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## Experimental Study of Moral Sensitivity in Audit Profession

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### Abstract

Auditors' professional duty towards society, capital owners and others requires observation of general ethical principles in all respects as well as adherence to the Code of Professional Conduct. The aim of the present study is to evaluate the impact of moral orientation, professional commitment and organizational commitment on auditors' abilities to identify ethical issues and on their level of moral development. This is an applied study in terms of objective. It is considered as a descriptive-analytical research in terms of inference methods. Furthermore, it is a survey study in terms of research design. It was conducted in the National Audit Organization and three other audit institutions. The population consisted of 1114 auditors. Cochran formula was used to determine the sample size. A sample size of 360 people was determined using random sampling method. Data were collected through standard "auditors' opinions" and "moral voice" questionnaires using a Likert scale. The research model was tested using structural equation modeling with the help of LISREL. The results suggest the significant influence of auditors' moral orientation on professional commitment and thereby organizational commitment. Moral sensitivity is not positively correlated with age and educational level. Female auditors showed a higher level of moral development as reflected in their moral judgments. Initial auditors' moral orientation influences on their individual commitment towards their profession and company. Accounting firms should more stress on moral sensitivity through continuous training and periodical assessment of auditors' moral orientation.

**Keywords:** Idealism, Professional commitment, Moral development, Moral sensitivity, Relativism

### 1. Introduction

Development and diversification of economic activities in Iran and efforts to privatize state-owned companies led to broadening the scope of activities of public companies and dramatic development of capital market over the past decade. Therefore, there is an increasing need for financial supervision on production, trade and service enterprises. This requires provision of reliable, relevant and comparable financial information by various companies and institutions along with the use of services of professional accountants and professional independent auditors to review and audit financial statements. Auditors should be aware of their responsibilities towards the audit profession and clients. Auditors should be accountable for the quality of their operations.

They must observe all professional requirements and procedures in audit profession. Otherwise, they may face punishments such as expel from the professional community or legal litigation. This experimental study examines factors that may influence moral sensitivity of auditors.

Most certified public accountants (CPAs) and universities active in the field of accounting profession consider themselves as moral institutions [2]. As a result, some members believe that it is not necessary to take time to assess moral situation of the audit profession. A short review of financial scandals and massive frauds in the global market such as frauds in Enron, WorldCom and Parma at which caused bankruptcy of one of biggest audit institutions in the world "Arthur Anderson" as well as

scandals occurred recently in Iran such as discovery of large financial embezzlement of “Aria” Investment Company which led to suspension and liquidation of several audit institutions reveal that shareholders, stakeholders and the community do not feel confident and relaxed as much as accountants ensure their professional moral principles.

One of the potential tools to achieve success in the accounting profession is to well understand why different societies of CPAs understand ethical and professional conflict situations differently. With a better understanding of the factors affecting the ability of auditors to identify the moral nature of situations, audit firms will be able to prepare their staff for such situations[1].

The aim of the present study is to understand the factors influencing the sensitivity of auditors towards situations of moral content. These factors may be caused by the cultural space, personal experiences, and professional and organizational space. Some researchers consider accounting and auditing as a subculture so that cultural characteristics of the society may affect accounting and auditing profession and its members [2]. In other words, accounting subculture is influenced by social culture. The mood of population including auditors may be influenced by personal experiences as well as professional and organizational space. Understanding the effect of personal experience and professional and organizational space on auditor's ethical orientation, organizational commitment and professional commitment can primarily help to predict some accounting practices. Secondly, auditors can be supported in their professional judgments with improvement of some conditions. This study investigates the effect of aforementioned factors on the following items: 1. Auditor's ethical orientation that is shaped in the cultural space through personal experiences, 2. Organizational commitment and 3. Professional commitment. In addition, the present study was done to determine possible correlations between auditor's moral sensitivity and moral understanding.

The objectives of this study include: 1. creating a standard for moral sensitivity of auditors, 2. measuring the ethical orientation, moral sensitivity and moral understanding of auditors, 3. effects of professional commitment, organizational commitment and ethical orientation on moral sensitivity of auditors, 4. effects of professional commitment and ethical orientation of auditors on organizational commitment and 5. Investigating the relationship between the auditor's moral sensitivity and moral development.

