussion. A colleague who is from Taiwan and who is a practicing CPA was the final authority on wording for any discrepancies that remained after the discussions.

**Experimental Design and Method of Analysis**

The experiment employed a two-level, within-subjects design, in which two other variables were nested within each level of the within-subjects variable (Neter, Wasserman, and Kutner, 1990). Context was manipulated within-subjects by having all subjects respond to two vignettes: the case used by Sweeney and Roberts (1997) and a second case concerning whether or not the auditor should make an unauthorized disclosure of client information to a third party heavily invested in the client. The presence or absence of potential sanctions was manipulated within the first case by manipulating the probability that the action would be detected and punished. Whether or not the heavily invested third party was a member or the auditor’s family ingroup or social ingroup was manipulated within the second case. Each subject therefore responded to one of four combinations of cases, as follows:

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>sanctions absent</td>
<td>third party a member of social ingroup</td>
</tr>
</tbody>
</table>
sanctions absent  third party a member of family ingroup
sanctions present third party a member of social ingroup
sanctions present third party a member of family ingroup

The fact that different treatments were nested under the two cases used in the experiment meant that a conventional within-subjects ANOVA was not appropriate for the analysis of the data. In lieu of a within-subjects ANOVA, Neter et al. (1990) suggest that the most appropriate method for analyzing an experimental design with different treatments nested under the levels of an experimental variable is the regression approach. Since hypotheses 2 and 3 make differential predictions about the effects of manipulated variables at different levels of moral reasoning, the model includes both main effects and two-way interactions between levels of moral reasoning and the other experimental variables. The following model was therefore used to analyze the data.

\[
\text{POINTS} = a + b_1 \text{PLEVEL} + b_2 \text{SANCTION} + b_3 \text{CONTEXT} + b_4 \text{INGROUP} + b_5 \text{RULES} + b_6 \text{IMPORT1} + b_7 \text{IMPORT2} + b_8 \text{YEARS} + b_9 \text{GENDER} + b_{10}(\text{PLEVEL} \times \text{SANCTION}) + b_{11}(\text{PLEVEL} \times \text{CONTEXT}) + b_{12}(\text{PLEVEL} \times \text{INGROUP}) + b_{13}(\text{PLEVEL} \times \text{RULES}) + b_{14}(\text{PLEVEL} \times \text{IMPORT1}) + b_{15}(\text{PLEVEL} \times \text{IMPORT2})
\]

where

\[
\text{POINTS} = \text{the judgment for each vignette}; \\
\text{PLEVEL} = \text{the level of moral development, coded as } -1 \text{ for subjects reasoning at preconventional or conventional levels, } 1 \text{ for subjects reasoning at the postconventional level};
\]
SANCTION = a dummy variable, coded as −1 for responses to the first vignette with sanctions absent, 1 for responses to the first vignette with sanctions present, and 0 for responses to the second vignette;

CONTEXT = a dummy variable, coded as −1 for responses to the first vignette and 1 to the second;

INGROUP = a dummy variable, coded as −1 for responses to the second vignette where the third party was a member of the social ingroup, 1 for responses to the second vignette where the third party was a family member, and 0 for responses to the first vignette;

RULES = perceived importance of rule-directed behavior;

IMPORT1 = a dummy variable, coded as 1 if the subject reported that conformance to the Code of Professional Conduct was the most important factor in responding to the first vignette, −1 for other responses to the first vignette, and 0 for responses to the second vignette;

IMPORT2 = a dummy variable, coded as 1 if the subject reported that conformance to the Code of Professional Conduct was the most important factor in responding to the second vignette, −1 for other responses to the second vignette, and 0 for responses to the second vignette;

YEARS = reported years of experience in the subject’s present position;

GENDER = a dummy variable, coded as −1 for males and 1 for females

Points

The dependent variable is the response by auditors to each of the two ethical vignettes.

Consistent with the case construction strategy emphasized by Rest (1979a), each dilemma
depicts a hypothetical auditor's actions. Rest stresses that evaluation of moral judgments must be in reference to a third person to mitigate the potential social desirability response bias present in self-reports concerning sensitive issues (Randall and Fernandes, 1991). The response scale requires the subject to make a judgment regarding what the hypothetical auditor should have done, as opposed to asking the subject what action he or she would have taken in the scenario.

