Developing Rest's Model to Examine the Relationship between Ethical Accounting Education and International Education Standard 4(IES 4) Principles¹

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Abstract

This paper is designed to develop Rest's Model by adding new constructs, in orderto reexamine the relationship between ethical accounting education and the IFAC's principles (based on IES 4). Based on a survey instrument, a self-evaluation scale is used to assess the components of the revised model in order to enhance the compliance with IFAC's principles (IES 4). Data was collected from a sample of 125 professional accountants in Syria. Findings support the revised Rest's Model; ethics education for professional accountants would promote ethics sensitivity, which in turn provokes the compliance with IFAC's principles through intervening constructs.

Keywords: Rest's model, ethics accounting education, IES 4, IFAC's Principles.

1. Introduction

The accounting profession is addressing many issues and raising several questions about regaining public trust post Enron and Arthur Andersen. The American Accounting Association (AAA) has asked universities to place a greater emphasis on "accounting education to foster students' sensitivity to ethical and social responsibilities" (American Accounting Association Committee on the Future Structure, Content, and Scope of Accounting Education, 1986). The accreditation standards for business and accounting programs require curriculum coverage of ethical courses. In 2006, the International Accounting Education Standards Board (IAESB), an independent standard-setting board of the International Federation of Accountants (IFAC), released an information paper entitled Approaches to the Development and Maintenance of Professional Values, Ethics and Attitudes in Accounting Education Programs (IFAC, 2006) to encourage and assist accounting educators and member bodies of IFAC to implement ethics education programs (Cooper et al., 2008).

Furthermore, in response to calls for improving accounting education generally, and for enhancing ethics for professional accountants specifically, IFAC issued the International Education Standard 4 (IES 4). IES 4, Initial Professional Development – Professional Values, Ethics, and Attitudes prescribes the main principles that professional accountants should acquire through the formal education system (IFAC, 2014). Ponemon (1988) concluded that the structure of most accounting should be improved to develop a sense of integrity or ethical beliefs during a person's education or career. Ethics research suggests incorporating business ethics courses into the curricula may have an effect on the ethical awareness or ethical reasoning skills of business students (Hiltebeitel and Jones, 1991; Cohen and Pant, 1989; Armstrong, 1993). Rest (1986) suggests that college and graduate school education can increase ethical reasoning skills.

Ethics research has focused on the ethical behavior of accounting and business practitioners (Armstrong et al., 2003; Thorne, 2001). Accounting ethics research has demonstrated a relationship where higher ethical development is associated with ethical behavior. Yadegari et al. (2015) reported that the increase in moral reasoning in both the public and private sectors is the result of moral education. However, other researchers (e.g., Ponemon, (1993); Bay and Greenberg, (2001)) reported contrary results where ethical development does not correlate positively with ethical behavior. Hooker (2004), in his analysis study, defended the standpoint of the Economist Milton Friedman (1970) which states that business people respond to economic and legal incentives, not to ethical sentiments, which means that teaching ethics will have no effect. The study of Murrell (2014) found no significant differences in moral judgment between medical students in any of the separate curricular years.

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These mixed findings concerning the relationship between ethical development and ethical behavior could be due to the direct relationship proposed by researchers. Based on Rest's Model (1983), the ethical character (action), to be developed, needs to go through processes or stages. Therefore, the relationship between ethical accounting education and the ethical behavior of accountants could be indirect, and several constructs are considered as intervening constructs. This paper develops Rest's model to incorporate ethics accounting education and IFAC's principles. It also examines the relationships between those constructs empirically based on a premise that there is an indirect relationship between ethics education and moral principles acquirement. Gaining a better understanding of the relationship between professional accountants' behavior and ethical education level has practical implications for accounting education and future accounting ethics research. By developing and incorporating adequate ethics curricula universities would enhance the compliance of IFAC's principles.

Despite the growing interest in ethical accounting education, there seems to be two extremes from total skepticism to total certainty regarding the effectiveness of ethics education (IFAC, 2006). Therefore, this paper aims to 1) revise the Rest's sensitivity model to include ethics education and IFAC's principles, 2) test empirically the suggested assumption underlying this model, which states that ethics education promotes the compliance of IFAC's principles through Rest's constructs (ethical sensitivity, ethical judgment, ethical motivation, and ethical action).