## 2. Background

Below, research done in this field inside and outside of Iran is briefly reviewed.

The results of a research on moral philosophy and ethical beliefs showed that the value priorities cannot alone predict ethical beliefs. Instead, personal values have an indirect effect on ethical beliefs through individual moral philosophy. In addition, a high level of motivation for self-enhancement among auditors was negatively correlated with moral idealism. However, it had a positive relationship with relativism. It can be concluded that idealistic auditors are more likely to condemn customers who have neglected ethical principles while relativistic auditors are more easygoing [3].

The results of a study on the effects of ethical orientation on moral reasoning of Chinese auditors showed that relativism and idealism are respectively negatively and positively correlated with moral judgments of auditors [4]. Studies on the effects of gender, educational level, religion and work experience on moral choices of American auditors revealed that ethical standards are different depending on gender, educational level (undergraduate or graduate), religion and work experience [5].

The results of a study entitled “the institutional directors and social responsibility: ethics against shareholders' values” showed that managers take decisions based on the regulations of their companies, not personal and professional ethics. Accordingly, even increased ethical teachings will not have much

influence on the decisions of most managers [6].

Studies on the effect of ethical perspective on decisions and practices show that that people with more idealistic moral perspective are less likely to manipulate profit data as compared with relativists [7].

The results of a study on the views of accounting students and practitioners about ethical teachings in accounting showed that accounting students give a higher priority to ethical teachings as compared with practitioners [8].

A study was conducted to investigate whether gender is a distinct factor in ethical decision-making from cultural aspect or not? The results showed that females are moral sensitive than males[9].

The research findings indicate the existence of at least seven conceptual models of ethics in accounting. Survey of accountants' views showed that they are not only agree with individual preferences as ethical criteria, but they are disagree with both power creation and increased profit. In addition, respondents believed that coordination, clear results, facilitating the management task for full report and observable behavior of managers are among ethical accounting practices[10].

In a study entitled "ethics in accounting: the impact of moral motivation on ethical behavior", the effect of moral motivation on ethical decision making in both individual and organizational levels were examined. The results suggested that students' ethical behavior is almost the same at both individual and organizational levels. Furthermore, no correlation was found between moral motivation and ethical decision making in individual situations. However, there was a significant correlation between moral motivation and decisions relating to organization and work environment [11].

A study was conducted to examine the impact of moral perspective of financial managers on the quality of financial reports. The results showed that moral perspective of managers affects the quality of financial reports so that it

explains 18% of changes in this variable. In addition, idealism has a significant positive effect on the quality of financial reports (Etemadi and Dianati).

The effects of gender, educational level and religion and work experience on ethical decision making of Iranian accountants were investigated. It was found that Iranian accountant are at an average level of ethical standards and females have a higher level of ethical standards. In addition, increased accounting work experience results in a decrease in auditors' moral values [12].

**Moral Sensitivity:** Decision-making ability to recognize ethical issues, analyze situations and understand how the proposed practice may affect others [1].

**Professional Commitment:** Commitment to the profession. Standards of professional ethics arise due to the goals and values of accounting profession and accountants must adhere to these standards in all activities.

**Organizational Commitment:** Commitment to organization. Organizational commitment includes: belief in and acceptance of organization's goals and values, a desire for significant efforts as a representative of the organization and a desire to maintain membership in the organization [13].

**Ethical Orientation:** Perception of ethical schools. It seems more appropriate to describe the ethical dimensions [14].

