

**The Role of Individual Variables,  
Organizational Variables, and Moral Intensity  
Dimensions in Accountants' Ethical Decision  
Making:  
A Study of Management Accounting in Libya**

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## **Abstract**

Over the last few decades the business environment throughout the world has seen several accounting and corporate scandals such as the collapse of Enron, Arthur Andersen, WorldCom, and Parmalat. As a result of these 'scandals', significant attention has been directed to the issue of ethics in business in general, and in accounting in particular. Several empirical studies have been conducted on the subject of ethical decision making and ethical issues within accounting. Interestingly, most of this research has been done in the USA and the remaining has been conducted mainly in developed countries. Although some of the ethical decision making research has been done in accounting, very little research has been conducted in the area of management accounting. This study addresses this gap by adding empirical evidence related to the association of numerous variables with management accountants' ethical decision making in one of the developing countries, namely Libya.

The purpose of this study is twofold; first, to investigate the impact of those variables (individual variables, organizational variables, and moral intensity dimensions) on the ethical decision making of management accountants and future accountants (i.e. accounting students) in Libya; and second, to determine what types of ethical issue are faced by Libyan management accountants at their workplace. The ethical decision making model adopted in this study hypothesizes that individual variables (e.g., age and gender), organizational variables (e.g., code of ethics and ethical climate), and moral intensity dimensions (e.g., magnitude of consequences) have relationships with the first three stages of ethical decision making (recognition, judgment, and intention) as constructed by Rest (1981). Adopting a cross-sectional methodology, a questionnaire that included four scenarios was used to gather data from a sample of Libyan management accountants and accounting students. Using several advanced statistical techniques (e.g., One-way ANOVA and Hierarchical Multiple Regression), data was analysed and the study hypotheses were tested.

The results of this study reveal that, among all the variables examined, personal moral philosophy dimensions had the strongest significant relationship with the three stages of ethical decision making for both samples. Also, moral intensity dimensions explained a significant portion of the variance in management accountants' ethical decision making stages, whereas only the ethical intention stage of accounting students was significantly associated with moral intensity dimensions, temporal immediacy in particular. Moreover, while no significant relationships were found in relation to the impact of all organizational variables examined, very few significant results were found related to the impact of age, gender, and educational level on ethical decision making stages. Also, Libyan management accountants recognized several issues that have been found in other countries, including the issues of injustice in distributing the company's resources within companies, the misuse of the company's equipments, and managers' use of power to serve personal interest. Encouraging idealistic philosophy and giving more attention to ethics in accounting education are some of the implications of this study. Future research should apply other methods (e.g., interview) to investigate ethical issues in management accounting, including other dimensions of moral intensity and ethical climate components, and include samples from developing countries, especially Muslim countries.

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## **Chapter One**

### **Introduction and Background**

#### **1.1 Introduction**

Over the last few decades the business environment throughout the world has seen several accounting and corporate scandals such as the collapse of Enron, Arthur Andersen, WorldCom, Xerox and others companies in the USA, Parmalat in Italy, Vivendi-Universal in France, Ahold in the Netherlands, HIH Insurance and OneTel in Australia, and Sk Global in South Korea.

As a result of those ‘scandals’, significant attention has been directed to the issue of ethics in business in general, and accounting in particular, including endeavours to improve the education of accounting students and the regulation of accounting practitioners. In recent decades, numerous empirical studies have been conducted on the subject of ethical decision making, cognitive moral development, and ethical issues within accounting (e.g., Bernard & Sweeney, 2010; Bernardi & Arnold Sr, 1997; Brandon, Kerler Iii, Killough, & Mueller, 2007; Buchan, 2005; Doty, Tomkiewicz, & Bass, 2005 ; Feng, 2008; Fisher, 1999; Fisher & Lovell, 2000; Radtke, 2004; Rogers & Smith, 2001; Schneider, 2004; Sweeney & Costello, 2009; Thorne, 1999; Welton, Lagrone, & Davis, 1994). Furthermore, the association of individual variables, organizational variables, and moral intensity dimensions with the ethical decisions of accounting students, management accountants, and auditors have been investigated on some studies (e.g., Bernard & Sweeney, 2010; Buchan, 2005; Etherington & Schulting, 1995; Keller, Smith, & Smith, 2007; Leitsch, 2004, 2006; Marques & Azevedo-Pereira, 2008; O'Leary & Stewart, 2007; Roxas & Stoneback, 2004; 2007; Sweeney & Costello, 2009). This study investigates the significance of these variables on ethical decision making of Libyan management accountants and future Libyan accountants (i.e. accounting students).

This chapter provides the essential background of this study. It begins with a section that provides basic background in relation to ethical decision making stages and individual variables, organizational variables and moral intensity dimensions. This is followed by reviewing and discussing the literature of management accounting ethics research. The next sections discuss the research motivation and list the research aims. Then, an overview about the Libyan context is provided. Finally, the organization of the study is presented in the last section.

## **1.2 Background of the Study**

According to the psychologist James Rest, the ethical decision making process involves four essential stages: ethical recognition, ethical judgment, ethical intention, and ethical behaviour. Several variables have been hypothesized, and some found, to have significant relationships with these stages (see Chapter Two). The variables include individual characteristics, organizational characteristics, and moral intensity dimensions. Individual variables studied include gender, age, educational level, personal moral philosophy, work experience, religion, nationality, and personal values; organizational variables examined include ethical climate, code of ethics, organizational size, type of industry, and top management pressure; moral intensity dimensions include magnitude of consequences, social consensus, concentration of effect, and temporal immediacy. These variables have been investigated within several areas include marketing (e.g., Akaah & Lund, 1994; Akaah & Riordan, 1989; Deconinck, 2004; Dubinsky & Loken, 1989; Karande, Rao, & Singhapakdi, 2002; Kelley, Ferrell, & Skinner, 1990; Lund, 2008; Perry, 1998; Seshadri & Broekemier, 2009), information systems (e.g., Haines & Leonard, 2007a, 2007b; Leonard, Cronan, & Kreie, 2004), management (Bowen, 2005; Mencl, 2004; Rosalie, 2006), and accounting (e.g., Buchan, 2005; Doty et al., 2005 ; Radtke, 2004; Richmond, 2001; Schneider, 2004; Shafer, 2007).

These studies have found mixed results. For example, some have suggested that females exhibit higher ethical behaviour than males, whereas others found no

significant differences. Interestingly, only one study revealed a few significant results that males are more ethical than females (Marques & Azevedo-Pereira, 2008). The theory of cognitive moral development, developed by Kohlberg, hypothesized that older individuals should exhibit higher ethical values and behaviour; but past research on the influence of age on ethical decision making has produced inconsistent and mixed results.

business and accounting ethics scholars agree that personal values (e.g. honest, courageous ambitious, helpful) play a key role in the dimensions of ethical decision making (Abdolemohammadi & Baker, 2006; Fritzsche & Oz, 2007; Gowing, Norm, Lan, Sharon, & Fritz, 2005). Nevertheless, quite a few researchers have suggested that there is no significant relationship between personal values and the ethical decision making in business or organizational context (Shafer, Morris, & Ketchand, 2001).

With regard to years of employment and education, research has revealed that there is a significant relationship between years of employment and ethical beliefs. Some states that, when an employee works a long time for the company, he or she will likely act ethically (Appelbaum, Deguire, & Lay, 2005; Bernardi & Arnold Sr, 1997), whereas some argue that that relationship is surrounded by ambiguity (O'Leary & Stewart, 2007). Appelbaum et al. (2005) also suggest that education has a positive correlation with ethical behaviour.

While the literature of accounting ethics shows varied evidence that ethical behaviour will be influenced by courses which students are given (e.g., Cohen & Pant, 1998; Gray, Bebbington, & Mcphail, 1994), contrary, some argue that education might have no important relationship with ethical behaviour in the workplace (e.g., Comunale, Sexton, & Gara, 2006; Jackling, Cooper, Leung, & Dellaportas, 2007; Luthar, DiBattista, & Gautschi, 1997; Ponemon & Glazer, 1990).

Goodwin et al. (2000) argue that, although there is an increase in the literature of accounting ethics, only a small amount of research has examined the influence of

culture on ethical decision making in accounting and auditing, and they also state that the impact of cultural values on ethical decision making is not merely vital for international public accounting firms, but multinational companies are also faced with the difficulty of making sure that workers adhere to common codes of conduct.

Researchers have also found that there might be significant consequence regarding code of ethics, ethical climate, and peer group on ethical decision making in the workplace. Employees who adhere to a code of ethics tend to be more likely to consider ethical issues when they arise and to decide the more ethical alternative available to them (Nwachukwu & Vitell, 1997). Others, though, argue that a code of ethics is not enough for supporting ethical behaviour (Kohut & Corriher, 1994; Kram, Yeager, & Reed, 1989).

Prior to 1991, business ethics research focused on a variety of individual and organizational variables that hypothesize to influence the process of making ethical decisions. In 1991, Jones noted that various ethical decision making models (e.g., Ferrell & Gresham, 1985; Rest, 1986; Treviño, 1986) included several individual and organizational variables; however, none incorporated the characteristics of the ethical issue itself. He argued that these models do not consider the differences between ethical issues or dilemmas; for example, the issue of misusing some of the equipment of the organization is considered as the same as the issue of releasing a dangerous product to market (McMahon & Harvey, 2007). Jones (1991) used the four stages of Rest's (1986) ethical decision making model to build up his new construct, which he labelled as moral intensity. According to Jones, moral intensity is "a construct that captures the extent of issue-related moral imperative in a situation." According to Jones (1991), the moral intensity construct relates exclusively to characteristics of the ethical issue and consists of six components (or dimensions), including magnitude of consequences, social consensus, concentration of effect, proximity, probability of effect, and temporal immediacy. Several empirical studies have shown that these dimensions have significant relationship with ethical decision making stages (e.g., Barnett, 2001;

Carlson, Kacmar, & Wadsworth, 2002; Singh, Vitell, Al-Khatib, & Clark, 2007; Singhapakdi, Vitell, & Kraft, 1996; Sweeney & Costello, 2009; Vitell & Patwardhan, 2008; Watley & May, 2004).

Researchers organize variables that affect ethical decision making within organizations into various groups. Some break them up into several elements such as personal attributes (nationality, religion, age, etc), education and employment background (type of education, years of education etc), referent groups (peer group influence, top management influence, etc), and organizational variables (organizational size, industry type, etc), whereas others divide them into three main parts; variables relating to the situation within organization, variables relating to individuals themselves, and others relating to the situations themselves. Overall, these variables have been widely classified into three elements, individual variables (e.g., age, gender, and personal values religion, etc), organizational variables (e.g., organizational culture, peer group, and code of ethics etc), and moral intensity dimensions (e.g., magnitude of consequences, social consensus, and proximity etc).

### **1.3 Ethics in Management Accounting**

Significant attention has been given to ethical issues within business in general and accounting in particular in a large number of academic journals. Generally, many of these focus on ethical reasoning, moral development, and ethical decision making processes of practising accountants and accounting students, and look at the variables which influence the ethical decisions made by those individuals and why these variables are significant. Management accounting is one of the major subject areas in accounting which is 'concerned with the provision of information to individuals within the organization to help them make better decisions and improve the efficiency and effectiveness of existing operations' (Drury, 2004, p. 4). The National Association of Accountants (NAA), in statement number 1B, also identified the objectives of management accounting as to (1) provide information and (2) participate in the management process. Accordingly, management accountants have several

responsibilities to their organizations including providing information regarding planning, assessing, controlling operations, safeguarding the assets of their organization, and communicating with several parties such as shareholders and regulatory bodies (Woelfel, 1986). Therefore, management accountants are in position where they can affect others' decision making in their organizations. Several business ethics issues may face management accountants at their workplace and they may become accounting issues if conducted behaviours are, for example, due to manipulating financial information. In general, several decisions made by management accountants regarding, for example, performance reports, cost, evaluating new product, transfer pricing, and budgeting may involve some ethical content, and therefore they should be taken in account. Management accountants also encounter several ethical conflicts in their organizations as a result of the dual responsibility they have to their employer and their profession (Brierley & Cowton, 2000; Etherington & Schulting, 1995; Shafer, 2002).

Although management accountants play a key role at their workplace and the ethical conflict that may be faced, published research regarding management accounting ethics has been limited and mostly conducted in the USA (Bampton & Cowton, 2009).

The literature of management accounting ethics has tended to focus on issues related to teaching ethics into management accounting. Mintz (1990) carried out a study regarding integrating ethics in management accounting courses. Using a sample of members from the management accounting section of the American Accounting Association, he found that the majority of the respondents did address ethics in their courses. However, the study revealed that very few of the textbooks used included ethics yet they are the common teaching material for students. Bampton & Cowton (2002a; 2002b) surveyed university academics in the UK and found a small number of management accounting lecturers who claimed that they include ethical issues in their materials. Bampton & Cowton suggested that personal interest in ethics may be one

significant reason for the addressing of ethics in lecturers' courses. Similar findings were obtained by Hajjawi (2008) who studied Palestine universities.

Little research has been undertaken concerning management accountants' moral development. A study by Etherington and Schulting (1995) investigated the moral development of Canadian Management Accountants (CMAs) and factors that may affect it. They found that Canadian CMAs had a similar level of moral reasoning to the Canadian CPAs and a higher level compare to the US CPAs. Additionally, the researchers found that gender associated significantly with CMAs' moral development and suggested that the higher level of ethical education in Canadian universities could be one explanation for these results. Similarly, Etherington & Hill (1998) studied US Certified Management Accountants (CMAs). They found that the US CMAs had a similar level of moral reasoning to Certified Public Accountants (CPAs) and there was a connection between conservative social beliefs and lower levels of moral reasoning. Moreover, the researchers found that differences in moral development were based on gender-females had a higher level of moral reasoning than their male counterparts. The researchers recommended further research in this area, especially to give more attention to the issue of education and the relationship between moral reasoning and rule-orientation.

Although several empirical studies have been conducted concerning ethical decision making in accounting, there has been very little research into the management accounting area. Mihalek et al. (1987) surveyed a sample from the members of the National Association of Accountants (NAA) to determine if management accountants had manipulated financial reports due to the pressure of their organizations, how they reacted and solved this issue, and whether the code of ethics was considered. The results indicated that the organization's and management accountants' characteristics (including work experience, type of certification they have, and job title) had a significant relationship with ethical decisions. A professional code of ethics had no significant relationship with accountants' ethical decision making. The researchers

suggested that management accountants may not have been familiar with the professional code yet.

Flory et al. (1992) used a questionnaire that included four scenarios, adopted in this study, to explore how US CMAs make their ethical judgments in relation to accounting ethical issues. Three dimensions were used to evaluate the ethical perceptions. It was found that moral equity, relativism, and contractualism capture a significant amount of the decision dynamics performed by the participants to make ethical judgments. Also, they found that these dimensions capture an important amount of the variance in ethical intention. They recommended that further research is needed concerning the relationship between moral development and the ethical decision process of management accountants. Johnson and Beard (1992) examined a random sample of CMAs, professors and students in the USA to identify how individuals perceive the behaviour of management accountants. No agreement was found between the groups examined concerning what constitutes unethical behaviour. Participants indicated that ethics education should be given more attention.

A study by Douglas et al. (1994) compared the dimensions of personal moral philosophy of the CMAs and internal auditors in the USA. They found that, while management accountants were more absolutist than internal auditors, internal auditors were more subjectivist than management accountants. The researchers concluded that management accountants are more likely to perceive ethical issues in terms of right and wrong than internal auditors. They argued that this result may be because internal auditors typically encounter a variety of situations at their workplace and are more likely to consider only the rules and regulations when making their decisions.

Jones and Hildebeitel (1995) investigated the relationship between the individual variables and organizational variables and ethical decision process of management accountants from the Institute of Management Accountants (IMA). Using ANOVA, the results of the questionnaire and the five scenarios included revealed that age, gender, education and code of ethics had a significant relationship with ethical decision making

process. The researchers suggest further research regarding the exact role of these variables.

Using a questionnaire including ten scenarios, Goodwin et al. (2000) studied a sample of Australian and Singaporean accountants who worked within different settings (i.e. internal auditing, management accounting and public practice). The aim of this study was to investigate the impact of cultural dimensions (e.g., Individualism/Collectivism, Power Distance, Uncertainty Avoidance), as suggested by Hofstede (1980; 1991), on ethical decision making process. The result showed that differences between the two samples were significantly based on the cultural dimensions.

The role of codes of ethics within management accounting area has been investigated by some empirical studies (e.g., Coppage, 1988, 1992; Douglas & Otto, 2002; Jones & Hildebeitel, 1995; Morgan, Soroosh, & Woelfel, 1985; Philip & Cottell, 1987; Sheldahl, 1986). These studies focused mainly on examining the content of the professional code of ethics developed by management accountants' professional bodies and whether management accountants used them to solve the ethical issues they had encountered.

Morgan et al. (1985) examined management accountants' opinions of code of ethics after NAA published a statement on management accounting (SMA) No 1C : Standards of Ethical Conduct for Management Accountants. Questionnaires were mailed to 400 CMAs and 400 corporate controllers in the US. Participants believed that a code of ethics is important and supported their organization's code of ethics, but it is not a final solution for ethical issues faced.

The study of Coppage and Sriram (1992) concluded that further evaluation of the current code of ethics was needed and several behavioural issues might not easily be matched to the content of the current code of ethics. In another study, Coppage (1992) interviewed 25 US CMAs to develop a questionnaire in order to evaluate the professional code of ethics. The results revealed seven categories of 330 behaviours. The seven categories included Supervision, Confidentiality, Objectivity, Integrity,

Legality, Competence, and Conflicts of Interest. In both studies, the researchers recommended that a Supervision section should be considered in the future professional code of ethics. Douglas and Otto (2002) examined whether the professional code of ethics developed by the IMA was considered by US CMAs in recognizing and solving ethical issues. The researchers concluded that the code of ethics was significantly related to the ethical decisions made by members to solve the faced ethical issues. Other results reported by the study revealed only weak relationships between members' ethical decision making stages (recognition and judgment) and their personal moral philosophy, age, certification, and corporate ethical values.

Ethical issues that may face management accountants at their workplace have been investigated (e.g., Coppage, 1992; Coppage & Sriram, 1992; Fisher & Lovell, 2000). In their qualitative and quantitative study, Fisher and Lovell (2000) interviewed 45 members of the UK CIMA. Various ethical issues within organizations were identified by participants. The authors categorized these issues, or problems as they sometimes labelled them, in eight categories as follows:

- Distributive justice (e.g., ethical issues related to distributing rightly the organization's resource and budgets between departments, programmes, and groups within organizations).
- Economy with the truth (e.g., omit, delay, and withhold some of the crucial information in order to have desired outcomes; a better example the authors found was related to 'recasting information to justify a particular treatment of budget codes and accruals')
- Confidentiality and privileged information (e.g., disclosing the confidential information and the issue of insider information)
- Conflict of interest (e.g., whether the accountants should follow the interest of their organization at the cost of their professional code of ethics and vice versa)

- Bullying (e.g., managers bullied or harassed members of staff and vice versa to achieve a desirable outcome as well as the issue of indispensable skills to blackmail the organization for personal interests)
- Rule-bending and ethical risk-taking (e.g., breaking rules where they are thought to be wrong, misusing the organization's equipment such as phones, and signing off documents without appropriate check)
- Matters of principle (e.g., considerations as to personal principles, animals right is an example)
- Giving and withdrawing trust (e.g., trusting a person despite the fact he/she has done prejudiced things and also giving a second chance to those who had broken trust)

Additionally, the researchers added that interviewees experience similar ethical issues at their work regardless of their specialism. Code of ethics was also investigated by Fisher and Lovell's study; it was found that members used them to resolve the ethical issues they faced at their workplace. Additional results provided by this study were related to the issue of whistle-blowing; fifteen cases were reported by thirteen participants, but none felt able to take the issue to a higher level within the organization. It is worth mentioning here that the current study depended heavily on the ethical issues presented above to develop several questions related to identifying the ethical issues that exist within the Libyan management accounting context.