2. Literature Review

The increasing significance of ethics in the accounting profession is evidenced by the seminal events that witnessed the collapse of major corporations (e.g. Enron and WorldCom); regulatory interventions (e.g. Sarbanes-Oxley Act in the USA), calls for increased ethics interventions in the accounting curriculum (Dellaportas et al., 2014), the issuance of the IFAC's Code of Ethics for Professional Accountants (2005), and also the release of International Education Standard 4 by the IFAC (IFAC, 2014).

One of the crucial factors to develop and promote a person's moral awareness is education (Kohlberg, 1983). Other empirical evidence demonstrating the importance of ethics education include those in Ward et al. (1993), Lane et al. (1988), and Leung and Cooper (1995). Hoffman and Moore (1982) also pointed out to the need for ethics education and training. Jackling et al. (2007) demonstrate the potential causes of ethical failure and the need for ethics education. Chan & Leung (2006) also indicate that an accounting ethics intervention may have a positive effect on accounting students' ethical sensitivity development. The recent corporate and accounting crises, have also pointed out the significant importance of business schools undertaking the teaching of ethics to future accountants and leaders (PricewaterhouseCoopers, 2003; Waddock, 2005).

At the heart of the criticisms leveled at the accounting profession is the moral base of the profession (Lovell, 1995). The collapse of large corporations has serious financial implications to investors, employees and the public (Elias, 2004), giving rise to a credibility crisis (Earley and Kelly, 2004). Ethical misconduct may be real or apparent; nevertheless, professional and educational institutions have responded by calling for more ethics education in the accounting curriculum (Lovell, 1995).

This increasing interest in ethics for professional accountants calls for ethics education pre- and after qualification (Lovell, 1995; Early and Kelly, 2004). Ethics education includes all aspects of educational and developmental activities which aim to enhance and maintain professional values, ethics and attitudes. Professional values, ethics and attitudes that include: a commitment to technical competence; ethical behavior (such as independence, objectivity, confidentiality and integrity); professional manner (such as due care, timeliness, courteousness, respect, responsibility and reliability); pursuit of excellence (such as commitment to continuous improvement and life-long learning) and social responsibility (such as awareness and consideration of the public interest) identify professional accountants as members of a profession (IFAC, 2006).

Behavioral principles presented by IES 4 have been developed by the IFAC to ensure that the professional accountant's perform their duties free from bias and financial temptation (Ponemon, 1990). As experience has shown, however, ethical action is not brought about by normative rules of conduct alone, but is prescribed by ethical judgment (Beach, 1984). As stated in the International Education Standard 4 (IES 4), a professional accountant is required to comply with the following fundamental principles (IFAC, 2015):

(a) Integrity: A professional accountant should be straightforward and honest in all professional and business relationships.

- (b) *Objectivity*: A professional accountant should not allow bias, conflict of interest or undue influence of others to override professional or business judgments.
- (c) *Professional Competence and Due Care*: A professional accountant has a continuing duty to maintain professional knowledge and skill to provide competent professional service.
- (d) *Confidentiality* A professional accountant should respect the confidentiality of information acquired as a result of professional and business relationships and should not disclose any such information to third parties without proper and specific authority unless there is a legal or professional right or duty to disclose.
- (e) *Professional Behavior*: A professional accountant should comply with relevant laws and regulations and should avoid any action that discredits the profession.

In an attempt to introduce a model to explain ethical behavior, Rest (1983) develops a four-component model that consists of: moral sensitivity (awareness and interpretation); moral judgment (decision-making ability to discern right from wrong); moral motivation (prioritizing moral values); and moral character (courage, persistence and strength of character). Rest's model provides a basis for the overall development of professional values, ethics and attitudes (IFAC, 2006).

Bebeau (2002) has summarized Rest's four-component as follows:

1. Ethical sensitivity: the individual must be able to identify a moral dilemma

1

2. Ethical judgment: the individual forms a judgment on the ideal solution to the moral dilemma

 $\mathbb{1}$

3. Ethical intention (motivation): the individual's intention to comply or not comply with the ideal solution is formed

1

4. Ethical behavior (action): the individual develops the courage to follow through with his/her moral action.

Rest states that "the production of moral behavior in a particular situation involves (1) interpreting the situation in terms of how people's welfare is affected by possible actions of the subject [moral sensitivity], (2) figuring out what the ideally moral course of action would be [moral judgment], (3) selecting among valued outcomes to intend to the moral course of action [moral motivation], and (4) executing and implementing what one intends to do [moral character]. (Rest, 1983, p. 559).