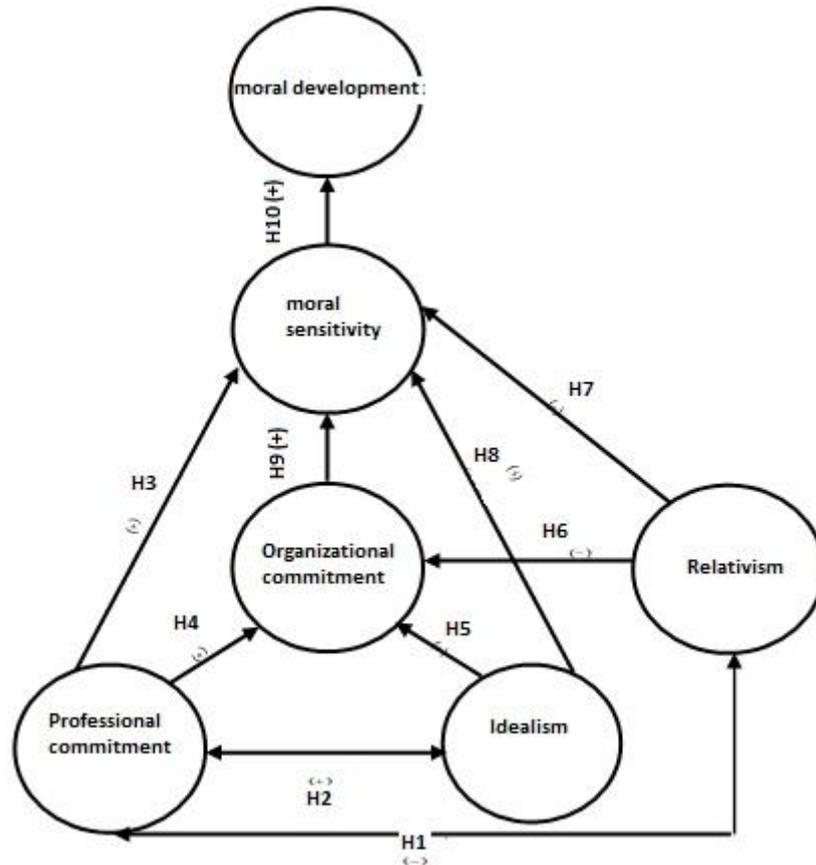
**Moral Development:** Moral maturity of auditors which may affect their sensitivity towards situations of moral content [15].

**Moral Idealism:** People who have a high degree of idealism believe that they should always act to not harm others. Those who are less idealistic believe that it is impossible to prevent harm to others in all circumstances, therefore a good job should be done even if some people hurt [16].

**Moral Relativism:** According to this moral philosophy, there is no universal set of ethical rules and standards. People who have a high degree of relativism are not willing to accept the social rules and believe in the role of circumstances, situations and individuals in determining the nature of an ethical decision. In other words, there is no guarantee that an ethical behavior in certain circumstances be

considered moral in other circumstances. Those with a low degree of relativism behave according to ethical rules [17].

**Research Model:** The aim of the present study is to investigate the effects of three exogenous variables (professional commitment, idealism and relativism) on three endogenous variables (organizational commitment, moral sensitivity and moral development).



**Figure 1:** Research model

Among the exogenous variables, it is assumed that professional commitment has a negative relationship with relativism (H1) and a positive relationship with idealism (H2). In the case of endogenous variables, it is predicted that organizational commitment would have a positive impact on moral sensitivity (H9), and thus a positive effect on moral development (H10). It is predicted that all three exogenous variables will influence organizational commitment and moral sensitivity. The influences of professional commitment (H3 and H4) and idealism (H5 and H8) are positive

while the effects of relativism (H6 and H7) are negative. It is predicted that none of the exogenous variables will not affect moral development.

### 3. Methods

**Methodology:** This is an applied research in terms of objective. It is considered as a descriptive-analytical study in terms of inference methods. It is a survey research in terms of research design. Information obtained from the statistical sample were analyzed. Required data were collection using

questionnaires. The present research was conducted as a field study. The lack of precision in measurements was considered and addressed using LISREL. LISREL is capable of simultaneously measuring the intensity of relationships between unobservable social and psychological variables.

**Population:** This study was conducted in the National Audit Organization and three large audit firms under supervision of the Iranian

Association of Certified Public Accountants. The population consisted of 1114 auditors (1010 from National Audit Organization and 104 from three another CPA firms). Cochran formula was used to determine the sample size. A sample size of 360 participants was calculated (32.3% of the target population). Among them, 343 auditors (95.2% of the sample) responded to the questionnaire. Simple random sampling was used in this.

