Auditor Bias and Deliberative Reasoning

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Abstract

How does auditor decision making differ when biased versus unbiased decisions are made? How is this affected by auditor socialization? This understanding is important for designing effective auditor ethics training. It is posited that ethical and unethical decisions are made in foreseeable ways. Auditor decisions were compared with fourth year accounting students to assess the effect of auditor socialization. Results indicate that auditors relied on three ethical rationales when faced with auditor independence and conflict-of-interest decisions: moral equity, relativism, and egoism. Auditor reliance on a post-conventional mode of deliberative reasoning, moral equity, led to more ethical decisions than auditor reliance on egoism, a pre-conventional mode of deliberative reasoning. Disappointingly, auditors did not rely on post-conventional rationales for all three scenarios and there was reliance on the egoism rationale, for two of the three scenarios. The accounting students had higher deliberative reasoning, used more postconventional modes of deliberative reasoning, less pre-conventional modes of deliberative reasoning and made more ethical decisions than auditors. These results have implications for auditor socialization, ethics training and ultimately their ethical decision-making, and support the use of the moral equity mode of deliberative reasoning for making more ethical auditor independence and conflict-of-interest decisions.

Introduction

The objectives of the current study are to identify the modes of deliberative reasoning used by auditors to resolve auditor independence and conflict-of-interest decisions, the effect of auditor socialization on these modes, and the effect of these modes on decisions. This understanding is important in crafting effective ethics training programs for auditors. Deliberative reasoning is the actual level of ethical reasoning an individual is utilizing in a particular context (Rest 1979). Although auditor bias is anathema to their responsibility to society, accounting firms regularly face fines due to conflict of interest issues (Agnew, 2015; Crump, 2015; Withers, 2018). Auditors have identified auditor independence, the concept that the provider of assurance on financial information should be free of conflicting interests, as some of the most difficult ethical contexts they face (Finn et al., 1988; Peterson, 2018). Studies have therefore recognized the importance of understanding these challenges faced by accountants (Ayal and Gino, 2012; Cain et al., 2005; Church, Jenkins, & Stanley, 2018; Guiral et al., 2010; Moore et al., 2010). Research suggests this problem is largely the result of the ineffective management of conflicts of interest (Bazerman and Gino, 2012). The AICPA, for example, has begun promoting ethical principles, adding an ethical conceptual framework to its existing Code of Professional Conduct. This framework encourages

members to increase awareness of threats to their compliance with the code of conduct and establishing safeguards against these threats (Spalding & Lawrie, 2019). Two threats examined in this study are the use of pre-conventional modes of deliberative reasoning and the effect of socialization.

Auditor Independence and Conflict of Interest

Auditor independence and conflict of interest are commonly discussed together in the literature (Bazerman and Gino 2012; Dopuch et al. 2003; Guiral et al. 2010; Moore et al. 2006; Nelson 2004). The auditor maintains independence by not having conflicts of interest with clients. Auditor independence, the taking of an unbiased point of view in the performance of auditing duties, is essential (Levitt, 2000). The Securities and Exchange Commission (SEC) defines auditor independence as a circumstance where an auditor "exercise(s) objective and impartial judgment" (Macey and Sale, 2003, p. 1167). Arthur Andersen's downfall in 2002 has often been attributed to a lack of auditor independence.

The violation of SEC rules provides numerous examples of a lack of auditor independence (Ketz, 2020). In 2019, for example, the SEC identified auditor independence violations in 19 cases involving PricewaterhouseCoopers mischaracterizing consulting as audit work (http://bit.ly/37vqcKt) and RSM US LLP providing non-audit services to various firms with a partner having a forbidden employment relationship with a client (http://bit.ly/2GxlsrW). Auditor independence violations were also discovered by Marcum LLP (http://bit.ly/37LbUWp), and KPMG Bermuda (http://bit.ly/2GwhsrO).