The main approach in his model is ethical judgment that is guided by moral awareness. Meanwhile, being aware of a moral dilemma involves recognizing an ethical issue is at stake in a given situation (Alteer et al., 2013). Awareness precedes judgment, which is a process of seeking the most morally justifiable course of action from the alternatives (Rest, 1994). Rest (1994) affirmed that moral judgment is only part of the psychology of morality. He explicitly includes moral awareness in his Four Component Model of moral behavior, calling it "moral sensitivity" (Rest, 1994).

Ethical sensitivity is "the empathic interpretation of a situation in determining who is involved, what actions to take, and what possible reactions and outcomes might ensue" (Lepper, 1996; Narvaez, 2001). The Ethics Education Framework (EEF) presented by International Accounting Education Standards Board (IAESB) describe individual ethical sensitivity as the ability to recognize an ethical threat or issue when it occurs and being aware of alternative courses of action which can lead to an ethical solution (Leung et al., 2006). It also includes an understanding of how each alternative course of action affects the parties concerned. Once an ethical problem is identified, decision makers select a course of action from the options generated in stage 1. In other words, they make judgments about what is the right or wrong thing to do in this situation. After concluding what course of action is best, decision makers must be focused (motivated to follow through) on their choices. Executing the plan of action takes character. Moral agents have to overcome opposition, resist distractions, cope with fatigue, and develop tactics and strategies for reaching their goals (IFAC, 2006).

Several factors (e.g. age, year of graduation, gender, etc.,) were studied to promote ethical sensitivity. Nevertheless, Enhancing ethical sensitivity through ethics education will enable accountants to more readily identify any threat (Alteer et al., 2013).

Although focus is placed on the development of sensitivity and judgment during the prequalification stage (educational stage), such character traits have to be further enhanced and supported in the post-qualification stage when the individual wrestles with different motivations, and strengthens his/her character through experience and continuing education and development (IFAC, 2006).

Formal education may be an important factor in moral judgment development (Dellaportas, 2006; Abdolmohammadi & Reeves, 2000). Rest and Narvaez (1994) found unusual gains in moral judgment with age, but also found that education was a far more powerful predictor of moral development with the general trend that the longer students continue in formal education the higher the ethics sensitivity scores tend to be. Rest (1986) found in reviewing two meta-analyses of around 10,000 participants that age and education accounts for 30 to 50% of the variance in ethics sensitivity scores (Emerson et al., 2007).

Based on the discussion above, the IFAC Principles' Acquirement Model can be suggested below. The ethical education level impacts the principles that should be acquired by professional accountants through an intervening constructs: ethical sensitivity, ethical judgment, ethical motivation, and ethical action. In other words, ethical education and training should develop an ethical sensitivity and an ethical judgment, which in turn determine the individual's motivation. This motivation then shapes ethical action, and the latter contributes to the acquiring of IFAC's principles. In other words, based on motivation, the individual develops the courage to follow through with his/her moral action. If this behavior is developed, then the principles of the IFAC should be acquired by professional accountants; which means that character traits enable professional accountants to comply with IFAC's principles.



3. Methodology

To test the suggested IFAC principles' model empirically, a questionnaire was distributed to a sample of 150 professional accountants, 125 responses were valid for analysis. The constructs of the model are measured as following: three questions about ethical education level from the IFAC's survey (2006), six questions to measure the following constructs: ethical sensitivity; ethical judgment; ethical motivation; and ethical action from the work of Narvaez (2001), and one question to measure the IFAC's principles from the work of IFAC's (2014). See the appendix.

4. Results and Discussion

- 1) Table 1 shows that 65.6% of respondents were introduced to integrated ethics courses, 14.4% were introduced to units dedicated to ethics, and 20% of them had no ethics courses in their universities. On the other hand, all respondents mentioned that no ethics education requirements by their professional bodies. Regarding the respondents who chose the ethics integrated course, 53.5% of them had more than 10 percent, while 46.3% of them had less than 10 percent.
- 2) Table 2 presents the means of the continuous variables: ethical sensitivity (2.50), ethical judgment (2.40), ethical motivation (2.38), ethical action (2.55), and IFAC's principles (2.58).
- 1) Testing the differences between ethics education groups (ethics courses integrated, independent ethics course, and no ethics course) and ethics sensitivity using one-way ANOVA. Sig < .05 which means that there are significant differences between the means of the groups.
- 2) Testing the differences between ethics courses integrated (more than 10 percent, less than 10 percent) and ethics sensitivity using independent t-test. Sig is .767, which means there are no significant differences between the two groups.
- 3) Testing the relationship between ethical sensitivity and ethical judgment: there is a positive relationship, and correlation is significant at level .01. R^2 = .494, which means that 49% of variance in ethical judgment can be explained by ethical sensitivity.

