

Impact of Teaching Accounting Ethics on the Ethical Decision-Making of Future Managers

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ABSTRACT

This study aims to emphasize the necessity of dealing with cognitive moral development from the undergraduate level and contribute to the literature by testing two major ethical decision-making models considering perceived overall harm and perceived social pressure concepts that emerge from the literature with a combined approach. For this purpose, the ethical decision-making processes (Rest Model) and moral intensity components (Jones Model) are used to better understand individual factors as well as a standalone ethics course impact on the moral sensitivity and ethical decision-making process. So, the ethical differences between business undergraduate students who took the accounting ethics course, undergraduate students, and MBA students who did not take this course are compared. To do the research, the participants responded to scenario-based questions where an accounting officer is forced to capitalize expenses fraudulently. The analysis is realized using T-test, One-Way Anova and Two-Way Manova tests to shed light on the interaction and the differences between groups. Generation, work experience, and gender are other individual factors used for cross-group comparison. Overall, all hypotheses of the research are partially accepted. The results highlight that the students who do not take the ethics course are significantly negatively different from the MBA students and the students who take the ethics course in terms of overall harm. Other findings conclude that a student who has taken an ethics course is as aware of ethical decision-making processes and

moral sensitivity as someone in professional life.

Keywords: Accounting Ethics Course; Ethical Decision-Making; Moral Intensity; Individual Factors

INTRODUCTION

Organizational sustainability can be reached by leaders with advanced moral character. Especially in the accounting profession, the importance of cognitive moral development has been explained by various professional codes of conduct. The primary moral character of an accounting profession member is to act with integrity which is referenced constantly in the AICPA Code of Professional Conduct, the IESBA Handbook, the Code of Ethics for Professional Accountants (IFAC Code), and IMA Standards. Integrity relies on being straightforward and honest in all professional and business relationships. Essentially, this brief definition emphasizes very heavy and difficult duty. A professional with integrity must react in all conditions similarly when confronted with an ethical dilemma (Harris, 2008). He must give the professional service needed to his client by considering the public interest and public trust (Loeb, 1988). Unfortunately, the primary causes of accounting scandals such as Enron, Worldcom, Sunbeam, and Arthur Anderson rely on a lack of education on

ethical sensitivity and ethical awareness in university undergraduate programs (Russell & Smith, 2003; Bampton & Cowton, 2013; Boni & Lazano, 2007).

While accounting ethics topics are considerably examined in published manuscripts in many categories such as the methods of teaching ethics, the accounting ethics course curriculum, the impact on students' ethical decision-making, and the role of demographic factors on the perceptions of accounting ethics education (Gonan et al., 2021; Loeb, 2006), especially researches focusing on teaching ethics and its role on the future accounting professionals likelihood to react ethically is still unclear (Hanson and Moore, 2013).

The integration method of teaching ethics as a part of an accounting course is the most common way (Vendemia and Kos, 2013; Chawla, S.K., et al. 2015; Shawver and Miller, 2017). According to Martinov-Bennie and Mladenovic (2015), ethical reasoning effectiveness does not increase through a stand-alone course. In the recent study of Mladenovic et al. (2019), these past results and the importance of integrated ethics education are underlined. However, some researchers concluded that students who took ethics as a stand-alone course had significantly higher ethical reasoning than those who had ethics as an instruction integrated into the accounting course (Klimek & Wenell, 2011; Billiot et al, 2012; Chawla et al., 2015; Vendemia & Kos, 2013). At this point, it should be affirmed that the content of the course is also crucial. If the student has only been taught some professional rules, for example, the accounting profession ethics codes, of course, the desired result may not be obtained.

This study has three major contributions. First, studies undertaken to evaluate the cognitive moral development of accounting students in developing countries are limited. Moreover, a stand-alone accounting ethics course with a curriculum emphasizing cognitive moral development theories and fraud examinations is rare. The second

contribution which is directly related to the first one in a developing country context is that this study offers a significant contribution to the literature by providing insights into the commonly discussed question of whether ethical sensitivity, ethical judgment, and ethical intention/motivation (Rest Model) and ethical intensity (Jones Model) can be significantly evaluated by adapting a stand-alone accounting ethics course. Finally, we also aim to provide an investigation of the role of individual factors such as gender, generation -rather than age-, work experience, and an accounting course on the ethical decision-making process.

As many studies (e.g. Ryan and Bisson, 2011; Miller et al., 2014; Adkins & Radtke, 2004; Graham, 2012; Tormo-Carbó et al., 2016; Lehnert et al., 2015; Rogers and Schill, 2021) consider that the major goal of accounting ethics education is to improve the ethical sensibilities of the profession' members and to be aware of performing the accounting profession within a set of virtues, this study focus on three main types of research questions: (1) to ascertain if the students who took a stand-alone accounting ethics course improve significantly ethical sensitivity, ethical judgment, and ethical intention compared to the students who did not (2) to understand if a stand-alone accounting ethics course influence these students 'ethical intensity (3) to find out if ethical decisions are influenced by individual factors.

LITERATURE REVIEW

Rest developed a four-component model (moral sensitivity/awareness, moral judgment, moral intention/motivation, moral character/action/behavior) of the ethical decision-making process. While other ethical decision-making models have been proposed (Dubinsky & Loken, 1989; Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Treviño, 1986), Rest's EDM model is considered "the gold standard" by many scholars in the field (Nguyen and Crossan, 2022; Hannah et al., 2011). The rest model

is one of the most cited, fundamental models supporting most of the empirical research in the ethical decision-making area (Cooper et al., 2008; Schwartz, 2016, Procópio, 2018). Jones (1991) advanced Rest's model by taking into consideration the content of the moral situation that he called moral intensity. He affirmed that moral intensity has a significant effect on ethical decision-making at all stages of the process. (Jones, 1991; Nguyen, Crossan, 2022; Arrami and Yang, 2021)

Rest's model is assumed as a single process but it's not necessarily linear or sequential. However, the four components should be studied to explain how moral decisions drive conduct. The first component is about being capable to recognize that an act, an issue, or a situation contains an ethical object which has the probability to harm people or damage their benefits; then we can talk about the moral sensitivity/awareness of an individual vis-a-vis an ethical dilemma. The second component is about judging a situation and reasoning about the possible positions to be taken and evaluating the possible consequences, which is called moral judgment. The third component, moral motivation/moral intention, determines the position taken by an individual because of an ethical dilemma. The decision can be morally right or more self-oriented. The last component is moral behavior/action/character which is the result of the first three steps. Failure in any step can prevent ethical decision-making.