**Table 1:** Demographic data

<b>Educational level</b>	<b>%</b>	<b>Frequency</b>	<b>Age (years)</b>	<b>%</b>	<b>Frequency</b>
PhD	0.9	3	< 30	47.5	163
Master	7	24	30-40	36.4	125
Bachelor	89.2	306	40-50	11.7	40
Assistant	2.9	10	≥ 50	4.4	15
Total	100	343	Total	100	343
<b>Ethical educations</b>	<b>%</b>	<b>Frequency</b>	<b>Continuous training (h)</b>	<b>%</b>	<b>Frequency</b>
Up to 50 h	86.9	298	Up to 250	64.4	221
> 50 h	13.1	45	250-500	15.5	53
Total	100	343	500-750	10.2	35
			750-1000	8.5	29
<b>Field of study</b>	<b>%</b>	<b>Frequency</b>	<b>&gt; 1000</b>	<b>%</b>	<b>Frequency</b>
Accounting	100	343	> 1000	1.5	5
Total	100	343	Total	100	343
<b>Work experience (years)</b>	<b>%</b>	<b>Frequency</b>	<b>Gender</b>	<b>%</b>	<b>Frequency</b>
Up to 5	39.3	137	Female	21	72
5-15	41.1	41	Male	79	271
15-25	12.8	44	Total	100	345
> 25	6.1	21	<b>Occupational level</b>	<b>%</b>	<b>Frequency</b>
Total	100	343	Manager	3.9	13
<b>مدرك حرفه‌ای</b>	<b>%</b>	<b>Frequency</b>	Senior supervisor	7.8	27
Certified accountant	4.4	15	Supervisor	9.3	32
Expert accountant	2	7	Senior auditor	11.7	40
NA	93.6	321	Auditor	67.3	231
Total	100	343	Total	100	343

**Data Collection:** Data were collected using standard questionnaires of "auditors' opinions" and "moral voice" using a Likert scale.

**Questionnaire:** The questionnaires measure six main variables including professional commitment, organizational commitment, idealism and relativism (the combination of these two forms moral orientation), moral sensitivity and moral development. The questionnaires are generally understandable and auditors were able to fill out them within an acceptable period of time (thirty to

fifty minutes). Cronbach's alpha coefficient was used to calculate reliability. Before final implementation, 30 people were randomly selected and the questionnaires were distributed among them. Cronbach's alpha coefficient was calculated using SPSS. According to the obtained coefficients, the questionnaire is reliable.

**Data Analysis:** The research model was tested using structural equation modeling with the help of LISREL. This technique combines path analysis and factor analysis to evaluate the relationships between observable and unobservable structures as well as the relationships between unobservable structures.

Hypotheses were tested to clarify that whether the proposed model is able to explain the real correlations between variables or not. Depending on the nature of hypothesis, hypotheses 11 to 20 were tested using regression analysis, multi-way analysis of variance (ANOVA) and t-test.

#### 4. Results

**Hypothesis 1:** Auditor's professional commitment is negatively correlated with moral relativism.

**Hypothesis 2:** Auditor's professional commitment is positively correlated with moral idealism.

Given the t-statistic and significance level of 0.000 which is smaller than the error value of 0.05, both hypotheses are confirmed. In other words, auditor's professional commitment has a negative relationship with moral relativism and a positive correlation with idealism.

This reflects a relationship between three underlying structures of moral sensitivity. It also reveals a correlation between professional commitment and ethical orientation of auditors. Therefore, the relationship between personal ethics and intellectual perspective towards career is demonstrated.

Implicitly, it indicates that an auditor who strengthens and maintains the standards of idealism in the accounting profession will show a higher level of professional commitment. Given the confirmation of hypotheses 1 & 2, if idealistic auditors, especially those with absolutism moral orientation are supported, they will be present with a higher proportion of the population at higher levels of the accounting profession. Through this self-selection process, the idealistic auditors would shape professional and ethical standards for the accounting profession. This perpetuates the cycle of idealistic standards. These standards will motivate and encourage the supporters of idealism, especially those with absolutism moral orientation to continue their activities in the accounting profession.