Regulations such as the US Sarbanes-Oxley Act (SOX) of 2002 and the Revised Eight Company Law Directive of 2006 in the European Union are in place to enhance auditor independence. Regulators and oversight bodies assume auditors can remain conflict of interest free by avoiding certain relationships (Taylor, DeZoort, Munn, & Thomas, 2003). They have focused their independence activities almost entirely on identifying client relationships that are not allowed (Taylor, DeZoort, Munn, and Thomas 2003; Reiter and Williams 2004; Fearnley, Beattie, and Brandt 2005) based on whether the auditor-client relationship is free of conflicts of interest (SEC 2001). It has been argued however, that this approach of an ever-increasing number of regulations describing independence violations is not acceptable (Church, Jenkins, and Stanley 2018; Guenin-Paracini, Malsch, and Tremblay 2015) or even required or desirable (Jamal and Sunder, 2011).

A major determinant of auditor independence is auditor mentality (Previts and Merino 1998). Independence is a state of mind, it is not possible to regulate settings in which independence is challenged (Gaa, 2006, Humphrey et al., 2006). Furthermore, audit partners perceive that many aspects of SOX have little impact on audit quality (Beattie, Fearnley, and Hines, 2013). An independence mentality is consistent with honesty and integrity and is free of conflicts of interest (Church, Jenkins, and Stanley, 2018), exercising professional judgment independent of clients' wishes (Carey, 1956).

Audit firms assert that their incentive schemes and professional values limit conflict-of-interest decisions (Ernst & Young LLP, 2012; KPMG, 2016; Frank, 2020) and research provides some support for this (King, 2002; Bauer, 2015). Market forces, and legal and regulatory mechanisms provide incentives for auditors to perform quality audits. A loss of reputation is highly detrimental to firm profits. The value a firm brings to an audit is based on the reputation of the firm for doing an audit independent of conflicts of interest. Contract, tort, and statutory securities laws are potential legal liabilities motivating quality audits as well as possible punitive actions by the profession's regulatory bodies (Pritchard and Puri, 2006; Nelson, 2009).

Cognitive Processes

The Code of Professional Ethics of the American Institute of Certified Public Accountants (AICPA) places great importance on auditor independence as the principal role of auditors. In encouraging auditor independence, it has been suggested that auditors must come to realise the important influence of biases (Ketz, 2020) on judgment and the need for ethics training to elucidate these errors and the reasons they are made (Bazerman, Lowenstein, and Moore, 2002,). Armed with this knowledge, the profession's leaders can reduce auditor bias by highlighting deficiencies in auditors' ethical reasoning (Bazerman, Lowenstein, and Moore, 2002).

The auditor independence literature has traditionally adopted an economic perspective to the problem (Moore, Tanlu, & Bazerman. 2010), assuming that auditor bias is a deliberate choice (Antle, 1984; Simunic, 1984). This perspective is disputed by psychological research which suggests that ethical decision-making is affected by cognitive processes (Culham, 2013, 2015; Herda et al., 2019; Weaver et al., 2014) and that there has been insufficient focus on the challenges accountants experience when facing conflicts of interest (Bazerman and Gino, 2012; Moore et al., 2010; Nelson, 2004). It has been posited that for management of conflict of interests to be effective, interventions must recognise the cognitive obstacles that exist, and identify ways to overcome them (Ishaque, 2019; Tenbrunsel, 2005). Sauer (2019, 43) argues that "the key to competent moral judgment is how subjects manage and, if necessary, override their intuitions." While there are economic pressures leading to bias, these can be minimized by recognizing cognitive hindrances and overriding auditor intuitions. The first step is recognizing how auditors' deliberative reasoning modes differ between ethical and unethical decisions.