- 4) Testing the relationship between ethical judgment and ethical motivation: there is a positive relationship, and correlation is significant at level .01. $R^2 = .713$, which means that 71% of variance in ethical motivation can be explained by ethical judgment.
- 5) Testing the relationship between ethical motivation and ethical action: there is a positive relationship, and correlation is significant at level .01. $R^2 = .514$, which means that 51% of variance in ethical action can be explained by ethical motivation.
- 6) Testing the relationship between ethical actions and acquiring IFAC's principles: there is a positive relationship, and correlation is significant at level .01. $R^2 = .842$, which means that 84% of variance in IFAC's principles acquirement can be explained by ethical action.

In conclusion, ethical sensitivity differs significantly between ethics education group indicating that a prequalification requirement of ethics education changes the level of ethical sensitivity. Nonetheless, ethical sensitivity does not vary whether the integrated ethics courses are less or more than 10 percent. Ethical sensitivity correlates positively with ethical judgment; however the strength of this relationship is medium. Ethical judgment also correlates positively with ethical motivation, and the relationship between them is strong. Ethical motivation correlates positively with ethical action, however the strength of this relationship is medium. Finally, ethical action correlates positively with IFAC's principles acquirement, and the strength of this relationship is very strong.

Results indicate that the inclusion of ethics in accounting education can enhance ethical sensitivity. Accounting educators can address these opportunities by enabling students to be better prepared to deal with ethical dilemmas in their workplace (Gaa & Thorne, 2004). Educators need to convey the role of ethics in the students' future professional lives and enable them to develop critical perspectives on ethical issues (Haywood et al., 2004).

The findings confirm the results of Noel and Hathorn (2014)who concluded that completing ethics training in college, significantly predicted ethicalness. Further, completing ethics courses or training both in college and at work, more strongly predicted ethical awareness, judgment, and intent (Noel and Hathorn, 2014). It also agrees with the findings of Jackling et al. (2007) that demonstrate strong support for participation in prescribing the nature of ethics education by members of professional accounting bodies. However, Chan & Leung (2006) found that there is no significant relationship between accounting students' ethical sensitivity and their ethical reasoning (P-score). But their results indicate that an accounting ethics intervention may have positive effect on accounting students' ethical sensitivity development. Hence, an individual who possesses the ability to determine what is ethically right or wrong (high ethical reasoning) may fail to behave ethically due to a deficiency in identifying ethical issues (low ethical sensitivity). Thorne (1998) found a strong correlation between accountants' ethical decision process and their professional judgment.

Keller et al. (2007) state that understanding the factors which shape the ethical standards of future accountants will help educational institutions develop appropriate ethics curriculum and help firms develop appropriate ethics training for their employees. Graham (2012) demonstrates that students regard ethics teaching as being important to them and that a stand-alone ethics course is preferred to integrate teaching across the curriculum. A study of the accounting curriculum by PricewaterhouseCoopers (2003) indicated that ethics is not a consistent, integrated part of the education of most accounting students. With limited ethics coverage in the business and accounting curriculum it is unlikely that accounting students and trainees will have sufficient training in business ethics. According to Rest (1986b), moral judgment continues to develop during one's education and stabilizes when education stops. Rest (1988) claims that students aged between 20 and 30 are in a very important formative period of ethical development and formal schooling is a powerful catalyst for ethical development. In fact, students in their 20s and 30s receive the greatest benefit from moral education programs (Trevino, 1992). The findings of this study provide additional evidence to support Rest's model and provide a more comprehensive model to enhance IFAC's principles by inclusion ethics education at pre-qualification of accountants which promote the ethical development of individuals.