Each case required subjects to allocate 1,000 points between an "approval" versus a "disapproval" response to the behavior of the hypothetical auditor in the case. In each case, both statements are equivalent measures of conformity with professional standards. For the first case, the point allocation to the statement that the auditor should NOT have disclosed the disbursement was the dependent variable. For the second case, the point allocation to the statement that the auditor SHOULD have told the person invested in the corporation about the inventory loss was the dependent variable. In both cases, agreement with the statement indicated that the auditor should have violated professional standards. The potential number of points allocated to the category ranged from zero (absolute compliance with professional standards) to 1,000 (absolute violation of professional standards).

Requiring subjects to assign a fixed number of points to mutually exclusive categories is consistent with prior research in accounting ethics (e.g., Sweeney and Roberts, 1997; Arnold and Ponemon, 1991; Ponemon and Gabhart, 1990; Ponemon, 1993). Using such a scale allows subjects to assign zero points to the dilemma, indicating absolute compliance, or a positive number of points over the range, indicating their relative sensitivity to factors that may have affected the hypothetical auditor's lack of compliance. Assigning zero points suggests that a subject is not sensitive to contextual factors of the case and views the case strictly in accordance with the dictates of professional standards. Accordingly, other studies of ethical judgments (e.g.,
Sweeney and Roberts, 1997) have either analyzed zero point responses separately or eliminated them from further analysis, depending on the issue being examined. We analyzed our data both including and excluding three participants who gave zero point responses to both vignettes, and found that excluding the participants did not substantively affect our results.\(^2\) Therefore, we include the participants with zero responses to both vignettes in our results.

\textbf{PLevel}

The DIT (Rest, 1979a) is an objective test of ethical development based on the six stages defined by Kohlberg. The output of the DIT is a continuous variable, the PScore, that is "interpreted as the relative importance a subject gives to principled moral considerations in making a decision about ethical dilemmas" (Rest, 1979b, p. 5.2). While the PScore is an index based on the relative importance given to Stages 5 and 6 reasoning strategies, it has been shown to be representative of moral development across the six theoretical stages. Rest (1979a, p. 101) presents results that the PScore performed better than other indices of moral development, and suggests that the highest type of moral judgment (stages 5 and 6) shows a steady gradual increase over the developmental continuum. Rest (1979a, p. 101) interprets these results to mean that the PScore is a good surrogate measurement for locating a subject along the underlying developmental continuum represented by the three (preconventional, conventional, and postconventional) levels of development.

Table 1 presents descriptive statistics for Pscore, for the independent variables used to test our hypotheses, and for our control variables. The mean PScore was 43.15, with a standard

\(^2\) A problem with labeling subjects as insensitive to contextual factors based on a single zero point response is that one has no way of knowing whether a subject might give non-zero responses when responding to a different case. Given that participants in the present study made judgments about conformance with ethical standards in two different contexts, we therefore have a more robust indicator of subjects' lack of sensitivity to contextual factors. Accordingly, we only labeled a subject as being insensitive to contextual factors if they made zero point responses to \textit{both} vignettes.
deviation of 12.66. These PScore data are consistent with those of public accountants reported in prior research (Gaa, 1992; Ponemon and Gabhart, 1993). The literature on PScore suggests that postconventional reasoning is associated with PScores above 41.5, while conventional moral reasoning is associated with PScores between 27.6 and 41.5, and preconventional reasoning is associated with PScores of 27.5 or below (Rest, 1979b). Hypotheses 1 and 2 make differential predictions for judgments of auditors reasoning at the preconventional and conventional level when compared to judgments of auditors reasoning at the postconventional level. Accordingly, we split the sample into one group with subjects reasoning at the preconventional or conventional level (PScores of 41.5 or less) and a second with subjects reasoning at the postconventional level (PScores greater than 41.5). There were 22 subjects in the preconventional or conventional moral reasoning group and 28 subjects in the postconventional moral reasoning group.

Sanction

The probability that the auditor’s acquiescence is discovered and is therefore subject to sanction (i.e., the threat of punishment) was manipulated in the first case, consistent with Sweeney and Roberts (1997). Twenty-five subjects each responded to cases with sanctions absent and sanctions present.

