

An Empirical Study to Determine the Relationship between Revealing Accounting Fraud and Culture¹

Gülğün Erkan, Assistant Professor¹, Fulya Temel, Graduate Student²

¹(Business Administration, Çanakkale Onsekiz Mart University, Turkey)

²(Business Administration, Çanakkale Onsekiz Mart University, Turkey)

Abstract : This study, which focuses on accounting processes and especially the relationship between culture and fraud, attempts to propound the relationship between the cultural dimensions of the accounting professionals operating in Istanbul (Turkey) and the behavior of revealing fraud. The study attempts to demonstrate the degree of influence which the auditors are exposed in the event of ethical dilemma in two perspectives: firstly by examining the relationship between the factors that influence the auditors and the cultural dimensions, secondly by examining the relationship between the decisions to be made in the case of ethical dilemma and the cultural dimensions of the auditors. The results of the study conducted on independent auditors operating in Istanbul show that the dominant cultural dimension of auditors' cultural identities is the high power distance, taking into consideration the sampling. Nevertheless, it is seen that auditors have high cultural dimensions arising from avoidance of uncertainty, high collectivity and femininity. Despite the high level of avoidance of uncertainty, it was found that auditors' risk avoidance degree is moderately high, not substantially high. This can be explained by the high education level of the sampling group, their positions as top level managers and decision makers. Ethical sensitivity was found to be higher in women than men in the study. Conversely, it was determined that there is no relationship between cultural dimensions and revealing fraud, and there is a positively low strength, partial relationship between the factors that influence auditors in the case of an ethical dilemma and the risk taking attitude of the auditors.

Keywords: Fraud, Culture, Audit, Ethical Decision Making and Culture Relationship.

I. INTRODUCTION

Accounting fraud is a major problem in a society like in all fields. Accounting fraud can largely affect not only departments and businesses, but also state economies from time to time. As it is the case, businesses and countries make changes and regulations to the system, taking precautions to prevent accounting fraud.

The importance of prevention and revealing accounting fraud is undeniable. However, with the purpose of taking more proactive measures, it is important to determine why and by whom the fraud is committed, the conditions affecting the individual at the stage of revealing, in which societies, in which cultures and among which personality type fraud is common. One of the determinants of human behavior is the culture of the society where one is born and raised. A person bears traces of the society's culture and the personality is shaped accordingly. Therefore, it is possible to see the effect of the culture in most of the decisions taken by the individual. The purpose of this study; is to determine whether the decision makers in accounting are affected by their culture during the time when fraud is revealed. In this context, a survey was conducted on independent auditors operating in Istanbul.

II. THE ROLE OF CULTURE IN ETHICAL DECISION MAKING

It was proven with the studies conducted that culture is among the main causes of the behaviors and decisions taken by an individual during their life, furthermore it also influences ethical decision making.

Srnka [1] demonstrates in the study conducted on the marketing ethics that culture is influential on the moral decisions made by marketers. Dehghani et al. [2], in the study conducted between Iran and the United States, researches the divergence of preferences among cultures and sets forth the theory that these preferences are closely related to culture. Mustamil [3] conducted a study on the Malaysian managers in his doctoral dissertation where he researched the effect of culture and ethical ideology on the ethical decision making process of managers. Mustamil's [3] findings reveal the role of culture as the pioneer of the individual's moral ideology. Okpara [4] demonstrates that culture has important influence on managers' ethical attitudes as a result of the study conducted on 351 executives in Nigeria, which examines the relationship between culture and the

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managers' attitude toward business ethics. Okpara [4] discusses his research within the framework of the Hofstede's cultural dimensions. Zheng et al. [5] conducted their research, which examines the influence of culture on ethical decision making, in United States and China. Zheng et al. [5] set forth in their study, which is conducted on 181 participants by establishing 20 ethical scenarios, that cultural differences affect decisions regarding ethical issues. In the study that discusses the effect of culture on the ethical decision making process; Mustamil and Quaddus [6] reveal that collectivism, one of the cultural dimensions of Hofstede, is influential on the moral decision making process. In the same study, it was demonstrated that the effect of power distance on ethical decision making is insignificant.

III. THE STUDIES CONDUCTED ON THE RELATIONSHIP BETWEEN CULTURE AND ETHICAL DECISION MAKING IN ACCOUNTING

Roxas and Stonebeck [7] investigated the effect of culture on the ethical decision making process in their study titled; "An investigation of the ethical decision-making process across varying cultures". In this study, Roxas and Stonebeck [7] focused on the following questions;

- Do perceptions change in the case of ethical dilemma in various cultures?
- Do these cultures prefer different types of action?
- Do cultures cause the accountants to have different responding perceptions?