References

- AAA. (1986). Committee on the Future Structure, Content and Scope of Accounting Education (Bedford Committee) (1986). Future of accounting education: Preparing for the expand profession. Issues in Accounting Education, 1(1), 168-195.
- Abdolmohammadi, M. Reeves, M.F. (2000). Effects of Education and Interventions on Business Students' Ethical Cognition: A cross sectional and longitudinal study, Teaching Business Ethics 4 (August), 269-
- Alteer, A. M., Yahya, S. B. & Harson, M. H. (2013). Auditors' Personal Values and Ethical Judgmentat Different Levels of Ethical Climate: A Conceptual Link. Journal of Asian Scientific Research 3(8),862-875.
- Armstrong, M. B. (1993). Ethics and Professionalism in Accounting Education: A Sample Course, Journal of Accounting Education, 11,77-92.
- Armstrong, M., Ketz, B. J. E. & Owsen, D. (2003). Ethics Education in Accounting: Moving Toward Ethical Motivation and Ethical Behavior, Journal of Accounting Education, 21,1-16.
- Bay, D. D. & Greenberg, R. R. (2001). The Relationship of the DIT and Behavior: A Replication. Issues in Accounting Education, 16(3), 367-380.
- Beach, J. (1984). Code of Ethics: The Professional Catch 22, Journal of Accounting and Public Policy, 3, 311-
- Bebeau, M. (2002). The Defining Issues Test and the Four Component Model: contributions to professional education, Journal of Moral Education, 31, 271-295.
- Chan, S. Y. S. & Leung, P. (2006). The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity. Managerial Auditing Journal, 21(4), 436-457.
- Cohen, J. R.& Pant, L. W. (1989). Accounting educators' perceptions of ethics in the curriculum, Issues in Accounting Education, 4(1), 70-81.
- Cooper, B. J., Leung, P., Dellaportas, S., Jackling, B. & Wong, G. (2008). Ethics education for accounting students—a toolkit approach, Accounting Education, 17(4), 405-430.
- Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. Journal of Business Ethics, 65, 391-404.
- Dellaportas, S., Kanapathippillaib, S., Khana, A.& Leung, P. (2014). Ethics Education in the Australian Accounting Curriculum: A Longitudinal Study Examining Barriers and Enablers, Accounting Education: an International Journal, (23)4, 362-382.
- Earley, C. & Kelly, P. (2004). A note on ethics educational interventions in an undergraduate auditing course: Is there an "Enron Effect". Issues in Accounting Education 19 (February), 53-71.
- Elias, R. Z. (2004). The impact of corporate ethical values on perceptions of earnings management, Managerial Auditing Journal, 19(1),84-98.
- Emerson, T. L. N. & Conroy, S. J. (2004). Have ethical attitudes changed? An inter temporal comparison of the ethical perceptions of college students in 1985 and 2001, Journal of Business Ethics, 50, 167-176.
- Gaa, J. (1994). The ethical foundation of public accounting, CGA-Canada Research Foundation, Vancouver.
- Gaa, J. & Thorne, L. (2004). An introduction to the special issue on professionalism and ethics in accounting education. Issues in Accounting Education, 19 (February): 1-6.
- Grahama, A. (2012). The teaching of ethics in undergraduate accounting programmes: the Students' perspective. Accounting Education: an International Journal, (21)6, 599-613.
- Haywood, E. M., McMullen, D. A., & Wygal, D. E. (2004). Using games to enhance student understanding of professional and ethical responsibilities, Issues in Accounting Education: an International Journal, 19(1),85-99.
- Hiltebeitel, K. M., & Jones, S. K. (1991). Initial Evidence on the Impact of Integrating Ethics into Accounting Education. Issues in Accounting Education, 6(2), 262-275.
- Hoffman, W., & Moore, J. M. (1982). Result of a business ethics curriculum survey conducted by the Center for Business Ethics. Journal of Business Ethics, 1(2),81-83.
- Hooker, J. (2004). The case against business ethics education: a study in bad arguments. Journal of Business Ethics Education, 1(1), 75-88.
- IAESB. (2006). Approaches to the development and maintenance of professional accountants. http://www.ifac.org
- IAESB. (2014). Handbook of International Education Pronouncements, 2014 edition. http://www.ifac.org.