Context plays a significant part in ethical decisions (Cohen and Martinov-Bennie, 2006; Shaub 1994; Arnold 1997; Rest et al. 1999). Individuals tend to use more principled reasoning to resolve context-free ethical issues than issues they face in everyday life (Rest et al., 1999; Thorne, 2001). The current study therefore examines the ethical rationales employed with deliberative reasoning, "the formulation of an intention to act on a particular moral (ethical) dilemma" (Thorne 2001, 106). Cognitive moral capability (prescriptive reasoning) is the level of ethical reasoning an individual is capable of in general contexts (in a particular context) while deliberative reasoning is the ethical reasoning an individual uses in a particular context (Rest 1979). This is significant. Accounting students, for example, may not use their full moral capability when facing

accounting ethical dilemmas and have higher prescriptive reasoning scores than deliberative reasoning scores (Thorne 2001).

Ethics Training

It has been posited that instead of reinforcing regulations, ethical behavior should be encouraged by teaching ethics, religion, or culture (Kaufmann, 2018). The accounting profession and business schools agree that ethics training is important. IFAC (International Federation of Accountants) members must include ethics in their training programs (International Federation of Accountants, Standard IES4, 2014). The IFAC stresses the importance of ethics for accounting professionals and the role of trainers and professional organizations in the development and maintenance of appropriate ethical behaviour. The AACSB's (Association to Advance Collegiate Schools of Business) "Ethics Education in Business Schools" report recommends ethics courses in business school programs to help students recognize ethical problems and increase their cognitive ability when confronting ethical challenges. Ethics education, however, has been criticized as not as prevalent as it should be in either universities (Miller and Shawver, 2018) or professional bodies (Spalding, 2019).

Ethics training research has generally taken the approach of trying to assess the effectiveness of various approaches rather than attempting to understand how these decisions are made and thereby designing effective interventions. Research examining the effectiveness of ethics courses yield mixed results (Manea, 2021). Some studies indicate that ethics courses positively influence moral development (Welton et al. 1994; Eynon et al. 1997; Loe and Weeks 2000; Marnburg 2003; Earley and Kelly 2004; Dellaportas 2006; O'Leary 2009; Welton and Guffey 2009; Chaplais, C., Mard, Y. & Marsat, S., 2016) which persists with time (Eynon et al., 1997; Welton and Guffey, 2009). Other studies suggest otherwise (Ritter, 2006; Wynd and Mager, 1989; Cagle et al., 2008, St. Pierre et al. 1990; Ponemon 1993; Lampe 1996).

Results of the current study indicate that auditor reliance on a post-conventional mode of deliberative reasoning led to more ethical decisions than auditor reliance on the preconventional mode of deliberative reasoning. Auditors used three of the five ethical rationales identified by Reidenbach and Robin (1988) when faced with conflict of interest decisions. The moral equity rationale (a post-conventional mode of deliberative reasoning) was used in only one of the three scenarios, as was the relativism rationale (the conventional mode of deliberative reasoning). The egoism rationale (the preconventional mode of deliberative reasoning) was used in two of the three scenarios. For these decisions, the use of the moral equity mode of deliberative reasoning appears to be the most important mode for making ethical decisions, the egoism mode the least. Auditors used lower deliberative reasoning, less post-conventional and more preconventional deliberative reasoning modes and made less ethical decisions than fourthyear accounting students. These results suggest important implications for auditor socialization, ethics training and their ethical decision-making.

Hypothesis Development Deliberative Reasoning Modes

There is increasing support for the belief that behavior is affected by a deliberative process (Wolford et al. 2000) that is controlled, reflective, analytic, slow, deliberate, methodical, structured decision-making. Changing or improving our deliberation is important for improving ethical behavior. Moral judgement, determining ethicality, results in ethical behavior and relies on conscious processes (Kohlberg, 1969). Ethical outcomes of deliberation are stimulated by conditions such as having enough time and cues and training encouraging a bigger picture (Grossmann, Brienza & Bobocel, 2017). How we utilize our deliberative processes influence whether the result is ethical or unethical decisions. Busyness, for example, has been found to be associated with less ethical decisions (Mead et al., 2009; Gino et al., 2011). "It takes cognitive energy to be reflective enough to stop the impulse to cheat" (Bazerman & Gino 2012, 99). Altering modes of reasoning can result in differences in ethical decision-making (Bazerman & Gino 2012). Moral reasoning therefore emanates from such thinking, since this is the method used to assess a situation, make a deliberate decision, and decide on a course of action (Marquardt and Hoeger, 2009; Provis, 2017; Woiceshyn, 2011).