In general, it can be noted that research on management accounting ethics has mostly focused on evaluating the contents of the professional code of ethics and also investigating whether ethical materials were included in management accounting courses. Additionally, these studies were essentially conducted in developed countries, particularly the USA, Canada, and the UK. Moreover, few empirical studies examined the relationship between individual and organizational variables and management accountants' ethical decision making process, and this was done a long time ago. Thus, a gap can be noted in the literature of management accounting ethics, especially

research related to the impact of several organizational variables such as ethical climate, organizational size, type of industry, and of several individual variables such as work experience, educational level, gender, and personal moral philosophy, and moral intensity dimensions (the six components of moral intensity). This study hopes to fill this gap by conducted an empirical investigation of the association between a range of individual variables, organizational variables, and moral intensity dimensions and management accountants and accounting students' (the future accountants) ethical decision making stages.

#### **1.4 Research Motivation**

Several studies concerning ethics in accounting have been conducted in developed countries (Bampton & Cowton, 2002a; Bernardi & Arnold Sr, 1997; Chan & Leung, 2006; Comunale et al., 2006; Jones & Hildebeitel, 1995; Keller et al., 2007; Loeb, 1971, 1988; Low, Davey, & Hooper, 2008; O'Leary & Stewart, 2007; Ponemon, 1992, 1993). However, there is limited research has been done in developing countries (Al-Shaikh, 2003; Fülöp, Hisrich, & Szegedi, 2000; Shafer, 2007) such as Libya.

An excellent opportunity and new challenge are given to scholars to investigate ethics in accounting within these countries, especially during the period of their transition from a planned to market economy, and also where corruption is somewhat higher. Burgess and Mullen (2002) argue that the failure of business ethics over the last few years; transition from planned to market economy, privatization and globalization are expected to make the issue of ethics more vital than ever before in developing countries.

Privatisation of state owned enterprises, liberalisation of trade and finance, restructuring of companies, and the entry of foreign direct investment are generally considered to be the most essential features of changing from planned to market economy. Such changes certainly put great pressure on accountants in particular within organizations to be aware of ethical issues that they might encounter during the time of that change.

The transition from a planned to market economy in Libyan context, which started a decade ago, has caused some changes in the environment of Libyan companies. For instance, a number of non-oil companies have been sold to the private sector and others are restructuring and under the supervision and control of The General Board of Ownership Transfer of Public Companies and Economic Units (GBOT). This association was established to carry out the programme of transferring public company and economic unit ownership to the private sector. However, oil companies remain under the control of government.

Management accountants within Libyan companies have been chosen for this research for several reasons. First, although quite a lot has been written lately about moral reasoning and ethical behaviour in organizations, few empirical studies have examined the variables that influence ethical decision making of management accountants; see discussion above.

Second, Libya is one of the developing countries which is currently at the stage of transition from a planned to market economy. Consequently ethical decisions of management accountants and variables associated to their ethical decisions making when facing ethical issues need to be investigated, in order to understand what kind of ethical issues are occurring and to determine the main individual and organizational variables that might influence management accountants, so that the community, organizations and employees can be protected from the spread of unethical behaviour.

Third, while there has been some research conducted concerning accounting ethics, little research has been done concerning management accounting (Bampton & Cowton, 2002b; Etherington & Schulting, 1995). Fourth, some (Ford & Richardson, 1994; Jones & Hildebeitel, 1995; Keller et al., 2007) argue that individual and organizational variables still need further investigation in order to increase the literature of the field of business ethics, of which accounting ethics is considered to be one of the main elements. Finally, to the best of the researcher knowledge no study concerning ethical decision making has been done in Libyan business. This research proposes to fill this

gap in the literature by testing a model of individual, organizational variables and moral intensity dimensions influences on ethical decision-making.

### **1.5 Research Aims**

The principal aim of this study is to determine the variables that influence ethical decision making in a developing country. More specifically, this study was designed to address the variables that influence management accountants and accounting students' ethical decision making in Libya. To accomplish this aim, the following research objectives will be pursued:

1. To identify what types of ethical issues are faced by management accountants within Libyan companies;
2. To determine the relationship between individual variables (age, gender, educational level, work experience, and personal moral philosophy) and the decision making process of Libyan management accountants and accounting students;
3. To determine the relationship between organizational variables (codes of ethics, ethical climate, organizational size, and industry type) and the decision making process of Libyan management accountants; and
4. To determine the relationship between moral intensity dimensions (magnitude of consequences, social consensus, and temporal immediacy) and the decision making of Libyan management accountants and accounting students.

Organizational variables were not examined in this study in relation of the accounting students sample because they are full time students and had no work experience. The reasons for the choice of particular variables for investigation are explained later.

## **1.6 Research Methodology**

This study was only interested to look at the Libyan management accountants' ethical decision making. Accounting student sample was used in this study to examine their ethical decision making as they are expected to be the future accountants. Any differences from current management accountants would indicate the possibility of change in the future, whereas similarities would point towards stability, in spite of the many significant changes that have been occurring in Libya. In this respect, Collins (2000) pointed out that the current business students are the future business leaders and understanding their ethical decision making process while in universities can be very relevant to understanding their future ethical workplace decision making. Therefore, Libyan accounting students were investigated in this study only for the check.

This section provides a summary regarding the study methodology used to meet the study aims. Several procedures were undertaken to reach the final draft of the study instrument. By adopting a cross-sectional methodology, a questionnaire includes four scenarios, which were used in several empirical accounting ethics studies, was used in this study to gather the data from two samples, Libyan accounting students and management accountants.

The questionnaire including scenarios has been the common method in business ethics research (see Chapter Three). It was formed in three main sections; demographic individual and organizational variables were included in section one, while personal moral philosophy was included in the second section. Section three was devoted to the four scenarios. The questionnaire was administered to 392 Libyan management accountants working within 71 Libyan companies and 168 Libyan accounting students studying at four Libyan universities. A total of useable 229 (58.40%) questionnaires were received from management accountants and 152 (90.50%) from accounting students. The issue of reliability and validity of the study instrument was considered and established. Descriptive statistics (means and standard deviations) and advanced

statistical tests (e.g., independent sample t-test, One-way ANOVA, and Hierarchical Multiple Regression) were used to analyse the data collected.

### **1.7 Libyan Context**

Libya is a developing Arab and Muslim country and the first significant producer of oil in North Africa. Historically, Libya had been occupied by several foreign powers, with the Phoenicians setting a colonisation trend that saw the Greeks, the Romans, the Ottomans and more recently the Italians followed by the British and France tutelage. Since independence, the Libyan political and economic system has seen several dramatic changes. The most significant of these changes are:

1. The UN declaration of the independence of Libya in 1951.
2. The discovery of oil in 1959, which turned the country from a poor into a relatively wealthy nation with the potential for extensive development.
3. The revolution of Colonel Moummer Al Gaddafi in September 1969, followed by his declaration of the Third Universal Theory in 1977, when the new political system was introduced to Libya and the official name of the state was changed to “The Socialist People's Libyan Arab Jamahiriya”. Accordingly, the country became a socialist state, to be governed by the people, and authority was transferred to the General People’s Congress (GPC).
4. In September 1992, the law of privatization was passed to regulate the private sector within Libyan business environment and the door was opened for privatizing several public sector organizations.
5. The UN sanctions in 1993, when Libyan government refused to hand over the two suspects of the Lockerbie airline bombing in 1988 in Scotland.
6. In 2003, Libya was admitted back to the international community and the sanctions were lifted, after a settlement was reached between the Libyan government and the families of the Lockerbie victims.

Since 2003, the Libyan government, with its new relationship with European countries and the USA, has attempted to play a significant role in the world, and several international organizations have entered the Libyan market. Recently, great attention has been given to encouraging the private sector in Libya and several Libyan manufactures and service companies were privatized (Central Bank of Libya, 2007). Currently, there are over 190 large public enterprises (Ahmad & Gao, 2004). The main aim of these enterprises is to offer services and goods to the public rather than to make a profit. Generally, political and economic variables have an important relationship with individuals' attitudes and behaviours. Thus, these changes are more likely to have some significant impact on Libyans' ethical decision making process.

The Islamic religion and Arabic language are the two dimensions that characterize Libyan culture. According to Hofstede (1984, p. 389), culture can be defined as "The collective programming of the mind which distinguishes the members of one category of people from those of another." Hamid et al. (1993) state that culture "may be taken to refer to all those social, political and other factors which influence individuals' behaviour". Every culture has its own values and norms that are developed over generations. Culture plays a significant role in individuals' ethical reasoning and attitudes (Christie, Kwon, Stoeberl, & Baumhart, 2003). Primarily, cultural values are transmitted to a culture's members by parenting and socialization, education and religion. Moreover, Ahmed et al. (2003) argue that ethics and ethical decision making processes involve the application of societal values.

With regard to the Libyan aspect, Aghila (2000) indicated that family, religion and language have a significant impact on the attitudes and behaviours of individuals both in Libya and in Arabic society in general. The Libyan family operates as a small society, with its members being assigned to a hierarchical order, according to age and generation. Authority and leadership are the preserve of the father, grandfather or eldest son (El Fathaly, 1977, cited in Ahmed, 2004). This hierarchy is supported by Islamic principles and Arab tradition (Bjerke & Al-Meer, 1993). Moreover, like other Arab

states, Libya is characterized by the extended family, clan, tribe and village, which play a significant role in the society's life and individuals' relationships with each other (Aagnaia, 1997). Additionally, personal relationships and family connections can play a more important role in many decisions regarding business and career promotion than practical experience or academic qualification. Thus, individuals' ethical behaviours are more likely to be influenced by many members within the society.

Libya is one of a number of Arabic countries included in Hofstede's (1997) cultural study, along with Egypt, Iraq, Kuwait, Lebanon, Saudi Arabia, and the United Arab Emirates. Although Arab countries have many similar common characteristics, they differ from each other in many aspects. Hofstede (1997) reported that, for instance, the Saudis are more collectivist than some other Arabs such as the Lebanese or Egyptians. Comparisons of culture values between Arab countries and other countries have been reported (Baydoun & Willett, 1995; Hofstede, 1997). Arab countries scored higher levels of power distance, uncertainty avoidance, and collectivism than several western countries such as the UK and the USA. These dimensions have been found to have a significant relationship with individuals' ethical decision making process (Cherry, Lee, & Chien, 2003; Christie et al., 2003; Fleming, Chow, & Su, 2010; Goodwin & Goodwin, 1999; Roxas & Stoneback, 1997; Singhapakdi, Vitell, & Leelakulthanit, 1994; Vitell & Paolillo, 2004). Moreover, it has been argued that cultures where there is low individualism, and stronger in both uncertainty avoidance and power distance, would place more importance on codes of behaviour (Marta, Attia, Singhapakdi, & Atteya, 2003).

Religion promotes social solidarity, partly by providing norms and values that reduce conflict and also by forcing sanctions against antisocial behaviour (Kennedy & Lawton, 1998). Research regarding the impact of religion upon individuals' ethical decision making process is well documented (Conroy & Emerson, 2004; Kennedy & Lawton, 1998; Singhapakdi, Marta, Rallapalli, & Rao, 2000). Islam, like other religions in several countries, is one of the most significant factors which has shaped current Arab

value systems (Darwish, 2001). In general, Muslims derive their ethical system from the teachings of the Quran (which Muslims believe was revealed by God to the Prophet Muhammad, peace be upon him) and from the Sunnah (the recorded sayings and behaviour of the Prophet Muhammad, peace be upon him) (Abbasi, Hollman, & Murrey Jr, 1989; Rice, 1999). Also, the Islamic tradition places ethical/social activity ahead of individual profit maximization (Beekun, Hamdy, Westerman, & Hassab, 2008; Rice, 1999). Rice (1999) added that in Islam, it is ethics that dominates economics and not the other way around. Also Islam urges strict compliance with the moral dictates of the Quran; therefore, followers of this belief tend to be more idealistic and less relativistic (Abeng, 1997). Libyans are predominantly Muslim and approximately 97% of them are Suni. In 1977, the importance of religion in Libya was clearly demonstrated by legislative acts that the Holy Quran became the major source of the written laws and most of the legal environment surrounding business transactions. Therefore, strict adherence to the tradition of Islamic religion in Libya would strengthen deontological norms and codes of ethics in individuals' ethical system.

The Libyan accounting profession and accounting education have been recognized in Libya for several years. Two periods of time can be recognized regarding the development of accounting education and the accounting profession in Libya. The first is before independence when there was no formal accounting education available for local people and no domestic accounting profession was established; business depended mainly on foreign accounting firms from western countries (Bait-El-Mal, Smith, & Taylor, 1973; Buzied, 1998; Kilani, 1988). Generally, in the 1950s the country was greatly reliant on advisers from the UK, USA and UN (e.g., the Libyan Public Development and Stabilisation Agency, the Libyan American Reconstruction Commission, the Libyan and American Joint Service) to build up its accounting system (Ahmad & Gao, 2004). The second period started after independence, when accounting education was offered to students at pre-university and university level. In 1957, for example, the Faculty of Economics and Commerce at the University of Libya (currently called Garyounis University) opened the accounting education department and started

to offer accounting courses to Libyan students. In general, Libyan accounting education has relied significantly on the British and the US models (Ahmad & Gao, 2004; Buzied, 1998; Kilani, 1988). Recently, Libyan accounting education has witnessed several changes and developments including developing several accounting curricula, sending many accounting students abroad (PhDs, Master's, and Bachelor), and restructuring several accounting departments at Libyan universities. However, including ethical material in accounting curricula has not been considered in Libyan accounting education. Formal education is regarded as one means of intervention conducive to moral development. Researchers have repeatedly reported that moral development is highly associated with the level of education (Armstrong, Ketz, & Owsen, 2003; Steven, Cooper, & Leung, 2006). Moreover, some research has shown significant results related to ethics courses (David, Gerard, Paul, & Peter, 2009; Leung & Cooper, 1994; Nellen & Monsour, 2007; Wright, 1995).

In 1973, the Libyan Accountants and Auditors Association (LAAA) was established when the Law No. 116 of 1973 was enacted. The LAAA member should be Libyan having a university degree in accounting and at least five years of qualification. Several other issues were covered by Law No 116, including responsibilities, registration, fees, exercise of profession, obligations of accountants and auditors, and penalties. Although the LAAA was established a long time ago, it has done nothing to build any theoretical base for the accounting profession in Libya (Bakar, 1997). Bakar identified several limitations regarding the LAAA including: 1) no code of ethics has been suggested, 2) it has failed to regulate itself and to recognize its obligation towards the public interest, and 3) some of its objectives have not been achieved, including holding and participating in activities such as research, conferences, seminars, continuing education and training programmes. Currently, members of the LAAA are practising mainly as auditors and offer several services, including auditing, taxation, accounting advice, and accounting systems design. In Libya, no separate professional body has been established for management accountants since the LAAA is the only accounting professional body established in Libya so far (Ahmad & Gao, 2004). Accordingly,

Libyan management accountants may only consider their organizations' code of ethics and their individual system when facing ethical issues.

### **1.8 Thesis Structure**

The thesis is organized into five chapters. *Chapter One* provides an introductory outline of the study and highlights the study motivation and aims. Also this chapter discusses and analyses the empirical literature of management accounting ethics. Several issues related to the Libyan context were presented.

*Chapter Two* provides an overview of the literature related to the ethical decision making four stages as suggested by Rest (1986) and variables that have been hypothesized, and some found, to have significant relationship with these stages. These variables include first, individual variables (age, gender, educational level, work experience, and personal moral philosophy); second, organizational variables (code of ethics, ethical climate, type of industry, and organizational size); and third, moral intensity dimensions (magnitude of consequences, social consensus, and temporal immediacy).

*Chapter Three* describes the methodology of the study. It provides detailed information on the sample and the population of this study, the design and testing of the questionnaire, the content of the final draft of the questionnaire, and the procedures to the questionnaire translation. It also discusses and analyses the scenarios adopted in this study. Additionally, it explains how the study instrument was administered to Libyan accounting student and management accountants. Issues related to the validity and reliability are presented and explained. Statistical tests used in this study are discussed at the end of the chapter.

*Chapter Four* presents the results of the data collected. It presents the hypothesis tests by using several advance statistical techniques such as Hierarchical Multiple

Regression and One- way ANOVA. Also, it provides detailed discussion on the assumptions of the statistical tests used in this study.

Finally, *Chapter Five* summarizes the major results of this study and provides related discussion. Also, it discusses the study's contribution to knowledge. The limitations of the study, recommendations and conclusions are provided at the end of the chapter.

## **Chapter Two**

### **Theoretical and Empirical Background of Variables Influencing Ethical Decision Making Process**

#### **2.1 Introduction**

This chapter aims to provide an essential theoretical and empirical background in relation to the association of individual, organizational variables and moral intensity dimensions with ethical decision making process. It is organized into seven sections starting with a review of the four stages of ethical decision making process; ethical recognition, ethical judgment, ethical intention, and ethical behaviour. The third section is devoted to discuss the business ethics literature that relates to the variables that influence ethical decision making process. These variables are, first, individual variables (age, gender, educational level, years of experience, and moral philosophy), second, organizational variables (codes of ethics, ethical climate, and size and type of industry), and third, moral intensity (magnitude of consequences, social consensus, and temporal immediacy). In the fourth section, limitations of previous studies are discussed. A summary of this chapter, the model and the hypotheses of the study are presented in the final three sections.

#### **2.2 Ethical Decision Making Processes (EDM)**

Theories on ethical decision making (EDM) are several. Researchers turn to ethical theories, philosophical and psychological approaches to understand ethical decision making process. Two approaches are commonly adopted in the area of business ethics; the normative approach and the descriptive approach (O'Fallon & Butterfield, 2005). The normative approach, which is based on the field of moral philosophy and theology, is concerned with how individuals should behave, what is right and wrong and what ought to be done. On the other hand the descriptive approach, which is based primarily on the area of business and psychology, is concerned with how individuals actually make ethical

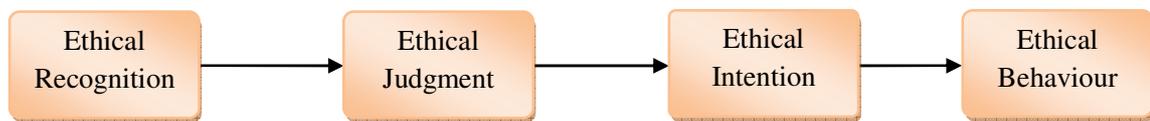
decisions, what steps they take, which moral principles they invoke and what other variables influence their decisions (Miner & Petocz, 2003).

There have been lots of normative or moral philosophy theories (e.g., Aristotle & Plato) have been done, however they are not in management or business ethics area. To date, most empirical studies in the area of business ethics area especially ethical decision making are more descriptive rather than normative in nature (McMahon & Harvey, 2007; Nill, Schibrowsky, & Peltier, 2004). For example, the well-known ethical decision making models (e.g., Jones, 1991; Rest, 1986; Treviño, 1986) are descriptive theory based, and they assume that ethical decision making process is affected by numerous individual, organizational variables and the characteristics of ethical issue (Nill et al., 2004).

Ethical decision making is defined as “a process by which individuals use their base to determine whether a certain issue is right or wrong” (Carlson et al., 2002, pp. 16-17). Jones (1991) adds that ethical decision is both legal and morally acceptable to the larger group. Guy (1990) argued that ethical decision making in the workplace entails individual morality and work related judgment. He concluded that the characteristic of ethical decision making consist of 1) the decision influences two or more values; 2) the individual is encountered with a dilemma; and 3) the process is filled with uncertainty, and unknown outcomes a wait. These characteristics show the difficulty and complexity in the nature of ethical decision making process (Miao-Ling, 2006).