- IFAC. (2015). Handbook of the Code of Ethics for Professional Accountants. http://www.ifac.org.
- IFAC. (2005). Code of Ethics for Professional Accountants. http://www.ifac.org.
- IFAC. (2014). Values, Ethics and Attitudes in Accounting Education Programs, http://www.ifac.org.
- IFAC. (2015), Handbook of the Code of Ethics for Professional Accountants, 2015 edition.www.ethicsboard.org.
- Izzo, G. (2000). Compulsory ethics education and the cognitive moral development of salespeople: A quasi-experimental assessment. Journal of Business Ethics, 28 (December), 223-241.
- Jackling, B., Cooper, B. J. Leung, P. & Dellaportas, S.(2007) Professional accounting bodies' perceptions of ethical issues, causes of ethical failure and ethics education. Managerial Auditing Journal, 22(9), 928 944.
- Jennings, M. (2004). Incorporating Ethics and professionalism into accounting education and research: A discussion of the voids and advocacy for training in seminal works in business ethics. Issues in Accounting Education 19 (February), 7-26.
- Jones, T. M. (1991). Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model. Academy of Management Review, 16(2), 366-395.
- Keller, A. Craig; S., Katherine T. & Smith, L. M. (2007). Do gender, educational level, religiosity, and work experience affect the ethical decision-making of U.S. accountants? Critical Perspectives on Accounting, (18)3, 299-314.
- Kidwella, L. A., Fisherb, D. G., Braunc, R. L. & Swansonb, D. L. (2014). Developing learning objectives for accounting ethics using Bloom's taxonomy. Accounting Education: an International Journal, (22)1, 44-65.
- Kohlberg, L. (1983). The philosophy of moral development. Harper & Row, San Francisco, USA.
- Lane, M. S., Schaupp, D., & Parsons, B. (1988). Pygmalion effect: An Issue for Business Education and Ethics, Journal of Business Ethics, 7, 223-229.
- Lepper, T. S. (1996). Ethical sensitivity, cognitive mapping, and organizational communication: A different approach to studying ethics in organizations. The Electronic Journal of Communication, (6)4. Available at: http://www.cios.org/EJCPUBLIC/006/4/00641.HTML
- Leung, P., & Cooper, B. (1995). Ethical dilemmas in accountancy practice. Australian Accountant, May, 28 32.
- Lovell, A. (1995). Moral reasoning and moral atmosphere in the domain of accounting, Accounting, Auditing and Accountability Journal, 8(3),60-80.
- Lovell, A. (2004). Ethics in business: A literature review, A review undertaken for The Institute of Chartered Accountants In Scotland..
- Loh, C. Y. & Wong, J. B. (2009) Matching the 'knowing what to do' and the 'doing what you know' in ethical decision-making. Australasian Accounting, Business and Finance Journal, 3(2), 2009. Available at:http://ro.uow.edu.au/aabfjvol3/iss2/3
- Mayo, M. A. & Marks, L. J. (1990) An empirical investigation of a general theory of marketing ethics. Journal of the Academy of Marketing Science, 182, 163-171.
- Murrell, V. S. (2014). The failure of medical education to develop moral reasoning in medical students. International Journal of Medical Education, 5, 219-225.
- Narvaez, D. (2001). Ethical Sensitivity Activity Booklet 1: Nurturing Character in the Middle School Classroom. *Community Voices and Character Education Partnership Project*. Department of Children, Families and Learning & the University of Minnesota University of Minnesota Design Team Authors. Available at https://cee.nd.edu/curriculum/documents/actbklt1.pdf.
- Noel, C. Z. J. & Hathorn, L. G. (2014). Teaching ethics makes a difference. Journal of Academic and Business Ethics, 8 July, 1-31.
- O'Leary, C. & Cotter, D. (2000). The ethics of final year accountancy students: an international comparison. Managerial Auditing Journal, 15(3), 108-115.
- Ponemon, L. A. (1990). Ethical judgments in accounting: A cognitive-developmental perspective. Critical Perspectives on Accounting, 1, 191-215.
- Ponemon, L. A. & Gabhart, D. R. L. (1990). Auditor independence judgments: A cognitive developmental model and experimental evidence. Contemporary Accounting Research, 7(1), 227-251.
- Ponemon, L. A. (1993a), Can ethics be taught in accounting? Journal of Accounting Education, 11, 185-209.
- Ponemon, L. A. (1993b). The influence of ethical reasoning on auditors' perceptions of management's competence and integrity. Advances in Accounting, 11,1-29.