Three dimensions of ethical decision making are discussed in the study (dilemma, action, results). At the end of the study, the auditors from different cultures gave different responses regarding ethical decisions. Tsui and Windsor [8] examine the differences between the auditors in Australia and China on ethical reasoning. Tsui and Windsor [8], as a result of their study, reveal that there is a difference regarding ethical reasoning scores between two countries and this difference is due to four cultural dimensions of Hofstede. Chan et al. [9] show the effect of Hofstede's individualism and power distance dimensions on the accounting faults' size in 80 foreign businesses with different cultures in China, in their study which sets forth the effect of culture on accounting faults detected during audits. This study sets a frame for evaluation of the mistaken statements from a cultural perspective for the auditors. Parboteeah et al. [10] researched the cultural effects in Japan and USA on ethical climates in accounting organizations. In this study, Parboteeah et al. [10] claim that national cultural differences will lead to different ethical climates. As a result of the study; it was concluded that national culture was partially influential on the ethical climate, although the accounting culture and institutional powers (rules, regulations etc.) have a stronger influence. Parboteeah et al. [10] stresses that accounting institutional rules and regulations cause differences in ethical climates. Sweeney et al. [11] investigated the effect of organizations and specific demographic variables in Ireland and the United States on perceived ethical cultures and intentional behavior in auditors. As a result of the study, participants from the United States show that they have higher ethical considerations than Irish participants and fewer intentions about unethical actions. In their study, Ho and Lin [12] focus on differences among cultures in ethical decision making on future accountants from different cultures. In the study conducted on graduates and undergraduates in the USA and Taiwan; significant differences were observed in ethical awareness, ethical development and ethical intentions. Curtis et al. [13] examines the influence of culture on ethical decision-making on accounting students from four countries. As a result of the research, it is propounded that justice perceptions, power range perceptions and gender are related to ethical decision making in China, Japan, Mexico and the USA.

Table 1. The Literature Regarding the Culture and Ethical Decision Making in Accounting

| Author and Research Year | Method | Sampling | Research Results |
|--------------------------|---|---|--|
| Roxas and Stonebeck [7] | Multivariate analysis of variance (Manova), Anova | Accounting Students (USA, Canada, Australia, Philippines, Thailand, Germany, Moldova, Ukraine, China) | The culture is influential on ethical decision making. |
| Chan et. al. [9] | Regression Analysis | Accountants working in companies with different cultures in China | Power distance and individualism have a direct impact on the magnitude of accounting errors. |
| Parboteeah et. al. [10] | Factor Analysis Analysis of Covariance (ANCOVA) | Members of accounting firms operating in America and Japan | There is a partial relationship between the ethical climate and the national culture, the accounting culture and institutional forces have more impact on the ethical climate. |
| Sweeney et. al. [11] | Pearson Correlation Analysis, Regression Analysis, Manova Analysis, Factor Analysis | Auditors operating in Ireland and the USA | There is an effect of administrative pressure on unethical behavior. Participants in the USA have a higher ethical rating than Irish participants. |
| Ho and Lin [12] | ANCOVA Analysis, Regression Analysis | Undergraduate and graduate accounting students in USA and Taiwan | There is significant difference in the students from the USA and Taiwan with respect to ethical intention, the development of ethical judgments and the ethical awareness of |

| | | | |
|----------------------------|---|---|--|
| | | | accounting ethics. |
| Curtis et. al. [13] | Discriminate Analysis, Univariate Regression Analysis | Accounting students in China, Japan, Mexico and the USA | National culture has an effect on ethical dilemma situations. |
| Tsui J. and Windsor C. [8] | T-test | Auditors in Australia and China | There are differences between the two countries in terms of ethical reasoning. |

IV. RESEARCH METHOD AND HYPOTHESES

Survey method was used in the research. Surveys were sent to participants via electronic mail and social media.

When the surveys were analyzed, anova was used in the demographic factors for the purpose of evaluating whether the difference between the means of the groups was significant, and Pearson correlation analysis was applied with the aim of determining the presence-absence of the relationship between the scale and the variables in the survey.

4.1. Research Universe and Sampling

Independent auditing firms operating in Istanbul registered at the Public Surveillance Authority (UPS) were determined as the universe. The sample group consists of independent auditors in independent audit firms operating in Istanbul. In the study, special effort was made to reach the partner/business owner, executive, senior independent auditors working in 132 audit firms registered in the Istanbul province and 85 independent auditors replied to the survey.

4.2. Data Collection Tool

The first part of the questionnaire is aimed at determining demographic factors. In the second part, a culture scale with 8 items, which was formed by Erturan [14], is used. The scale is based on the cultural dimensions of Hofstede. This scale is used with the aim of demonstrating the cultural dimensions of independent auditors. The third part of the survey is formed to determine the risk taking attitudes of the independent auditors, Erturan's risk scale was used when the questions were prepared, new questions were added to the scale and the scale was finalized after pilot study. In the fourth part of the survey, new questions were added according to the purpose of the study, Inspired by two questions Kutlu's [15] ethical dilemma questionnaire on the factors which have influenced auditors during the ethical dilemma process. In the fifth part, the questions were made suitable to the study's purpose by adapting from the fiction created in order to determine the ethical dilemma of the independent auditors used by Erturan [14] in his study.

4.3. The Purpose of the Research and Hypotheses

The problem of the study is whether the independent auditors are able to act independently of culture in the case of the ethical dilemma they face during the process of revealing accounting fraud. Hypotheses based on the literature for this purpose are given below;

Harris et al. [16] show that women are more rigorous than men in respect to ethical values in their study, which examines the ethical values of individuals according to the differences in organizational hierarchy, gender, education, and experience factors. Alatas et al. [17] put forward in their study that there is a significant difference in the behavior of women compared to men concerning corruption in terms of gender-related behaviors among different countries. The following hypothesis has been established based on these assumptions, **H1**: Ethical sensitivity differs according to gender.