Jones (1991) developed the moral intensity model. The model emphasizes that each component of Rest's Model might be influenced by the intensity of the moral situation (ethical dilemma). When people are faced with a morally intense issue, they will consider it as moral thereby acting ethically depending on the intensity of the situation/issue. According to Jones Model, there are six dimensions of moral intensity: (i) Magnitude of Consequences, - result faced in terms of harms or benefits by a moral decision (ii) Temporal Immediacy, - refers to the occurrence of an event and the

speed at which the results of the event occur. (iii) Social Consensus, - refers to the segregation of an action/issue by society as ethical or unethical which is in fact a kind of social contract. (iv) Proximity, - the closeness of the decision-maker to the people involved in the ethical action/issue in the cultural, physical, psychological, and social sense. (v) Probability of Effect, - the predictability of an action/issue likely to have harmful or beneficial consequences. and (vi) Concentration of Effect - an inverse relationship between the number of people affected by an ethical act of a given magnitude (Jones, 1991, p.377). As the number of people affected by ethical acts increases, its impact decreases.

Jones model is widely used in the literature by many disciplines (Singhapakdi et al., 1996; May and Pauli, 2000; Weber, 1990, 1999; Morris and McDonald, 1995; Shafer et al., 1999; Silver et al. 2000; Arend, 2021, Detienne et al., 2019) to detect the moral intensity using the six components. These studies highlight that moral intensity is significantly related to the first three steps of Rest's model. They also explore diverse scenarios to put forward the volatility of moral intensity depending on the situation.

Accordingly, our study uses these two models with a combined approach to better elucidate the impact of ethics education and individual factors on ethical decision-making.

Cohen and Martinov-Bennie (2006), in their study conducted on Big four audit partners and managers by using three different scenarios, show that among six components of moral intensity, the magnitude of consequences is the most significant, while the temporal immediacy is the least significant one. Leistch (2004) found that especially accounting students' perceptions of moral intensity are influenced by different situations and there was a positive connection between moral sensitivity and moral intensity. Chan and Leung (2006) found no significant relationship between accounting students' ethical sensitivity and reasoning. McMahon et al. (2007) in their

study analyzed moral judgment which is the second step of Rest's model. They concluded that gender, the magnitude of consequences, and social consensus had a significant influence on ethical judgment, while proximity had none.

We see that Rest (1986) affirmed that strengthening the moral decision components would have resulted in better ethical choices, but he did not consider the role played by the moral intensity of the ethical issue articulated by Jones (1991). The four components of Rest's model and the six dimensions of moral intensity (reduced to two dimensions as perceived overall harm and perceived social pressure according to the literature (Shawver and Shawver 2013)) are used in our analysis to realize comparisons to shed light to the possible differences according to the demographic variables and ethics education. Most studies based on the impact of ethics education in accounting remain static, but the field is evolving rapidly. So, this study will provide a perspective based on Rest's model (1986), Jones model (1991), and individual factors to determine the differences that arise from ethics education. Moreover, the individual factors and the education aimed to build the moral character of an individual should be recognized for differences in the moral decision-making process. Surely, the process of the moral decision changes depending on the person and the moral cognitive development of that person at the center of that process (DeTienne et al. 2019; Procópio, 2018).

Individual factors are frequently used to examine directly ethical decision-making (Singhapakdi, 1999; Loe et al., 2000, Hussain et al., 2021). Age is one of the factors correlated with moral awareness (Chan and Leung, 2006; Eweje and Brunton, 2010; Su, 2006) and so the gender, experience, and, education (Herrington and Weaven, 2008; Chan and Leung, 2006; Eweje and Brunton, 2010; McCullough and Faught 2005; Procópio, 2021). According to the literature review made by Craft et al. (2013), women are more ethical than men in

ten of thirty-eight studies. Other research found that; although, men are more consistent and severely faced with an ethical dilemma, women are higher overall in their level of moral reasoning ability (Hopkins et al, 2008; Marques and Azevedo-Pereira, 2009). Valentine and Rittenburg (2007) resulted that age and work experience were significantly related to ethical judgment, despite gender was not. Students who have more experience tend to be more ethical (Eweje and Brunton, 2010).

Therefore, the first three hypotheses are formed as follows:

H1: There is a statistically significant difference between men and women on the perceived ethical decision-making and moral intensity.

H2: There is a statistically significant difference between Gen Y and Gen Z on the perceived ethical decision-making and moral intensity.

H3: There is a statistically significant difference between people with working experience and no-work experience on perceived ethical decision-making and moral intensity.

To build the moral character of a professional accountant, accounting ethics should be taught in accounting course. (Miller et al. 2014, Dellaportas et al, 2006, Sin et al., 2012; D'aurizio et al. 2022). The question of whether the ethical decision-making process which is one of the requirements of the accounting profession, should be integrated as a separate course or into an accounting course has been also discussed in the literature. (Klimek & Wenell, 2011; Vendemia & Kos, 2013; Chawla, S.K., et al. 2015; Martinov-Bennie & Mladenovic, 2015; Arrami, Yang, 2021). Accordingly, we can hypothesize:

H4: The perceived ethical decision-making, and moral intensity of business administration undergraduate students who took an accounting ethics course, undergraduate students who did not take an accounting ethics course, and MBA students

who took and did not take an accounting ethics course differ significantly.

H5: Those in Generation Z who took the accounting ethics course are significantly different in terms of moral sensitivity, perceived overall harm, and perceived social pressure than those who did not take the course in the same generation.

MATERIALS & METHODS

The syllabus of the course is divided into 2 foundations. In the 14-week course, firstly the concept of ethics, major theories of ethics (teleology, deontology, virtue ethics, etc.), and major approaches (Jones Model, Rest Model, Kohlberg Five Stage, etc.) are explained. In case of an ethical dilemma that may occur in an accounting sense, it is evaluated with case studies examining the ethical decision-making processes. Then, the ethical rules of the profession are taught within the scope of AICPA, IFAC, and IMA. After all this basic information, case studies such as Enron and WorldCom are examined. The managers involved in the development of these events, their ethical understanding, accounting frauds, and their effects on the financial statements are discussed and evaluated. Case studies

involving ethical dilemmas in daily business life and concerning the field of accounting are examined and evaluated based on theories related to ethical decision-making processes. Thus, the students will manage their ethical decision-making process.

The study aims to evaluate the cognitive moral development of accounting students in a developing country context. Accordingly, the statistical population, the future managers, is made up of the students who took the course, those who didn't take it, and students with some work experience. Finally, 161 students participated in the research. The students were informed that no data regarding their personal information would be shared, and they were allowed to answer the questions with their explicit consent. They were first asked questions about their demographic characteristics, and then they were asked to answer questions based on a scenario describing an accounting officer who was forced to capitalize expenses fraudulently. A 7-point Likert scale rated from 1, "strongly disagree," to 7, "strongly agree" is used. In Table 1 you can see the questions used and identify their source in the literature.