Context

Two cases were used in this research. The first is the same case used by Sweeney and Roberts (1997) and is presented in Appendix 2. The case involves a dilemma in which the auditor is asked to acquiesce to the controller's request to conceal an irregularity, and

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3 We merged the preconventional and conventional reasoning groups, since as Table 1 shows, there were only six subjects in the preconventional group.
incorporates issues designed to appeal to the perspectives of different levels of moral
development. The second case developed for this research is also presented in Appendix 2. An
auditor has information that a write-down of obsolete inventory will have a material effect on the
expected earnings of a corporation. The case contains a dilemma in which the auditor is aware
that insider information would be of significant value to a person close to the auditor who has a
sizeable investment in the audit client.

In the first case, violation of the Code of Conduct is a violation of the auditor’s
responsibilities to the client. The violation does not have a significant effect on the financial
statements or the information available to financial statement users. Potential sanctions include
being sued by the client and being disciplined by the audit firm and perhaps, the auditor’s
professional organization. The potential sanctions in the second case are more severe in that the
auditor could be subject not only to the sanctions involved in the first case, but also to civil and
criminal penalties for violations of securities laws. The differences in the nature and severity of
potential sanctions across the two cases is designed to examine differences in judgments as a
function of moral intensity (Jones 1991).

**Ingroup**

The manipulation within the second case is whether the heavily invested individual is an
uncle or a close friend and college roommate of the auditor. The purpose of this manipulation
was to test whether auditors from a collectivist society differentiate between family and non-
family members in responding to ethical dilemmas. Twenty-eight subjects responded to the case
where the heavily invested individual was a close friend; 22 responded to the case where this
individual was an uncle.
The attitude toward rule observance was operationalized using the scale used by Jeffrey and Weatherholt (1996), which was adapted from a scale used by Bacharach and Aiken (1976). Response options consisted of 5-point Likert-type scales ranging from (1) Strongly Agree to (5) Strongly Disagree, which are summed and converted back to the original 5-point scale such that a higher number indicates a greater perceived importance of rule-directed behavior. The internal consistency as measured by Cronbach's alpha was 0.83 for the composite measure used in this study. The English translation of the rule observance scale items is presented in Appendix 1. The mean score for perceived importance of rule-directed behavior was 3.73, with a standard deviation of 0.49. As the mean value is greater than the midpoint on the scale, it appears that the participants in the study view rule-directed behavior as important on average, as suggested in the development of hypothesis 4.

Items presented at the end of each vignette elicited what issues subjects perceived as most important when evaluating the professional ethical dilemmas. One item, "Whether the Code of Professional Conduct or professional standards would be violated" was used to operationalize the importance of following professional standards in resolving ethical dilemmas. Twenty-seven auditors (54%) selected this statement as the most important issue in evaluating the first case, and 35 auditors (70%) chose this as the most important item in evaluating the second case. As indicated above, this variable was assessed and coded separately for each case because the perceived importance of compliance with professional rules and guidelines was expected to vary across individual professional dilemmas. In contrast, the general attitude towards rules captured in the RULES variable is not expected to vary across dilemmas.
The longer one is a practitioner, the more one is exposed to the rules of the profession, including the Code of Conduct and its nuances. This increased knowledge of the Code and the potential penalties for violating it may lead more experienced auditors to be less likely to agree with violations of the code, independent of their level of moral development. Therefore, we include years of experience as a covariate in our model.

Gender

The published research on moral development in general indicates only minor differences by gender (Thoma 1986). However, some accounting studies have found the mean PScore of female auditors to be significantly higher than that of male auditors (Shaub 1994; Sweeney and Roberts 1997). Further, there may be gender differences in attitudes toward rules or perceived importance of an ingroup. Therefore, gender was included in the model as a control variable.

RESULTS

We initially fit the complete regression model indicated above to the data. Because both PLEVEL and several interactions with PLEVEL are in the model, we obtained variance inflation factor (VIF) statistics for each of the independent measures in the model (Neter et al., 1990). Two factors had high VIF statistics: PLEVEL (74.9) and the interaction of PLEVEL and RULES (75.2). Since we do not predict a main effect for PLEVEL, and this variable did not significantly affect POINTS in our initial analysis (p = .94), we dropped PLEVEL from our analysis of the data. Table 2 presents the regression results for the revised model. Goodness of fit statistics showed a reasonably good fit of the model to the data (r-square = .41, adjusted r-square = .31, F
The interaction between PLEVEL and SANCTION was statistically significant \((p = 0.04)\), and the interactions between PLEVEL and CONTEXT and PLEVEL and IMPORT2 were marginally significant \((p = 0.08\) and \(p = 0.10\), respectively). To assess the specific nature of each interaction, we ran a second regression model, in which we replaced the main effect and interaction terms for each of these three variables with terms designed to separately assess the effects of the variable for each level of moral reasoning scores.\(^5\) Table 3 presents the results of this model.