Ethical Rationales

Decisionmakers rely on different modes of ethical reasoning when faced with different ethical dilemmas (Flory et al. 1992; Cohen et al. 1993; Cohen et al. 1996; Cohen et al. 2001, Ge and Thomas, 2008; Thomas, 2018). Furthermore, the factors affecting auditor ethical decisions differ from one auditing context to another (Cohen and Martinov-Bennie, 2006). Accordingly, studying ethical reasoning modes of auditors in particular auditing contexts is vital.

A multidimensional ethics scale (MES) has been used in several studies (Flory et al. 1992; Cohen et al. 1993; Cohen et al. 1996; Cohen et al. 2001, Ge and Thomas, 2008; Thomas, 2012; Thomas, 2018) assessing how different rationales are used in deciding ethical issues. It is assumed that one or more rationales are used in making ethical decisions, reliance on these rationales varying with decision context. Moral equity, contractualism, relativism, utilitarianism, and egoism are five ethical rationales that have been identified from the moral philosophy literature (Reidenbach and Robin 1988). Moral equity postulates an assessment based on inherent fairness, justice, and morality. Contractualism focuses on the unspoken responsibilities that individuals have towards each other. Relativism emphasizes the context of ethical decisions; there are no universal rules. Utilitarianism posits the importance of decision outcomes, with the goal of maximizing benefits and minimizing costs for society. Egoism also focuses on benefits and cost, but the focus is on the individual decision maker rather than society (Reidenbach and Robin 1990).

Ethical rationales have been used to assess ethical judgment, the perception of the ethicality of an action, across a wide array of settings (Mudrack & Mason, 2013; Pan & Sparks, 2012) including management accounting (Flory et al. 1992, Thomas, 2018), auditing (Cohen, Pant & Sharp, 1996, Ge & Thomas, 2008; Thomas, 2012) and general business (Cohen, Pant & Sharp 1992, 1996; Reidenbach & Robin 1990) contexts.

Ethical judgment is a predictor of behavioral intention (Mudrack & Mason, 2013; Pan & Sparks, 2012; Reidenbach & Robin, 1990).

Cognitive Moral Development (CMD) Theory (Kohlberg 1969, 1976) posits that ethical decisions are based on the cognitive moral development of the decision-maker and that five ethical philosophies identified by Reidenbach and Robin (1988) may be placed into the three cognitive moral development levels identified by Kohlberg (Ge and Thomas, 2008; Thomas, 2012; 2018). At a pre-conventional moral development level and reliance on the egoism rationale, ethical decisions are based on the perceived benefits that accrue to the decision maker. At the conventional level of moral development and reliance on the relativism rationale, the expectation of significant others is the dominant factor. At the post-conventional moral development level and reliance on the moral equity, utilitarianism and contractualism rationales, the major influence when making ethical decisions are universal fairness (moral equity), the good of society (utilitarianism) and personally held principles (contractualism).

More ethical decisions are associated with the use of post-conventional modes of deliberative reasoning; moral equity, contractualism, and utilitarianism and less ethical decisions are associated with the use of the pre-conventional modes of deliberative reasoning, egoism, for students (Ge and Thomas, 2008) and for management accountants (Thomas, 2018). This leads to the following hypothesis:

H1: Auditors using post-conventional (pre-conventional) deliberative reasoning modes make more (less) ethical independence and conflict of interest decisions than those that do not.