Roxax and Stonebeck [7] concluded that accountants from different cultures make different ethical judgments in the study which discusses the effect of culture on the ethical decision making process of the accountants. Chan et al. [9] also set forth the effect of two dimensions of culture on accounting fraud audit/detection. The following hypothesis has been established based on these assumptions; **H2**: There is a relationship between Culture and the Attitude Regarding Revealing Fraud.

In the study which examines the possible reasons in observation of national differences with regard to risk taking, Weber et al. [18] demonstrate that cultural differences are associated with risky choice behavior. Based on this assumption, the following hypothesis has been established;

H3: There is a relationship between culture and personal risk taking.

In the countries with low avoidance of uncertainty typically individuals can take risks more easily and tolerance towards alternative views and behaviors is higher in these cultures [19]. Therefore it can be said that individuals who have high avoidance of uncertainty will abstain from personal risk taking.

Seleim and Bontis [20] ascertain in their study, which is based on cultural dimensions of Hofstede, that there will be more corruption and fraud in societies with high levels of uncertainty avoidance. Based on this assumption it can be said that tendency to commit fraud will be higher in individuals with lower levels of risk taking attitude. Therefore it can be said that auditors with high levels of risk taking will be more inclined to

reveal fraud. Bozkurt, [21] when talking about the characteristics of a typical fraudulent employee, refers to people who can take risks, not abiding by the rules, expecting personal gain. In the research where they utilized cultural norms such as gender roles and risk preferences, Lee and Guven [22] found that the risk had a significant impact on corruption outcomes. According to Lee and Guven [22] risk taking has a 3-4% marginal effect on the tendency to justify a bribe. Based on these assumptions, the following hypothesis has been established;

H4: There is a relationship between personal risk taking and fraud revealing behavior.

Hofstede [23] propounds that individuals with low levels of avoidance of uncertainty can take risks more easily. Hofstede [24] argues that individuals with high levels of uncertainty avoidance need rules even though they do not comply with them. Based on this assumption, it can be considered that independent auditors with a low propensity to take personal risks may be highly affected by written rules and laws in the case of ethical dilemma. Nevertheless, it can be considered that independent auditors, who are high risk takers, may tend to avoid unclear factors such as culture, ethics, bilateral relations, or on the contrary, independent auditors may be more affected by factors such as their relationship with customers, culture, morality besides written rules and laws.

H5: There is a relationship between influencing factors in the case of ethical dilemma and personal risk taking.

Hofstede [23], [24] puts forward the theory that individuals with a collectivist cultural dimension attach more importance on “we” awareness than “me” awareness, individuals in society are tightly connected with each other and they feel a sense of belonging. Based on this assumption of Hofstede it can be said that collectivist independent auditors may be affected by culture and ethical rules in the event of an ethical dilemma. Hofstede [24] also claims that non-group individuals will be excluded from individuals with a collectivist cultural dimension. It is also stated that the nepotism factor is more effective in collectivist societies [25]. Based on this, it is possible to assume that independent auditors with a collectivist structure may be influenced by the customer relationship in the case of an ethical dilemma. Moreover, Hofstede [23] argues that power, competition and success are at the forefront in societies with masculine culture dimensions, whereas in feminine cultures bilateral relations are more prevalent. Therefore, the tendency to consider the relationship with the customer in the case of ethical dilemma can be assumed to be higher in independent auditors with feminine. This is because individuals with a feminine cultural dimension may be more likely to be influenced by bilateral relations than by professionalism. Hofstede [23] sets forth that individuals need clarity in societies with high levels of uncertainty avoidance cultural dimension. In this context, it can be said that independent auditors with a high tendency to avoid uncertainty can be influenced by written laws and rules in the case of an ethical dilemma. Based on all of these assumptions, it is thought that factors affecting auditors during ethical dilemmas are associated with the culture structure which the auditors have.

In this chapter, power range dimension was ignored when preparing the questions of the factors influencing the auditors. This is because the vast majority of independent auditors to whom the survey is applied consist of managers, business owners, executives or senior independent auditors, and these auditors are already at the decision-making stage. The following hypothesis was developed on the basis of the questions created through Hofstede's views [23], [24] on cultural dimensions,

H6: There is a relationship between the influencing factors in the case of ethical dilemma and culture.

4.4. Research Findings

Table 2. Demographic Findings

| Gender | Number | Percent (%) |
|---|---------------|--------------------|
| Male | 66 | 77.6 |
| Female | 19 | 22.4 |
| Total | 85 | 100 |
| Age | Number | Percent (%) |
| Under 35 | 23 | 27.1 |
| Between 35-44 | 30 | 35.3 |
| Between 45-50 | 18 | 21.2 |
| Above 50 | 14 | 16.5 |
| Total | 85 | 100 |
| Education Status | Number | Percent (%) |
| Undergraduate | 58 | 68.2 |
| Graduate | 27 | 31.8 |
| Total | 85 | 100 |
| Position in the Firm | Number | Percent (%) |
| Partner | 33 | 38.8 |
| Executive | 17 | 20 |
| Auditor | 35 | 41.2 |
| Total | 85 | 100 |
| Work Experience Period as an Auditor | Number | Percent (%) |
| Less than 10 years | 52 | 61.2 |

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|--------------------|----|------|
| More than 10 years | 33 | 38.8 |
| Total | 85 | 100 |

When the demographic characteristics of the participants are examined, it is determined that 77.6% were male, 22.4% female, 27.1% under 35 years old, 35.3% in the age group of 35-44 years, 21.2% in the age group 45-50.2 and 16.5% above 50 years old. 68.2% of the participants are undergraduates while 31.8% of them have graduate education. When the positional distribution of the participants in the survey is examined, it is determined that 38.8% are partners, 20% are managers and 41.2% are auditors. 61.2% of the participants had less than ten years of experience as auditors, 38.8% of them had 10 and more years of experience as auditors.