Rest's (1979, 1986) theoretical frameworks are possibly the most important writing on the ethical decision making process within organizations. He proposed a four-stage ethical decision making sequence (see Figure 2.1) to describe individuals' cognitive stages when they faced ethical dilemma. These stages comprise 1) ethical recognition – being able to interpret the situation as being ethical or unethical; 2) ethical judgment – deciding which course of action is morally right; 3) ethical intention – prioritizing ethical alternative over other alternatives; and 4) ethical behaviour – engaging in ethical behaviour. Rest argues that each stage is conceptually different and that success in one stage does not mean success in any other stage. Wotruba (1990) states that these types

generally occur in the sequence implied, although they can affect each other. Since the early 1980s, most of ethical decision making studies and models within business area have been heavily based upon Rest's framework. Business researchers from different areas such as marketing, auditing, and management, and different countries have adopted this framework in their research. While some have examined only one stage (e.g., Weeks, Moore, McKinney, & Longenecker, 1999; Yetmar & Eastman, 2000), others have investigated two or more stages (e.g., Bass, Barnett, & Brown, 1999; Nguyen & Biderman, 2008)



**Figure 2.1 Ethical decision making stages**

Treviño (1986) offered an interactionist ethical decision model, which was mainly built on Kohlberg's (1969) cognitive moral development (CMD) theory (see ethical judgment, section 2.2.2) and included three parts from Rest's model of the ethical decision making process in her model. In this complex model, she describes ethical decision making process in three stages from recognizing the ethical issue, to cognitive processing, to engaging in the real action. Both individual and organizational variables were incorporated within this process. She proposed that ethical decision making is the outcome of an interaction between individual and organizational variables regarding individual's manner of thinking about ethical dilemmas. Including these variables in ethical decision making theoretical frameworks is considered to be one of the important developments in business ethics research; for example, the three reviews of Ford and Richardson (1994), Loe et al. (1996) and O'Fallon & Butterfield (2003), which will be discussed later in this chapter, revealed that more than forty individual variables and organizational variables have been investigated and several significant relationships with the stages of ethical decision making have been found.

Based on Rest's (1986) model, Jones (1991) built his issue-contingent model of ethical decision making. He argues that most models of ethical decision making in business ethics research were developed on Rest's (1986) sequential four components model. Nevertheless, none of these models incorporated the characteristics of the moral issue itself as either an independent factor or a moderating factor (Jones, 1991). Therefore, Jones incorporated the features of the moral issue itself (i.e., moral intensity components, see section 2.3.3) into the ethical decision making process model. He argues that people react differentially to ethical issues in a way that is systematically related to characteristics of the issue itself. Jones claims that the characteristics of ethical issue itself are crucial determinants of ethical decision making process.

Hunt and Vitell (1986) developed a positive theory of marketing ethics by integrating moral philosophy. They argued that normative theories of moral philosophy (e.g., teleology & deontology) must be included in ethical decision making theories. Hunt and Vitell propose that ethical decision making starts with recognizing the ethical dilemma in a given situation. Both deontological and teleological evaluations then are used to judge various courses of action to obtain related ethical judgments. Intentions to act will be the outcome of those ethical judgments made. Finally, ethical behaviour is the result of these sequence stages. Hunt & Vitell (1986) argue that ethical judgment does not always agree with the intent of action and also ethical behaviour is not always consistent with the ethical intention. Although Hunt and Vitell added a stage of teleological evaluation, in which the consequences of the ethical decision are evaluated, they did not suggest a systematic association between consequences and subsequent components of the model intentions and behaviour (Jones, 1991).

In general, all of these models (Hunt & Vitell, 1986; Jones, 1991) are essentially based on Rest's (1986) model, and each of them incorporated some factors that have been empirically found to possibly influence the stages of ethical decision making process. Because this study is interested to investigate the association of some individual, organizational variables, and the characteristics of the ethical issue with the ethical

decision making stages (ethical recognition, ethical judgment, and ethical intention), these models as well as Rest's model are primarily used here to achieve its aims.

Descriptive business ethics studies have been built on theoretical models derived from Rest's (1986) model of ethical decision making (Groves, Vance, & Paik, 2008). Traditionally, the four stages (ethical recognition, ethical judgment, ethical intention, and ethical behaviour) have been treated as the outcome variables, while researchers have investigated individual, organizational variables and moral intensity characteristics as predictor variables (Loe, Ferrell, & Mansfield, 2000; O'Fallon & Butterfield, 2005). These four stages of ethical decision making are discussed below.

### **2.2.1 Ethical Recognition**

Ethical recognition is the fundamental and crucial stage in ethical decision making process, because recognizing ethical issue as morally presumably helps to initiate ethical decision making. Butterfield et al. (2000, p. 988) defined ethical recognition as "an individual's recognition that his or her potential decision or action could influence the interests, welfare, or expectations of the self or others in a way that may conflict with one or more ethical principles". Three key points can be perceived in this definition: the recognition of the decision maker, the decision or action, and individuals who will be affected.

The ethical decision making process begins when an individual can recognize that the situation involves an ethical issue or an ethical principle ought be applied (Rest, 1986). Rest argues that an ability to identify and properly assess the ethical issue in situations is a necessary prerequisite to right ethical decisions. Hunt and Vitell (1986) describe this stage as the catalyst that entirely drives ethical decision making process.

In their review of ethical behaviour in organizations, Treviño et al. (2006) found that two approaches have been used by researchers to investigate ethical recognition. The first approach focuses on an individual's ethical sensitivity (ethical recognition), which refers,

as mentioned early, to the ability of the individual to identify the ethical issue in a given situation. Several studies have been done regarding this stage in many areas such as marketing (Seshadri & Broekemier, 2009; Sparks & Hunt, 1998), accounting (Geiger & O'Connell, 1998; Shaub, Finn, & Munter, 1993; Yetmar & Eastman, 2000), and management (Minett, Yaman, & Denizci, 2009). In general, these studies revealed that ethical recognition was affected by several variables such as gender and age and provide that work experience and training can improve individuals' ethical recognition. The second approach considers the individual as only as any of many variables that can form ethical recognition. An example for this approach is the Jones's model of moral intensity which focused on the characteristics of the ethical issue itself rather than the individuals themselves.

Although individuals make many ethical decisions, they do not always recognize the ethical elements of their decisions. In this context, Hunt & Vitell (2006, p. 147) state that "when placed in a decision-making situation having an ethical component, some people never recognize that there is an ethical issue involved at all." Likewise, Rest (1986, p. 6) claims that differences between individuals in their propensity to identify ethical issues can be striking: "Before it happens to some individuals that an ethical issue may be involved, they have to see the blood flowing; other people are so supersensitive that every act, work or grimace takes on momentous moral implications." However, some (Jackling et al., 2007) argue that the problem for individuals is that ethical issues are often hidden and they often not have the ethical sensitivity to recognize ethical issues when they arise. Moreover, Sparks and Hunt (1998) point out that ethical sensitivity does not mean ethicality; being more ethically sensitive does not imply necessarily that an individual is more ethical, since many individuals who behave immorally might be conscious of the ethical issues involved in their decisions. They add that individuals might behave differently if they know that some of their decisions have ethical elements.

Jones (1991) claims that recognizing ethical issues involves two components that are necessary to identify the ethical issues: 1) individual must realize that his/her actions will

influence the welfare of others and 2) the individual has volition in the issue. Hence, if the individual fails to identify the ethical issue, he/she has no chance to continue through the next stages of ethical decision making and their decision will be made according to other aspects such as economic motivation. Chia and Mee (2000) maintain that when the ethical dimensions of an issue are recognized by individuals, this recognition has the potential to influence their judgments, intentions and behaviours. Hence, the ability to recognize the possible impact to one's self and others is the main element in the ethical recognition construct (VanSandt, Shepard, & Zappe, 2006).

Empirical research (e.g., Chan & Leung, 2006; Ferrell & Gresham, 1985; Jones, 1991; Roxas & Stoneback, 2004; Treviño, 1986) has suggested and demonstrated that ethical recognition is contingent upon individual variables (e.g., age, gender, level of education, etc), organizational variables (e.g., code of ethics, ethical climate, top management, etc) and the contents of ethical issue (e.g., magnitude of consequences, social consensus, probability of effect, etc). Researchers have called for more research to clarify those variables that may affect ethical recognition (Chan & Leung, 2006; Treviño et al., 2006).

### **2.2.2 Ethical Judgment**

The second stage of ethical decision making process is ethical judgment. Treviño (1986, p. 604) defined ethical judgment as “cognitive process in which an individual determines which courses of action are morally right or wrong”. The main element of this definition is that cognitive skills will be used by the decision maker when faces an ethical issue to distinguish between the right and wrong. Deciding between the right and wrong is a vital element in ethical judgment stage that if the individual does not have an actual choice of right or wrong then the individual's judgment cannot actually be explained as ethical (Murphy, 2007). Once an individual realize that there is an ethical issue in a given situation, the ethical judgment ought to be more likely to be triggered (Rest, Narvaez, Thoma, & Bebeau, 1999). Can et al. (2005) suggest that the process of ethical judgment is theorized to depend on internalized moral standards. These standards can be affected by individual variables, organizational variables and the characterisers of the issue itself.

Schminke et al. (2007) add that individuals use these standards to weigh alternatives and determine the correct actions. In their model of ethical decision making, Hunt and Vitell (1986) claim that deontological and teleological evaluations play key role in making ethical judgments about the ethical issue and in turn may influence individual's intentions to behave in particular way. Ethical judgment is basically an approach of perceiving and finding resolutions for ethical conflicts in given situation (Ponemon, 1990).

This stage is primarily based on the cognitive stages of moral development (CMD) developed by Kohlberg (1969, 1981), which is originally based on the early work of Piaget (1932/1965). Kohlberg's theory of CMD has been the theoretical base for various versions of ethical decision making theories (Haines & Leonard, 2007a; Rest, Bebeau, & Volker, 1986). It addresses how the cognitive processes of ethical decision making become more sophisticated as individuals develop (Haines & Leonard, 2007a). Treviño (1986) used Kohlberg's model to build up a theory of ethical decision making that centres on the characteristics of the individual making the decision. Her model connects ethical judgement to ethical behaviour and proposes that individual factors influence links throughout the process of decision making rather than only judgments of whether the behaviour was acceptable and ethical (Haines & Leonard, 2007a). In this respect, Rest developed the Defining Issues Test (DIT), to determine the level of individual's moral development and the reasons behind ethical decisions (Forte, 2004). Much research has indicated that CMD directly influences ethical decision making process (e.g., Ashkanasy, Windsor, & Treviño, 2006; Reynolds, 2006; Thorne, 1999; Treviño, 1986).

Although the purpose of the present study is not to elaborate extensively upon the theoretical aspects of CMD, some explanations of Kohlberg's theory are beneficial in order to understand the theoretical background of the study.

The theory of CMD is concerned with how judgments are made and why individual formulates judgment. This theory, which was based on interview data and direct observation, consists of three levels and within each level there are two different stages (see Figure 2.2). Level one (stages one and two), which is known as pre-conventional

level, individuals base moral reasoning on their personal interests. Level two (stages three and four), which is known as conventional level, individuals develop their moral judgments from the perspective that they are part of a group whose members share common interests. Level three (stages five and six), which is known as post-conventional level, individuals function rationally and ethically in an effort to maintain the ethical standards upon which a just society is built (Steven et al., 2006). Ponemon (1990) states that one way to understand these three levels is to think about them differently in terms of the relationships between the self and society's rules and expectations.

In stage one, obeying the rules is important because it is a means to avoid punishment. Individuals at stage two base their ethical judgments on a type of cost-benefit analysis, primarily reflecting their personal interests. At stage three individuals behave ethically in order to satisfy the interests of significant others. At stage four, the focus is on maintaining law and order by following the rules, doing one's duty, and respecting authority. Individuals at stage five begin to account for the differences in values, opinions, and beliefs of others. At stage six, ethical behaviour is based on maintaining universal principles of justice and ethics (Carlson & Kacmar, 1997; Kohlberg, 1969; Steven et al., 2006). Generally higher levels of moral reasoning are indicative of higher ethical standards (Jackling et al., 2007)

**Figure 2.2 Kohlberg's theory**

Level One: Pre-conventional Morality	Stage 1: Punishment-Obedience Orientation
	Stage 2: Instrumental Exchange Orientation
Level Two: Conventional Morality	Stage 3: Good Boy- Good Girl Orientation
	Stage 4: Law and Order Orientation
Level Three: Post-Conventional Morality	Stage 5: Social Contract Orientation
	Stage 6: Universal Ethical Principle

Although the theory of Kohlberg has dominated the area of ethical research in psychology as well as business, it is not without criticisms (Jones, 1991; Rest, Narvaez, Thoma et al., 1999). In their review, Rest et al. (1999) summarized some limitations of CMD theory. They criticise that theory of CMD focused only on ethical judgment as the

main deterrent of ethical behaviour ignoring other parts of the ethical process such as ethical intention that can affect individual's behaviour. Another criticism is that CMD theory is based upon western philosophy and culture. Some Eastern countries, for example China or India, have different cultures and philosophies that may have different ethical views from "the western" that were not accounted for by Kohlberg's theory; however, Kohlberg's theory is quite general and abstract and therefore can be applied to those societies too. The final criticism to be mentioned here is that Kohlberg's theory was primarily developed based on empirical research using only male participants. Gilligan (1982) argued that Kohlberg's theory did not adequately describe the concerns of women. Although this research is not interested to study gender differences in individuals' cognitive moral development, one of its aims is to investigate empirically the role of gender in ethical judgment.

Previous studies demonstrate that judgments that related to ethical issue are influenced by multiple forces such as individual variables, organizational variables and the characteristics of ethical problem itself (Eleonora & Niki, 2006; Leitsch, 2006). Ethical recognition and ethical judgment are generally considered to be cognitive processes that serve as precursors to ethical intentions and behaviours (Treviño et al., 2006).

### **2.2.3 Ethical Intention**

The third stage of ethical decision making process in Rest's (1986) model is ethical intention. Once an individual makes an ethical judgment, he/she formulates an intention to behave ethically based on an assessment of the 'right' choice in opposition to other alternatives (Sweeney & Costello, 2009). Ajzen and Fishbein (1980, p. 42) defined intention as "the subjective probability that a given behavioural alternative will be performed". They conclude that intention is an essential determinant of behaviour.

According to Rest (1986) stated that ethical motivation (intention) is "the degree of commitment to taking the moral course of action, placing moral values over other values, and taking personal responsibility for moral outcomes" (Armstrong et al., 2003, p. 8). He

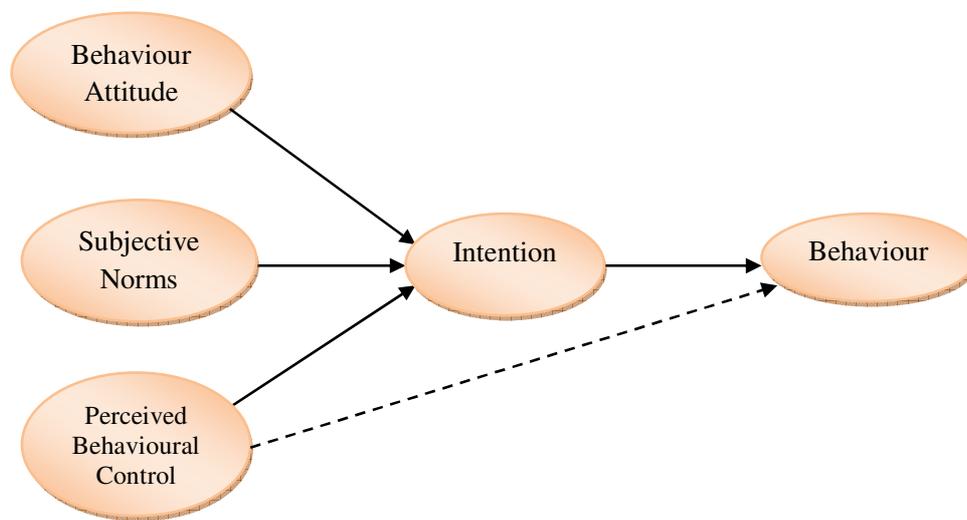
argues that the intention of individuals to behave ethically, even at the expense of their own interests, can stem from several things including shame, social norms, commitment to a higher good, empathy, care and affection, and self-integrity. Therefore, at this stage, the individual will have to weigh ethical values in relation to other values to establish ethical intentions (Jones, 1991; Rest, 1986). Moreover, deficiencies in ethical intentions could result in an unethical behaviour. In most common models of ethical decision making (Hunt & Vitell, 1986; Jones, 1991; Rest, 1986) that have been constructed, establishing ethical intentions is vital (Sweeney & Costello, 2009). In the Hunt and Vitell (1986) model, ethical intention is considered to be the most important outcome variable influenced by ethical judgment and the teleology of the action. Similarly, in Rest (1986) and Jones (1991) models, ethical intention is the final outcome that is affected by ethical judgment. Several previous empirical studies showed significant relationships between ethical judgement and ethical intentions (Barnett, 2001; Marta, Singhapakdi, Ashraf, & Vitell, 2004), whereas some studies revealed no significant relationships (Shapeero, Koh, & Killough, 2003).

The Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and its extension, the Theory of Planned Behaviour (TPB) (Ajzen, 1985) are considered to be the best known theories relate to ethical intention (Leonard et al., 2004). They are entirely focused on the third and fourth stages of Rest's model of ethical decision making, ethical intention and ethical behaviour. Both theories provide a framework to expand the understanding of the variables that associated with individual's ethical intentions (Buchan, 2005).

Basically, the TRA is based on an individual's intention to engage in the action. The TRA suggests that an individual's intention to perform or not to perform a behaviour is the immediate antecedent to the actual action (Cruz, Shafer, & Strawser, 2000). According to this theory, attitudes toward behaviour and subjective norms are the essential determinants of the individual's intention to involve in a particular action. Attitudes involve judgments whether the action is right or wrong and whether the

individual intend to or not perform it. Subjective norms are the perception of how individual should act (Buchan, 2005).

Later Ajzen (1985) extended the Theory of Reasoned Action (TRA) to the Theory of Planned Behaviour (TPB); the model of this theory is described in Figure (2.3). Perceived behaviour control was added to this theory to reflect the perception of how easy or difficult it would be to carry out the action. Madden et al. (1992) argue that perceived behavioural control will influence intentions to engage in behaviour.



**Figure 2.3 The Theory of Planned Behaviour model**

Both theories have been the basis of several studies. Previous empirical studies support the proposed associations that are explained by the theories' models (Buchan, 2005; Madden et al., 1992; Randall, 1989; Sheppard, Hartwick, & Warshaw, 1988). Moreover, they have contributed to ethical decision making research (Leonard et al., 2004). For example, Dubinsky and Loken (1989) stated that their model of ethical decision making in a marketing context was founded upon the framework of Theory of Planned Behaviour (TPB). Empirical studies have shown some evidence that intention will lead to behaviour (Oumlil & Balloun, 2008). Additionally, they have proved that the characteristics of

ethical issue, individual and organizational variables influence the individual's ethical intention to engage in an ethical action (Leitsch, 2006; Loe et al., 2000).

Although the Theory of Planned Behaviour (Ajzen, 1985) predicts a link between intention and behaviour and has been supported in some areas (e.g., Beck and Ajzen, 1991), recent ethics research has revealed that what an individual intends to do may not be what an individual actually does (Weber & Gillespie, 1998).

#### **2.2.4 Ethical Behaviour**

The final stage of ethical decision making process is ethical behaviour. It is where an individual engage in a proper action as a result of his or her intentions. Ethical behaviour is defined as one that is both "legal and morally acceptable to the larger community" (Jones, 1991, p. 367). Rest (1986) suggests that ethical behaviour is the outcome of multiple and complex process.