Table 1. Question Mapping and Variables.

Label	Variables	Scenario Questions	Related Literature
Q1	Moral Sensitivity (Rest's Model Step 1)	<i>The adjustment made by the staff accountant is unethical</i>	Singhapakdi et al. 1996; Leitsch 2006
Q2	The magnitude of Consequences (Jones Model)	<i>The overall harm (if any) in completing this action would be small. (Reverse Coded)</i>	Singhapakdi et al. 1996; May and Pauli 2000; Leitsch 2004, 2006; Yang and Wu 2009
Q3	Social Consensus (Jones Model)	<i>Most people would agree that completing this action is wrong</i>	Leitsch 2004, 2006; Yang and Wu 2009
Q4	Probability of Effect (Jones Model)	<i>There is a very small likelihood that this action will cause any harm (Reverse Coded)</i>	Leitsch 2006; Shawver and Sennetti 2009
Q5	Temporal Immediacy (Jones Model)	<i>This action will not cause any harm in the immediate future (Reverse Coded)</i>	Leitsch 2004, 2006; Yang and Wu 2009
Q6	Proximity (Jones Model)	<i>If the controller is a friend, the action is wrong.</i>	Leitsch 2004, 2006; Yang and Wu 2009
Q7	Moral Judgment (Rest's Model Step 2)	<i>The staff accountant in the scenario should report this request</i>	May and Pauli 2000; Leitsch 2006
Q8	Concentration of Effect (Jones Model)	<i>The action will harm very few people if any. (Reverse Coded)</i>	Singhapakdi et al. 1996; May and Pauli 2000;
Q9	Moral Intention/Motivation (Rest's Model Step 3)	<i>Most staff accountants would report the request made by the controller</i>	Singhapakdi et al. 1996; Leitsch 2006; Shawver and Sennetti 2009

As the study empirically investigates the effect of individual factors of students on Rest's Model -Moral Sensitivity, Moral Judgment, and Moral Intention/Motivation- as well as on the 6 elements of the Jones Model, students are categorized according to their gender, graduation, generation, and work experience.

Table 2. Sample Composition and Individual Factors.

Individual Variable	Frequency	Percentage
Gender	161	%100
Male	85	%53
Female	76	%47
Generation	161	%100
Y	58	%36
Z	103	%64
Graduation	161	%100
Graduate Student with No Ethics Course	42	%26
Graduate Student with Ethics Course	30	%19
MBA Student	89	%55
Job Position	161	%100
Working	42	%26
Non-working	119	%74

As seen in Table 2, the group called "Graduation" includes 3 types of students: business administration undergraduate students who took an accounting ethics course, undergraduate students who did not take an accounting ethics course, and also MBA students. This last group includes students from 27 to 35 years, most of whom had an engineering education, who had never taken an accounting course before, and who had no ethical course background. These MBA students work at the level of newly entered or middle-level managers. In the group named "Work Experience", students were separated according to whether they were working or not. It would be useful to note that there are graduate students who were not currently working but already had work experience. The "Gender" group is separated according to being Woman and Man. The "Generation" group is divided into two as Generation Y and Generation Z. The main factor in not making age grouping is both the narrow age range of the sample and the lack of a previous study on the Z generation in this context. Those who are born after the year 1998 are considered Generation Z, while others are accepted as Generation Y (McCrinkle & Wolfinger, 2009).

According to this data and the groups to study the statistically significant interaction between the variables T-test, One-way Anova and Two-Way Manova tests are used as in this combined approach. ANOVA and Manova are well suited for testing problems for high-dimensional data (Rouder et al., 2022; Rouder and Haaf, 2021). This approach is straightforward and

computationally effective. After the tests for the validity and reliability of the variables in the study, the appropriate tests are realized according to the number of groups.

For variables consisting of two groups Independent Sample t-Test was used; for the variables consisting of more than two groups, one-way ANOVA was applied if the variances were homogeneous, and the Welch Test was applied if the variances were not homogeneous. In case of differences between groups as a result of ANOVA/Welch Tests, Post Hoc tests were applied to determine between which groups the difference was located. In case the variances are equal, Tukey; in case of not being equal, the Tamhane Post Hoc Test was used. The mean difference is significant at the 0.05 level.

RESULTS

Consistent with the prior literature, it has been stated that six components can be reduced to two dimensions: perceived overall harm and perceived social pressure. The perceived overall harm consists of the magnitude of consequences, probability of effect, temporal immediacy, and concentration of effect. Perceived social pressure consists of proximity and social consensus. (Shawver and Shawver 2013; Yang and Wu 2009; Sweeney and Costello 2009; Singhapakdi et al., 1996). Exploratory factor analysis and Cronbach's alpha coefficients were used for the validity and reliability of the study. The principal components method and varimax factor rotation method were used to determine the factors, and the eigenvalue criterion was

used to determine the number of factors. The KMO test value was calculated as 0.633, indicating that the data are suitable for factor analysis. The significance level of the Barlett test value is $p=0.000$, which shows that there is a high correlation between the variables and that the data set is suitable for factor analysis.

As seen in Table 3, six components were divided into two factors perceived overall harm and perceived social pressure following the literature. As a result of the reliability analysis, Cronbach's alpha coefficients for both factors were 0.685 and 0.662, respectively, so the scale was found to be reliable.

Table 3. Rotated Component Matrix.

Label	Item of Moral Intensity	Perceived Overall Harm	Perceived Social Pressure
Q2	Magnitude of Consequences	0.782	0.207
Q8	Concentration of Effect	0.722	-0.341
Q4	Probability of Effect	0.620	-0.520
Q5	Temporal Immediacy	0.487	0.105
Q6	Proximity	0.201	0.678
Q3	Social Consensus	0.125	0.516

The total variance explained in the factor analysis is presented in Table 4. Only factors with an eigenvalue above 1 are included and the two components explain 52,3% of the total variance.

Table 4. Total Variance Explained.

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.976	32.928	32.928	1.771	29.515	29.515
2	1.166	19.437	52.365	1.371	22.850	52.365

Table 5 and Table 6 provide descriptive statistics covering gender, generation and work experience, and graduation. The group graduation is given separately as this is subdivided into 3 categories that need to be mentioned solely.

Table 5. Descriptive Statistics for Graduation.