(Insert Tables 2 and 3 about here)

Hypothesis 1a predicts that auditors reasoning at the preconventional or conventional levels will display a lower propensity to violate professional standards when it is likely that the violation will be discovered; hypothesis 1b predicts that the judgments of auditors reasoning at the postconventional level will not be affected by the presence of potential sanctions for the violation. The significant PLEVEL by SANCTION effect in the first model is consistent with these predictions. The specific contrasts tested in the second model show that for the lower moral reasoning score group, mean agreement with the auditor’s actions was higher \((p = .02)\) when sanctions were absent (620.0 points) than when they were present (466.0 points) (See Table 4, Panel B). However, the presence of sanctions did not effect the ethical judgments of the group with higher moral reasoning scores \((p = 0.74)\). These results therefore support both hypotheses 1a and 1b.

(Insert Table 4 about here.)

\(^4\) All VIF statistics for this model are less than 1.5. VIF values in excess of 10 are an indication that multicollinearity is influencing regression coefficient estimates (Neter et al. 1990, p. 409).

\(^5\) Goodness of fit statistics for this regression are the same as for the regression presented in Table 2. All VIF factors for this regression are less than 1.5.
Hypothesis 2a predicts that auditors with reasoning at the preconventional and conventional levels will display a lower propensity to violate professional standards when the potential sanction includes both civil and criminal penalties, while hypothesis 2b predicts that the judgments of auditors reasoning at the postconventional level will not be affected by the nature and severity of potential sanctions. The marginally significant PLEVEL by CONTEXT interaction in the first model is consistent with this prediction. However, the specific contrasts tested in the second model show that CONTEXT had significant effects on ethical judgments for both low (p < 0.01) and high (p = 0.03) moral reasoning score groups. The results therefore support hypothesis 2a, but not hypothesis 2b. It should be noted, however, that the effect of CONTEXT on judgments of low moral reasoning score subjects was greater than the effect on judgments of high moral reasoning score subjects. As shown in Table 4, Panel A, the value of POINTS (i.e., the tendency to agree with the auditor’s actions) is 254.1 points lower, on average in the second case than in the first for the low moral reasoning group, and only 192.5 points lower, on average in the second case for the high moral reasoning group.

Hypothesis 3 predicts that Taiwanese auditors will demonstrate a stronger propensity to violate professional standards when loyalty to a family member would encourage such a violation. There is a statistically significant negative coefficient on the INGROUP variable (p = 0.03), indicating that the subjects were more likely to agree with the auditor’s actions in cases where the third party was a friend (323.6 points), instead of a family member (229.6 points) (See Table 3, Panel C). The results are therefore significant in the opposite direction than predicted by Hypothesis 3.

Hypothesis 4 predicts that the stronger perceived importance of rule-directed behavior, the less likely is a violation of professional standards. There are two measures of rule-directed
behavior in this study: the overall attitude towards the importance of rules (RULES) and the importance of the *Code of Professional Conduct* in making judgments on each case (IMPORT1, IMPORT2). Coefficients for RULES ($p = 0.03$) and IMPORT1 ($p = 0.02$) are significant in the predicted direction. The main effect of IMPORT2 is not significant ($p = 0.18$), but the analysis in Table 2 shows a marginally significant interaction between IMPORT2 and moral reasoning level ($p = 0.10$). The mean judgments displayed in Table 4, Panel E show that the tendency to agree with the auditor’s actions is lower for individuals who consider compliance with the *Code of Professional Conduct* most important in Case 2, regardless of moral reasoning score level. The difference in means is not significant for the low moral reasoning score group ($p = 0.84$) and is significant for the high moral reasoning score group ($p = 0.02$).

The results therefore support Hypothesis 4, except with respect to the effects of the perceived importance of the *Code of Professional Conduct* for low moral reasoning score subjects in Case 2. However, as Table 5 shows, only 5 low moral development subjects indicated that compliance with the Code of Professional Conduct was not most important in making their judgments. The small number of subjects in this cell suggests that the non-significant results for low moral development subjects may be due to lack of statistical power.