Although many researchers (e.g., Reiss & Mitra, 1998; Treviño et al., 2006) have recommended that more empirical research is needed regarding ethical behaviour, some argue that ethical behaviour is not easy to study due to its sensitive nature and the difficulties in measuring and observing it without biases (Ampofo, Mujtaba, Cavico, & Tindall, 2004).

Research related to Theory of Reasoned Action and Theory of Planned Behaviour, which they were mentioned early, has found both theories are very useful in predicting behaviour (Madden et al., 1992; Sheppard et al., 1988). Additionally, some argue that when an organization wants to encourage ethical behaviour, they must focus upon factors (e.g., individual factors, ethical philosophy, external factors and organizational factors) that could affect and control that ethical behaviour (Cleek & Leonard, 1998).

Little research has been done related to this stage (O'Fallon & Butterfield, 2005). The sensitivity of this stage and the related difficulties in measuring it (i.e. observing the subjects to engage in the ethical/unethical behaviour cannot be easily achieved) may be

one of the significant reasons behind this limitation (Broekemier, Seshadri, & Nelson, 1998; Haines & Leonard, 2007a; Treviño, 1992). Apparently, studying this stage needs much time and enough budgets, which were not available to the researcher. Moreover, while most of prior empirical studies focused only on one or two stages of ethical decision making (see Table 2.8), this study is looking at three out of the four stages of ethical decision making. Based on this, ethical behaviour stage will not be examined in this study.

### **2.2.5 Summary**

The well-known models of ethical decision making (e.g., Hunt & Vitell, 1986; Jones, 1991; Rest, 1986), whether were established in the field of psychology or business, agree that the process of ethical decision making of individuals consists of four stages. Stage one is the ethical recognition which refers to the awareness of the individual that an ethical problem exists in a given set of circumstances; any person fails to recognize the ethical issue in a given situation, he or she will not have a chance to advance in the next stages of ethical decision making. Stage two is the ethical judgment, which refers to the judgments made by individual regarding the faced ethical issue; several studies have been done concerning this stage which is predominantly based on Kohlberg's theory of cognitive of moral development. Stage three is the ethical intention which refers to that the individual must intend to behave in ethically right way; Theory of Reasoned Action and the Extended Theory of Planned Behaviour have been used by researchers to study individuals' ethical intention. The final stage is ethical behaviour which refers to the engagement in the action.

These four stages have been found to associate with each other and can be affected by several external and internal factors. An individual who demonstrates adequacy in one stage may not necessarily be adequate in another and ethical failure can occur when there is a deficiency in any one component, for example an individual who has identified an ethical problem in a situation may have insufficient or incomplete moral reasoning to determine the ideal moral action- a component two failure (Chan & Leung, 2006).

Although research has shown that there are relationships between the three stages of ethical decision making process, these relationships are not investigated in this study. Rather, this study is only interested to investigate the influence of some individual, organizational variables and three dimensions of moral intensity upon each of the three stages (ethical recognition, ethical judgment and ethical intention). Theoretical and empirical discussion of these variables and their influence upon the three stages of ethical decision making are discussed next.

### **2.3 Variables Affecting EDM: An Overview of Theoretical & Empirical Background**

Variables that associated with ethical decision making process are many. More than forty sub-variables divided between personal variables, organizational variables, and variables relate to the ethical issue itself have been found to have different levels of relationship with the four stages of ethical decision making (Loe et al., 2000; O'Fallon & Butterfield, 2005, see also Table 2.8).

In this study, only the following variables are discussed and analyzed in terms of their theoretical and empirical background: individual variables – age, gender, educational level, experience, and moral philosophy; organizational variables – code of ethics, ethical climate, size and type of industry; moral intensity components – magnitude of consequences, social consensus, and temporal immediacy. Choosing only these variables from the vast range of variables suggested in the literature of business ethics for research within Libyan environment was mainly due to several reasons. Firstly, some of these sub-variables, for example age, gender, codes of ethics, ethical climate, magnitude of consequences and social consensus have been reported more than any other variables in business ethics research (O'Fallon & Butterfield, 2005). However, little research has investigated these variables within developing countries (Al-Khatib, Dobie, & Vitell, 1995; Shafer, 2007) such as Libya. Moreover, some of these variables, for example, age, gender, and work experience can be easily collected from participants. Therefore, they are included in this study. Secondly, there are some variables such as type of industry, level of education, and some dimensions of moral intensity (i.e., temporal immediacy)

have been paid very little attention by business ethics researchers across countries. Thus, findings related to these factors will empirically add new evidence to the literature of business ethics, and ethical decision making area in particular. Thirdly, investigating some sub-variables in some countries can be valueless, for example examining nationality and religion within only Libyan companies and universities is worthless due to that most management accountants and accounting students in Libyan companies and universities are Libyan as well as their religion is Islam. Finally, studying all variables that relate to ethical decision making stages in limited time and budget cannot be easily done.

There are many reviews related to ethical decision making process have been already done (e.g., Treviño et al., 2006; Wright, 1995) in business ethics literature. However, only the results of three comprehensive reviews concerning individual's ethical decision making in business ethics literature (Ford & Richardson, 1994; Loe et al., 2000; O'Fallon & Butterfield, 2005) are used here. These reviews, which reviewed studies published in prominent journals (e.g., Journal of Business Ethics, Business Ethics Quarterly, Journal Business Research, Business Ethics: A European Review and Journal of Marketing), comprise of more than 350 studies that investigated ethical decision making process and variables have been found affecting it. Ford and Richardson (1994) reviewed 62 studies between early 1960s and 1994; Loe et al. (1996) reviewed 124 empirical studies conducted between 1994 and 1996, and O'Fallon & Butterfield (2003) reviewed 174 empirical studies that were published between 1997 and 2002. These three reviews offer very valuable findings concerning variables that influence ethical decision making process. Undoubtedly, reviewing empirical studies included in the three reviews again is useless as long as their results were reported already within these reviews. Therefore drawing related results from those reviews was beneficial in providing an empirical and theoretical background for this study.

In order to ensure comprehensive coverage of the literature, in addition to the review of those reviews, 44 empirical studies (see Tables 2.7 and 2.8 in pages 91-92) relate to ethical decision making and variables affecting it in business ethics research were

included in this study to have some updating results related to these variables and ethical decision making stages. This also assisted to clarify and understand some of the relationships existed between those variables and ethical decision making stages.

The studies presented in Table 2.8 were chosen if they met the following criteria. First, the studies were published after 2003. The 2003 was selected as the first year of inclusion as this was the last year in which studies were included in O'Fallon and Butterfield's (2005) review. Nevertheless, four additional studies (Davis, Andersen, & Curtis, 2001; Pater & Anita, 2003; Schminke, 2001; Vitell & Singhapakdi, 1993), which were conducted before that time, were added to the current study's review because they were missed in the three previous reviews. Second, the studies were selected if they were conducted in business ethics literature field. Third, this review only included studies if they examined the first three stages of ethical decision making represented by Rest's (1986) model. Finally, the studies only included if they examined the following variables and their sub- variables; individual variables (age, gender, educational level, years of experience, and personal moral philosophy), organizational variables (ethical climate, codes of ethics, size of organization, and industry type), and finally three of six moral intensity components (magnitude of consequences, social consensus, and temporal immediacy).

Empirical studies have consistently found statistically significant relationships from various individual, organizational variables and moral intensity components to each of the first three stages (May and Pauli, 2002; O'Fallon and Butterfield, 2005). Thus, these three stages of ethical decision making's model serve as the primary theoretical foundation for this study.

### **2.3.1 Individual Variables and Ethical Decision Making**

Various individual variables including demographic characteristics, personality traits, beliefs, values and attitudinal measures have been proposed in the literature of business ethics to have an impact upon ethical decision making process. Moreover, range of

individual variables has been studied in several areas such as marketing, management, accounting, information system. Gender, personal moral philosophy, nationality, education, culture and age have been the most commonly researched individual variables that could affect ethical decision making process (O'Fallon & Butterfield, 2005). However, the results regarding the impact of many of these variables on ethical decision making process are still not conclusive. Nill and Schibrowsky (2005) argue that differences in designing studies and the differences between each stage in ethical decision making process can be one reason to make these results not always clear.

Treviño (1986) utilized Kohlberg's model of cognitive moral development to develop a theory of ethical decision making that centres on the characteristics of the individual making the decision; five individual variables were identified to have an influence on ethical decision making process: moral reasoning level, education, ego strength, field dependence, and locus of control (Haines & Leonard, 2007a). Rest et al. (1986) also suggests that individual variables influence the relationships between the four stages (Haines & Leonard, 2007a). Additionally, Hunt and Vitell (1986) argue that personal characteristics influence individuals' ethical decisions. As explained early, only five sub-individual variables were included in this study. Both their theoretical and empirical foundation are discussed and analyzed to identify and understand the nature of the relationships of those variables with ethical decision making stages and how they (variables) affect them (stages). These sub-individual variables included here are gender, age, educational level, experience, and personal moral philosophy (idealism and relativism).

### **2.3.1.1 Gender**

Gender has been reported in more business ethics empirical studies than any other demographic variable. Although much research (e.g., Betz, O'Connell, & Shepard, 1989; Shaub, 1994; Simga-Mugan et al., 2005; Stedham, Yamamura, & Beekun, 2007) has related to gender differences in making ethical decisions reporting mixed results, much

research has revealed that females are more ethical than males (e.g., Keller et al., 2007; Lund, 2008; Oumlil & Balloun, 2008; Stedham et al., 2007).

Differences in gender have been theoretically discussed. Several approaches have been theorized in the literature of ethics to find out rational explanations to these differences (Betz et al., 1989; Nguyen, Basuray, Smith, Kopka, & McCulloh, 2008). The gender socialization theory, which its foundation was laid by Kohlberg's theory of moral development, suggests that perspective of men and women regarding ethical issues are generally attributed to the early socialization (Gilligan, 1982). Moreover, it proposes that women and men bring different sets of values to the workplace. Since men are concerned with achieving success, they are more likely to break rules and law and therefore engaging in unethical behaviour (Guffey & McCartney, 2007). Women on the other hand are more concerned with performing their tasks well and maintaining harmony in the workplace, therefore, they are less likely to break the rules and law and consequently are less to involve in unethical behaviour (Betz et al., 1989). Accordingly, women and men will react in a different way when they face an ethical dilemma. Some (e.g., Gilligan, 1982; Peterson, Rhoads, & Vaught, 2001; Smith & Oakley, 1997) argue that women tend to evaluate ethical issues in terms of their caring view of others, understanding relationships and responsibility to the whole community, whereas men tend to perceive ethical issues from rules, fairness, rights and justice view. In their recent meta-analysis, which tested several hypothesis regarding ethical issues, Jaffee & Hyde (2000) found support for this theory.

The structural theory suggests that occupational environment and the rewards and costs structure within the workplace will overcome the impact of gender differences that caused by early socialization (Betz et al., 1989). Thus, women and men will similarly respond to ethical issues within the workplace (Comunale et al., 2006; Derry & Green, 1989; Reidenbach, Robin, & Dawson, 1991).

Understanding gender differences in ethical decision making is crucial that more women are not only entering the business environment but they have reached higher level of

managerial positions than ever before (Nguyen et al., 2008) . Therefore, differences could have practical impact on ethical decision making within business environment (Roxas & Stoneback, 2004).

Much research has been undertaken regarding gender effects on ethical decision making process and fairly inconsistent results have been found. In their review, Ford and Richardson (1994) reported fourteen empirical studies related to the relationship between gender and ethical decision making. Seven of these studies, as shown in Table 2.1, revealed that gender had a significant impact on ethical decision making that women are likely to behave ethically than men (e.g., Beltramini, Peterson, & Kozmetsky, 1984; Ferrell & Skinner, 1988; Ruegger & King, 1992), whereas the remaining seven (e.g., Callan, 1992; McNichols & Zimmerer, 1985) suggested no significant differences between men and women in ethical decision making. It should be mention here that several previous studies examined ethical decision making process did not mention which stages they investigated; therefore, the results of these studies were separately shown in an EDM column in relevant tables (Tables 2.1, 2.2, 2.3, 2.4 and 2.5).

After eliminating thirteen studies that were already reviewed by Ford and Richardson (1994), the review by Loe, Ferrell, & Mansfield (2000) added thirteen new studies related to the role of gender in ethical decision making. Most results (e.g., Brady & Wheeler, 1996; Galbraith & Stephenson, 1993; Serwinek, 1992; Whipple & Swords, 1992) indicated that gender had significant relationship with ethical decision making process or women are more sensitive to ethical issues than men.

The forty-nine studies concerning gender effects in the review of O'Fallon & Butterfield (2005) were presented based upon the relationship between the influences of gender and each stage of ethical decision making. From Table 2.1, it can be seen that the bulk of these studies (33) examined ethical judgment as a dependent variable; four examined ethical intention and finally three investigated ethical recognition. While 24 studies revealed that gender had no or few significant results on ethical decision making process (e.g., Deshpande, 1997; Roozen, De Pelsmacker, & Bostyn, 2001; Smith & Oakley,

1997), 16 studies provided significant results that women were more ethical than men or there were differences that women are more ethical than men (e.g., Fleischman & Valentine, 2003; Tse & Au, 1997). They concluded that gender ethics literature continues to provide relatively stable results. They (O'Fallon & Butterfield, 2005, p. 379) stated that “there are often no differences found between males and females, but when differences are found, females are more ethical than males”.

**Table 2.1 Summary of the Relationship between Gender and EDM**

Stages and Reviews	Recognition		Judgment		Intention		EDM		Total	
	Sig.D/ F >M	No/few Sig.D *	Sig.D F >M	No/few Sig.D						
Current review 2010	3	3	8	8	9	5	1	1	21	17
O'Fallon & Butterfield 2005	1	2	13	20	2	2	-	-	16	24
Loe et al. 2000	-	-	-	-	-	-	9	4	9	4
Ford & Richardson 1994	-	-	-	-	-	-	7	7	7	7
Total	4	5**	20	28	11	7	17	12	53	52

\* Sig.D/ F >M: Significant different results / females are more ethical than males.

\*No/few Sig.D: No/ few significant different results.

\*\*One study revealed that males were more ethical than female.

The review of this study, which is shown in Table 2.8 and the summary in Table 2.7, reported thirty eight findings relate to gender effects. These findings are to some extent consistent with previous reviews that the effect of gender on ethical decision making stages is fairly stable. While seventeen studies reported no or few significant gender impacts on ethical decision making process, twenty one studies indicated the significant differences between men and women in ethical decision making process that women were more ethical than men. Most of these studies examined the role of gender in one or two stages of ethical decision making. 16 studies examined the influence of gender on ethical judgment and found no or few significant results in 8 studies (e.g., Barnett & Valentine, 2004; Stedham, Yamamura, & Lai, 2008), whereas 8 studies revealed that women were more significantly ethical than men (e.g., Lund, 2008; Nguyen et al., 2008). With regard to the ethical intention, out of 14 empirical studies, 9 revealed that women

were significantly more ethical than men (e.g., Oumlil & Balloun, 2008; Westerman, Beekun, Stedham, & Yamamura, 2007), while 5 studies reported no or few significant results (e.g., Nill & Schibrowsky, 2005). Ethical recognition was examined by 6 studies and found significant results in three studies that females were significantly sensitive to ethical issues than males (e.g., Ritter, 2006; Simga-Mugan et al., 2005). It is noteworthy that, only one study (Marques & Azevedo-Pereira, 2008) indicated that females were significantly less sensitive to ethical issues than males. Two studies did not mention which stages were examined.

Generally speaking, empirical studies across many countries indicated that gender is the most researched variables than any other demographics variables (105 studies). Although some mixed results related to gender continue to be noticeably shown in the business ethics literature, previous research revealed that gender has no or few impacts on ethical decision making process or females in certain circumstances behave ethically more than males. In another words with the exception of Marques and Azevedo-Pereira's (2008) study, this is a clear conclusion that males are not more ethical than females.

#### **2.3.1.2 Age**

The potential relationship between age and ethical decision making has been investigated in the literature of business ethics by many researchers (Cagle & Baucus, 2006). Mixed results have been yielded that while some (Nill & Schibrowsky, 2005) have indicated that age is positively and significantly correlated with ethical decision making, others have found no significant relationship (Marta et al., 2004). Theory of cognitive moral development (CMD), which was built by Kohlberg, suggested a positive impact of age on moral development and individuals generally move from lower stages of moral reasoning to higher one as they grow (Borkowski & Ugras, 1998; Cagle & Baucus, 2006). Thus, older individual are expected to exhibit higher ethical values and behaviours than younger in dealing with ethical situations. Comunale et al. (2006) argue that age is posited to have an effect on judgments of individual in given ethical situation.

Surprisingly, this is to some extent not true in the literature of business ethics. The review by Ford and Richardson (1994) provided eight studies that investigated the relationship between age and ethical decision making. Five of these studies reported no or few significant results of the effect of age on ethical decision making (e.g., Callan, 1992; Izraeli, 1988), whereas three studies indicated significant findings, older individuals were less ethical than younger individuals in one study (Browning & Zabriskie, 1983). Overall, they summarized that mixed results among age and ethical decision making existed. This is consistent with the results of the thirty-five studies reported in the meta-analysis conducted by Borkowski and Ugras in 1998 that while seven studies revealed no significant or mixed result of the age impact on ethical decision making process, twenty eight studies indicated significant results that older students were more ethical than younger students (18 studies) or vice versa in the remaining studies (10 studies).

Loe et al. (2000) reported eight studies regarding the relationship between age and the morality of individuals. Five studies indicated that older individuals are more ethically in making decisions than younger individuals (e.g., Brady & Wheeler, 1996; Kelley et al., 1990). No significant results were revealed in three studies (e.g., Kohut & Corriher, 1994).

O'Fallon and Butterfield (2005) provided thirteen studies concerning the association of age with ethical decision making. results of seven studies revealed a significant relationship between age and the individuals' ethical decision (e.g., Kim, 2003; Singhapakdi, 1999), whereas no or few significant relationship was reported in six studies (e.g., Roozen et al., 2001; Singhapakdi, Vitell, & Franke, 1999). O'Fallon and Butterfield (2005) reported separately the impact of age on each stage of ethical decision making. With regard to ethical recognition, two studies were reported; one revealed significant positive relationship between age and ethical recognition, the remaining study provided few significant results. Ethical judgment was examined in eleven studies and significant results were found in six studies, whereas the remaining four studies reported no or few

significant results; one study (Razzaque & Hwee, 2002) reported mixed results. One study relate to ethical intention indicated no significant relationship.

**Table 2.2 Summary of the Relationship between Age and EDM**

Stages and Reviews	Recognition*		Judgment		Intention		EDM		Total	
	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im
Current review 2010	1	2	3	6	4	3	1	-	9	11
O'Fallon & Butterfield 2005	1	1	6	4	-	1	-	-	7	6
Loe et al. 2000	-	-	-	-	-	-	5	3	5	3
Ford & Richardson 1994	-	-	-	-	-	-	3	5	3	5
Total	2	3	9	10	4	4	9	8	24	25

Sig Re/Im: Significant relationship or impact; No/few Re/Im: No or few significant relationship or impact

The review of this study, which is presented in Table 2.8, reported twenty additional studies examined the relationship of age with ethical decision making stages. Eleven of these studies revealed no or few significant relationships or impacts (e.g., Marques & Azevedo-Pereira, 2008; Stedham et al., 2008), whereas the remaining indicated significant relationship with ethical decision making stages (e.g., Cagle & Baucus, 2006; McMahon & Harvey, 2007). Ethical recognition was reported in three studies and found had no or few significant results in two studies (e.g., Conroy & Emerson, 2004), while the remaining one revealed significant results. In respect to ethical judgment, out of nine studies, six revealed no or few significant relationship or impact on or with age (e.g., Bernard & Sweeney, 2010; Nguyen et al., 2008); the remaining three reported significant results. Ethical intention had significant relationship with age in four studies (e.g., Valentine & Rittenburg, 2007) and no or few significant results in three studies.