- Ponemon, L. A. (1995). The Objectivity of Accountants' Litigation Support Judgments. The Accounting Review, 70(3), 467-488.
- PricewaterhouseCoopers. (2003). Educating for the public trust: The PricewaterhouseCoopers position on accounting education, PricewaterhouseCoopers LLP. http://www.pwc.com/images/us/eng/careers/carinexp/EducatingPublicTrust.pdf
- Rest, J. R. (1983). Morality. In P. H. Mussen (Series Ed.) & J. H. Flavell & E. M. Markman (Vol. Eds.), Handbook of child psychology. Vol. 3: Cognitive development (pp. 556–629). New York: Wiley.
- Rest, J. R.. (1986). Moral development: advances in research and theory. New York: Praeger.
- Rest, J. R. (1988). Why does university promote development in moral judgment? Journal of Moral Education, 17(3), 183-194.
- Rest, J. & Narvaez, D. (1994). Background theory and research in moral development in the professions. Lawrence Erlbaum Associates, Hillsdale, NJ.
- Rest, J.R. (1994). Background theory and research. In J.R. Rest and D. Naravaez (eds), Moral Development in the Professions: Psychology and Applied Ethics (p. 1-26). Hillsdale, NJ: Laurence Erlbaum Associates.
- Thorne, L. (1999). An analysis of the association of demographic variables with the cognitive moral development of Canadian accounting students: An examination of the applicability of American based findings to the Canadian context. Journal of Accounting Education, 17,157-174.
- Trevino, L. (1992). Moral reasoning and business ethics: Implications for research, education and management. Journal of Business Ethics, 11, 445-459.
- Ward, S. P., Ward, D. R., & Deck, A. B. (1993). Certified public accountants: ethical perception skills and attitudes on ethics education. Journal of Business Ethics, 12(8), 601-610.
- Waddock, S. (2005). Hollow men and women at the helm.. Hollow accounting ethics? Issues in Accounting Education, 20(2), 145-150.
- Wygala, D. E., Wattyb, K. & Stoutc, D. E. (2014). Drivers of teaching effectiveness: views from accounting educator exemplars in Australia. Accounting Education: an International Journal, (23)4, 322-342.
- Yadegari, M. H., Royaee, R. & Jamshidinavid, B. (2015). Education and training in ethics affect the ethical awareness of practicing accountants.GMP Review 18(3), 209-215.

Appendix

Table 1: Frequencies of respondents' answers on O1, O2, and O3

7)	professional ethics education requirements at the pre-qualifying level required by your university:	65.6% ethics is integrated in the program	14.4% one or more units/topics are dedicated to ethics	20% no ethics education is required
8)	professional ethics education requirements at the pre-qualifying level required by your professional body			100% no ethics education is required
9)	extent of ethics inclusion where ethics education is integrated in the pre-qualifying level	53.6%More than 10 per cent	46.3% 10 per cent or less	

Table 2: Descriptive Statistics

	N	Mean	Std. Deviation
Ethics Sensitivity	125	2.50	1.013
Ethical Judgment	125	2.40	.916
Ethical Motivation	125	2.38	.692
Ethical Action	125	2.55	.712
Professional Principles	125	2.58	.743
Valid N (list wise)	125		

Table 3: ethics education (EE)

EE-1. From the options provided, which best describes the elements of professional ethics education requirements at the pre-qualifying level required by your university? (Please cross [X] one only) [] Ethics is integrated in the program 1 [] One or more units/topics are dedicated to ethics 2 [] No ethics education is required 3 EE-2. From the options provided, which best describes the elements of professional ethics education requirements at the pre-qualifying level required by your professional body? (Please cross [X] one
only)
[] Ethics is integrated in the program 1
[] One or more units/topics are dedicated to ethics 2
[] No ethics education is required 3
EE-3. Where ethics education is integrated in the pre-qualifying level, please indicate them approximate extent of ethics inclusion: (Please cross [X] one only)
[] More than 10 per cent 1
[] 10 per cent or less 2