(Insert Table 5 About Here)

**DISCUSSION AND CONCLUSIONS**

Consistent with previous research (Sweeney and Roberts 1997), judgments of auditors reasoning at the preconventional or conventional levels of moral development were influenced by the potential for penalties. These subjects were less likely to violate standards when the violation was likely to be discovered and penalized. Judgments of auditors reasoning at the postconventional level, however, were not affected by the probability of discovery.
This study extended previous research to investigate whether auditors would be less likely to violate standards when an action would violate both professional standards and legal requirements. It was predicted that only the judgments of auditors with lower moral development scores would be affected by the nature and severity of potential sanctions. However, auditors were less likely to agree with violations of professional standards in a case involving both violations of professional auditing standards and insider trading rules, regardless of their level of moral development.

The study also examined the effects of ingroup membership in the case involving both violations of professional auditing standards and insider trading rules. It was predicted that since Taiwan has been identified as a collectivist society, loyalty to family would influence judgments about whether to reveal confidential information to an investor. However, the opposite result was found; Taiwan auditors demonstrated a stronger propensity to violate professional standards when the dilemma involved loyalty to a friend, as opposed to a relative. This result was unexpected given the literature on individualism/collectivism. Before this evidence can be considered conclusive, however, it will be necessary to investigate alternative definitions of ingroup membership. It is possible that a different result might have occurred if the family member had been a closer relation, such as a parent or sibling. This result also suggests that more research needs to be done in developing definitions of ingroups in collectivist societies. It would also be worthwhile to investigate the effects of ingroup membership in the first of the two vignettes, as it is possible that ingroup membership might have a different effect on auditors’ ethical judgments in a scenario where the potential sanctions are not as severe.

Finally, the study investigated whether attitudes towards observing professional rules would have an effect on auditors’ ethical judgments. Consistent with predictions, a measure of
overall attitudes towards rule observance was negatively correlated with auditors’ propensity to agree with violations of professional standards, regardless of their level of moral development, sanctions, or context. However, the relationship between perceived importance of the *Code of Professional Conduct* in making ethical judgments and auditors’ propensity to agree with violations of ethical standards varied across contexts and across moral development levels.

In Case 1, the main effect of perceived importance of the *Code of Professional Conduct* was significant for auditor judgments. In Case 2, the main effect of the perceived importance of the *Code of Professional Conduct* was not significant, although the interaction between this variable and moral reasoning level was significant. The hypothesized relationship did hold for auditors reasoning at the postconventional level. The predicted effect was not significant for auditors reasoning at lower levels, although this may be a result of the low power of the statistical test for this particular relationship.

As noted by Triandis (1990, p. 48), scant research has previously examined psychological constructs in a collectivist culture. This study extends prior theory by examining Taiwanese auditors’ ethical judgments and their relationship to moral development and cultural constructs. The unexpected results with respect to the ingroup manipulation, whererby we found a violation of the Code was more likely when a friend, as opposed to a family member, was involved, should be the topic of additional study. Extensions of this research might also directly compare the effects of moral development, individualism/collectivism, rule observance behavior, and moral intensity across cultures. As the global focus of business increases, the importance of understanding the impact of cultural values on accountants’ professional conduct across countries also increases.


Kohlberg, L. 1958. 	extit{The Development of Modes of Moral Thinking and Choice in the Years 10 to 16}. University of Chicago: Ph.D. dissertation.


\textit{Advances in International Accounting}. 5: 213-236.


APPENDIX 1

Items on the Rule Observance Scale:

1. I always stick to the letter of the rules.
2. I always have to follow strict operating procedures at all times.
3. I always check to see that I am following the rules.
4. I expect other accountants to always follow the rules to the letter.
5. Accountants have procedures for every situation.
Please read the following cases very carefully. Using your best judgment, please allocate 1,000 points to the following two categories:

A: You agree with the decision of the auditor in the case.
B: You do not agree with the decision of the auditor in the case.

Unless you are in absolute agreement with the auditor's decision, do not allocate 1,000 points to that category. For example, if you are about 80% in agreement with the auditor's decision, allocate 800 points to category A and 200 points to category B.

Case Study 1:
Chris Gibson has been employed by the public accounting firm of RS&T for the past four years and is the senior in-charge of the Greenwood Manufacturing Company audit. Greenwood is a manufacturer of household furniture and a division of a large, publicly traded corporation. With annual sales of approximately $40 million, Greenwood is in good financial health and the corporation has received unqualified audit opinions in recent years.