**Table 2:** t-statistics and results of Hypothesis 1 to 10

Hypothesis	Relationship between variables	t-value	Significance level	Result
1	Professional commitment and moral relativism	7.76	0.000	Confirmed
2	Professional commitment and moral idealism	5.71	0.000	Confirmed
3	Professional commitment and moral sensitivity	6.46	0.000	Confirmed
4	Professional commitment and organizational commitment	11.13	0.000	Confirmed
5	Idealism and organizational commitment	7.26	0.000	Confirmed
6	Relativism and organizational commitment	11.27	0.000	Confirmed
7	Relativism and moral sensitivity	5.56	0.000	Confirmed
8	Idealism and moral sensitivity	4.61	0.000	Confirmed
9	Organizational commitment and moral sensitivity	6.79	0.000	Confirmed
10	Moral sensitivity and moral development	7.32	0.000	Confirmed

**Hypothesis 3:** Auditor's professional commitment predicts and is positively correlated with moral sensitivity. Given the t-statistic and significance level of 0.000 which is smaller than error value of 0.05, hypothesis is confirmed. In other words, professional commitment predicts and has a positive relationship with auditor's moral sensitivity.

An auditor committed to the profession of accounting is expected to be more sensitive to ethical issues, because most of accountants believe in implementation of ethical standards as an important step to ensure the health and development of accounting profession. Acceptance of professional objectives and values by auditors implicitly suggests that professional staff is more sensitive to situations contrary to professional values.

**Hypothesis 4:** Auditor's professional commitment predicts and is positively correlated with organizational commitment.

**Hypothesis 5:** Auditor's moral idealism predicts and is positively correlated with organizational commitment.

**Hypothesis 6:** Auditor's moral relativism predicts and is negatively correlated with organizational commitment.

Given t-statistics and significance level of 0.000 which is smaller than error value of 0.05, all three hypotheses are confirmed. In other words, professional commitment, moral idealism and moral relativism predict and are respectively positively, positively and negatively correlated with the level of organizational commitment.

As was previously discussed, studies show that professional commitment and organizational commitment are not independent and a high level of professional commitment in accountants who are engaged in professional organizations will result in a high level of organizational commitment. Professional commitment is shaped during the socialization process, academic education and career. Therefore, professional commitment is found in auditors prior to organizational commitment and it also has a significant impact on organizational commitment. This hypothesis is confirmed and the results were consistent with previous research.

Auditors' ethical orientations are determined by cultural environment and personal experiences. But, ethical orientations can be somewhat balanced in terms of organizational aspects. Hence, organization's ability to modify auditors' ethical orientation to cope with the organization or to create an environment close to the auditory norms will affect organization's ability in terms of inference and a high level of organizational commitment.

**Hypotheses 7:** Auditor's moral relativism predicts and is negatively correlated with moral sensitivity.

**Hypothesis 8:** Auditor's moral idealism predicts and is positively correlated with moral sensitivity.

Given the t-statistic and significance level of 0.000 which is smaller than error value of 0.05, both hypotheses are confirmed. In other words, moral relativism and moral idealism predict and are respectively negatively and positively correlated with moral sensitivity.

Codes of Professional Conduct were used to measure moral sensitivity. These regulations are divided into two main parts including principles and laws. To implement the principles and laws, accountants should be able to interpret situations. Naturally, these interpretations are guided by their personal ethical orientation. The laws and regulations do not explicitly cover items about professional situations. Auditors should make their own decisions on "what decision or action provides the public interest", "which measures provide more honesty and trustworthiness" and "how they should behave realistically and objectively". Therefore, people believe in absolutism (low relativism, high idealism) are expected to exhibit a higher level of moral sensitivity.

**Hypothesis 9:** Auditor's organizational commitment predicts and is positively correlated with moral sensitivity.

Given the value of t-statistic and significance level of 0.000 which is smaller than error value of 0.05, the hypothesis is confirmed. In other words, auditor's level of organizational commitment predicts and has a positive relationship with moral sensitivity.

This finding is consistent with congruence between the goals of professional organization and professional employees. This has been confirmed in previous studies. Therefore, auditors with high commitment to their companies will show appropriate moral sensitivity in stressful situations for the organization.