Table 4: ethical sensitivity

4. From the list provided, give a score from 1 to 5 indicating your self-ethical sensitivity (1 indicates		
very low, and 5 indicates very high):		
Ethical Sensitivity		
ES-1 Reading and Expressing Emotion		
Identifying Emotions	(1 - 2 - 3 - 4 - 5)	
Expressing Emotions	(1 - 2 - 3 - 4 - 5)	
ES-2 Taking the Perspective of Others		
Making inferences to take another's perspective	(1 - 2 - 3 - 4 - 5)	
Using culture knowledge to take another's perspective	(1 - 2 - 3 - 4 - 5)	
ES-3 Caring by Connecting to Others		
Relating to Others	(1 - 2 - 3 - 4 - 5)	
Showing care	(1 - 2 - 3 - 4 - 5)	
Being a friend	(1 - 2 - 3 - 4 - 5)	
ES-4 Working with Interpersonal and Group Differences		
Becoming multicultural	(1 - 2 - 3 - 4 - 5)	
Working with diversity in our community	(1 - 2 - 3 - 4 - 5)	
ES-5: Controlling Social Bias		
Examining bias Preventing bias	(1 - 2 - 3 - 4 - 5)	
ES-6 Generating Interpretations and Options		
Generating multiple interpretations of an event/situation	(1 - 2 - 3 - 4 - 5)	
Generating multiple options for action	(1 - 2 - 3 - 4 - 5)	
ES-7 Identifying the Consequences of Action and Options		
Relating events to consequences	(1 - 2 - 3 - 4 - 5)	
Predicting Consequences	(1 - 2 - 3 - 4 - 5)	

Table 5: ethical judgment

5. From the list provided, give a score from 1 to 5 indicate very low, and 5 indicate very high):	ing your self-ethical judgment (1 indicates
Ethical Judgment	
EJ-1 Developing General Reasoning Skills	(1 - 2 - 3 - 4 - 5)
EJ-2 Developing Ethical Reasoning Skills	(1 - 2 - 3 - 4 - 5)
EJ-3 Understanding Ethical Problems	(1 - 2 - 3 - 4 - 5)
EJ-4 Using Codes and Identifying Judgment Criteria	(1 - 2 - 3 - 4 - 5)
EJ-5 Reflecting On The Process And Outcome	(1 - 2 - 3 - 4 - 5)
EJ-6 Planning To Implement Decisions	(1 - 2 - 3 - 4 - 5)
EJ-7 Developing Optimism	(1 - 2 - 3 - 4 - 5)

Table 6: ethical motivation

6. From the list provided, give a score from 1 to 5 indicating your ethical motivation (1 indicates very low, and 5 indicate very high):

Ethical Motivation

Etilicai Motivation	
EM-1 Respecting Others	(1 - 2 - 3 - 4 - 5)
EM-2 Developing Conscience	(1 - 2 - 3 - 4 - 5)
EM-3 Acting Responsibly	(1 - 2 - 3 - 4 - 5)
EM-4 Helping Others	(1 - 2 - 3 - 4 - 5)
EM-5 Making Peace and Cooperating	(1 - 2 - 3 - 4 - 5)
EM-6 Valuing Social Structures	(1 - 2 - 3 - 4 - 5)
EM-7 Developing Ethical Identity And Integrity	(1 - 2 - 3 - 4 - 5)

Table 7: ethical action]

7. From the list provided, give a score from 1 to 5 indicating your ethical action (1 indicates very low, and 5 indicate very high):

Ethical Action

EA-1 Communicating Well	(1 - 2 - 3 - 4 - 5)
EA-2 Resolving Conflicts and Problems	(1 - 2 - 3 - 4 - 5)
EA-3 Identifying Needs and Acting Assertively	(1 - 2 - 3 - 4 - 5)
EA-4 Taking Initiative as a Leader	(1 - 2 - 3 - 4 - 5)
EA-5 Developing Courage	(1 - 2 - 3 - 4 - 5)
EA-6 Developing Perseverance	(1 - 2 - 3 - 4 - 5)
EA-7 Working Hard	(1 - 2 - 3 - 4 - 5)

Table 8: Professional Principles

8. From the list provided, give a score from 1 to 5 indicating the following professional principles' acquirement (1 indicates very low, and 5 indicate very high):

Professional Principles	
PP-1 Integrity	(1 - 2 - 3 - 4 - 5)
(Should be straightforward and honest)	
PP-2 Objectivity	(1 - 2 - 3 - 4 - 5)
(Should not allow bias, conflict of interest or undue influence of	fothers)
PP-3 Professional Competence and Due Care	(1 - 2 - 3 - 4 - 5)
(Maintain professional knowledge and skill)	
PP-4 Confidentiality	(1 - 2 - 3 - 4 - 5)
(Should not disclose any such information to third parties)	
PP-5 Professional Behavior	(1 - 2 - 3 - 4 - 5)
(Comply with relevant laws and regulations)	