		Mean	Std.Deviation
Q1	MBA student	6.07	1.26
	Ethics Course Student	5.63	1.67
	No Ethics Course Student	5.31	1.76
Q2	MBA student	5.07	1.37
	Ethics Course Student	5.23	1.38
	No Ethics Course Student	4.54	1.52
Q3	MBA student	4.90	1.62
	Ethics Course Student	4.93	1.34
	No Ethics Course Student	4.65	1.45
Q4	MBA student	4.71	1.45
	Ethics Course Student	5.40	1.35
	No Ethics Course Student	4.42	1.51
Q5	MBA student	5.38	1.23
	Ethics Course Student	4.77	1.22
	No Ethics Course Student	4.14	1.65
Q6	MBA student	5.16	2.03
	Ethics Course Student	4.13	2.21
	No Ethics Course Student	4.62	1.98

Q7	MBA student	5.64	1.65
	Ethics Course Student	5.96	0.76
	No Ethics Course Student	4.89	1.63
Q8	MBA student	4.64	1.69
	Ethics Course Student	4.83	1.72
	No Ethics Course Student	4.15	1.61
Q9	MBA student	5.05	1.45
	Ethics Course Student	4.06	1.46
	No Ethics Course Student	3.79	1.43

There is a significant difference between Women (Mean= 4.25) and Men (Mean= 5.05) in Q6 Proximity (sig 0.014) and Perceived Social Pressure (sig 0.17). Men are more cautious about proximity than women. Even if the person causing the

ethical dilemma is their friend, they show that it is wrong with a higher mean than women. Likewise, social pressure is significantly different for men (Mean=4.95) than women (M= 4.46). H1 is partially accepted.

Table 6. Descriptive Statistics for Gender, Generation and Work Experience.

	Gender	Mean	SD	GEN Y and Z	Mean	SD	Work Experience	Mean	SD
Q1	Man	5.64	1.74	Gen Z	5.47	1.71	Working	6.07	1.26
	Woman	5.51	1.54	Gen Y	5.76	1.52	Non-worker	5.39	1.73
Q2	Man	4.94	1.58	Gen Z	4.68	1.53	Worker	5.07	1.37
	Woman	4.66	1.36	Gen Y	5.03	1.36	Non-Worker	4.71	1.51
Q3	Man	4.86	1.57	Gen Z	4.72	1.42	Worker	4.90	1.62
	Woman	4.67	1.37	Gen Y	4.86	1.57	Non-Worker	4.72	1.43
Q4	Man	4.57	1.61	Gen Z	4.83	1.43	Worker	4.71	1.45
	Woman	4.81	1.36	Gen Y	4.43	1.60	Non-Worker	4.67	1.53
Q5	Man	4.37	1.68	Gen Z	4.32	1.59	Worker	5.38	1.23
	Woman	4.81	1.39	Gen Y	5.05	1.41	Non-Worker	4.29	1.58
Q6	Man	5.05	2.01	Gen Z	4.44	2.09	Worker	5.16	2.03
	Woman	4.25	2.04	Gen Y	5.09	1.93	Non-Worker	4.49	2.05
Q7	Man	5.30	1.72	Gen Z	5.13	1.53	Worker	5.64	1.65
	Woman	5.26	1.39	Gen Y	5.55	1.61	Non-Worker	5.15	1.53
Q8	Man	4.27	1.85	Gen Z	4.28	1.68	Worker	4.64	1.69
	Woman	4.55	1.45	Gen Y	4.62	1.64	Non-Worker	4.32	1.66
Q9	Man	4.36	1.57	Gen Z	3.86	1.42	Worker	5.05	1.44
	Woman	3.94	1.46	Gen Y	4.70	1.57	Non-Worker	3.86	1.43
Perceived Overall Harm	Man	4.53	1.17	Gen Z	4.53	1.05	Worker	4.95	.96
	Woman	4.71	.91	Gen Y	4.78	1.05	Non-Worker	4.50	1.06
Perceived Social Pressure	Man	4.95	1.33	Gen Z	4.57	1.23	Worker	5.04	1.44
	Woman	4.46	1.25	Gen Y	4.97	1.42	Non-Worker	4.61	1.25

There is a significant difference in Q5 Temporal Immediacy (sig=0.004) between Gen Z (Mean=4.32) and Gen Y (Mean= 5.05). Gen Z cannot weigh the possible effects of the ethical dilemma in a short time. There is also a significant difference between the two generations in terms of Q9 Moral Intention (sig= 0.001). The mean of Gen Y (Mean= 4.70) is higher than that of Gen Z (Mean= 3.86). Compared to GenY, Gen Z is hesitant to act in the face of this unethical situation accordingly H2 is partially accepted.

Workers are significantly different from non-workers in terms of Q1 Moral Sensitivity (Sig=0.022). Sensitivity about the existence of an ethical dilemma situation is higher in workers (Mean= 6.07) than non-workers (Mean=5.39). In terms of Q5 Temporal Immediacy, workers (Mean= 5.38) are significantly different from non-workers (Mean= 4.29; Sig.=0.000). Workers can better evaluate the impact of an ethical dilemma in a short time, probably thanks to the knowledge gained through experience. In addition, although they are not different from each other in Q7 Moral Judgment, they

are significantly different from each other in Q9 Moral Intention (Sig=0.000). Workers are reluctant to report this situation to their superiors (Mean=5.05), while non-workers are hesitant to report this with a significantly lower average (Mean= 3.86). H3 is partially accepted.

As mentioned above, there are 3 categories in the Graduation group, these are business students who have never taken an accounting ethics course, business administration students who have not taken an accounting ethics course, and MBA students who have never taken an accounting course. As seen in Table 7, our

null hypothesis (H0) in Levene's test is that the variance of each group is equal. If the p-value is higher than 0.05, we cannot reject this hypothesis and we can say that variance homogeneity is achieved. If the p-value we obtained from Levene's test is less than 0.05, we reject this hypothesis and say that the variance homogeneity assumption is not met. In this case, we cannot use the F and p values given in the ANOVA table. Instead, the F value obtained through the Brown-Forsythe F, and Welch's F statistics presented in SPSS and the corresponding p-value are used.

Table 7. Results of Homogeneity of Variances.

	Levene	Significance	Variance	Test Used
Q1	7.653	0.001	Not equal	Welch/Brown-Forsythe
Q2	1.178	0.311	equal	ANOVA
Q3	0.553	0.576	equal	ANOVA
Q4	1.066	0.347	equal	ANOVA
Q5	6.137	0.03	Not equal	Welch/Brown-Forsythe
Q6	0.724	0.487	equal	ANOVA
Q7	7.262	0.01	Not equal	Welch/Brown-Forsythe
Q8	0.159	0.853	equal	ANOVA
Q9	0.956	0.387	equal	ANOVA
Perceived Overall Harm	1.128	0.326	equal	ANOVA
Perceived Social Pressure	1.900	0.153	equal	ANOVA

When the ANOVA results are examined in Table 8, it is seen that there is a significant difference between groups in Q2 Magnitude of Consequences, Q4 Probability of Effect, Q9 Moral Intention, and Perceived Overall Harm.

Table 8. One Way ANOVA Results.