Overall, empirical studies regarding the role of age in ethical decision making have continued to produce clearly inconsistent and mixed results, see Table 2.2 above. Of forty-nine studies reviewed, no or few significant impacts or relationship were reported in twenty five studies, while twenty four studies provided significant results; significant

negative impact or relationship were reported by five studies. Nevertheless, it can be concluded that most of significant results (19 out of 24) related to the impact of age on ethical decision making are positive.

### **2.3.1.3 Educational Level (Academic Experience)**

Educational level and ethical decision making have been studied in the literature of business ethics. In early research, some (e.g., Dubinsky & Ingram, 1984; Kidwell, Stevens, & Bethke, 1987) argued that there does not appear an impact of educational level on ethical decision making, whereas others (e.g., Browning & Zabriskie, 1983; Rest, 1975) suggest a significant relationship between the two exists.

Early, individual's moral development, which is theorized to have a strong relationship with ethical judgment, was found to be positively impacted by the individual's level of education (Kohlberg, 1981; Rest, 1975). In addition, it is argued that the length of formal education is one of the crucial variables in individuals' ethical judgment (Kohlberg, 1981).

Prior to 1990s, research had not yet provided clear results regarding the impact of educational level on ethical decision making process. In the review of Ford and Richardson (1994), six studies examined the impact of educational level on ethical decision making. While three studies revealed clearly that educational level had no significant relationship with ethical decision making process (e.g., Dubinsky & Ingram, 1984; Kidwell et al., 1987), the remaining three showed some statistical differences in ethical decisions based on educational level (e.g., Browning & Zabriskie, 1983; Lane, Schaupp, & Parsons, 1988). After removing studies that had already reviewed by Ford and Richardson, one new study (Laczniak & Inderrieden, 1987) was reported by Loe et al. (2000). It indicated that the educational level had no impact on ethical decision making.

More recent research has shown to some extent different direction that level of education had some significant positive impact on ethical perceptions of the decision makers. O'Fallon and Butterfield (2005) reported thirteen studies that examined the impact of level of education on ethical decision making stages. Out of these studies, three investigated the relationship between ethical recognition and educational level. Ethical recognition was not significantly influenced by the level of education in two studies, for example in the study by Cohen et al. (2001) there were no significant differences between students and professional accountants in their sensitivity of ethical issues; one study indicated that level of education had an impact on ethical recognition.

With regard to ethical judgment, seven studies were conducted to examine its relationship with educational level; most of these studies (five) revealed that level of education had significant positive relationship with ethical judgment (e.g., Kracher, Chatterjee, & Lundquist, 2002; Razzaque & Hwee, 2002), while the remaining two showed no significant results (Cohen et al., 2001; Shafer et al., 2001). Ethical intention was reported in three studies; while two studies (e.g., Cohen et al., 2001) showed that ethical intention was found to be positively affected by the level of education, Shafer et al.(2001) provided no significant impact for level of education on intentions. The majority of the above studies (8 studies), which reviewed by O'Fallon and Butterfield, conclude that there are some significant positive relationships/impacts with /on ethical decision making stages that based on educational level.

This study added new nine studies regarding the association between individuals' ethical decision making and the effect of their educational background (see Table 2.8). Of these, only one study examined ethical recognition and found no significant relationship with level of education (Cagle & Baucus, 2006). In respect to ethical judgment, four studies investigated the impact of educational level on judgments of individual related to the given ethical issues; they indicated no or few positive differences based on educational level (e.g., Bernard & Sweeney, 2010; Cagle & Baucus, 2006; Marques & Azevedo-Pereira, 2008). Similarly, ethical intention was found to be not affected by the level of

education in one study (Nill & Schibrowsky, 2005), whereas the other study showed positive impact in only one scenario (Bernard & Sweeney, 2010). Two studies did not mention a specific stage but revealed significant positive relationship between ethical decision making process and educational level in one study (Keller et al., 2007) and no significant findings in the remaining study (Krambia-Kapardis & Zopiatis, 2008).

Although researchers have argued that level of education plays an important role in ethical decision making process, unfortunately previous research continues to present somewhat mixed results, see Table 2.3 below. While fifteen studies revealed few or significant positive relationships between education level and ethical decision making process, fourteen studies showed no significant results. However, it can be concluded that research has shown clear conclusion that no significant negative relationships have been found. Students sample could be one reason in providing such findings that more than 13 of the above studies used convenience universities students; eight of these studies showed no significant results.

**Table 2.3 Summary of the Relationship between Education Level and EDM**

Stages and Reviews	Recognition*		Judgment		Intention		EDM		Total	
	Sig/few Re/Im	No Re/Im								
Current review 2010	-	1	2	2	1	1	1	1	4	5
O'Fallon & Butterfield 2005	1	2	5	2	2	1	-	-	8	5
Loe et al. 2000	-	-	-	-	-	-	-	1	-	1
Ford & Richardson 1994	-	-	-	-	-	-	3	3	3	3
Total	1	3	7	4	3	2	4	5	15	14

Sig/few Re/Im: Significant relationship or few impacts; No Re/Im: No significant relationship or impact

### 2.3.1.4 Years of Experience

Similar to other demographic variables, there has been research interested in business ethics literature on how years of experience of individuals affect their ethical decision making (Bernardi, 1994; Kamel, 2001; Nill & Schibrowsky, 2005). However, some have

argued that research examining the impact of length of experience on ethical decision making is still limited (e.g., Bernard & Sweeney, 2010).

Kohlberg's theory provides a framework which hypothesizes a relationship between years of experience and moral development (Treviño, 1986). Treviño (1986) claims that this relationship provides opportunities for role taking and the responsibility to resolve ethical issues within the workplace. Glover et al. (2002) argue that greater experience may be associated with greater awareness of what is ethically acceptable. Dawson (1997) also proposes that ethical standards change with years of experience.

Empirical studies within business ethics area concerning the association of years of experience with the stages of ethical decision making have offered different results. In their review of four studies related to years of employment, Ford and Richardson (1994) came to the conclusion that empirical studies produced mixed results. Two studies provided no significant relationship between years of experience and individuals' morality (Dubinsky & Ingram, 1984; Serwinek, 1992), whereas one study showed that individuals who had more years of experience tended to display more ethical views (Kidwell et al., 1987). Other study revealed no relationship between the individuals' ethical values and years of employment (Callan, 1992).

Loe et al. (2000) reviewed four studies regarding the relationship between work experience and ethical decision making. Similarly to Ford and Richardson, they found mixed results. In two studies examined the impact of work experiences on ethical decision making between executives and students, they found that executives were more ethical than students (Lane et al., 1988). The remaining two studies revealed no significant impact or there was no significant relationship between work experience and individuals' ethical decisions (e.g., Kohut & Corriher, 1994).

Studies reviewed by O'Fallon and Butterfield (2005) summarized that more years of work is positively related to ethical decision making. Out of ten studies reviewed the relationship between ethical decision making and the experience of individuals, two

studies looked at the effect of experience on ethical recognition. Individuals with years of experience were more ethically sensitive than individuals who had little experience (Cohen et al., 2001). The other study revealed no major differences was found based on years of experience (Sparks & Hunt, 1998). Ethical judgment was examined in five studies; two of them showed positive relationship between years of experience and the individuals' views (Larkin, 2000; Weeks et al., 1999), whereas no significant results or negative relationship were found in the remaining three (Cohen et al., 2001; Reiss & Mitra, 1998; Roozen et al., 2001). Finally, two studies related to ethical intention and work experience provided positive influences (Cohen et al., 2001; Jones & Kavanagh, 1996). In general, O'Fallon and Butterfield concluded that work experience is positively related to ethical decision making process.

Similarly to O'Fallon and Butterfield (2005) review, recent studies reviewed by this study (see Table 2.8) reported positive results related to the relationship between years of experience and ethical decision making stages. No study was found related to ethical recognition. With respect to ethical judgment, four studies indicated that years of experience had significant positive relationship with ethical judgment (e.g., O'Leary & Stewart, 2007; Pflugrath, Martinov-Bennie, & Chen, 2007). Ethical intention findings were significant and positive in three studies (e.g., Bernard & Sweeney, 2010; O'Leary & Stewart, 2007), whereas not in one study (Nill & Schibrowsky, 2005).

It appears that positive relationship between years of experience and ethical decision making have been increasingly shown in the literature of business ethics supporting Kohlberg's theory of moral development and Treviño's (1986) theory that adult development is linked to education and work experiences.

#### **2.3.1.5 Personal Moral Philosophy (Idealism & Relativism)**

Personal moral philosophy is another individual variable that has been extensively studied in business ethics literature. Business ethics theorists concur that individuals within organizations will implement ethical guidelines or rules based on their personal

moral philosophies when they confronted with situations having an ethical content. Personal moral philosophy is depicted as one of the vital factors affecting ethical decision making process in established theoretical frameworks of business ethics. Ferrell and Gresham (1985) state that “It is impossible to develop a framework of ethical decision making without evaluating normative ethical standards derived from moral philosophy”. Moreover, Hunt and Vitell (1986) included moral philosophies, deontology and teleology, as the core of their model of ethical decision making. Social psychologists have also considered moral philosophies to be a significant variable affecting an individual’s ethical decisions (Singhapakdi, Salyachivin, Virakul, & Veerayangkur, 2000).

Moral philosophies refer to the rules and principles considered by an individual during decision making to distinguish between right and wrong (Ferrell & Fraedrich, 1997). This definition contains three main elements; moral rules and moral principles individuals believe, the situation they face which contains an ethical content and using those rules and principles to distinguish between right and wrong. Researchers and theorists have classified moral philosophies into different types - including rights, relativism, egoism, theories of justice, deontology and utilitarianism - in efforts to develop theoretical frameworks that can explain the association between individuals’ moral philosophies and their decisions regarding the ethical issues they confront.

The most common category of personal moral philosophy that has been examined within business ethics literature is Schlenker and Forsyth’s (1977) two dimensional model of personal moral philosophy, *idealism and relativism*. Schlenker and Forsyth maintained that individuals’ ethical decisions can be explained by taking into account these two dimensions (Marta, Singhapakdi, & Kraft, 2008; Oumlil & Balloun, 2008). Forsyth (1980) suggested that these dimensions are distinct.

Marta et al. (2008) claim that the two dimensions loosely conform to formalism and utilitarianism as personal expressions of moral philosophies; they argue that this is clear from the definition of Forsyth of the these dimensions, relativism in particular. Others

argue that idealism and relativism are basically drawn from the philosophical theories of deontology, teleology, and ethical scepticism (Bass et al., 1999). Fernando et al. (2008) explain that each of the four typologies of moral philosophies (see Figure 2.4) can be linked to a specific school of thought. They add that the low idealism and high relativism support an ideology related to ethical scepticism; high idealism and low relativism tend to agree with deontology; and low idealism and low relativism are more compatible with the teleological ethical philosophy. Finally, some (Al-Khatib, Vitell, & Rawwas, 1997; Cui, Mitchell, Schlegelmilch, & Cornwell, 2005) suggest that deontological/teleological paradigm is similar to the concepts of idealism and relativism theorized by Schlenker and Forsyth (1977). In general, researchers within business ethics literature agree that these two dimensions as conceptualized by Schlenker and Forsyth (1977) present the basic type of personal moral philosophies. Moreover, the Ethics Position Questionnaire (EPQ), which was developed by Forsyth (1980, 1992) to measure personal moral philosophy, has been commonly and successfully used and validated by business ethics research (e.g., Chan & Leung, 2006; Dubinsky, Natarajan, & Wen-Yeh, 2004; Shafer, 2007; Singhapakdi & Vitell, 1993; Vitell & Patwardhan, 2008). This study adopted these dimensions to examine the relationship between personal moral philosophies of Libyan management accountants and accounting students and their ethical decision making process.

Forsyth (1980) defines *moral idealism* as “the degree to which an individual focuses upon the inherent rightness or wrongness of actions regardless of the results of those actions”. It portrays an ideology based on altruism and optimism and embraces the welfare of others (Singhapakdi et al., 1999). In making ethical decisions, moral idealists use idealistic rather than practical criteria; individuals who have high idealism believe that desirable outcomes can be acquired, and harming others is universally and always bad and should be avoided (Swaidan, Rawwas, & Al-Khatib, 2004). Those who are less idealistic believe that harm is sometimes necessary to produce the greatest good consequences for the greatest number of individuals, even though it may be harmful to a

certain group of individuals (Barnett, Bass, & Brown, 1994). Forsyth (1988) state that “moral principles typically guide the decisions and actions of moral idealists”.

With respect to *moral relativism*, Forsyth (1980, p. 175) defines it as “the extent to which individuals reject universal moral rules or standards”. Relativists assume that moral rules are relative to the society and culture in which they occur (Schlenker & Forsyth, 1977). Thus, moral relativists do not accept universal moral rules and codes in making ethical decisions. Highly relativistic individuals believe that the situational circumstances (e.g., time, place, culture, individuals involved) determine what is right and wrong for all involved (Schlenker & Forsyth, 1977). Therefore, they may rely on circumstances more than ethical rules. In contrast, individuals who are low in relativism believe that morality requires acting in ways that are consistent with moral principles, norms, or laws and they maintain strict adherence to general moral principles (Forsyth, 1992).

In his taxonomy of ethical ideologies, Forsyth (1980) divided people into four different ideologies depend on the extent to which they are relativistic and idealistic. Figure 2.4 presents the four possible ethical moral philosophies (i.e., combinations of high/low idealism and relativism), labelled Situationist, Absolutist, Subjectivist, and Exceptionist.

This figure shows that individuals who have high level of idealism and relativism reject universal moral principles and believe that their behaviours should be conducted in order to produce positive consequences. This is referred to as situationists. Subjectivists, who have high level of relativism and low level of idealism, are those who reject universal ethical principles, and believe that negative outcomes do not necessarily make an action immoral. Absolutists (high idealism and low relativism) believe that their actions should respect universal moral rules, and produce positive consequences for all those involved. Exceptionists (low idealism and low relativism) refer to those who respect universal moral rules but do not believe that negative outcomes always cannot be avoided, that is, harm to someone is sometimes needed to obtain good outcomes for others.

**Figure 2.4 Taxonomy of Ethical Ideologies**

	<b>High relativism</b>	<b>Low relativism</b>
<b>High Idealism</b>	<i>Situationist</i> Reject moral rules; ask if the action yielded the best possible outcome in the given situation.	<i>Absolutist</i> Feel actions are moral provided they yield positive consequences by following moral rules.
<b>Low Idealism</b>	<i>Subjectivist</i> Reject moral rules; base moral judgments on personal feelings about the action and the setting.	<i>Exceptionist</i> Feel conformity to moral rules is desirable, but exceptions to these rules are often permissible.

**Adopted from Forsyth (1980, 1992)**

Forsyth (1980, 1992) developed an instrument, the Ethics Position Questionnaire (EPQ), to measure the dimensions of personal moral philosophy - idealism and relativism. Several studies that have been conducted to examine individuals' ethical philosophies are based on Forsyth's model (e.g., Dubinsky et al., 2004; Lee & Sirgy, 1999; Sivadas, Kleiser, Kellaris, & Dahlstrom, 2003; Vitell & Patwardhan, 2008). Using the EPQ, researchers have also examined the impact of individuals' moral philosophy on ethical decision making stages - ethical recognition (Chan & Leung, 2006), ethical judgment (Davis et al., 2001; Marques & Azevedo-Pereira, 2008), ethical intuition (Singh et al., 2007) and ethical behaviour (Glover, Bumpus, Logan, & Ciesla, 1997).

Researchers have demonstrated that personal moral philosophy (idealism & relativism) is crucial in evaluating moral differences between individuals and significantly affects ethical belief and the perceptions of the "rightness" and "wrongness" of the action under question (Al-Khatib et al., 1997; Lee & Sirgy, 1999; Rawwas, 2001). Additionally, differences in individuals relating to idealism and relativism are claimed to affect their intention (Forsyth & Pope, 1984). Business ethics literature has suggested that idealism is related to greater ethicality and relativism is associated with lower ethicality (Swaidan et al., 2004).

Prior ethics research has examined personal moral philosophies as a factor that has considerable impact upon ethical decisions, and produced somewhat consistent results (Henle, Giacalone, & Jurkiewicz, 2005; Karande et al., 2002; O'Fallon & Butterfield,

2005). While Ford and Richardson (1994) did not report any study related to the influence of both idealism and relativism on ethical decision making stages, Loe et al. (2000) reported only one study related to these dimensions and revealed that personal moral philosophies had significant relationship with participants' ethical judgments in the two scenarios and on ethical intention in one scenario. However, Loe et al. (2000) provided fourteen studies that related to personal moral philosophy and ethical decision making. These studies categorized personal moral philosophy differently to Forsyth's (1980, 1992) categories such as deontology and teleology and used different types of instruments such as Reidenbach and Robin's Multidimensional Ethics Scale (MES) (Reidenbach & Robin, 1991). They showed significant results related to the relationship of personal moral philosophies with ethical decision making. Within different areas such as marketing, auditing, and management, the majority of these studies (12) revealed significant results that individual moral philosophies affected ethical decision making stages (e.g., Fraedrich & Ferrell, 1992; Mayo & Marks, 1990; Singhapakdi & Vitell, 1993).

O'Fallon and Butterfield (2005) provided thirty one findings regarding individual moral philosophies and ethical decision stages. Of these, eighteen studies used Ethics Position Questionnaire (EPQ) to examine both idealism and relativism, whereas the remaining studies used different types of instrument such as MES. It can be noted that EPQ has been widely used by business ethics studies to investigate personal moral philosophies more than any other instruments. Relativism was negatively related to ethical recognition in two studies (Sparks & Hunt, 1998; Yetmar & Eastman, 2000). Out of twenty studies that examined ethical judgement, thirteen studies used EPQ and found significant results in eleven studies (e.g., Bass et al., 1999; Davis, Johnson, & Ohmer, 1998; Kim, 2003). While idealism was found to positively affect ethical judgment in four studies, relativism had negative impact on ethical judgement in five studies. Ethical intention was reported in nine studies; EPQ was adopted to examine the impact of personal philosophies in five studies. Three studies revealed no significant results in relation to the impact of personal moral philosophy on ethical intention (e.g., Eastman, Eastman, & Tolson, 2001), whereas

the remaining studies reported significant impact (e.g., Singhapakdi, Marta et al., 2000). O'Fallon and Butterfield concluded that idealism impacts positively ethical decision making stages, while relativism is generally negative to ethical decision making stages. Moreover, they stated that idealistic individuals tended to be more ethical than relativistic individuals.

Findings related to the review of this study are consistent with previous reviews' results. Ten studies were included (see Table 2.8) in this study's review. Ethical recognition was affected significantly by moral idealism in one study (Dubinsky et al., 2004), while another study revealed no significant results (Chan & Leung, 2006). Five studies examined the relationship between personal moral philosophies and ethical judgment. Three of these studies showed significant results. Both moral idealism (positive direction) and moral relativism (negative direction) affected significantly ethical judgment in the three studies (e.g., Marques & Azevedo-Pereira, 2008; Vitell & Singhapakdi, 1993). With respect to ethical intention, six studies were reviewed. Out of these studies, two studies revealed no significant results (Shafer, 2007; Singh et al., 2007), the remaining four showed that the dimensions of moral philosophies had few or significant impact on ethical intention (e.g., Davis et al., 2001; Vitell & Patwardhan, 2008).

It can be concluded that research concerning the role of personal moral philosophies on ethical decision making process continues to produce positive direction regarding the relationship between idealism and ethical decision making stages and negative results relating to the association between relativism and ethical decision making stages.