Auditors and Students

University education seems to have a positive impact on accounting students' ethical decision-making (Thomas, 2012). Accounting students have recently and consistently been taught about accountants' professional obligations to society. This can be contrasted with the argument that auditor socialization has shifted auditor values away from a public service orientation towards profit maximization and a diminishing of ethical standards (Barrainkua & Espinosa-Pike, 2018; Gendron et al., 2006, Suddaby et al., 2009, Wyatt, 2005). Consistent with this, comparisons of students and auditors in Brazil and China indicate a higher commitment to independence enforcement and the public interest among Brazilian students (Barrainkua & Espinosa-Pike, 2018), and higher deliberative reasoning among Chinese students (Fleming et al., 2010). Comparing the deliberative reasoning auditors and senior accounting students use in conflict of interest decision contexts, the second hypothesis is therefore as follows:

H2: Auditors use lower deliberative reasoning than senior accounting students when making independence and conflict of interest decisions.

The five deliberative reasoning modes (moral equity, utilitarianism, contractualism, relativism, egoism) are affected by decision-makers' deliberative reasoning (Ge and

Thomas 2008). Since auditors are expected to have lower deliberative reasoning than senior accounting students (H2), they are expected to use higher (post-conventional) deliberative reasoning modes less frequently and lower (pre-conventional) deliberative reasoning modes more frequently than senior accounting students. The third hypothesis is therefore as follows:

H3: Auditors use more (less) pre-conventional (post-conventional) deliberative reasoning modes than senior accounting students when making independence and conflict of interest decisions.

Research indicates that accounting students' with higher deliberative reasoning make more ethical decisions (Ge and Thomas 2008). Since auditors are expected to have lower deliberative reasoning than senior accounting students, they are expected to make less ethical decisions. The remaining hypothesis is therefore as follows:

H4: Auditors make less ethical independence and conflict of interest decisions than senior accounting students.

Research Methodology Subjects

Subjects were 64 Canadian Chartered Professional Accountants (CPAs) recruited through the Chartered Professional Accountants (formerly Chartered Accountants) of Alberta newsletter and 70 senior accounting students with approximately four accounting courses to complete. The auditors' average age was 26 years and had an average of 2.7 years audit experience, 50% were female. The accounting students' average age was 21 years and had approximately four accounting courses to complete at a western Canadian liberal education university, 44% were female. Participation was anonymous and voluntary.

Instrument

The online instrument consisted of three scenarios each involving auditor conflict of interest decisions taken from Thorne's (2000) instrument. Subjects were asked to indicate how they believed the person in the case would respond. Choices were either that the unethical action would be taken, would not be taken, or that the respondent could not decide. Previous studies have employed Thorne's (2000) instrument to test the ethical reasoning of accounting professionals (Thorne et al. 2003; Thomas, 2018) and accounting students (Ge and Thomas 2008; Bernardi et al. 2002).

The MES scale was the one used in previous accounting studies (Ge and Thomas 2008; Cohen et al. 1998, 2001) using the same procedure as the Ge and Thomas (2008) study. Subjects assessed actions described according to the five MES factors comprised of 13 items: three each for moral equity, utilitarianism, and relativism, and two each for contractualism and egoism, using a seven-point Likert-type scale. The average item scores for moral equity and contractualism exceeded the Cronbach's alpha score of 0.70 recommended by Nunnally (1978). When the Cronbach's alpha measure was lower than 0.70, through trial and error the item combination with the

highest alpha score was used. The Cronbach's alpha for relativism was highest using the items "culturally acceptable" and "traditionally acceptable." Cronbach's alphas for egoism and utilitarianism were less than 0.70 regardless of the item combinations, so the item deemed most appropriate was chosen. "Personally beneficial/not personally beneficial" and "minimizes benefits while maximizes harm/maximizes benefits while minimizes harm" were chosen for egoism and utilitarianism respectively. Reliability measures (Cronbach's alphas) are reported in Table 1. These measures were comparable with previous studies (Cohen et al. 1998; Ge and Thomas, 2008).