Variable	F	Significance
Q2	3.469	0.034*
Q3	0.642	0.528
Q4	5.003	0.008*
Q6	2.309	0.103
Q8	2.527	0.83
Q9	10.997	0.000*
Perceived Overall Harm	9.189	0.000*
Perceived Social Pressure	1.713	0.184

* The mean difference is significant at the 0.05 level.

According to the results mentioned in Table 9, there is a difference between groups in

Q1 Moral Sensitivity, Q5 Temporal Immediacy, and Q7 Moral Judgment.

Table 9. Welch/ Brown-Forsythe Results.

	Welch	Significance	Brown-Forsythe	Significance
Q1	3.874	0.025*	0.038	0.038*
Q5	11.469	0.000*	0.000	0.000*
Q7	11.803	0.000*	0.000	0.000*

* The mean difference is significant at the 0.05 level.

Tukey test was applied for Q2 Magnitude of Consequences, Q4 Probability of Effect, Q9 Moral Intention, and Perceived Overall Harm and it was examined to determine where the difference within the group originated. For Q2, there is a significant difference (sig.= 0.045) between those who took the Ethics course and those who did not. The mean of students who took an ethics course (M= 5.23) was significantly higher than those who did not (M= 4.54).

Students who take the ethics course predict the possible consequences of ethical dilemmas better. There is a significant difference between those who take the ethics course and those who do not (sig.= 0.005) in Q4. The mean of students who took an ethics course (M= 5.40) is significantly higher than those who did not (M= 4.42), even higher than the mean of MBA students (M= 4.71). On Q9, there is a significant difference between MBA students and students who have taken ethics course (sig.=0.014) and those who have not (sig.= 0.000). The mean of MBA students (M= 5.06) is significantly higher than the other two groups. This result shows that MBA students can act ethically through professional experience. In terms of perceived overall harm, MBA Students (M= 4.95) are significantly different from students who have not taken ethics course (sig= 0.003). Likewise, students who have taken an ethics course (M=5.05) are also significantly different (sig.=0.002) from students who have not taken an ethics course (M=4.31).

The results in Table 10 show the difference between the groups for Q1 Moral Sensitivity, Q5 Temporal Immediacy, and Q7 Moral judgment determined by the Tamhane test. According to the result for Q1, MBA students are significantly different from students who have not taken an ethics course (sig=0.018). MBA Students (M= 6.07) are more aware of the fact that they are facing an ethical dilemma than students who have not taken an ethics course. Likewise, they differ significantly from each other in Q5 (sig=0.000) and Q7 (sig= 0.048). The temporal immediacy of MBA students (M= 5.38) is higher than students who have not taken an ethics course (M= 4.13). The same comparison is also valid for Moral Judgment between MBA Students (M= 5.64) and students who have not taken an ethics course (M= 4.89). While evaluating all these results, it should be underlined that the students who have taken ethics course have the highest means in Q1, Q5, and Q7. H4 is partially accepted. The results are presented in Table 10 which resumes where the difference within the group originated.

Table 10. Results Overview

Ethical Decision-Making (Rest Model)	
Q1 Moral Sensitivity	<ul style="list-style-type: none"> Workers are significantly different from non-workers (p=0.022). MBA students are significantly different from students who have not taken an ethics course (p=0.018).
Q7 Moral Judgment	<ul style="list-style-type: none"> Students who have not taken ethics course are significantly different from students who have taken ethics course (p=0.000) and MBA Students different from each other (p= 0.048).
Q9 Moral Intention	<ul style="list-style-type: none"> There is a significant difference between Gen Z and Gen Y. (p= 0.001) Workers and Non-workers are significantly different from each other (p=0.000) MBA students are significantly different from students who have both taken ethics course (p=0.014) and those who have not (p= 0.000).
Moral Intensity (Jones Model)	
Q2 Magnitude of Consequences	<ul style="list-style-type: none"> There is a significant difference between those who took the Ethics course and those who did not (p= 0.045)
Q3 Social Consensus	No Significant Difference Between Groups.
Q4 Probability of Effect	<ul style="list-style-type: none"> There is a significant difference between those who take the ethics course and those who do not (p=0.005).
Q5 Temporal Immediacy	<ul style="list-style-type: none"> There is a significant difference (p=0.004) between Gen Z and Gen Y. Workers are significantly different (p=0.000) from non-workers Temporal immediacy of MBA students is higher than students who have not taken an ethics course (sig=0.000)
Q6 Proximity	<ul style="list-style-type: none"> There is a significant difference (p= 0.014) between Women and Men.
Q8 Concentration of Effect	No Significant Difference Between Groups.
Two Dimensions obtained from Factor Analysis	
Perceived Social Pressure	<ul style="list-style-type: none"> Perceived Social Pressure is significantly different (p= 0.17) for men than women.
Perceived Overall Harm	<ul style="list-style-type: none"> Students who have not taken ethics course are significantly different from students who have taken ethics course (p=0.002) and MBA Students different from each other (p= 0.003).

The effects of Graduation and Generations independent variables on the dependent variables of overall social pressure, overall harm, and Q1 were investigated by performing a Two-Way MANOVA analysis.

Box's M test was used to test the assumption that the covariance matrices of the dependent variables are equal in MANOVA. As seen in Table 11, since the p-value is 0.443 (greater than 0.05), covariance equality is provided.

Table 11. Box's Test of Equality of Covariance Matrices.

Box's M	19.229
F	1.011
df1	18
df2	11778.739
Sig.	0.443

As seen in Table 12, there is equality of variance for each of the dependent variables Overall Social Pressure, Overall Harm, and Q1 ($p > 0.05$). In this way, the basic assumptions of MANOVA are provided. Looking at Levene's Test of Equality of Error Variances table, the highest p-value is seen for overall harm ($p = 0.272$). This gives

the result that the equality of variance in the overall harm variable is more significant than the other variables.

Table 12. Levene's Test of Equality of Error Variances.

	Levene Statistics	Df1	Df2	Sig.
Perceived Social Pressure	1.680	4	155	0.157
Perceived Overall Harm	1.302	4	155	0.272
Q1	3.950	4	155	0.004

^a Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Results from the MANOVA main results (Table 13) and between-subject effects (Table 14) indicate that the Graduations variable has a significant effect on overall harm and Q1 Moral Sensitivity (among the dependent variables at the $p < 0.05$ level). However, no significant differences were detected at the $p < 0.05$ level for both the Generations variable and Graduations*Generations interaction on the dependent variables, but at the $p < 0.10$ level there was a statistically significant interaction between Graduations and Generations for Overall harm ($p = 0.46$).

Table 13. Two-Way MANOVA Tests Results.

Variable	F	Df1	Df2	n2
Graduation	3.620	6.000	0.002**	0.066
Generation	0.500	3.000	0.683	0.010
Graduation * Generation	2.076	3.000	0.10*	0.039

Wilks'Lambda, * $p < .1$; ** $p < .05$.