### **2.3.2 Organizational Variables and Ethical Decision Making**

The literature of business ethics has examined the impact of organizational factors on ethical decision making process (O'Fallon & Butterfield, 2005). Researchers recognize that organizational variables affect the decision making of employees concerning ethical issues. Organizational variables contain all factors that have no relationship with the decision-maker as an individual (e.g., personality and physical characteristics) or to the

decision alternatives (Ross & Robertson, 2003). Organizational variables are defined as “characteristics of the decision setting (versus characteristics of the decision-maker or the decision) that should influence the decision-making process and outcomes”(Ross & Robertson, 2003, p. 214). These factors include, for example, codes of ethics, ethical climate, organizational size, top management, organizational structure, organization culture, and rewards and sanctions. Treviño (1986) found support that some organizational variables often create obstacles to individual’s ethical decisions. A great deal of literature has focused on the effectiveness of some of these factors on ethical decision making process; for example, codes of ethics (Ampofo et al., 2004; Pflugrath et al., 2007), ethical climate (Flannery & May, 2000; Fritzsche, 2000; Vardi, 2001), and top management (Ferrell & Weaver, 1978; Hian Chye & El’fred, 2004).

Codes of ethics and ethical climate have been researched widely in business ethics literature because of their potentially important relationship with ethical decisions within organizations. Research has shown significant results related to the influence of these variables on individuals’ ethical decisions in several areas such as marketing, accounting, and management especially within developed countries. However, very limited ethics research has been done within the management accounting field in general and regarding these variables in particular (see Chapter One, section 1.3). Thus, findings related to these factors will empirically add some evidence to the literature of accounting ethics in general, and ethical decision making within management accounting area in particular. Additionally, very limited research regarding the impact of organizational size and industry type on ethical decision making process has been done in business ethics literature (Bernard & Sweeney, 2010; O’Fallon & Butterfield, 2005). Therefore, in this study only these four factors are intended to be examined. These factors are discussed and analysed next.

### **2.3.2.1 Code of Ethics**

A code of ethics is considered to be one of the important prevalent means used by organizations in efforts to guide the behaviours of their employees (Pater & Anita, 2003;

Schwartz, 2002). It addresses several common ethical issues that might face members at their workplace. Code of ethics enhance corporation reputation and brand image (Singh, Carasco, Svensson, Wood, & Callaghan, 2005). Stevens (1994, p. 64) defined a code of ethics as “written documents through which corporations hope to shape employee behaviour and produce change by making explicit statements as to desired behaviour”. Also Langlois and Schlegelmilch (1990) described codes of ethics as a statement laying down corporate principles, ethics, rules of conduct, code of practice or company philosophy, concerning responsibilities to employees, shareholders, consumers, the environment and society. These definitions refer clearly to the main contents that should be included in any set of code of ethics. Several reasons have pressured organizations to develop their own code of ethics. External pressures such as governments, public, professional associations, and consumers have resulted in increasing the concern toward to the responsibility of individuals’ ethical behaviour within organizations (Rottig & Heischmidt, 2007; Schwartz, 2002).

The contents of code of ethics are many and differ among organizations. However, several ethical issues can be generally found covered in any organization’s code of ethics. Research has shown that a code of ethics’ contents commonly incorporate three ethical categories; issues influencing employees (e.g., employees’ rights), issues influencing organizations (e.g., misuse of confidential information and organization equipment) and issues influencing the society as a whole (e.g., environmental issues) (O’Dwyer & Madden, 2006). However, several researchers claim that code of ethics has focused mostly upon issues related to the behaviour within organizations (Rodriguez-Dominguez, Gallego-Alvarez, & Garcia-Sanchez, 2009). Quite lot of studies investigated the contents of ethics within organizations (e.g., Brian Farrell, 2000; Singh, 2006; Wood, 2000), others look at whether organizations have code of ethics or not and to what extent they are effective (e.g., Lere & Gaumnitz, 2003; Schwartz, 2002; Somers, 2001; Webley & Werner, 2008). Although discussing and analyzing the contents of code of ethics is beneficial, this is beyond the aims of this study as it aims only to investigate the impact of the presence of code of ethics on ethical decision making stages.

Much research has investigated the role of code of ethics within organizations in business ethics literature and shows interesting results (Boo & Koh, 2001; Pater & Anita, 2003). Moreover, research has provided different results between groups regarding the effectiveness of the presence of code of ethics within organizations (Boo & Koh, 2001; Singh et al., 2005).

The existence of the code of ethics have been found to positively influence ethical behaviour within organizations (Singh et al., 2005; Wotruba, Chonko, & Loe, 2001). Nevertheless, it is argued that code of ethics might be not sufficient by itself to ensure that the individuals within organizations make ethical decisions to many faced ethical situations (Cleek & Leonard, 1998). Communicating code of ethics to all members and enforcing them within organization could be one reason for code of ethics to work sufficiently (Chia-Mei & Chin-Yuan, 2006; Cleek & Leonard, 1998; McClaren, 2000). Another reason is that the content of code of ethics themselves may be not comprehensible to have an adequate impact on individuals' ethical decisions.

Nine studies were reviewed by Ford and Richardson (1994). Interestingly, more than half of these studies were conducted in the field of marketing. The authors came to conclusion that the presence of code of ethics within organizations is related positively and significantly to ethical decision making. These finding were supported by six out of nine studies reviewed (e.g., Laczniak & Inderrieden, 1987; Weeks & Nantel, 1992).

With respect to the review of Loe et al. (2000), fourteen studies were reported regarding to the role of code of ethics in individuals' ethical decisions. Similarly to Ford and Richardson's (1994) review, the majority of these studies (10 studies) indicated that code of ethics had significant positive relationship with ethical decision making (e.g., Barnett, Cochran, & Taylor, 1993; Kaye, 1992). The remaining studies reported no significant relationship between code of ethics and ethical decision making process within organizations (e.g., Ferrell & Weaver, 1978; Kohut & Corriher, 1994).

O'Fallon and Butterfield (2005) reviewed eight studies relate to the impact of code of ethics on ethical decision making stages. One study examined ethical recognition and revealed positive significant results (Weaver, Treviño, & Cochran, 1999). Ethical judgment was examined by five studies and found no significant influences related to code of ethics in three studies (e.g., Douglas, Davidson, & Schwartz, 2001; Nwachukwu & Vitell, 1997), while significant results were found in the remaining two (e.g., Adams, Tashchian, & Shore, 2001; Stohs & Brannick, 1999). Two studies investigated ethical intention and significant positive results was found in one study (Granitz, 2003).

**Table 2.4 Summary of the Relationship between Code of Ethics and EDM**

Stages and Reviews	Recognition		Judgment		Intention		EDM		Total	
	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im
Current review 2010	-	-	1	1	1	1	-	-	2	2
O'Fallon & Butterfield 2005	1	-	2	3	1	1	-	-	4	4
Loe et al. 2000	-	-	-	-	-	-	10	4	10	4
Ford & Richardson 1994	-	-	-	-	-	-	6	3	6	3
Total	1	-	3	4	2	2	16	7	22	13

Sig/few Re/Im: Significant relationship or few impacts; No Re/Im: No significant relationship or impact

This study reviewed four studies (see Table 2.8) related to the role of code of ethics in ethical decision making process. Mixed results regarding this relationship were found. There was no study examined ethical recognition. While the study of Pflugrath et al. (2007) revealed significant positive relationship between the existence of codes of ethics and ethical judgment, Rottig and Heischmidt's (2007) study showed no significant association. Ethical intention was examined by two studies. Interestingly, significant negative impact was found between the presences of ethical codes and ethical intention (Pater & Anita, 2003), while the study of Rottig and Heischmidt (2007) revealed no significant results.

It can be seen from Table 2.4 that research concerning the relationship between the first three stages of ethical decision making and the existence of code of ethics has noticeably declined. Focusing on examining the content of code of ethics could be one reason. Also examining the relationship between the existence of code of ethics and the stage number four of ethical decision making (i.e., ethical behaviour) could be another reason, for example O'Fallon and Butterfield (2005) provided twelve studies related to this stage.

In sum, although there have been mixed results in recent years related to the relationship between the presence of code of ethics and ethical decision making process, the majority of studies support the idea that the existence of a code of ethics is positively related to ethical decision making.

### **2.3.2.2 Ethical Climate**

Organizational environment has been investigated within business ethics literature for more than three decades. Ferrell and Weaver (1978) examined the relationship between individuals, peers and top management; Schneider (1975) reported some important findings regarding the ethical climate in organizations; Ford, Gray and Landrum (1982) studied the effect of codes of conduct on ethical behaviour of employees; DeConinck & Lewis (1997) investigated how sales managers react to ethical and unethical acts by their salespeople; David (2000) examined the effect of ethical climate on the dimensions of ethical decisions. These studies and a number of recent empirical studies, which have been reviewed by some researchers (e.g., Loe et al., 2000; O'Fallon & Butterfield, 2005), propose that the organization's environment has an impact on the individuals' ethical decisions.

Ethical climate is one of the important organizational factors that has been found to have some significant influences on employees' ethical decisions at their workplace. Victor and Cullen (1988, p. 101) define ethical climate as "the prevailing perceptions of typical organizational practices and procedures that have ethical content". They argue that the ethical climate at the workplace will be a crucial source for employees' information

relating to the “right” or ethical actions within organizations. Martin and Cullen (2006) add that climates can be understood as shared perceptions of procedures, policies, and practices, both formal and informal, of the organization.

Using theories from moral philosophy (e.g., Williams, 1985) and moral psychology (Kohlberg, 1981), Victor and Cullen (1987) developed the ethical climate questionnaire (ECQ) to identify the ethical climate of organization or group. The ECQ investigates the perceptions of individuals within organizations regarding how organizations’ members deal with ethical issues that face them. The ECQ specifies several events, practices, and procedures necessitating ethical criteria for decision making.

Victor and Cullen (1988) theorize that ethical climate within organizations differs along two dimensions; the three classes of ethical theory (egoism, benevolence, and principle) and three loci of analysis (individual, local, and cosmopolitan). Barnett and Vaicys (2000) argued that the three classes of ethical theory differ in term of the decision rules used in ethical reasoning. They described these three classes as following:

1. An egoist is based on the moral philosophy of egoism, which implies that a consideration of what is in the individual’s best interest will dominate the ethical reasoning process.
2. The benevolence or utilitarian criterion is based largely on utilitarian principles of moral philosophy, which suggest that individuals make ethical decisions by considering the positive or negative consequences of actions on referent others. Both egoism and utilitarian can be described as teleological.
3. The principled or deontological criterion is based in large part on deontological principles of moral philosophy, which theorize that individuals should make ethical decisions after considering actions in regard to universal and unchanging principles of right and wrong.

The loci of analysis refer to the referent groups that individuals use when making ethical decisions. Based on sociological theories, Victor and Cullen (1988) conceptualize three levels of reference groups; individual, local, and cosmopolitan. If the locus of analysis is at the individual level, the ethical climate within organization supports an individuals' norm or their self interest. At local level, the key referent groups are within the organization, for example workgroup. The cosmopolitan level of ethical climate is supported by the external sources to the organization such as professional codes or laws. By combining the two dimensions, nine types of ethical climate result (see Figure 2.5). It is by far the most completely developed framework and has been used by a number of researchers (Miao-Ling, 2006).

In the egoistic-individual, local, and cosmopolitan climates, the interest of individuals (e.g., personal gain), groups within the organization (e.g., profit), and individuals who are outside the organization (e.g., efficiency) (respectively) leads ethical decisions. Secondly, in the benevolent-individual, local, and cosmopolitan climates, the welfare of individuals, groups inside the organization, and those who are external to the organization (respectively) guides ethical decisions. Finally, in the principled-individual, local, and cosmopolitan, the personal morality, rules and procedures of the organization, and laws and professional codes (respectively) guides ethical decisions. VanSandt et al. (2006) argue that ethical climate was not developed as a normative construct to measure the ethicality of organizations; rather it was developed as a descriptive sign of the dominant mode of moral thinking within organizations. According to Victor and Cullen's (1987; 1988) ethical climate construct, it is theorized that climates characterized by self-interest (egoistic/individual) and firm interest (egoistic/local) are more likely to be correlated with questionable or unethical behaviour. In contrast, climates that emphasize following law and professional codes (principle/cosmopolitan) should in general be associated with more ethical decisions. Climates that emphasize social responsibility or serving the public interest (benevolent/cosmopolitan) should also be related with more ethical decisions.

**Figure 2.5 Theoretical Dimensions of Ethical Climate**

<b>Locus of Analysis</b>				
<b>Ethical Criterion</b>		<i>Individual</i>	<i>Local</i>	<i>Cosmopolitan</i>
	<i>Egoism</i>	Self-Interest	Company Interest	Efficiency
	<i>Benevolence</i>	Friendship	Team Interest	Social Responsibility
	<i>Principle</i>	Personal Morality	Company Rules and Procedures	Laws and Professional Codes

Victor and Cullen (1987; 1988) conducted several studies to validate this construct and found some of the nine types of ethical climate exist. After a main test was undertaken, they reduced the nine types to five dimensions and labelled them as caring, law and code, rules, instrumental, and independence. Previous studies have empirically supported some of these dimensions (Treviño, Butterfield, & McCabe, 1998). Although the entire ethical climate dimensions have been used in many empirical studies, some have used only some dimensions or some of the items of these dimensions to identify the ethical climate within organizations (Kincaid, 2003). The impact of ethical climate within organizations on ethical decision making process has been investigated by several studies producing significant results (Martin & Cullen, 2006; VanSandt et al., 2006).

Treviño et al. (1998) argue that previous empirical studies' evidence proposed that a reduced number of ethical climate dimensions could be used to explain some characteristics of the ethical context within organizations. Moreover, Peterson (2002) claims that so far no research has demonstrated that all nine types of ethical climate are found within organizations. This is supported by the meta-analysis of ethical climate conducted by Martin and Cullen (2006), which concluded that not all types of ethical climate emerge within organizations. This study will investigate four out of the nine types of ethical climate within Libyan companies; these four are organization interest, social responsibility, personal morality, and law and professional code. These types have been most investigated in previous empirical ethics studies and therefore are expected to be found within Libyan companies. For example, social responsibility and personal morality may be found within countries where religion and cultural dimensions (power distance,

uncertainty avoidance, and collectivism) play significant role in individuals' ethical decisions. Also, the other two types (Law and professional code and organization interest) have been investigated in several studies, especially in developed countries (e.g., Deconinck, 2004; Parboteeah & Kapp, 2008; Wimbush, Shepard, & Markham, 1997b). Only a few results have been found related to these types in developing countries (e.g., Shafer, 2007; Shafer, 2009). Additionally, this study was not only interested in studying organizations' ethical climate (i.e. thirteen independent variables were investigated by this study); therefore four of the nine types of ethical climate were included.

Although several studies have been conducted regarding ethical climate, little literature has been found concerning the associated of this variable with ethical decision making stages (Martin & Cullen, 2006). The reviews presented here show significant result regarding the relationship between ethical climate and ethical decision making stages. While Ford and Richardson (1994) did not report any study concerning the relationship between ethical decision making and ethical climate dimensions, Loe et al. (2000) reported four studies. Three of these studies showed that ethical climate related significantly to ethical decision making (e.g., Schwepker, Ferrell, & Ingram, 1997; Verbeke, Ouwerkerk, & Peelen, 1996). A study by Elm and Nichols (1993) indicated that ethical climate was unrelated to ethical decision making process.

The review of O'Fallon and Butterfield (2005) provided fifteen studies related to the influence of ethical climate on ethical decision making stages; for example the results provided by Sparks and Hunt (1998) revealed that ethical climate dimensions of both benevolence and principle were related to the higher level of recognition, whereas the egoistic ethical criterion was related to the lower levels of ethical recognition. With regard to ethical judgment, four studies reported some significant relationships between ethical climate and ethical judgment. Ethical climate positively (Verbeke et al., 1996) and strongly (Singhapakdi, Karande, Rao, & Vitell, 2001) affected ethical judgment. Benevolent and instrumental ethical climate were the predominate climate in the ethical decision making process (Upchurch, 1998; Weber & Seger, 2002). Ethical intention was

reported in four studies. While no significant results were provided by one study (DeConinck & Lewis, 1997), three studies showed significant relationship between ethical climate and ethical intention (e.g., Barnett & Vaicys, 2000; Flannery & May, 2000). O'Fallon and Butterfield concluded that there is an increase in supporting the idea that ethical climates' dimensions have significant relationship with ethical decision making stages.

Studies investigated recently the relationship between ethical climate and ethical decision making stages are limited (see Table 2.8). Only three empirical studies were reported by the review of this study. A study by VanSandt et al. (2006) indicated that ethical climate is a primary predictor individuals' ethical recognition. Shafer (2007) examined the impact of four types of ethical climate. These four types are egoistic/local climate, benevolent/cosmopolitan climate, principle/individual climate and principle/cosmopolitan climate. He concluded that these four types had no significant impact on ethical judgment, whereas they significantly affected ethical intention. Buchan (2005) showed no significant association between ethical climate and ethical intention.

Generally speaking, research related to the impact of ethical climate types on ethical decision making process is limited. Findings indicate that research generally supports the notion that ethical climate has a significant relationship with ethical decision making process.

### **2.3.2.3 Organizational Size and Type of Organization**

Size and type of organization are another factors relate to the organization's characteristics that can impact employees' ethical decision making. Some researchers (Weber, 1990; Weber & Seger, 2002) theorize that organizational size has an influence on ethical decision making of individuals within organizations. Differences in work environment between large and small organizations exist (Appelbaum et al., 2005). Clarke et al. (1996) point out that larger organizations may have the benefit of the support mechanisms that are not in place in smaller organizations when ethical decisions need to

be made. Vitell and Festervand (1987) suggest that smaller organizations might be under pressure to involve in unethical behaviour in order to compete with larger organizations.

Type of industry has been suggested to have an impact on individual ethical behaviour (Oz, 2001). Individuals who work in a place where dangerous products are produced, for example drug, may be sensitive to recognize ethical issues than individual work for companies produce safe products such as furniture.

However, research has provided a different story. Ford and Richardson (1994) reported three studies related to the effect of organizational size and ethical decisions making and three studies examined the relationship between type of organization and ethical decision making. Interestingly, they found that organizational size affected negatively individuals' ethical decision making in the three studies. One of these studies, for example, indicated that individuals who work for larger organizations were more likely to accept gifts and favour from clients. With respect to the type of industry, the three studies revealed no differences between participants from different organizations in terms of their ethical decisions. Ford and Richardson concluded that there is relationship between the size of organizations and their individuals' ethical decision making that when the size of an organization increases, the individuals' ethical behaviour decreases.

While Loe et al. (2000) did not report new studies, O'Fallon and Butterfield (2005) reported five studies related to organizational size and eight studies related to industry type. The size of organization was found to have no significant impact on ethical decision making in the five studies. While no study reported ethical recognition, size of organization had no significant relationship with ethical judgment (Razzaque & Hwee, 2002; Roozen et al., 2001; Shafer et al., 2001) and ethical intention (Paolillo & Vitell, 2002; Shafer et al., 2001). With regard to the association between type of industry and individuals' ethical decision making process, ethical judgment had significant relationship with industry type in five studies (e.g., Ergeneli & Arıkan, 2002; Latif, 2000; Roozen et al., 2001). Only the study of Shafer et al. (2001) revealed no significant results

regarding the impact of industry type on ethical judgment. Industry type had no significant impact on ethical intention (Shafer, 2007).

The current study's review, as shown in Table 2.8, reported only three studies related to the effect of organizational size on ethical decision making. All of these three studies revealed that ethical intention was significantly and positively affected by the size of organization (Bernard & Sweeney, 2010; Marta, Singhapakdi et al., 2008; Schminke, 2001), whereas ethical judgment was reported in one study, which revealed significant positive results in only one of four scenarios (Bernard & Sweeney, 2010). With regard to industry type, two additional studies were found. Significant differences between individuals' ethical decisions were found based on their type of organization (Krambia-Kapardis & Zopiatis, 2008; Shafer, 2007).