Table 3. Mean and Standard Deviation Values of the Participants Concerning the Cultural Dimensions

| ITEMS | | Absolutely not Important | Not Important | Undecided | Important | Absolutely Important | \bar{X} | s.s. |
|---|---|--------------------------|---------------|-----------|-----------|----------------------|-----------|------|
| To perform difficult work that will give you a feeling of success | f | - | 2 | - | 47 | 36 | 4.37 | 0.61 |
| | % | - | 2.4 | - | 55.3 | 42.4 | | |
| Definition of the job description | f | 1 | 12 | 14 | 3 | 19 | 3.74 | 1.00 |
| | % | 1.2 | 14.1 | 16.5 | 45.9 | 22.4 | | |
| Anti-individualism Collectivism General Average =4.05 | | | | | | | | |
| To be less stressed in the working environment | f | 2 | 11 | 18 | 36 | 18 | 3.67 | 1.02 |
| | % | 2.4 | 12.9 | 21.2 | 42.4 | 21.2 | | |
| To feel safe at work | f | - | 6 | 7 | 35 | 37 | 4.21 | 0.87 |
| | % | - | 7.1 | 8.2 | 41.2 | 43.5 | | |
| Avoidance of Uncertainty General Average =3.94 | | | | | | | | |
| To have good relationships with superiors | f | - | 6 | 3 | 40 | 36 | 4.24 | 0.82 |
| | % | - | 7.1 | 3.5 | 47.1 | 42.4 | | |
| To work in a prestigious company | f | - | 4 | 5 | 43 | 33 | 4.23 | 0.76 |
| | % | - | 4.7 | 5.9 | 50.6 | 38.8 | | |
| Power Distance General Average =4.235 | | | | | | | | |
| To be free to apply your own methods to the work | f | 1 | 8 | 12 | 41 | 23 | 3.90 | 0.94 |
| | % | 1.2 | 9.4 | 14.1 | 48.2 | 27.1 | | |
| To be able to work in collaboration with your teammates | f | - | 8 | 1 | 35 | 41 | 4.28 | 0.89 |
| | % | - | 9.4 | 1.2 | 41.2 | 48.2 | | |
| Femininity Against Masculinity General Average =4.09 | | | | | | | | |
| General Average =4.07 | | | | | | | | |

When the cultural dimension perceptions of the participants in Table 3 were examined, cultural dimension perceptions were found to be high (average=4.07). When the sub-dimension perceptions of the participants' cultural dimension perception levels were examined, it was determined that the perceptions of the anti-individualism collectivity sub-dimension were high (average=4.05). It is seen that the highest item belonging to the anti-individualism collectivity sub-dimension is "To perform difficult work that will give you a feeling of success" (average=4.37), while the lowest item is "Definition of the job description" (average=3.74). It was found that the perceptions belonging to the avoidance of uncertainty sub-dimension were high (average=3.94). It is also seen that the highest item belonging to the avoidance of uncertainty sub-dimension was "To feel safe at work" (average=4.21), while the lowest item was "To be less stressed in the working environment" (average=3.67). It was determined that the perceptions of the power distance sub-dimensions were high (average=4.23). It is seen that the highest item belonging to the power distance sub-dimension was "To have good relationships with superiors" (average=4.24), while item with lowest perception was "To work in a prestigious company" (average=4.23). It was determined that the highest item belonging the femininity against masculinity sub-dimension was "To be free to apply your own methods to the work" (average=4.28), while the item with the lowest perception was "To be able to work in collaboration with your teammates" (average=3.90).

Table 4. Average and Standard Deviation Values Concerning the Participants' Personal Risk Taking Approach

| ITEMS | | Never Agree | Do not Agree | Undecided | Agree | Completely Agree | \bar{X} | s.s. |
|--|---|-------------|--------------|-----------|-------|------------------|-----------|------|
| I'm willing to gamble either to double 50% or to lose 50% of my money that is meaningful to me | f | 30 | 34 | 19 | 4 | - | 1.91 | 0.81 |
| | % | 35.3 | 40 | 22.4 | 2.4 | - | | |

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|--|---|-----|------|------|------|------|------|------|--|
| If I have loaned/credit money, I evaluate this money as an investment instrument | f | 17 | 22 | 11 | 26 | 9 | 2.85 | 1.33 | |
| | % | 20 | 25.9 | 12.9 | 30.6 | 10.6 | | | |
| I insist on a project that I believe in but its yield is unclear | f | 8 | 21 | 33 | 23 | - | 2.83 | 0.93 | |
| | % | 9.4 | 24.7 | 38.8 | 27.1 | - | | | |
| General Average=2.53 | | | | | | | | | |

When the personal risk taking approach perceptions of the participants in Table 4 are examined, it was determined that their personal risk taking approach perceptions are at medium level (average=2.53). It is seen that the highest item belonging to the participants’ personal risk taking approach perception level is “If I have loaned/credit money, I evaluate this money as an investment instrument” (average=2.85), while the lowest item is “I’m willing to gamble either to double 50% or to lose 50% of my money that is meaningful to me” (average = 1.91).