Table 1.
Reliability Measures (Cronbach's Alphas) for the Ethical Rationale Scale Items for all Subjects

Cases	1	2	3
Moral Equity	.95	.93	.93
Contractualism	.95	.96	.87
Relativism	.71	.86	.81

Utilitarianism and egoism were measured using one scale.

Results

Table 2 presents ordinal logistic regressions of auditors' decisions on the ethical rationales used in the three cases.

Table 2. Ordinal Logistic Regressions of Decisions on Auditors' Ethical Rationales

Case :	1
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Mo	odel	-2 Log	Likelihood	Chi-Square

Intercept Only 65.63

Final 38.53 27.10***

MES Factors	Estimate	Std. Error	Wald
Moral equity	36	.29	1.50
Utilitarianism	36	.29	1.53
Contractualism	.01	.26	.00
Relativism	.47	.48	.96
Egoism	96***	.30	9.89

Case 2

Model	-2 Log Likelil	hood	Chi- Square
Intercept Only	81.77		
Final	66.71		15.06***
MES Factors Error	Estimate	Std.	Wald
Moral equity	.19	.32	.34
Utilitarianism	.23	.23	.63
Contractualism	09	.28	.11
Relativism	.32	.27	1.44

-.62***

Case 3

Egoism

Model	-2 Log Likelihood	Chi-Square
Intercept Only	52.55	
Final	24.50	28.05***

.22

7.97

MES Factors Error	Estimate	e Std.	Wald
Moral equity	-2.87***	1.08	7.09
Utilitarianism	36	.52	.48
Contractualism	.54	.51	1.11
Relativism	1.51	.91	2.72
Egoism	18	.45	.16

These results are summarized in Table 3.

Table 3. Summary of Auditors' Ethical Rationales and Decisions for Each Case

Case 1 Egoism***	Case 2 Egoism***	Case 3 Moral Equity*** Relativism*
Ethical Decisions:		
70.4%	50.0%	82.1%
Chi Square: 8.96***	0.00	23.14***

^{***}Significant at p < .01

The results indicate that auditors used three of the five ethical rationales, moral equity, relativism, and egoism. Contractualism and utilitarianism were not used.

Table 3 presents the percentage of decisions that were ethical for each case with Chi-Square tests comparing ethical and unethical responses indicating that for Cases 1 and 3 there were significantly more ethical than unethical decisions. As expected, the highest percentage of ethical decisions occurred for Case 3, when auditors did not use egoism (the pre-conventional deliberative reasoning mode) but instead used moral equity (a post-conventional deliberative reasoning mode). For Case 2 there was not a significant difference between ethical and unethical decisions.

Table 4 presents Chi-Square tests for significant differences among auditors' responses to the cases using the cellwise residual analysis in two-way contingency tables approach (Garcia-Perez et al., 2003; Beasley, 1995).

Table 4.
Chi-Square Tests Comparing Auditors' Responses by Case

Pearson Chi-Square 1	13.94***
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Overall Maan		Unethical	Ethical	Total
Overall Mean %		32.9%	67.1%	100.00%
Case 1	% within case Adjusted	29.6%	70.4%	100.00%
	Residual	-0.6	0.6	
	Chi-square		0.36	
Case 2	% within case Adjusted	50.0%	50.0%	
	Residual Chi-square	3.5	-3.5 12.25***	100.00%

^{*}Significant at p < .10

Case 3	% within case Adjusted	17.9%	82.1%	
	Residual	-2.9	2.9	
	Chi-square		8.41***	100.00%

^{***}Significant at p < .01

This provides support for Hypothesis 1, auditors using post-conventional (preconventional) deliberative reasoning modes make more (less) ethical conflict of interest decisions than those that do not. For Case 3, when auditors used moral equity (a post-conventional deliberative reasoning mode), a significantly higher percentage (82%) made ethical decisions than for Cases 1 and 2, when they used egoism (the preconventional deliberative reasoning mode). The mean percentage of ethical (or unethical) responses for Case 1 is not significantly different from the mean responses to the three cases (p = 0.549). However, the mean percentage of ethical (or unethical) responses to Case 2 is significantly lower than the mean responses to the three cases (p = 0.000) and the mean percentage of ethical (or unethical) responses to Case 3 is significantly higher than the mean responses to the three cases (p = 0.004).