It can be concluded that business ethics literature continues to produce mixed and inconsistent results regarding the impact of organizational size on ethical decision making. While early empirical studies provided significant negative results (3 studies) or no significant results (5 studies), recent empirical studies indicated significant results (3 studies). With respect to industry type, the majority of results (7 studies of 11) indicate that type of industry had significant impact on ethical decision making stages.

### **2.3.3 Moral Intensity and Ethical Decision Making**

Prior to 1991, business ethics research had almost focused on a variety of individual and organizational variables that affecting the process of making ethical decisions. In 1991, Jones noted that various ethical decision making models (e.g., Ferrell & Gresham, 1985; Rest, 1986; Treviño, 1986) included several individual and organizational variables, however none incorporated the characteristics of ethical issue itself. He argued that these models do not consider the differences between ethical issues or dilemmas, for example the issue of misusing some of the equipment of the organization is considered as the same as the issue of releasing a dangerous product to market (McMahon & Harvey, 2007). Jones (1991) used the four stages of Rest's (1986) ethical decision making model to build

up his new construct, which he labelled as moral intensity. According to Jones, moral intensity is “a construct that captures the extent of issue - related moral imperative in a situation.” Jones (1991) proposes that the foundation of moral intensity construct is found in moral philosophy theory. Moral intensity is conceptualized as a construct that has several dimensions and relates to the ethical issue itself, but not to the attributes of the individual or the situation in which he/she is located (Barnett, 2001). As such, moral intensity will differ as a function of the ethical issue with some issues eliciting high levels of moral intensity and some issues eliciting lower levels of moral intensity. Issues of high moral intensity will lead to the belief that the action is more immoral, and vice versa (Guffey & McCartney, 2007).

According to Jones (1991), moral intensity construct relates exclusively to characteristics of the ethical issue and consists of six components, including magnitude of consequences of an unethical act (the sum of the harm or benefit to victims or beneficiaries in a moral act), social consensus (the degree of social acceptance that a given act is good or evil), probability of effect (the probability that a given act might actually take place and the probability of its potential for harm or good), temporal immediacy (the length of time between the present and the onset of consequences of the moral act in question), proximity (feeling of nearness that the moral agent has for victims) and concentration of effect (an inverse function of the number of people affected by an act of given magnitude). These components are suggested by Jones, as independent variables, to influence significantly each stage of ethical decision making process (Singh et al., 2007). Research has examined the influence of these components on ethical recognition, ethical judgment, and ethical intention (e.g., Frey, 2000; May & Pauli, 2002; Singhapakdi et al., 1999; Singhapakdi et al., 1996) and found that the stages of ethical decision making were significantly and positively influenced.

Each of the moral intensity components has been investigated regarding one or more stages of the ethical decision making process. Also researchers have examined all of the six dimensions and others have focused only on one or two dimensions (Ballantine,

2002). This study extends business ethics research with respect to only the impact of three dimensions of moral intensity, magnitude of consequences, social consensus, and temporal immediacy on ethical decision making process. Magnitude of consequences and social consensus have been investigated by several empirical ethics studies in different area such as marketing, management and auditing especially within western countries (see Table 2.10). This study will empirically add new evidence related to the impact of these components on ethical decision making of management accountants and accounting students within one of the developing countries, namely Libya. Additionally, research related to the impact of temporal immediacy on ethical decision making process has been found very limited. Researchers call for more research regarding to this dimension (O'Fallon & Butterfield, 2005). Therefore, this dimension is also investigated by this study.

*Magnitude of consequences (MC)* as mentioned above refers to “the sum of harms and benefits resulting from a given action” (Jones, 1991, p. 374). Accordingly, individuals will make their ethical decisions based on considering the results rather than morality of the behaviour itself. For example, a behaviour that harms 500 persons is of greater moral intensity than a behaviour that harm only 5 persons, and a behaviour that causes death is of greater moral intensity than a behaviour that causes minor injury (Jones, 1991). Barnett and Valentine (2004) explain that if an action is perceived to cause more serious outcomes, this action would be considered as being more morally intense than an action with less serious outcomes. In the context of business, employees within a company may not consider that stealing a little money of the company’s supplies for personal use has a high level of moral intensity. However, they are more likely to consider stealing thousands of pounds of money does raise a higher level of moral intensity (Ng, White, Lee, & Moneta, 2009). With respect to the relationship between this dimension and ethical decision making stages, Mencl and May (2009) summarized that this relationship has consistently been statistically significant. They also state that, “as the severity of the harm increases, individuals are more likely to recognize the ethical implications of the

situation, engage in moral evaluations to a greater extent, and form more ethical intentions”.

Jones (1991, p. 375) defined *Social consensus (SC)* as the “degree of social agreement that a proposed act is evil (or good)”. He argued that individuals look at social rules and norms to decrease ambiguity when facing an ethical issue. Consequently, this will impact their views of the goodness of a variety of actions. Chia & Lim (2000) also claim that social consensus decreases ambiguity and, thus, heightens ethical recognition, ethical judgment, and ethical behaviour. Social norms, principles and habits can together shape the “established conventions” that adapted by individuals within the society. These established conventions represent social consensus on right action (Chia & Lim, 2000). Accordingly, moral intensity decreases if the agreement of the society regarding an action is ethically acceptable, whereas it increases if the agreement of the society concerning that action is ethically unacceptable. Previous research has found that both magnitude of consequences and social consensus are the most significant contributors in explaining an individual’s ethical decision making (Ng et al., 2009).

*Temporal immediacy (TI)* is defined by Jones (1991, p. 376) as the “length of time between the present and the onset of consequences of the ethical action in question”. He believes that longer elapsed time leads individuals to discount the amount of future harm they expect from an unethical behaviour. Accordingly, if the consequences of the action will take place far from now, moral intensity of that action will be lesser. Conversely, if the individuals perceive that consequences will take place soon after the action itself, the moral intensity of the action will be greater. Prior research has provided limited and inconsistent results related to this dimension (O’Fallon & Butterfield, 2005).

Previous research regarding the impact of moral intensity dimensions on ethical decision making process has shown clearly consistent results (see Table 2.5). While Ford and Richardson (1994) reported no studies regarding moral intensity, two studies were included in Loe et al.’s (2000) review. These studies support the notion that the

dimensions of moral intensity affect ethical decision making process (Robin, Reidenbach, & Forrest, 1996; Singhapakdi et al., 1996).

Since the late 1990s, moral intensity has received great attention by researchers. Twenty eight studies related to the first three stages of ethical decision making were included in the review of O'Fallon and Butterfield (2005). Six studies investigated the relationship of moral intensity with ethical recognition. Most of these studies (4 studies) showed significant results that moral intensity impact ethical recognition. Some of these studies indicated which component was examined. Magnitude of consequences had significant positive results with ethical recognition in the three reported studies (Barnett & Schubert, 2002; Butterfield et al., 2000; May & Pauli, 2002). Social consensus was reported in three studies; two of them showed positive relationship with ethical recognition (Barnett & Valentine, 2004; Butterfield et al., 2000), while the remaining study reported no significant influence (May & Pauli, 2002). Temporal immediacy had no relationship with ethical recognition in one study (Barnett & Valentine, 2004).

**Table 2.5 Summary of the Relationship between Moral Intensity and EDM**

Stages and Reviews	Recognition		Judgment		Intention		EDM		Total	
	Sig * Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im	Sig Re/Im	No/few Re/Im
Current review 2010	5	-	8	-	8	-	-	-	21	-
O'Fallon & Butterfield 2005	4	2	14	-	8	-	-	-	26	2
Loe et al. 2000	-	-	-	-	-	-	2	-	2	-
Total	9	2	22	-	16	-	2	-	49	2

Sig Re/Im: Significant relationship or impact; No/few Re/Im: No or few significant relationship or impact  
\*at least one dimension had significant relationship with one or more stages of ethical decision making.

With respect to ethical judgment stage, all fourteen studies showed significant findings related to the impact of moral intensity. Some of these studies mentioned which component was investigated. With the exception of Davis et al. (1998) study, all the remaining eight studies showed that magnitude of consequences had significant impact

on ethical judgment (e.g., Shaw, 2003; Singer, Mitchell, & Turner, 1998). Eight studies examined social consensus; the majority of these studies showed significant and positive relationship with ethical judgment (e.g., Shaw, 2003; Singer et al., 1998). Temporal immediacy was reported by only two studies and found to have significant result in only one study (Singer et al., 1998).

The ethical intention stage was examined in eight studies. All these studies showed significant results and indicated that at least one dimension of moral intensity affected ethical intention. Magnitude of consequences had significant positive impact on ethical intention in three studies (e.g., May & Pauli, 2002), whereas one study (Barnett & Valentine, 2004) showed significant negative impact on ethical intention. Social consensus influenced significantly and positively ethical intention in three of these studies (Barnett, 2001; Harrington, 1997; May & Pauli, 2002), while one study (Barnett & Valentine, 2004) indicated no significant findings. Temporal immediacy was found to have negative relationship with ethical intention in only one study (Barnett & Schubert, 2002).

The review of this study, as presented in Table 2.8, provided twenty one studies that investigated the impact of the dimensions of moral intensity upon ethical decision making stages. Some of these studies examined the dimensions of moral intensity as a group and other examined the impact of one dimension or more upon one or more stage of ethical decision making. In general, most of these findings were consistent with past reviews that moral intensity components have an impact on ethical decision making stages. The impact of moral intensity on ethical recognition was reported in five studies. Magnitude of consequence had significant relationship with ethical recognition in the four studies (e.g., Sweeney & Costello, 2009; Vitell & Patwardhan, 2008). Social consensus was examined by three studies and found to have positive relationship with ethical recognition (Barnett & Valentine, 2004; Bernard & Sweeney, 2010; Leitsch, 2004). Temporal immediacy had positive significant relationship with ethical recognition in two studies

(Leitsch, 2004; Sweeney & Costello, 2009), whereas no significant results was found in one study (Barnett & Valentine, 2004).

Findings related to ethical judgement was shown in eight studies. Moral intensity dimensions as a group were reported in four studies and found to have a significant impact on ethical judgment (Cohen & Bennie, 2006; Leitsch, 2006; Nguyen et al., 2008; Singh et al., 2007). Magnitude of consequence affected significantly ethical judgment in three studies (Barnett & Valentine, 2004; McMahon & Harvey, 2007; Sweeney & Costello, 2009), while one study revealed no significant impact (Leitsch, 2004). Four studies reported significant results related to the impact of social consensus on ethical judgment (e.g., Leitsch, 2004). Temporal immediacy had significant relationship with ethical judgment in two studies (e.g., McMahon & Harvey, 2007; Sweeney & Costello, 2009), while one study reported no significant results (Barnett & Valentine, 2004).

Ethical intention was examined in eight studies and found to be positively and significantly impacted by the components of moral intensity as a group in three studies (Leitsch, 2006; Nguyen et al., 2008; Singh et al., 2007). Magnitude of consequence had significant impact on ethical intention in three studies (Barnett & Valentine, 2004; Sweeney & Costello, 2009; Vitell & Patwardhan, 2008), while one study showed no significant results (Leitsch, 2004). Mixed results were found related to the impact of social consensus and temporal immediacy. Two studies for each (SC and TI) showed significant results (e.g., Vitell & Patwardhan, 2008), whereas another two studies for each of them indicated no significant relationship with ethical intention (e.g., Barnett & Valentine, 2004).

Generally, the majority of studies showed significant and positive relationship between moral intensity components and ethical decision making process. Magnitude of consequences and social consensus have been the most researched dimensions than the other four dimensions of moral intensity (i.e., temporal immediacy and concentration of effect) in most previous studies and found to have positive significant relationship with three stages of ethical decision making. Although previous reviews revealed inconsistent

results related to temporal immediacy (O'Fallon & Butterfield, 2005), the current study review showed significant results in most studies reviewed.

## **2.4 Limitations of Previous Studies**

Since the early 1980s, several empirical studies have been undertaken related to ethical decision making process (O'Fallon & Butterfield, 2005). Most of these studies have been done in effort to explain and predict the process by which an individual makes an ethical decision. In this section, several critical limitations related to previous empirical research regarding ethical decision making process and variables affecting it are discussed. In an addition to the three previous reviews (Ford & Richardson, 1994; Loe et al., 2000; O'Fallon & Butterfield, 2005), the forty four studies (see Table 2.7 and 2.8 in pages 19 & 92) reviewed by this study are used here to discuss these limitations. The limitations are discussed below:

1. The three reviews criticized, in general, the methodology used in business ethics literature that much research lacks strong theoretical background. The social psychology theories including Kohlberg's (1969) Theory of Cognitive Moral Development and Ajzen's (1991) Theory of Planned Behaviour have been the fundamental theories that predominantly applied in the area of business ethics research, ethical decision making in particular. Conceiving and testing individual and organizational, and issue-related impacts could contribute to understanding ethical decision making process; this can be achieved by paying more attention to theory development (O'Fallon & Butterfield, 2005). In this study, four types of the ethical climate theory developed by Victor and Callen (1988) were tested in Libyan environment. Moreover, the two dimensions of personal moral philosophy (i.e., idealism and relativism) built by Schlenker and Forsyth (1977) were examined within Libyan organizations.
2. O'Fallon and Butterfield (2005) noted that each of the four stages of Rest's (1986) model has received attention from researchers; more than 180 studies investigated

ethical judgment, 86 studies investigated ethical intention, and 85 studies related to ethical behaviour. However, they criticize that only 28 studies examined ethical recognition. Likewise, the current review showed few studies that focus on examining ethical recognition. Also, O'Fallon and Butterfield (2005) and the current review reported that only 7 out of 218 studies investigated three stages of ethical decision making; no study investigating the four stages was reported in these reviews. The current study examines the first three stages of ethical decision making to partially overcome the limited research related to the three stages of ethical decision making.

3. Despite the fact that several studies have been done regarding the effect of individual, organizational, and issue-related variables on ethical decision making process, it is noticeable that past research has mainly focused on individual variables; 303 out of the 428 studies reviewed in the four reviews. For example, the reviews reported 105 studies related to gender, 49 studies related to age and 29 studies related educational level. As well as individual variables, this study investigated organizational variables and moral intensity dimensions too.
4. Previous research has significantly centred on only the impact of one or two dimensions of moral intensity, particularly magnitude of consequences and social consensus. Researchers have suggested that additional work needs to be undertaken regarding the other four dimensions of moral intensity (Loe et al., 2000; O'Fallon & Butterfield, 2005). In addition to magnitude of consequences and social consensus, the present study examined one of the other four dimensions, temporal immediacy in particular. While several empirical studies have been done in relation to magnitude of consequences and social consensus, the three reviews revealed that very little research has been conducted regarding the influence that temporal immediacy might have on ethical decision making process. Reasons for chosen only these three dimensions are discussed in more details in section 2.3.3.
5. Using student samples within business ethics domain has been repeatedly debated by researchers (Randall & Gibson, 1990; Weber, 1992). O'Fallon & Butterfield (2005)

provided that 40% (70 out of 174 studies) of their studies reviewed used student sample or a mixture of them with some other group. Also the current review revealed that 56% (25 out of 44 studies) of the studies reviewed used only student samples. While some argue that utilizing student samples decreases the generalizability of the research's findings, others argue that student samples are appropriate for researching business ethics if they "comprise the population of interest or if the population of interest is similar to the student sample on theoretically relevant variables" (Randall & Gibson, 1990, p. 463). The population of this study comprise of two groups, Libyan management accountants and accounting students. The main reason for using student sample in this study is because they are expected to be the future management accountant; and therefore they were only used for the check. Also, Libya is changing rapidly and next generation of management accountants might be very different from current management accountants, who were trained, reacquired with experience in very different environment.

6. Scenarios are the most common instrument used by researchers to gain individuals' perspective regarding ethical issues within business ethics area. Of the 174 studies reviewed by O'Fallon & Butterfield (2005), 95 studies adopted scenarios in their research method. In the current review, all studies reviewed used scenarios as the main method to obtain the attitude of individuals regarding ethical issues. Using scenarios is regarded as an appropriate method to investigate ethical decision making because they allow the researchers to present participants with actual problems that entail a minimal amount of effort for a response; also to overcome some of the difficulties in investigating and observing individuals' ethical behaviours. Regarding the number of scenarios used, 39% of the studies reviewed in the current study used three or four scenarios, whereas 25% used only one or two scenarios to conduct their research; the remaining studies (36%) used more than four scenarios. Weber (1992) argues that using one or two scenarios should be avoided in that too few scenarios could impact the variables that are intended to be manipulated by the researcher, whereas too many scenarios could fatigue the participants in completing their participation. Following

business ethics researchers' recommendation (e.g., Randall & Gibson, 1990; Weber, 1992) this study used four pre-tested accounting scenarios to investigate ethical decision making stages and moral intensity dimensions.

7. Although empirical research within business ethics area concerning ethical decision making process is rapidly growing, the bulk of this research has been done within developed countries, mostly in the USA. This is also supported by the study's review; of the forty four studies reviewed, only nine studies collected data from less developed countries as a result of their purposes to compare the perceptions of individuals from these countries toward some ethical issues; most of (4 studies) of these studies were particularly undertaken in China. Interestingly, out of the forty four studies, 45% were conducted in the USA. Very little research has been done in developing countries and mostly investigated within contexts that are different to Libyan environment (e.g., China and Panama); also most of this research has been conducted in marketing and auditing areas. No study regarding ethical decision making has been conducted within Libyan context. Moreover, very little research has been conducted in countries that have some similar characteristics to Libya (e.g., one study in Egypt, Jordan, and Saudi; and one study in Morocco); however, these studies were interested in investigating the influence of cultural factors on ethical decision making in the field of marketing area. The current study was design to fill the gap in the literature of business ethics in general and ethical decision making in particular.
8. Despite the fact that much research on the topic of ethical decision making process has been done in business, empirical studies within the field of accounting regarding this topic are still limited (O'Leary & Stewart, 2007). Moreover, current review revealed that 14 studies out of 44 were conducted in the domain of accounting; no study was done within management accounting area. Additionally, very few studies related to ethics in general in the management accounting domain have been undertaken (see Chapter One, section 1.3). Therefore, this study will extend ethics literature within the field of accounting in general and management accounting in particular

Within the constraints of a single study, the present study is addressing several of the limitations seeking to use robust methods in a Libyan context with a focus on management accounting, comparing current management accountants with accounting students, who are the practitioners of the future.

## **2.5 The Study Framework**

Models developed in the literature of business ethics suggest that without considering individual, organizational factors and the characteristics of ethical issue itself, ethical decision making process cannot be understood. Based on the literature review of business ethics presented and discussed early in this chapter, especially on the models of ethical decision making developed by (Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Jones, 1991; Rest, 1986; Treviño, 1986), the theoretical framework of this study was built, see Figure 2.6 below.