Table 14. Tests of Between-Subjects Effects.

Source	Dependent Variable	df	F	Sig.	N2
Graduation	Perceived Social Pressure	2	0.221	0.802	0.003
	Perceived Overall Harm	2	9.678	0.000*	0.111
	Q1	2	4.339	0.015*	0.053
Generation	Perceived Social Pressure	1	0.042	0.837	0.000
	Perceived Overall Harm	1	1.516	0.220	0.010
	Q1	1	0.271	0.604	0.002
Graduation* Generation	Perceived Social Pressure	1	0.075	0.784	0.000
	Perceived Overall Harm	11	4.045	0.046*	0.025
	Q1	1	3.184	0.076	0.020

* $p < .05$.

Besides, the closer the partial eta squared (η^2) is to 1, the more effective the variable is, so Graduation is relatively more effective on Perceived Overall Harm.

According to the results discussed above, H5 is partially accepted.

In terms of the overall harm level in the Graduation variable, 2 separate groups are

created as seen in Table 15. Undergraduate students who took ethics course and MBA students are in one group, and undergraduate students who did not take ethics course are in a separate group.

Table 15. Perceived Overall Harm

Graduation	N	Subset	
		1	2
No ethics course grad student	88	4.3059	
MBA student	42		4.9524
Ethics Course Student	30		5.0583
Sig.		1.000	0.873

As can be seen from the results of the study, the differences especially in the Graduation group draw attention. It is observed that an accounting ethics course that is not integrated into the accounting course and taken as a stand-alone course prepares students for professional life. In terms of cognitive development, ethical decision-making, and moral intensity, there is no significant difference between people in the Y generation and with work experience in terms of the variables used in the study. According to the MANOVA results, those who take the accounting ethics course and MBA students form a significant group in terms of overall harm. Those in Generation Z who took the accounting ethics course are significantly different in terms of perceived overall harm than those who did not take the course in the same generation, so H5 is partially accepted.

DISCUSSION

This study aimed to determine whether there is a significant difference between students who took and did not take an accounting ethics course and those who did not take ethics course but had professional experience in terms of the ethical decision-making process and perception of moral intensity and to examine the effects of gender and work experience.

Overall, all hypotheses are partially accepted. According to the results obtained, if students take a standalone accounting ethics course, they will have in-depth knowledge of the core values and social obligations of the profession and will also consciously manage their ethical decision-making processes by critically examining their future professional roles (Dellaportas, 2006). When we examine the individual factors one by one, we see that the workers, in terms of moral sensitivity, are different

from those who do not work, and MBA students are different from those who have not taken ethics course. The working group generally consists of MBA students, while the non-working segment consists of undergraduate students who have not taken or have taken ethics courses. This explains the lack of a significant difference between these groups in terms of moral sensitivity. However, the significant difference between MBA students and students who have not taken ethics course highlights the awareness of students who have taken ethics course in terms of moral evaluation. Namely, these students are prepared and conscious when faced with an ethical dilemma. How they will manage the process after this step will also be related to their moral views. During the course, case studies are evaluated with different perspectives (e.g., deontology, justice theory, virtue ethics, consequentialism, Kohlberg five-stage of cognitive development, Rest Model...) used in ethical decision-making to give the student a perspective. By revealing the possible results and enabling them to think multi-dimensionally without interfering with the moral view of the student, it is revealed to what extent businesses, stakeholders, and therefore society is affected by these decisions. Moral Judgment between MBA Students and students who have not taken an ethics course is significantly different. This situation reveals that those who do not take ethics course naturally cannot proceed to the second step. The averages of those who took ethics course are higher than those of MBA students, and they evaluate better.

A few issues need to be mentioned at this point. It is very important to include cognitive development models and the examination of the main theories related to ethical decision-making processes in the curriculum of the course, especially in terms of case analysis for students to understand events by concretizing them (McDonald et al, 1995; MacClagan, 2003). When examined from a pedagogical point of view, students' discussion of the cases in the

classroom environment by providing interactive participation enables them to analyze accounting ethics much more effectively. The fact that the two generations and those who are working and not working are significantly different from each other on Moral Intention/motivation shows that the moral motivation of undergraduate students who have taken ethics course is not fully developed, and thus, even if they can make ethical judgments, they need to improve in transforming them into ethical action. On this basis, it can be said that inexperience in a professional career and age are important factors. When we examine the results in terms of Moral Intensity, there is a significant difference between those who take an ethics course and those who do not, in terms of the Magnitude of Consequences, Probability of Effect components. These two groups of students in the same generation are not at the same level of awareness about the consequences of a moral issue and how important and effective these consequences can be. The awareness of those taking the ethics course is significantly different from the other group. When we evaluate in terms of the Temporal Immediacy component, it is consistent with each other that there is a significant difference between Generation Y and Z, both working and non-working and those who took an MBA course and did not take an ethics course. In the perceived overall harm pressure dimension, MBA students from Generation Y and those from Generation Z who have taken ethics course appear as a single group, and this MANOVA result is an output of the effectiveness of the course.

The fact that all hypotheses are partially accepted shows that an ethics course is relevant for all undergraduate programs and necessary for a better understanding and cognition of ethical issues and situations that we face in our professional and daily life. These findings also support that the internship during undergraduate years is also valuable for the comprehension of

ethical issues according to the impact of working experience.

One interesting result, contrary to many results in the literature (e.g., Robin and Babin, 1997) is the significant difference between genders on the proximity variable as the men are more cautious about their proximity and feel more social pressure, this implies that men can put themselves in their friend's place or reflect the consequences of their practices. Accordingly, sincere and honest friendships in the organizations should be supported by the management.

CONCLUSION

Despite a large body of research by scholars to understand and explain ethical decision-making, the importance of education and the variables such as gender, work experience, and generation differences have to be studied continuously to minimize ethical misconduct. This study puts forward the importance of undergraduate-level standalone ethics course and emphasizes the importance of the curriculum of the course. Practically, the insertion of a similar course to the undergraduate programs especially in business-related departments can help future leaders develop their moral judgment and create ethical awareness. The significant difference between the students with work experience shows the importance for individuals to experience similar situations before professional life and develop a moral approach that will surely help them in their careers. Accordingly, internships should also be added to the business-related undergraduate programs.

From the theoretical perspective, the use of both the Rest Model and Jones' Model together can be helpful for researchers and practitioners to better understand ethical decision-making and to make ethical decisions in today's complex world. The traditional ethical decision-making models can be more effective when combined, the consideration of individual factors highlights the many individual and context-based factors that reveal the complexity of the ethical decision-making process. So, this

perspective considers uncertainties and contextual constraints using a scenario-based method and adds to the understanding of the field.