Table 5 presents a comparison of the deliberative reasoning of auditors and senior accounting students providing support for Hypothesis 2, auditors use lower deliberative reasoning than senior accounting students when making independence and conflict of interest decisions.

Table 5.
Comparing Auditors' and Students' Deliberative Reasoning

	Ν	Mean	Std. Deviation	t	Sig. (1-tailed)
Students	70	.34	.13	1.62	.054
Auditors	64	.30	.12		

Table 6 presents ordinal logistic regressions of students' decisions on the ethical rationales used in the three cases and Table 7, a summary of auditors' and students' ethical rationales and decisions providing support for Hypothesis 3, auditors use more (less) pre-conventional (post-conventional) deliberative reasoning modes than senior accounting students when making independence and conflict of interest decisions.

Table 6. Ordinal Logistic Regressions of Students' Decisions on Ethical Rationales

Case 1

Model	-2 Log Likelihood	Chi-Square
Intercept Only	57.12	
Final	28.93	28.24***

	Estimate	Std. Error	Wald
Moral equity	-1.05**	.47	4.93
Utilitarianism	.49	.40	1.49
Contractualism	.03	.34	.01
Relativism	.20	.52	.14
Egoism	40	.30	1.78

Case 2

Model -2 Log LikelihoodChi-Square

Intercept Only 82.11

Final 47.21 34.90***

	Estimate	Std. Error	Wald
Moral equity	-1.33**	.53	6.36
Utilitarianism	1.30***	.41	9.99
Contractualism	68	.37	3.41
Relativism	1.16**	.47	5.92
Egoism	56**	.22	6.53

^{***}Significant at p < .01

Case 3

Model -2 Log LikelihoodChi-Square

Intercept Only 59.60

Final 27.20 32.40***

	Estimate	Std. Error	Wald
Moral equity	-2.93**	1.19	6.05
Utilitarianism	.30	.58	.27
Contractualism	.37	.44	.70
Relativism	1.51	.97	2.43
Egoism	40	.38	1.15

^{***}Significant at p < .01

^{**}Significant at p < .05

^{**}Significant at p < .05

Table 7. Summary of Ethical Rationales and Decisions by Auditors and Students

Cases	1	2	3
MES Factors: Moral Equity	Students	Students	Auditors Students
Utilitarianism		Students	
Contractualism			
Relativism		Students	Auditors
Egoism	Auditors	Auditors Students	

Auditors used egoism in Cases 1 and 2 (the pre-conventional deliberative reasoning mode). Students only used egoism in one case, Case 2. Also, auditors used moral equity (a post-conventional deliberative reasoning mode) only one case, Case 3, while students used moral equity in all three cases. Students also used utilitarianism and contractualism (post-conventional deliberative reasoning modes) in Case 2.

Table 8 compares auditors' and students' responses to the cases, and provides support for Hypothesis 4, auditors make less ethical conflict of interest decisions than senior accounting students. Auditors made significantly less ethical decisions for Case 1 (p = 0.079) but there was no significant difference for Cases 2 and 3. These results are as expected. For Case 1, students used the moral equity rationale while auditors used the egoism rationale resulting in auditors making less ethical decisions. For Case 2, both auditors and students used the egoism rationale resulting in no difference between the number of ethical and unethical decisions and no difference between auditors and students. For Case 3, both students and auditors used the moral equity rationale resulting both making ethical decisions and no differences between them.