**Hypothesis 10:** Auditor's moral sensitivity predicts and is positively correlated with moral development. Given the value of t-statistic and significance level of 0.000 which is smaller than error value of 0.05, this hypothesis is confirmed. In other words, auditor's moral sensitivity predicts the level of moral development.

It is worth mentioning that the measure used to assess moral judgments in this study is moral development of auditors. Confirmation of this hypothesis seems quite reasonable, because auditors' moral maturity will actually affect their sensitivity towards situations of moral content. Therefore, those with a high level of moral sensitivity will have a higher level of moral maturity.

**Hypothesis 11:** Auditor's moral sensitivity depends on educational level. Auditor's educational level is measured in terms of company's ethical training hours, educational level, hours of continuing education in company, the number of academic courses in ethics and the number of academic courses with moral principles content in accounting.

Table 3 summarizes the Chi-square statistic for various variables obtained from Kruskal-Wallis test. Since the significant level is greater than the error value of 0.05, auditor's educational level will not affect moral sensitivity.

**Table 3:** t-statistics and results of Hypothesis 11 and 12

Hypothesis	Relationship between variables	Chi-square	Significance level	Relationship
11	Ethical educations and moral sensitivity	0.171	0.679	NA
11	Educational level and moral sensitivity	2.960	0.398	NA
11	Continuing trainings and moral sensitivity	3.105	0.540	NA
11	Academic courses in ethics and moral sensitivity	2.475	0.116	NA
11	Academic courses in accounting with moral principles content and moral sensitivity	0.147	0.701	NA
12	Auditor's occupational level and moral sensitivity	1.348	0.847	NA
12	Work experience and moral sensitivity	4.561	0.207	NA
12	Works experience in current company and moral sensitivity	5.550	0.136	NA

**Hypothesis 12:** Auditor's moral sensitivity depends on personal experience level. Audit experience is measured as years of activity in the field of public accounting, years of employment in accounting firms and his/her occupational level in the company.

Table 3 shows the Chi-square statistic for various variables obtained from Kruskal-Wallis test. Since the significance level in all three cases is greater than the error value of 0.05, auditor's occupational level, work experience and experience in the current company will not affect moral sensitivity.

**Hypothesis 13:** Auditor's moral sensitivity is directly related to individual characteristics including age, gender and marital status.

Table 4 shows the Chi-square statistic for various variables obtained from Kruskal-Wallis test. Since the significance level in all three cases is greater than the error value of 0.05, thus age, gender and marital status do not affect auditor's moral sensitivity. In other words, moral sensitivity is not directly related to age, gender and marital status.

**Table 4:** t-statistics and results of Hypothesis 13 to 20

Hypothesis	Relationships between variables	Chi-square	Significance level	Relationship
13	Age and moral sensitivity	1.923	0.589	NA
13	Gender and moral sensitivity	0.173	0.677	NA
13	Marital status and moral sensitivity	0.081	0.776	NA
14	Age and moral development	3.716	0.294	NA
15	Occupational level and moral development	6.421	0.170	NA
16	Experience and moral development	2.375	0.498	NA
17	Educational level and moral development	3.985	0.263	NA
18	Marital status and moral development	0.231	0.631	NA
19	Academic courses with moral content and moral development	0.487	0.485	NA
20	Female auditors and moral development	9.142	0.002	A

**Hypothesis 14 to 19:** These hypothesis are looking for correlations between age, occupational level, experience, educational level, marital status and academic courses with moral content on auditors' level of moral development.

Table 4 shows the Chi-square statistic for various variables obtained from Kruskal-Wallis test. Since the significance level in all cases is greater than the error value of 0.05, therefore age, occupational level, work experience, educational level, marital status and academic courses with moral content had no effect on moral development.

**Hypothesis 20:**Female auditors have a higher level of moral development than males.

Table 4 shows the Chi-square statistic for various variables obtained from Kruskal-Wallis test. Since the significance level is smaller than the error value of 0.05, therefore female auditors have a higher level of moral development than males.