Table 5. Average and Standard Deviation Values Concerning The Participants’ Attitude In the Case of Ethical Dilemma

| ITEMS | | Never Agree | Do not Agree | Undecided | Agree | Completely Agree | X̄ | s.s. | |
|---|---|-------------|--------------|-----------|-------|------------------|------|------|--|
| | | | | | | | | | |
| The action taken by X. INC. is a generally encountered case | f | 5 | 29 | 7 | 42 | 2 | 3,08 | 1.08 | |
| | % | 5.9 | 34.1 | 8.2 | 49.4 | 2.4 | | | |
| I agree as an auditor that the approval of the circumstance of X INC. by the auditor is appropriate to the professional ethical rules | f | 25 | 40 | 15 | 5 | | 4.00 | 0.84 | |
| | % | 29.4 | 47.1 | 17.6 | 5.9 | | | | |
| Do you have a conflict with the business executive in such a case when taking into consideration the scenario above? | f | 3 | 11 | 16 | 40 | 15 | 3.62 | 1.03 | |
| | % | 3.5 | 12.9 | 18.8 | 47.1 | 17.6 | | | |
| Inconsistency in the active items should not be ignored even though they’re very small quantities. | f | 7 | 25 | 12 | 34 | 7 | 3.10 | 1.16 | |
| | % | 8.2 | 29.4 | 14.1 | 40 | 8.2 | | | |
| General Average =3.45 | | | | | | | | | |

When the attitudes of the participants in Table 5 in the case of ethical dilemma are examined, their sample event perceptions was found to be high (average=3.45). The highest article belonging to the participants’ sample event perception level is “I agree as an auditor that the approval of the circumstance of X INC. by the auditor is appropriate to the professional ethical rules” (average=4.00).

Table 6. Independent Sampling T-test Results of the Differentiation Status of the Participants’ Attitude Levels based on their Genders in the Case of Ethical Dilemma

| | Gender | n | X̄ | ss | t | P |
|-------------------|--------|----|------|------|-------|--------|
| Case Study | Male | 66 | 3.37 | 0.49 | 2.623 | 0.010* |
| | Female | 19 | 3.72 | 0.55 | | |
| *p<0.05 | | | | | | |

H1: Ethical sensitivity differs according to gender.

Ethical sensitivity perceptions according to their gender, the difference among the groups was found to be statistically significant at the end of the t-test carried out for the purpose of determining whether the participants’ case study perceptions differ significantly according to their gender (t=-2.480;p<0.05). It is seen that the women’s ethical sensitivity perceptions are higher than those of men (average=3.37). In this case H1 hypothesis was accepted.

Table 7. Average and Standard Deviation Values Concerning The Factors Affecting The Participants in the Case of Ethical Dilemma

| ITEMS | | Absolutely No | No | Undecided | Yes | Absolutely Yes | X̄ | s.s. |
|---|---|---------------|------|-----------|------|----------------|------|------|
| | | | | | | | | |
| I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process. | f | 2 | 1 | 6 | 42 | 34 | 4,23 | 0.82 |
| | % | 2.4 | 1.2 | 7.1 | 49.4 | 40 | | |
| I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process. | f | 25 | 31 | 20 | 8 | 1 | 2.16 | 0.99 |
| | % | 29.4 | 36.5 | 23.5 | 9.4 | 1.2 | | |

| | | | | | | | | | |
|---|---|------|------|------|------|-----|------|------|--|
| I am mostly affected by the culture and ethics of the region where I live in the case of an ethical dilemma that I experience during the audit process. | f | 22 | 40 | 10 | 12 | 1 | 2.17 | 1.01 | |
| | % | 25.9 | 47.1 | 11.8 | 14.1 | 1.2 | | | |
| General Average=2.85 | | | | | | | | | |

When the participants’ perceptions based on the factors affecting them during the audit process in Table 7 are examined, it was found to be medium (average=2.85). It is seen that the highest item belonging to the participants’ cultural perception levels was “I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during audit process.” (average=4.23), while the item with lowest perception was “I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process.” (average=2.16).

Table 8. The Factors Affecting the Participants during the Audit Process Independent Sampling T-test Results of the Differentiation Status According to Their Genders of the Perception Levels

| | Gender | n | \bar{X} | ss | t | P |
|---|--------|----|-----------|------|--------|-------|
| I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process. | Male | 66 | 4.13 | 0.87 | -2.100 | 0.039 |
| | Female | 19 | 4.57 | 0.50 | | |
| I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process. | Male | 66 | 2.24 | 0.96 | 1.344 | 0.183 |
| | Female | 19 | 1.89 | 1.10 | | |
| I am mostly affected by the culture and ethics of the region where I live in the case of an ethical dilemma that I experience during the audit process. | Male | 66 | 2.19 | 1.02 | 0.346 | 0.731 |
| | Female | 19 | 2.10 | 0.99 | | |
| *p<0.05 | | | | | | |

The difference among the groups according to genders was found to be statistically significant with respect to “I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process.” as a result of the t-test made with the aim of determining whether the factor perceptions affecting the participants during the audit process differ significantly according to their gender (t=-2.100;p<0.05). It is seen that the perception of women (average=4.57) “I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process.” is higher than men (average=4.13).