While visually inspecting the accounting records of Greenwood in a search for unusual appearing transactions, Chris discovered an uncoded cash disbursement of $25,000. Chris decided to discuss the situation with the controller, Ed Johnson.

Ed Johnson first worked for Greenwood Manufacturing when it began operations in 1970. Mr. Johnson has held the controllers' position for eight years and is generally regarded as one of the most competent and highly respected executives at Greenwood. Mr. Johnson has always been cooperative and professional during the course of the audit.

Ed Johnson was along in his office when Chris Gibson entered and referred to the $25,000 disbursement. Mr. Johnson asked Chris to close the door, pulled a file from his desk, and then began the following conversation:

"I expected you might be dropping by to discuss that withdrawal. The disbursement is my personal responsibility and I repaid it the next day. You can verify the receipt by examining the bank statement. I have copies of all supporting documents in this file.

"I withdrew those funds from the company account after receiving a phone call that afternoon from my son, a student at the university. At the time, I was unaware he had developed a severe gambling problem. He told me that he had substantial losses which he was unable to pay. Furthermore, he had been threatened with bodily harm if he didn't pay $25,000 in gambling debts by that night. The only way I could obtain that much cash in a matter of hours was to access company funds. I repaid the amount the following day with personal funds. My son has since obtained counseling and treatment for his gambling problem.

"You are the only person I've confided in; you must realize that I will lose my job if this matter becomes public."

Chris confirmed that the support from Mr. Johnson's file was consistent with his explanation.

Chris is certain that the disbursement will not be subsequently examined.
(or, in the alternate form: Chris is aware that the disbursement may subsequently be examined)

A: Chris should NOT have disclosed the disbursement. _____ POINTS
B: Chris should have disclosed the disbursement. _____ POINTS

TOTAL 1,000 POINTS
Please indicate on the following scales whether each item was of great importance, much importance, some importance, little importance, or no importance in making your decision about the Greenwood Manufacturing Case.

(1) Whether the Code of Professional Conduct or professional standards would be violated

(2) Isn't it natural for a man to protect his son through any means possible and should he be punished for it?

(3) Is Chris willing to risk losing this job on the chance that not disclosing the information to the audit firm manager is discovered

(4) Whether Chris was an A student in college

(5) Whether Chris is acting in self interest or in the interests of someone else

(6) Whether the Greenwood Manufacturing Company's rights are being respected

(7) Whether the importance of spirit is more valuable than the importance of fate

(8) What values are going to be the basis for governing professional conduct

(9) Whether a regulation is going to protect a large corporation at the expense of an individual

(10) Whether adherence to the Code of Professional Conduct is getting in the way of family values

(11) Whether Greenwood Manufacturing has a reputation of not taking care of its employees

(12) Would keeping this information confidential in such a case bring about more total good for the whole society or not

Please indicate which of the above items was the most important item in you evaluation of the Greenwood Manufacturing Case. Please then indicate the second most important item, the third most important item, and the fourth most important item.
Case Study 2:

Pat Wilson is a CPA and has been employed by the public accounting firm LM&N for the past five years. Pat is the senior in-charge of the Creative Toys Corporation audit. Creative Toys has had a significant increase in revenues over the past three years as a result of the success of their major product, Electrobots. Electrobots are action figures that contain a microchip which enables the figures to talk and to respond to a remote control. Sales revenue was $40 million in 1991 and $53 million in 1992.

During the course of the audit, Pat discovered that orders for Electrobots increased during the first half of 1992, but decreased dramatically during the second half of the year. Inventories at December 31, 1992 were 85% above inventory levels at December 1991, because the company, anticipating further growth in demand, had increased production levels. The company was also continuing to increase its purchase of raw materials for production of the product.

Further investigation revealed that a competing product had been introduced early in 1992, and sales of the more technologically advanced Compurangers were strong. To sell Electrobot, substantial discounts were instituted in January, 1993. Further, Creative Toys had not succeeded in developing a new toy concept to replace Electrobots.

The audit firm and company management were discussing the establishment of an allowance to reduce the carrying value of the inventory; this adjustment would also substantially reduce reported net income for 1992.

Pat's uncle (or, in the alternate form: college roommate and good friend) had a substantial investment in Creative Toys. Pat believed that the announcement of an adjustment that would substantially reduce reported net income would have a significant effect on the stock price. Because of concern for the financial status of Pat's uncle (friend), Pat decided to disclose this information to the uncle (friend) prior to the release of this information to the financial press.