The limitations of this study should also be mentioned. The number of students who have taken the accounting ethics course is limited. In future studies, working with a larger sample may lead to more generalizable results. Not using more than one scenario in the study can also be considered a limitation. However, it should be noted that it was thought that using more than one scenario would not yield effective results, especially since there was no measurement of how the perceived moral intensity changed according to the situation in research, and the sample consisted of only students who had taken ethics course.

It should also be noted that this study is conducted in a developing country context. The course that is subject of the study is a pioneering course in Turkey, that examines cognitive moral development and ethical decision-making process theories, especially, by combining accounting scandals and accounting frauds. For this reason, when the literature on accounting ethics in developing countries is examined (Nguyen & Dellaportas, 2020), there is no study dealing with the Rest Model and the Jones Model, especially in studies in Turkey. For this reason, it can be said that the study will contribute to the relevant literature.

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REFERENCES

1. Adkins, N., Radtke, R. R. Students and faculty members' perceptions of the importance of business ethics and accounting ethics education: Is there an expectations gap? *J. of Bus. Eth.*, 2004, 51(3), 279–300.
2. Arend, R. J. Comprehensive Opportunity Assessment Using Commercial and Moral Intensities. *Adm. Sci.* 2021, 11, 148. <https://doi.org/10.3390/admsci11040148>
3. Arrami N., Yang Q. X. The role of moral identity in auditor's ethical decision making, *Int. J. of Res. in Bus. and Soc. Sci.* (2147-4478), Center for the Strategic Studies in Business and Finance, vol. 10(2), 2021, pages 157-169, March.
4. Bampton, R., & Cowton, C. Taking stock of accounting ethics scholarship: A review of the journal literature, *J. of Bus. Eth.*, 2013, 114(3), 549–563.
5. Billiot, M. J., Daniel, D., Glandon, S., & Glandon, T. Educational Context: Preparing Accounting Students to Identify Ethical Dilemmas, *Ame. J. of Bus. Edu.*, 2012, 5(3), 277-286.
6. Boni, A., & Lozano, J. F. The generic competencies: An opportunity for ethical learning in the European convergence in higher education, *Higher Edu.*, 2007, 54(6), 819–831.
7. Chan, S. Y. S., & Leung, P. The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity, *Man. Audit. J.*, 2006, 21(4), 436–457.
8. Chawla, S. K., Khan, Z. U., Jackson, R. E., Gray III, A. W. Evaluating ethics education for accounting students., *Man. Acco. Quart.*, 2015, 16 (2), 16-25.
9. Cohen, J. R., & Martinov-Bennie, N. The applicability of a contingent factors model to accounting ethics research. *J. of Bus. Eth.*, 2006, 65(1), 1-18.
10. Cooper, B. J., Leung, P., Dellaportas, D., Jackling, B., & Wong, G. Ethics education for accounting students: A toolkit approach. *Acco. Edu. An Int. J.*, 2008, 17(A), 405-430.
11. Craft, J. L. A Review of the Empirical Ethical Decision-Making Literature: 2004–2011. *J. of Bus. Eth.*, 2013, 117, 221–259.
12. D'Aurizio, G.; Santoboni, F.; Pistoia, F.; Mandolesi, L.; Curcio, G. Moral Judgement along the Academic Training. *Int. J. Environ. Res. Public Health* 2022, 19, 10.

13. Dellaportas, S., Cooper, B. J., & Leung, P. Measuring moral judgment and the implications of cooperative education and rule-based learning. *Acco. and Fin.*, 2006, 46(1), 53–70.
14. DeTienne, K. B., Ellertson, C. F., Ingerson, M. C., et al. Moral development in business ethics: An examination and critique. *J. of Bus. Eth.*, 2019, 170, 429–448.
15. Eweje, G., & Brunton, M. Ethical perceptions of business students in a New Zealand university: Do gender, age, and work experience matter? *Bus. Eth. A Eur. Rev.*, 2010, 19, 95–111.
16. Gentile M. Giving Voice to Values: A global partnership with UNGC PRME to transform management education, *The Int. J. of Man. in Edu.*, 2017, 15 (2), 121–125.
17. Gonan B. M., Kostelić, K.; Paulišić, M.; Smith, C.G. Business Ethics Decision-Making: Examining Partial Reflective Awareness. *Sustainability* 2021, 13, 2635. doi: 10.3390/su13052635
18. Graham, A. (2012). The teaching of ethics in undergraduate accounting programs: The students' perspective. *Accounting Education*, 21(6), 599–613.
19. Hanson, W. R. & Moore, J. R. (2013). Ethical Decision-Making by Business Students: Factors of Influence. *EJBO - Electronic Journal of Business Ethics and Organization Studies*, 18 (1), 15–26.
20. Harris, H. (2008). Promoting ethical reflection in the teaching of business ethics. *Business Ethics: A European Review*, 17(4), 379–390.
21. Hopkins, W. E., Hopkins, S. A., & Mitchell, B. C. (2008). Ethical consistency in managerial decisions. *Ethics and Behavior*, 18(1), 26–43.
22. Hussain, M.; Hassan, H.; Iqbal, Z.; Niazi, A.; Hoshino, Y. Moral Awareness: A Source of Improved Sustainable Performance. *Sustainability* 2021, 13, 13077.
23. Jones, T. M. (1991). Ethical decision making by individuals in organizations: an issue contingent model, *Academy of Management Review*, 16(2), 366–395.
24. Klimek, J., & Wenell, K. (2011). Ethics in accounting: An indispensable course? *Academy of Educational Leadership Journal*, 15(4), 107–107–118.
25. Lehnert, K., Park, Y., & Singh, N. (2015). Research note and review of the empirical ethical decision-making literature: Boundary conditions and extensions. *Journal of Business Ethics*, 129(1), 195–219.
26. Leitsch, D. (2004). Differences in the perceptions of moral intensity in the moral decision process: An empirical examination of accounting students. *Journal of Business Ethics*, 53, 313–323.
27. Loe, T. W., Ferrell, L., & Mansfield, P. (2000). A review of empirical studies assessing ethical decision-making in business. *Journal of Business Ethics*, 25, 185–204.
28. Loeb, S. E. (1988). Teaching students accounting ethics: Some crucial issues. *Issues in Accounting Education*, 3(2), 316–329.
29. Loeb, S.E. (2006), *Issues Relating To Teaching Accounting Ethics*, Jeffrey, C. (Ed.) *Research on Professional Responsibility and Ethics in Accounting (Research on Professional Responsibility and Ethics in Accounting, Vol. 11)*, Emerald Group Publishing Limited, Bingley, pp. 1–30.
30. MacClagan, P. (2003) Varieties of moral issue and dilemma: A framework for the analysis of case material in business ethics education, *Journal of Business Ethics*, 48(1), 21–32.
31. Marques, P. A., & Azevedo-Pereira, J. (2009). Ethical ideology and ethical judgments in the Portuguese accounting profession. *Journal of Business Ethics*, 86, 227–242.
32. Martinov-Bennie, N., & Mladenovic, R. (2015). Investigation of the impact of an ethical framework and an integrated ethics education on accounting students' ethical sensitivity and judgment. *Journal of Business Ethics*, 127(1), 189–203
33. May, D. R. and Pauli K. P. (2002) The role of moral intensity in ethical decision making: A review and investigation of moral recognition, evaluation, and intention. *Business and Society*, 41(1), 85–118.
34. McCrindle M., Wolfinger E. (2009). *The ABC of XYZ: Understanding the Global Generations*, UNSW Press, Sydney.
35. McCullough, P. M., & Faught, S. (2005). Rational moralists and moral rationalists value-based management: Model, criterion and validation. *Journal of Business Ethics*, 60, 195–205.