Table 9. Pearson Correlation Coefficient Results Determining the Relation between the Attitude in the Case of Ethical Dilemma and Cultural Dimension

| | | Anti-individualism Collectivity | Avoidance of Uncertainty | Power Distance | Femininity Against Masculinity |
|---|---|---------------------------------|--------------------------|----------------|--------------------------------|
| As an auditor, I agree that the approval of the circumstance of X INC. by the auditor is appropriate to the professional ethical rules. | r | 0.144 | 0.109 | -0.021 | 0.157 |
| | p | 0.188 | 0.319 | 0.851 | 0.151 |
| Do you have a conflict with the business executive in such a case considering the scenario above? | r | 0.192 | -0.013 | 0.122 | 0.201 |
| | p | 0.079 | 0.905 | 0.265 | 0.066 |
| Inconsistency in the active items should not be ignored even though they’re very small quantities. | r | -0.008 | 0.119 | -0.063 | 0.009 |
| | p | 0.943 | 0.277 | 0.569 | 0.933 |

H2: There is a relationship between Culture and the Attitude Regarding Revealing Fraud.

When the Pearson correlation coefficient results were examined, which was made in order to examine the relationship between cultural dimensions and attitude in the case of ethical dilemma, no statistically significant relationship was found between anti-individualism collectivity, avoidance of uncertainty, power distance, femininity against masculinity sub-dimensions (p>0.05). H2 was rejected as a result of these findings.

Table 10. The Pearson Correlation Coefficient Results Which Determines the Relationship between Cultural Dimension and Personal Risk Taking

| | | Anti-individualism Collectivity | Avoidance of Uncertainty | Power Distance | Femininity Against Masculinity | Personal Risk Taking |
|---------------------------------|---|---------------------------------|--------------------------|----------------|--------------------------------|----------------------|
| Anti-individualism Collectivity | r | 1 | 0.474** | 0.322** | 0.565** | 0.164 |
| | p | - | .000 | .003 | .000 | .133 |
| Avoidance of Uncertainty | r | 0.474** | 1 | 0.577** | 0.552** | 0.173 |
| | P | .000 | - | .000 | .000 | .114 |
| Power Distance | R | 0.322** | 0.577** | 1 | 0.527** | 0.147 |
| | P | .003 | .000 | - | .000 | .181 |
| Femininity Against Masculinity | R | 0.565** | 0.552** | 0.527** | 1 | 0.118 |
| | P | .000 | .000 | .000 | - | .280 |

| | | | | | | |
|----------------------|----------|-------|-------|-------|-------|---|
| Personal Risk Taking | R | 0.164 | 0.173 | 0.147 | 0.118 | 1 |
| | P | .133 | .114 | .181 | .280 | - |

H3: There is a relationship between culture and personal risk taking.

When the Pearson correlation coefficient results were examined, which was made in order to examine the relationship between cultural dimensions and personal risk taking, no statistically significant relationship was found between anti-individualism collectivity, avoidance of uncertainty, power distance, femininity against masculinity sub-dimensions ($p>0.05$). In this case, H3 was rejected.

Table 11. The Pearson Correlation Coefficient Results Which Determines the Relationship between Personal Risk Taking and the Case Studies

| | | Case 2 | Case 3 | Case 4 | Personal Risk Taking |
|---|----------|--------|--------|--------|----------------------|
| As an auditor, I agree that the approval of the circumstance of X INC. by the auditor is appropriate to the professional ethical rules. | r | 1 | .340** | .169 | -.091 |
| | p | | .001 | .122 | .408 |
| Do you have a conflict with the business executive in such a case when considering the scenario above? | r | .340** | 1 | .122 | .037 |
| | p | .001 | | .265 | .733 |
| Inconsistency in the active items should not be ignored even though they're very small quantities. | r | .169 | .122 | 1 | -.103 |
| | p | .122 | .265 | | .347 |
| Personal risk taking | r | -.091 | .037 | -.103 | 1 |
| | p | .408 | .733 | .347 | |

H4: There is a relationship between personal risk taking and fraud revealing behavior.

When the Pearson correlation coefficient results were examined, which was made in order to examine the relationship between the attitude revealing fraud and personal risk taking, no statistically significant relationship was found between the attitude revealing fraud and personal risk taking ($p>0.05$). H4 was rejected as a result of these findings.