Pat should NOT have provided this information to the uncle (friend). 

Pat should have provided this information to the uncle (friend).

TOTAL 1,000 POINTS
Please indicate on the following scales whether each item was of great importance, much importance, some importance, little importance, or no importance in making your decision about the Creative Toys Case.

(1) Whether the Code of Professional Conduct or professional standards would be violated

(2) Isn't it natural for a person to protect family members through any means possible and should a person be punished for it?

(3) Is Pat willing to risk losing this job on the chance that disclosure of this information is discovered

(4) Whether Pat was an A student in college

(5) Whether Pat is acting in self interest or in the interests of someone else

(6) Whether the Creative Toys Manufacturing rights are being respected

(7) Whether the importance of spirit is more valuable than the importance of fate

(8) What values are going to be the basis for governing professional conduct

(9) Whether a regulation is going to protect a large corporation at the expense of an individual

(10) Whether adherence to the Code of Professional Conduct is getting in the way of personal relationships

(11) Whether Creative Toys has a reputation of not taking care of its employees

(12) Would keeping this information confidential in such a case bring about more total good for the whole society or not

Please indicate which of the above items was the most important item in your evaluation of the Creative Toys Case. Please then indicate the second most important item, the third most important item, and the fourth most important item.
Table 1
Descriptive Statistics for Independent and Control Variables

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pscore mean (standard deviation)</td>
<td>43.15 (12.66)</td>
</tr>
<tr>
<td>Distribution of PScores</td>
<td></td>
</tr>
<tr>
<td>greater than 41.5 (postconventional moral reasoning)</td>
<td>28</td>
</tr>
<tr>
<td>27.5 to 41.5 (conventional moral reasoning)</td>
<td>16</td>
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<tr>
<td>less than 27.5</td>
<td>6</td>
</tr>
<tr>
<td>Importance of rule-directed behavior mean (standard deviation)</td>
<td>3.73 (.49)</td>
</tr>
<tr>
<td>Number of subjects rating compliance with professional standards most important</td>
<td></td>
</tr>
<tr>
<td>Case 1</td>
<td>27</td>
</tr>
<tr>
<td>Case 2</td>
<td>35</td>
</tr>
<tr>
<td>Mean (standard deviation) years of professional experience</td>
<td>3.91 (2.63)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
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<tr>
<td>Variable</td>
<td>t</td>
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<tr>
<td>------------------</td>
<td>-------</td>
</tr>
<tr>
<td>SANCTION</td>
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<tr>
<td>CONTEXT</td>
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<tr>
<td>INGROUP</td>
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</tr>
<tr>
<td>RULES</td>
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<tr>
<td>IMPORT1</td>
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<tr>
<td>IMPORT2</td>
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<td>YEARS</td>
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<tr>
<td>GENDER</td>
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<td>PLEVEL*SANCTION</td>
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<td>PLEVEL*INGROUP</td>
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<td>PLEVEL*CONTEXT</td>
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<td>PLEVEL*RULES</td>
<td>-0.698</td>
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<tr>
<td>PLEVEL*IMPORT1</td>
<td>1.018</td>
</tr>
<tr>
<td>PLEVEL*IMPORT2</td>
<td>-1.661</td>
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Table 3
Regression Results—Model for Assessing Interaction Effects

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
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</thead>
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<td>INGROUP</td>
<td>-2.267</td>
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</tr>
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<td>RULES</td>
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<td>YEARS</td>
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<td>PLEVEL*INGROUP</td>
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</tr>
<tr>
<td>PLEVEL*RULES</td>
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<td>0.49</td>
</tr>
<tr>
<td>PLEVEL*IMPORT1</td>
<td>1.018</td>
<td>0.31</td>
</tr>
<tr>
<td>SANCTION (low Pscore group)</td>
<td>-2.447</td>
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</tr>
<tr>
<td>SANCTION (high Pscore group)</td>
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<td>0.74</td>
</tr>
<tr>
<td>CONTEXT (low Pscore group)</td>
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<td>&lt;0.01</td>
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<tr>
<td>CONTEXT (high Pscore group)</td>
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<td>0.03</td>
</tr>
<tr>
<td>IMPORT2 (low Pscore group)</td>
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</tr>
<tr>
<td>IMPORT2 (high Pscore group)</td>
<td>-2.488</td>
<td>0.02</td>
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</table>
Table 4
Descriptive Statistics for Moral Judgments