36. McMohan, J. M., Harvey, R. J. (2007). The Effect of Moral Intensity on Ethical Judgment, *Journal of Business Ethics*, 72(4), 335–357.
37. McDonald, G. M. and Donleavy, G. D. (1995). Objections to teaching of business ethics, *Journal of Business Ethics*, 14(10), 839–854.
38. Miller, W., Becker, D., & Persteiner, A. (2014). The accounting ethics course reconsidered. *Global Perspectives on Accounting Education*, 11, 77–98.
39. Mladenovic, R., Martinov-Bennie, N. & Bell, A. (2019). Business Students' Insights into Their Development of Ethical Decision-Making. *Journal of Business Ethics* 155, 275–287.
40. Morris, S. & McDonald R. A. (1995). 'The role of moral intensity in moral judgments: An empirical investigation', *Journal of Business Ethics*, 14, 715–726.
41. Nguyen, B., Crossan, M. Character-Infused Ethical Decision Making. *J Bus Ethics* 178, 171–191 (2022).
42. Nguyen, L.A. and Dellaportas, S. (2020), Accounting ethics education research, *Accounting Ethics Education: Teaching Virtues and Values*, Routledge.
43. Procópio, M. L. (2018). Moral standards in managerial decisions: In search of a comprehensive theoretical framework. *Business Ethics A European Review*. 28. 10.1111/beer.12216.
44. Procópio, M. L. Qualitative empirical research on ethical decision-making in organizations: Revisiting Waters, Bird, and Chant's pioneering methodological approach, *Quality & Quantity*, 10.1007/s11135-021-01200-z, 56, 3, (1661-1680), (2021).
45. Rest, J. R. (1986) *Moral Development: Advances in Research & Theory* (New York: Praeger).
46. Robin, D., & Babin, L. (1997). Making Sense of The Research on Gender and Ethics in Business: A Critical Analysis and Extension. *Business Ethics Quarterly*, 7(4), 61-90. doi:10.2307/3857209
47. Rogers, B.; Schill, A.L. Ethics and Total Worker Health: Constructs for Ethical Decision-Making and Competencies for Professional Practice. *Int. J. Environ. Res. Public Health* 2021, 18, 10030.
48. Rouder, J. N., Schnuerch, M., Haaf, J.M., Morey, R. Principles of Model Specification in ANOVA Designs. *Comput Brain Behav.*, 2022, <https://doi.org/10.1007/s42113-022-00132-7>
49. Rouder, J., Haaf, J. M. Are There Reliable Qualitative Individual Differences in Cognition? *J. of Cognition*, 2021, 4(1), 46. <http://doi.org/10.5334/joc.131>
50. Russell, K., & Smith, C. (2003). Accounting education's role in corporate malfeasance: It's time for a new curriculum! *Strategic Finance*, 85(6), 47–51.
51. Ryan, T. G., & Bisson, J. (2011). Can ethics be taught? *International Journal of Business and Social Science*, 2(12), 44–52.
52. Shafer, W. E., Morris, R. E. and Ketchand A. A. (1999), The effects of formal sanctions on auditor independence, *Auditing*, 18, 85–101.
53. Shawver, T. J., & Miller, W. F. (2017). Moral intensity revisited: Measuring the benefit of accounting ethics interventions. *Journal of Business Ethics*, 141, 587-603.
54. Shawver, T. J., & Sennetti, J. T. (2009). Measuring ethical sensitivity and evaluation. *Journal of Business Ethics*, 88(4), 663–678.
55. Shawver, T. J., & Shawver, T. A. (2013). Accounting students' ethical sensitivity and moral judgments for business dilemmas. *Research on Professional Responsibility and Ethics in Accounting*, 17, 159–175 9
56. Silver, L., and Valentine S. (2000). College students' perceptions of moral intensity in sales situations, *Journal of Education for Business*, 75(6), 309–314.
57. Sin, S., Reid, A., & Jones, A. (2012). An exploration of students' conceptions of accounting work. *Accounting Education: an International Journal*, 21(4), 323–340
58. Singhapakdi, A., Vitell S. J. and Franke G. R. (1999). Antecedents, consequences, and mediating effects of perceived moral intensity and personal moral philosophies', *Journal of the Academy of Marketing Science*, 27(1), 19–36.
59. Singhapakdi, A., Vitell, S. J., and Kraft, K. L. (1996). Moral intensity and ethical decision-making of marketing professionals. *Journal of Business Research*, 36, 245–255.
60. Spence, M. 1973. Job marketing signalling. *Quarterly Journal of Economics* 87 (3), 355–374.
61. Su, S. H. (2006). Cultural differences in determining the ethical perception and decision-making of future accounting

- professionals: A comparison between accounting students from Taiwan and the United States. *The Journal of American Academy of Business*, 9(1), 147–158.
62. T. M. Jones (1991). Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model. *Academy of Management Review*, 16, 366–395
63. Tormo-Carbó, G., Seguí-Mas, E., & Oltra, V. (2016). Accounting ethics in unfriendly environments: The educational challenge. *Journal of Business Ethics*, 135(1), 161–175.
64. Valentine, S. R., & Rittenburg, T. L. (2007). The ethical decision-making of men and women executives in international business situations. *Journal of Business Ethics*, 71, 125–134.
65. Vendemia, W. G., & Kos, A. J. (2013). Impact of undergraduate business curriculum on ethical judgment. *Business Education Innovation Journal*, 5(2), 95-101
66. Weber, J. (1990). Managers' moral reasoning: Assessing their responses to three moral dilemmas. *Human Relations* 43(7), 687–702.
67. Weber, J. (1999). Influences upon managerial moral decision-making: Nature of the harm and magnitude of consequences. *Human Relations*, 49(1), 1–22.

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