Table 12. The Pearson Correlation Coefficient Results Which Determine the Relationship between the Influencing Factors in the Case of Ethical Dilemma and Personal Risk Taking

| | | Factor 1 | Factor 2 | Factor 3 | Personal Risk Taking |
|---|----------|----------|----------|----------|----------------------|
| I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process. | r | 1 | 0.097 | 0.021 | 0.048 |
| | p | | 0.378 | 0.849 | 0.662 |
| I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process. | r | 0.097 | 1 | .465** | .254* |
| | p | 0.378 | | 0 | 0.019 |
| I am mostly affected by the culture and ethics of the region where I live in the case of an ethical dilemma that I experience during the audit process. | r | 0.021 | .465** | 1 | 0.100 |
| | p | 0.849 | 0 | | 0.362 |
| Personal Risk Taking | r | 0.048 | .254* | 0.1 | 1 |
| | p | 0.662 | 0.019 | 0.362 | |

H5: There is a relationship between influencing factors in the case of ethical dilemma and personal risk taking

When the Pearson correlation coefficient results for examining the relationship between the cultural dimensions and auditing culture situations were examined, no statistically significant relationship was found between personal risk taking and “I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process.” with “I am mostly affected by the culture and ethics of the region where I live in the case of an ethical dilemma that I experience during the audit process.” among the audit culture situations ($p>0.05$).

The relationship between personal risk taking and “I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process.” was found to be statistically significant ($p<0.05$ $p=0.019$). A positive low strength relationship was found between personal risk taking and mostly taking into consideration the relationship with the customer in the case of an ethical dilemma ($p<0.05$) ($0.20<r<0.40$) ($r=0.254$). In other words, it was determined that personal risk taking would increase when there is an increase in the perception of “I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process.” H5 hypothesis was partially accepted.

Table 13. The Pearson Correlation Coefficient Results that Determine the Relationship between the Influencing Factors in the Case of Ethical Dilemma and Cultural Dimensions

| | | Anti-individualism Collectivity | Avoidance of Uncertainty | Power Distance | Femininity Against Masculinity |
|---|----------|---------------------------------|--------------------------|----------------|--------------------------------|
| I mostly take into consideration the written rules and laws in the case of an ethical dilemma that I experience during the audit process. | R | -0.056 | -0.155 | -0.028 | -0.108 |
| | P | 0.608 | 0.156 | 0.799 | 0.325 |
| I mostly take into consideration the relationship with the customer in the case of an ethical dilemma that I experience during the audit process. | R | 0.055 | 0.044 | 0.134 | -0.030 |
| | P | 0.614 | 0.692 | 0.222 | 0.784 |
| I am mostly affected by the culture and ethics of the region where I live in the case of an ethical dilemma that I experience during the audit process. | R | 0.054 | -0.009 | 0.136 | 0.067 |
| | P | 0.626 | 0.932 | 0.214 | 0.543 |

H6: There is a relationship between the influencing factors in the case of ethical dilemma and culture.

When the Pearson correlation coefficient results for examining the relationship between the cultural dimension and the factors influencing independent auditors in the case of ethical dilemma were examined, no statistically significant relationship was found between these factors and anti-individualism collectivity, avoidance of uncertainty, power distance, femininity against masculinity sub-dimensions ($p > 0.05$). H6 was rejected as a result of these findings.

Table 14. The Comparison of the Cultural Dimension Findings with the Literature

| Hofstede’s Cultural Dimensions | Hofstede’s Findings on Turkey Cultural Dimensions | Erturan (2007) Findings | Findings of the Study |
|--------------------------------|---|--|--|
| Individualism – Collectivity | Collective Cultural Dimension is High | Collective Cultural Dimension is High | Collective Cultural Dimension is High |
| Power Distance | Power Distance High | Power Distance High | Power Distance High |
| Avoidance of Uncertainty | Avoidance of Uncertainty Dimension is High | Avoidance of Uncertainty Dimension is High | Avoidance of Uncertainty Dimension is High |
| Masculinity - Femininity | Femininity is High | Femininity is High | Femininity is High |

When we look at Table 14, we see that the cultural structure of the independent auditors operating in Istanbul is collective, avoiding uncertainty, with high power distance and high femininity as demonstrated by Hofstede in the study conducted in Turkey. When these findings are compared with Erturan’s study applied on the independent auditors (2007), they show the same cultural structure.

Table 15. Hypothesis Test Results

| Relations between the Variables | Hypothesis Result |
|--|--------------------|
| H1: Ethical Sensitivity – Gender | ACCEPTED |
| H2: Cultural Dimensions – The Attitude Revealing the Fraud | REJECTED |
| H3: Cultural Dimensions – Personal Risk Taking Level | REJECTED |
| H4: Personal Risk Taking Level with the Attitude Revealing Fraud | REJECTED |
| H5: Personal Risk Taking Level with the Influencing Factors in the case of Ethical Dilemma | PARTIALLY ACCEPTED |
| H6: Cultural Dimensions with the Influencing Factors in the case of Ethical Dilemma | REJECTED |

Looking at the hypothesis results according to table 15, we see that there is a correlation between gender and behavior of revealing fraud. The ethical sensitivity of the independent auditors operating in Istanbul namely their perception revealing fraud is higher than that of men. In this case, H1 hypothesis was accepted. No significant relationship could be found between cultural dimensions with revealing fraud and personal risk taking level, H2 and H3 hypotheses were rejected. A positive direction low strength correlation was found between the influencing factors in the case of ethical dilemma and personal risk taking level, so H5 hypothesis was partially accepted. Meanwhile, no significant relation could be found between the influencing factors in the case of ethical dilemma and cultural dimensions, H6 hypothesis were rejected.