**Panel A:** Means (Standard Deviations) by Context and Moral Reasoning Level

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<thead>
<tr>
<th>Context</th>
<th>Moral Reasoning Level</th>
<th>Means Across Moral Reasoning Levels</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low (PScore &lt;= 41.5)</td>
<td>High (PScore &gt; 41.5)</td>
</tr>
<tr>
<td>Case 1 (cover up irregularity)</td>
<td>550.0 (302.0)</td>
<td>463.9 (276.5)</td>
</tr>
<tr>
<td>Case 2 (reveal insider information)</td>
<td>295.9 (278.9)</td>
<td>271.4 (278.4)</td>
</tr>
</tbody>
</table>

**Panel B:** Means for Case 1 by Presence of Sanctions and Moral Reasoning Level

<table>
<thead>
<tr>
<th>Sanction</th>
<th>Moral Reasoning Level</th>
<th>Means Across Moral Reasoning Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (PScore &lt;= 41.5)</td>
<td>High (PScore &gt; 41.5)</td>
</tr>
<tr>
<td>Sanctions Absent</td>
<td>620.0 (325.9)</td>
<td>466.0 (252.5)</td>
</tr>
<tr>
<td>Sanctions Present</td>
<td>491.7 (281.1)</td>
<td>461.5 (312.4)</td>
</tr>
</tbody>
</table>
### Panel C: Means for Case 2 by Ingroup and Moral Reasoning Level

<table>
<thead>
<tr>
<th>Ingroup</th>
<th>Moral Reasoning Level Low (PScore &lt;= 41.5)</th>
<th>Moral Reasoning Level High (PScore &gt; 41.5)</th>
<th>Means Across Moral Reasoning Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>343.6</td>
<td>303.6</td>
<td>323.6</td>
</tr>
<tr>
<td></td>
<td>(301.0)</td>
<td>(297.7)</td>
<td>(294.4)</td>
</tr>
<tr>
<td>Family</td>
<td>212.5</td>
<td>239.3</td>
<td>229.6</td>
</tr>
<tr>
<td></td>
<td>(229.5)</td>
<td>(264.7)</td>
<td>(247.2)</td>
</tr>
</tbody>
</table>

### Panel D: Means for Case 1 by Perceived Importance of Compliance with the *Code of Professional Conduct* and Moral Reasoning Level

<table>
<thead>
<tr>
<th>Perceived Importance of Compliance with the <em>Code of Professional Conduct</em></th>
<th>Moral Reasoning Level Low (PScore &lt;= 41.5)</th>
<th>Moral Reasoning Level High (PScore &gt; 41.5)</th>
<th>Means Across Moral Reasoning Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not most important</td>
<td>782.9</td>
<td>524.4</td>
<td>590.9</td>
</tr>
<tr>
<td></td>
<td>(151.2)</td>
<td>(267.2)</td>
<td>(255.9)</td>
</tr>
<tr>
<td>Most important</td>
<td>460.0</td>
<td>383.3</td>
<td>425.9</td>
</tr>
<tr>
<td></td>
<td>(315.8)</td>
<td>(279.1)</td>
<td>(296.9)</td>
</tr>
</tbody>
</table>
Panel E: Means for Case 2 by Perceived Importance of Compliance with the *Code of Professional Conduct* and Moral Reasoning Level

<table>
<thead>
<tr>
<th>Perceived Importance of Compliance with the <em>Code of Professional Conduct</em></th>
<th>Moral Reasoning Level</th>
<th>Means Across Moral Reasoning Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (PScore &lt;= 41.5)</td>
<td>High (PScore &gt; 41.5)</td>
</tr>
<tr>
<td>Not most important</td>
<td>380.0 (238.7)</td>
<td>415.0 (310.96)</td>
</tr>
<tr>
<td>Most important</td>
<td>271.2 (291.5)</td>
<td>191.7 (230.2)</td>
</tr>
<tr>
<td>Perceived Importance of Compliance with the Code of Professional Conduct</td>
<td>Moral Reasoning Level</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>Low (PScore &lt;= 41.5)</td>
<td>High (PScore &gt; 41.5)</td>
</tr>
<tr>
<td>Not most important</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Most important</td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>