Table 8.
Chi-Square Tests Comparing Auditors' and Students' Responses to the Cases

Case 1

	Unethical	Ethical	Total	% Ethical	Pearson Chi-
A dita ra					
Auditors		38	54	70.4	2.01*
Student s	11	49	60	81.7	
Total	27	87	114		

Case 2

					Pearson Cl	ni-
	Unethical	Ethical	Total	% Ethical	Square	
Auditors	30	30	60	50.0	0.40	
Student s	34	27	61	44.3		
Total	64	52	116			

Case 3

					Pearson Ch
	Unethical	Ethical	Total	% Ethical	Square
Auditors		46	56	82.1	0.11
Student s	12	47	59	79.7	
Total	15	80	95		

^{*}Significant at p < .10

Discussion and Conclusion

While there may be other unidentified ethical rationales, the current study indicates three of these, moral equity, relativism, and egoism are used by auditors when making independence and conflict of interest decisions (Table 3). Table 4 indicates that a significantly higher percent of auditors made ethical when the moral equity rationale was used (Case 3) than when the egoism rationale was used (Cases 1 and 2). For independence and conflict-of-interest decisions, auditor ethics training should emphasize thinking focused on the use of the moral equity mode of deliberative reasoning rather than egoism. The egoism mode of deliberative reasoning focuses on maximizing the decision maker's benefits. In contrast to this, moral equity deliberative reasoning emphasizes inherent fairness, justice, goodness, and the good of society. Further research should attempt to identify the characteristics of independence and conflict-of-interest decisions that cause auditors to use one mode of deliberative reasoning over another. Previous research also suggests the use of the other post-conventional deliberative reasoning modes (utilitarianism and contractualism) for making more ethical decisions (Thomas, 2008).

Senior accounting students exhibited higher deliberative reasoning (Table 5), used more post-conventional deliberative reasoning modes (Table 7), and made more ethical decisions than auditors (Table 8). When auditors used the egoism mode and students used the moral equity mode (Case 1, Table 7), as expected auditors made less ethical decisions (Table 8). Furthermore, when auditors and students used the egoism mode (Case 2, Table 7), there was no difference in their ethical decisions (Table 8). Similarly, when auditors and students used the moral equity mode (Case 3, Table 7) there was also no difference in their ethical decisions (Table 8). These results suggest the

importance of the moral equity and egoism deliberative reasoning modes for making ethical independence and conflict of interest decisions. Furthermore, auditor socialization appears to negatively impact auditor conflict of interest decisions, consistent with research linking auditor socialization, professional values, and ethical decisions (Anderson-Gough et al., 2018; Frank, 2020; Suddaby et al., 2009; Thomas, 2018).

Understanding these issues will help to clarify the role of accountants' conscious cognitive processes and may provide insights into ways to increase their independence and more effectively manage conflict of interests. Research indicates that auditors have inadequate awareness of their vulnerability to bias and thus their need to correct for this bias by increasing effort (Moore et al., 2006). The current study suggests auditor ethics training focused on the importance of utilizing moral equity modes of deliberative reasoning and their susceptibility to egoism modes when facing conflict of interest and independence situations.

Future research needs to identify if there are other modes of deliberative reasoning being employed by auditors when facing these decisions and the effect of these modes on the decisions. Ascertaining the modes of deliberative reasoning used by auditors for other ethical decisions is an important endeavor as well. Auditor ethics training should therefore focus on emphasizing deliberative modes that lead to ethical decisions and exposing those that lead to unethical decisions.

The current study looked at independence and conflict of interest scenarios. Future research should look at other auditing as well as other accounting ethical issues. Two of the MES factors, utilitarianism and egoism, were measured using single items because of low Cronbach's alpha scores. It is therefore possible that these items did not faithfully represent the concepts they were intended to capture. Also, the survey approach used in the current study may not invoke the real-world pressures faced by individuals in an actual ethical scenario.

The current study suggests that an effective approach to improved auditor ethical decision making is ethics training focused on deliberative reasoning. As a first step, this study examined the deliberative reasoning modes of ethical and unethical decisions of auditors making independence and conflict of interest decisions.

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