V. CONCLUSION

The study attempts to demonstrate the effect of culture during revealing fraud through a survey applied to independent auditors operating in Istanbul. In this context, the results in the cultural scale used with the aim of determining the cultural dimensions of the independent auditors show that Hofstede’s findings comply with the cultural dimensions of the independent auditors. When we examine in detail the cultural dimensions of independent auditors, it is seen that the most dominant cultural dimension is power distance. However

Hofstede's findings regarding Turkey show that the most dominant cultural dimension is avoidance of uncertainty. But the findings of the study reveal that avoidance of uncertainty has the lowest effect on auditors. The cause of this can be interpreted to sample as they are mostly managers, organization owners or they have seniority in organizations and their positions as decision makers. But looking at the findings as a whole it can be seen that cultural dimensions of auditors coincide with Hofstede's findings.

According to the findings of the study, the personal risk taking level is medium. It is observed that personal risk taking levels are not very low for the independent auditors with high levels of avoidance of uncertainty. This can be because the education level of the sampling group is high and they are at a position of decision making.

When the findings belonging to the tendencies for revealing fraud of the independent auditors operating in Istanbul are discussed, firstly it is seen that 52% of the participants stated that they usually encounter with the sample cases presented to them in the survey. The participants seem to have a high tendency to reveal fraud. Based on the findings, women's ethical sensitivity perception is higher than those of men. These results are in compliance with the literature as expected.

When we look at the factors influencing independent auditors operating in Istanbul in the case of ethical dilemma, it is seen that the most dominant factor is "I am mostly affected by the written rules and laws in the case of an ethical dilemma". 89% of the participants state that they are mostly affected by the written rules and laws in the case of an ethical dilemma." 15% of them state that they are mostly affected by culture and ethical rules. 23% of the independent auditors state that they are undecided about the opinion "I am mostly affected by the relationship with the customer in the case of an ethical dilemma", 10% of them state that they take into consideration the relationship with the customer during this process. According to the findings of the study, it is seen that the perception of women is higher than those of men with regards to "I am affected by the written rules and laws in the case of an ethical dilemma" as expected. No relationship was found between these results and cultural dimensions.

No significant relationship could be found between the cultural dimensions of the independent auditors operating in Istanbul and their attitude regarding revealing fraud. Furthermore, no significant relationship could also be found between the cultural dimensions and personal risk taking and between the attitude regarding revealing fraud and personal risk taking. A positive direction low strength correlation was found between the influencing factors in the case of ethical dilemma and personal risk taking level the independent auditors. There is a positive and low correlation between the independent auditors' risk taking level and perception of "taking into account the relation with the customer in the case of ethical dilemma". While the independent auditors' personal risk taking levels rise, the level of being affected by the relationship with the customer in the event of an ethical dilemma also rises. This finding is in compliance with the literature as expected. According to some studies in the literature, as individuals tend to take personal risks, the individual's tendency to fraud and corruption will increase. The professionals with high risk taking tendencies express that they may consider the relationship with the customer in the case of an ethical dilemma they experience. There was no significant relationship between cultural dimensions and the influencing factors in the case of an ethical dilemma.

When the findings are considered in general, there was no relation between cultural dimensions of the independent auditors operating in Istanbul and the process of revealing fraud. It is seen that the factors that affect independent auditors in the case of an ethical dilemma are partially related to their personal risk taking ratings. The result of the study show that instead of culture, gender has an effect on ethical sensitivity during the process of revealing fraud. As a result findings, it was concluded that the independent auditors operating in Istanbul were objective during the process of revealing fraud.

It should be taken into account that the independent auditors are influenced by social desirability bias in the part of the survey composed with the aim of determining the factors affecting independent auditors in the case of an ethical dilemma and in the case given with the aim of determining the attitude of independent auditors in the process of revealing fraud. Social desirability bias is referred to as the Bradley effect or Wilder effect in the literature. This term is especially used in the literature for the purpose of demonstrating why the election polls' results are different from reality. The subjects tend to give incorrect answers to the surveys in respect of social desirability bias. The subjects participating in the surveys answer in a manner perceived "good" in society and consequently this brings a result that is different from the participants' real intentions in the findings of the surveys. Here, the Bradley effect associates the inconsistency between the opinion surveys and the election survey results with this hypothesis. According to the definition in the literature, the individuals under the influence of social desirability bias will tend to prefer answers with higher acceptability in society. It should be considered that the individuals might answer the questions under the influence of this factor also in the studies discussing ethical processes such as revealing fraud, and the scale and survey questions must be prepared accordingly for future studies.

In the study, the survey was shortened, since the independent auditors tended not to answer due to the length of the survey in the pilot study. In future studies the number of case items can be increased to present a more comprehensive evaluation by choosing a sample group which is more reachable. The relationship between culture and revealing fraud cannot be easily assessed in respect to Turkey, because of limited studies that propound the relationship between culture and accounting frauds in Turkey. In future studies, researchers may focus on to what extent the effect of culture, professionalism, education level and titles differ in respect to revealing fraud in the surveys to be conducted separately on accountants with low education levels and independent auditors, especially at the stage of revealing accounting fraud. Also to get more objective results researchers can conduct studies on two different cultures as done in studies outside of Turkey in literature to determine the relationship between fraud revealing and culture more clearly.

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