## 5. Conclusion

The model used in this study measures moral concepts related to moral orientation (idealism and relativism), moral sensitivity and ethical development. According to the results, professional and organizational commitment and ethical orientation have a significant impact on moral sensitivity. Professional commitment has a significant impact on organizational commitment. Professional commitment and ethical orientation are significantly correlated. The results revealed a significant correlation between moral orientation and organizational commitment. In addition, the relationship between moral sensitivity and the level of moral development was investigated. A significant correlation was found between these two variables.

None of the demographic variables had a significant impact on the moral sensitivity. The relationship between demographic variables and moral development showed that females have a higher moral development than males.

To strengthen the ethical aspects of accounting students and practitioners, it is suggested to familiarize them with ethical issues through academic courses in ethics or increased hours of training in institutions. Accounting agencies are recommended to ensure the professional competence and ethical responsibility before hiring their staff. They are also recommended to evaluate moral orientation of their employees periodically. In addition, professional associations are recommended to establish a database for occupational information of CPAs to access certificates and charges arising from unprofessional and unethical behaviors.

## 6. References

1. Jabbari, H., Rahmani, H. (2010). Assessment of ethical issues in accounting, *Journal of Ethics in Science and Technology*, 3 and 4.
2. Sarlak, N. (2008). Accounting ethics, *Journal of Ethics in Science and Technology*, 1 and 2.
3. Adkins, N, Robin, R. (2004). Students' and Faculty Members' Perceptions of the Importance of Business Ethics and Accounting Ethics Education: Is There an Expectations Gap? *Journal of Business Ethics*; Volume 51, Issue 3, pp. 279-300.
4. Greenfield, A. (2005), Introducing an ethical dimension into the earnings management decision. [PhD dissertation]. Virginia: Commonwealth University.
5. Ross, N. (2007). Corporate Director and Social Responsibility: Ethic versus Shareholder Value. *Journal of Business Ethics*; Vol. 73, No. 3, pp. 319-331.
6. Keller, A., Katherine, T. (2007). Do gender, educational level, religiosity, and work experience affect the ethical decision-making of U.S. accountants? *Critical Perspectives on Accounting*; Volume 18, Issue 3, pp. 299–314.
7. Rafiei, A. (2007). The effect of gender, educational level, religion and experience on ethical decision making of accountants [Master thesis], Tehran: Tehran University.
8. Ramazani, A. (2011). Ethics education in accounting: effect of moral motivation on moral behavior, *Accounting Research*, Third Year, No. 9.
9. Etemadi, H., Dianati, Z. (2009). Impact of moral perspective of financial managers on the quality of corporate financial reports, *Journal of Ethics in Science and Technology*, 1 and 2.
10. Aghaei, M. A., Hesarzadeh, R. (2012). Conceptual modeling of ethics in accounting and accountants' perspectives, *Journal of Ethics in Science and Technology*, 3.

11. Hume, E., Aileen Smith, S. (2006). Cultural and gender Differences in the Ethical Beliefs of Accountants. *Journal of Legal, Ethical and Regulatory Issues*; Volume 9, Number 1, pp. 17-29.
12. Rose J. (2006). Corporate Directors and Social Responsibility: Ethics versus Shareholder Value. *Journal of Business Ethics*; Volume 73, Issue 3, pp. 319-331.
13. Chan, S. Leung, F. (2006). The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity. *Managerial Auditing Journal*; Vol. 21 Issue 4, pp.436 – 457
14. Keller, A. Smith, K. Murphy, S. (2007). Do gender, educational level, religiosity, and work experience affect the ethical decision-making of U.S. accountants? *Critical Perspectives on Accounting*; Volume 18, Issue 3, pp. 299–314
15. Kung, F. Huang, C. (2013). Auditors' moral philosophies and ethical beliefs. *Management Decision*; Vol. 51 Issue: 3, pp.479 – 500
16. Liu, M. (2013). Effect of Guanxi and ethical orientations on Chinese auditors' ethical reasoning. *Managerial Auditing Journal*; Vol. 28 Issue: 9, pp.815 – 837
17. Ho, Y. (2007). Undergraduate accounting students' perceptions of accounting ethics: A cross-cultural comparative study. [PhD dissertation]. Minnesota: University of Minnesota.