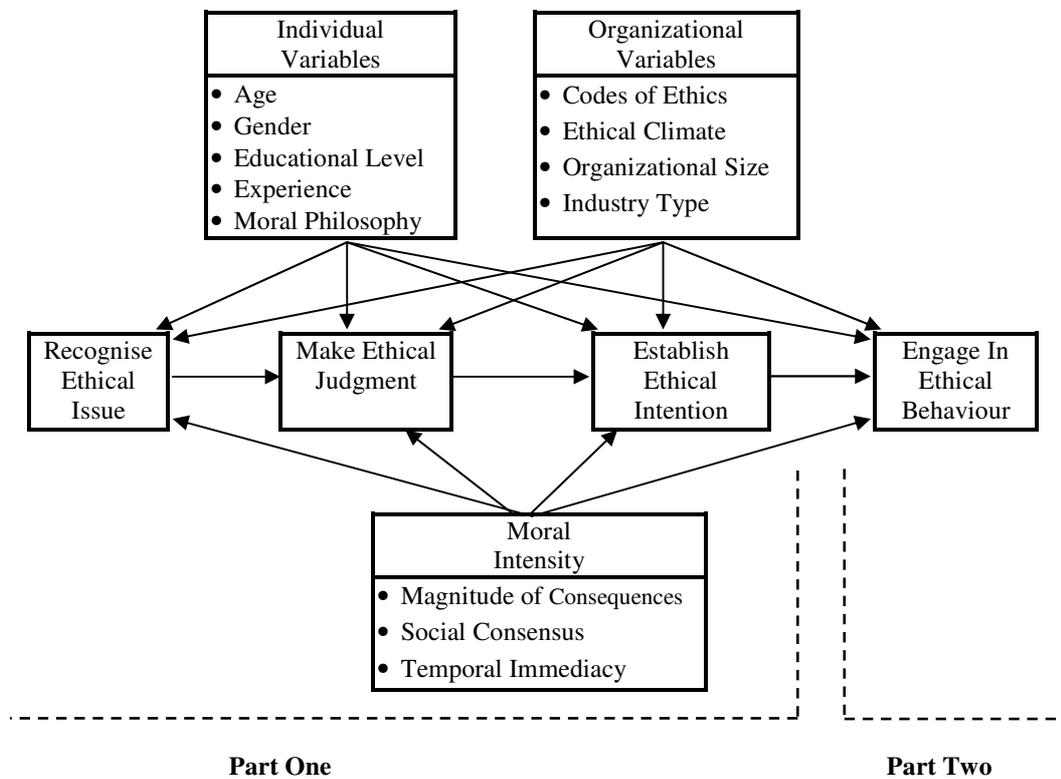
This framework illustrates the possible impact of individual factors, organizational factors and moral intensity components upon ethical decision making process. The relationship between the four mentioned models (Hunt & Vitell, 1986; Jones, 1991; Rest, 1986; Treviño, 1986) and the framework of this study is that each model recognized some of the factors that intended to be investigated in this research, for example Jones (1991) developed his model which focused on mainly on the effect of moral intensity components on ethical decision making stages. In part one this study is examining and investigating empirically those factors within Libyan companies. It should be noted that ethical behaviour, which is shown in part two, is not going to be studied in this research.

Although there are many variables have been found in the literature of business ethics, only the following variables are included in this model; first, individual variables are age, gender, educational level, experience, and personal moral philosophy; second, organizational variables are codes of ethics, ethical climate, and organizational size and type of industry; and finally the three dimensions of moral intensity including magnitude of consequences, social consensus, and temporal immediacy. Moreover, as mentioned

early, the first three stages of ethical decision making, as theorized by Rest (1981), serve as the main theoretical framework for this research.

Several researchers within the field of business ethics have used Rest's (1986) model as the basis for theory development and empirical investigation (O'Fallon & Butterfield, 2005). Moreover, previous studies have provided significant statistical relationships between moral intensity components, individual and organizational factors and the first three stages of ethical decision making (May & Pauli, 2002; O'Fallon & Butterfield, 2005).

**Figure 2.6 Framework of the Study**



## **2.6 Summary**

This chapter provided a review of the literature in relation to the theoretical and empirical background of ethical decision making process and factors affecting it. Several conclusions can be drawn. Although several studies related to ethical decision making has been done in business ethics area, this research is still limited (O'Fallon & Butterfield, 2005). Past research focused heavily upon few single variables such as gender, age, ethical climate, codes of ethics, magnitude of consequences, and social consensus, even though there are more than forty variables have some relationships and significant influences with/on ethical decision making process.

Moreover, ethical judgment is widely investigated than any other stages of ethical decision making. It noticeably appears that the influence of some of individual variables, organizational variables, and moral intensity dimensions, for example age and organizational size, continue to show mixed results and ambiguous relationships with ethical decision making stages. Studies regarding ethical decision making process that have been conducted in accounting area are still limited. Additionally, very little research concerning ethics has been undertaken within management accounting area and no study related to ethical decision making process has been conducted for long time ago. Interestingly, student sample are widely used by researchers. Additionally, most of the research regarding ethical decision making process has been done in the USA. The next chapter focus on the methodology of this study.

## 2.7 Hypotheses of the Study

Based on the literature of ethical decision making discussed above, the hypotheses of this study are presented below.

**Table 2.6 Hypotheses of the Study**

<b>N</b>	<b>Hypotheses</b>
H1a	<i>Mean Ethical Recognition Scores Will Significantly Increase as Age Increases</i>
H1b	<i>Mean Ethical Judgment Scores Will Significantly Increase as Age Increases</i>
H1c	<i>Mean Ethical Intention Scores Will Significantly Increase as Age Increases</i>
H2a	<i>Mean Ethical Recognition Scores of Females Will Be Significantly Higher than Males</i>
H2b	<i>Mean Ethical Judgment Scores of Females Will Be Significantly Higher than Males</i>
H2c	<i>Mean Ethical Intention Scores of Females Will Be Significantly Higher than Males</i>
H3a	<i>Mean Ethical Recognition Scores Will Significantly Increase as Level of Education Increases</i>
H3b	<i>Mean Ethical Judgment Scores Will Significantly Increase as Level of Education Increases</i>
H3c	<i>Mean Ethical Intention Scores Will Significantly Increase as Level of Education Increases</i>
H4a	<i>Mean Ethical Recognition Scores Will Significantly Increase as Years of Experience Increases</i>
H4b	<i>Mean Ethical Judgment Scores Will Significantly Increase as Years of Experience Increases</i>
H4c	<i>Mean Ethical Intention Scores Will Significantly Increase as Years of Experience Increases</i>
H5a	<i>Mean Ethical Recognition Scores Will Significantly Increase as the Size of Companies Increases</i>
H5b	<i>Mean Ethical Judgment Scores Will Significantly Increase as the Size of Companies Increases</i>
H5c	<i>Mean Ethical Intention Scores Will Significantly Increase as the Size of Companies Increases</i>
H6a	<i>Mean Ethical Recognition Scores Will Be Significantly Higher for Those Who Work in Companies That Have Code of Ethics</i>
H6b	<i>Mean Ethical Judgment Scores Will Be Significantly Higher for Those Who Work in Companies That Have Code of Ethics</i>
H6c	<i>Mean Ethical Intention Scores Will Be Significantly Higher for Those Who Work in Companies That Have Code of Ethics</i>
H7	<i>Mean Ethical Decision Making Stages Scores Will Be Significantly Different between Participants Based on the Type of Industry.</i>
H8a1	<i>Moral Idealism Has a Significant Positive Relationship with Ethical Recognition</i>
H8a2	<i>Moral Relativism Has a Significant Negative Relationship with Ethical Recognition</i>
H9a	<i>Ethical Climate Types Have a Significant Positive Relationship with Ethical Recognition</i>
H10a1	<i>Magnitude of Consequences Has a Significant Positive Relationship with Ethical Recognition</i>

<b>N</b>	<b>Hypotheses</b>
<i>H10a2</i>	<i>Social Consensus Has a Significant Positive Relationship with Ethical Recognition</i>
<i>H10a3</i>	<i>Temporal Immediacy Has a Significant Positive Relationship with Ethical Recognition</i>
<i>H8b1</i>	<i>Moral Idealism Has a Significant Positive Relationship with Ethical Judgment</i>
<i>H8b2</i>	<i>Moral Relativism Has a Significant Negative Relationship with Ethical Judgment</i>
<i>H9b</i>	<i>Ethical Climate Types Have a Significant Positive Relationship with Ethical Judgment</i>
<i>H10b1</i>	<i>Magnitude of Consequences Has a Significant Positive Relationship with Ethical Judgment</i>
<i>H10b2</i>	<i>Social Consensus Has a Significant Positive Relationship with Ethical Judgment</i>
<i>H10b3</i>	<i>Temporal Immediacy Has a Significant Positive Relationship with Ethical Judgment</i>
<i>H8c1</i>	<i>Moral Idealism Has a Significant Positive Relationship with Ethical Intention</i>
<i>H8c2</i>	<i>Moral Relativism Has a Significant Negative Relationship with Ethical Intention</i>
<i>H9c</i>	<i>Ethical Climate Types Have a Significant Positive Relationship with Ethical Intention</i>
<i>H10c1</i>	<i>Magnitude of Consequences Has a Significant Positive Relationship with Ethical Intention</i>
<i>H10c2</i>	<i>Social Consensus Has a Significant Positive Relationship with Ethical Intention</i>
<i>H10c3</i>	<i>Temporal Immediacy Has a Significant Positive Relationship with Ethical Intention</i>

**Table 2.7 Summary of the Review of the Current Study**

<b>Figures</b>	<b>Items</b>	<b>Total</b>	<b>Percentage</b>
Instrumental	Questionnaire with scenarios	44	100%
	Other	--	--
Sample used	Students	25	57%
	Other	19	43%
Place of conducted studies	Only in the USA	20	45%
	Only in developed countries (including USA)	38	86%
	Only in Developing countries	3	7%
	Comparing developed countries/developing countries	7	16%
Number of scenarios used	One or two	11	25%
	Three or four	17	39%
	More than four	16	36%
Tests used	Descriptive	44	100%
	Regression and Coloration	30	75%
	Other	22	55%
Area	Accounting	15	34%
	Marketing	8	18%
	Other	21	48%

**Table 2.8 Current Study's Review of Ethical Decision Making in Business Ethics Literature**

<b>Authors &amp; Year</b>	<b>Factors</b>	<b>Stages of EDM*</b>	<b>Findings</b>	<b>Statistical Tests</b>	<b>Method</b>	<b>Sample, Field &amp; Country</b>
Vitell & Singhapakdi (1993)	Personal moral* philosophy (ID & RE)	- Judgment	Both ID (positively) and RE (negatively) had significant relationship with ethical judgment in different two scenarios.	Regression	QUES* & 4 SCEN*	492 Marketing professionals (USA)
Schminke (2001)	Organizational size	- Intention	Members of larger organizations displayed stronger significant ethical intention than members of smaller organizations.	Correlation & Regression	QUES * & the character traits version.	209 Managers from mixed organizations (USA)
Davis et al. (2001)	Personal moral philosophy (ID & RE)	- Judgment - Intention	ID had significant positive impact on ethical judgment, while RE predicted it in one scenario. Partially both ID and RE impact ethical intention.	Regression	QUES & 3 SCEN	196 Business Students (USA)
Pater & Gils (2003)	Codes of ethics	- Intention	The existence of codes of ethics had a negative impact on individual ethical intention	Regression	QUES & 4 SCEN	128 Management Professionals (Netherlands)
Roxas & Stoneback (2004)	Gender	- Judgment	Across all countries examined, females were more ethical than males. Significant differences were only in two eastern countries	Correlation & T-test	QUES & 1 SCEN.	750 Accounting Students (4 Western & 4 Eastern countries)
Leonard et al. (2004)	Gender and age	- Intention	Gender and age were found to significantly impact the ethical intention in four of five scenarios.	Regression	QUES & 5 SCEN.	423 Computing Students (USA)
Barnett & Valentine (2004)	Moral intensity* (MC, SC & TI), gender, and age	- Recognition - Judgment - Intention	MC had significant relationship with the three stages. SC had only significant association with ethical recognition and judgment in one scenario but had no relationship with ethical intention. TI, Gender and age had no relationship with the three stages	Correlations, T-test & Regression	QUES & 2 SCEN.	273 Marketing professionals (USA)

\* 1. Ethical decision making (EDM). 2. Personal moral philosophy: (ID: Idealism; RE: Relativism). 3. Ethical climate types : ( CI: Company interest; law, LC: Law & Professional codes; SR: Social responsibility; PM: Personal morality). 4. Moral intensity components (SC: Social consensus; MC: magnitude of consequences; TI: Temporal immediacy). 5. QUES: Questionnaire. 6. SCEN: Scenarios

<b>Authors &amp; Year</b>	<b>Factors</b>	<b>Stages of EDM*</b>	<b>Findings</b>	<b>Statistical Tests</b>	<b>Method</b>	<b>Sample, Field &amp; Country</b>
Leitsch (2004)	Moral intensity (MC, SC & TI)	- Recognition - Judgment - Intention	MC and SC had significant impact on both ethical recognition and ethical judgment. TI had a significant influence on only ethical recognition	MANOVA	QUES & 4 SCEN	110 Accounting Students (USA)
Dubinsky et al. (2004)	Moral philosophy- Idealism (ID) & Relativism (RE)	- Recognition	While RE had no relationship with ethical recognition, ID had significant negative association with ethical recognition	Regression, T-test & Factor analysis	QUES & 29 SCEN (Statements)	201 Sales personnel (USA)
Conroy & Emerson (2004)	Gender & age	- Recognition	Gender affected significantly ethical recognition in 19 of 25 scenarios. In 11 of the 25 scenarios, the effect of being older is statistically significant.	Correlation	QUES & 25 SCEN	850 different (mixed) Students (USA)
Marta et al. (2004)	Age	- Intention	Age had only significant correlation with ethical intention in one scenario. Age was found to be an inconclusive predictor of ethical intention.	Correlation & Regression	QUES & 2 SCEN	134 Marketing professionals (Saudi, Egypt & Jordan)
Null (2004)	Gender & age	- Intention	While females were significantly more ethical than males, age had significant result in only one scenario that older students are more ethical than younger.	Cross-tabulation analysis (Chi-squared)	QUES & 2 SCEN	156 Business-Non business Students (Europe & USA)
Simga-Mugan et al. (2005)	Gender	- Recognition	Ethical recognition was significantly affected by gender. Females were more sensitive than males in the sixteen scenarios.	T-test & MANCOVA	QUES & 16 SCEN (Statements)	171 Mixed professionals at different management level (USA & Turkey)
Null & Schibrowsky (2005)	Moral intensity, age, gender, education level, and experience	- Intention	Age, gender, level of education, and experience had no significant impact on ethical intention. Moral intensity had a statistically significant relationship with ethical intention	Regression	QUES & 1 SCEN	210 Marketing Students (Germany and USA)
Buchan (2005)	Ethical climate (company interest)	- Intention	Ethical climate had negative relationship with ethical intention, but this relationship was not significant.	Regression, Factor analysis & Correlation	QUES & 2 SCEN	95 CPA (USA)
Cagle & Baucus (2006)	Gender, Age, Education level.	- Judgment	Females were significantly less to accept unethical behaviour than males in five of ten scenarios. Level of education had significant impact in only two of ten scenarios. Age had no significant results.	Regression	QUES & 10 SCEN (Statements)	86 Business & MBA Students (USA)

Authors & Year	Factors	Stages of EDM*	Findings	Statistical Tests	Method	Sample, Field & Country
Chan & Leung (2006)	Moral philosophy (ID&RE), Age, Gender, Level of education.	- Recognition	Moral philosophy, age, gender, and level of education were not found to be significantly associated with ethical recognition	Mann-Whitney U-test, Regression & Correlation	QUES, 1 SCEN & Welton et al.,' (1994) instrument	156 Accounting Students (Hong Kong)
Cohen & Bennie (2006)	Moral intensity (6 components)	- Recognition - Judgment - Intention	MC and SC had significant relationship with the three stages of ethical decision making, whereas TI had not	ANOVA	QUES & 3 SCEN	40 Audit partners and managers (USA)
Leitsch (2006)	Moral intensity (6 components)	- Recognition - Judgment - Intention	The characteristics of moral issue had a significant effect on ethical judgment and ethical intention. However, they had no significant impact on the recognition	Correlation, Regression & Factor analysis	QUES & 4 SCEN	110 Accounting Students (USA)
Ritter (2006)	Gender	- Recognition	Findings revealed that women of experimental group significantly showed improved ethical recognition.	Correlation, T-test & ANOVA	QUES & 15 SCEN	124 Business Students (USA)
VanSandt et al. (2006)	Ethical climate*	- Recognition	Ethical climate is a primary predictor of respondents' degree of ethical recognition	Factor analysis, Discriminant analysis, and ANOVA	QUES & 1 video clip SCEN	194 Individuals from mixed organizations (USA)
Keller et al. (2007)	Gender, Educational level, and Work experience	- EDM	There were no significant differences between females and males in EDM. Educational level and work experience appeared to have some impact on the ethical decision-making process.	Regression & T-test	QUES & Series of SCEN	171 Accounting Students (USA)
Guffey & McCartney (2007)	Gender, age, and level of education	- Judgment	Females were significantly higher in ethical judgment than males in the two scenarios. Age had only little impact on ethical judgment, whereas level of education had no significant results.	Factor analysis, T-test & Regression	QUES & 2 SCEN	397 Accounting Students (USA)
Haines & Leonard (2007a)	Gender	- Judgment - Intention	There were significant differences between females and males in both ethical judgment and ethical intention. Females were less to involve in questionable behaviour than males.	T-tests	QUES & 5 SCEN	167 Information system Students (USA)
O'Leary & Stewart (2007)	Years of experience	- Judgment - Intention	Experience had a significant impact on internal auditors' ethical judgment and intention in three of five scenarios.	ANOVA	QUES & 5 SCEN	66 Internal auditors (Australia & New Zealand)

Authors & Year	Factors	Stages of EDM*	Findings	Statistical Tests	Method	Sample, Field & Country
McMahon & Harvey (2007)	Moral intensity (6 components) age, and gender.	- Judgment	MC, SC, TI and gender had significant effect on ethical judgment. Age had no impact on ethical judgment.	Factor analysis, Regression & ANOVA	QUES & 3 SCEN	345 Students (USA)
Rottig & Heischmidt (2007)	Code of ethics.	- Judgment - Intention	Both ethical judgment and ethical intention were not significantly affected by the existence of codes of ethics	MANCOVA, t-test & Factor analysis	QUES & 1 SCEN	86 MBA Students (USA & Germany)
Pflugrath et al. (2007)	Codes of ethics and experience	- Judgment	The presence of a code of ethics had a positive impact on ethical judgment. Years of experience affected significantly ethical judgment.	ANOVA and Contrasts analyses	QUES & 1 SCEN	52 Professional Accountants & 60 Students (Australia)
Shafer (2007)	Ethical climate* (CI, LC, SR), moral philosophy, gender, & industry type	- Judgment - Intention	Ethical climate (3types) had no significant effect on ethical judgment, whereas the three types of ethical climate affected significantly ethical intention. Moral philosophy and gender did not affect judgment or intention. Industry type affected significantly both stages.	Multiple Regression	QUES & 3 SCEN	60 Auditors (China) & 68 Auditors international firms (China)
Stedham et al. (2007)	Gender	- Judgment - Intention	Females were more ethical than males in their judgments. Gender also had a significant impact on ethical intention.	Correlations & ANOVAs	QUES & 3 SCEN	44 Business Students (Germany)
Singh et al. (2007)	Moral intensity (6 components) and moral philosophy	- Judgment - Intention	Moral intensity affected significantly ethical judgment and intention. Moral philosophy affected ethical judgment and intention in only one scenario.	Chi-square, Correlation & Regression	QUES & 4 SCEN	372 Marketing managers (USA & China)
Valentine & Rittenburg (2007)	Gender, Age and Experience	- Judgment - Intention	While no significant differences between males and females were found in ethical judgments, females exhibited significant higher intention to behave more ethically than males. Age and experience had positive relationship with the two stages.	Correlations, MANCOVA & ANOVA	QUES & 10 SCEN	222 Business executives from mixed organizations (USA & Spain)
Westerman et al. (2007)	Gender	- Intention	Gender was found to have a significant impact on ethical intention that women were more ethical than men.	Correlations & ANOVA	QUES & 3 SCEN	165 Business Students (Germany, Italy & Japan)
Marta et al. (2008)	Moral philosophy, size of organization and gender.	- Intention	Females were more significantly ethical in their intentions than males. Idealism and relativism had no significant impact on ethical intention. Organizational size	Correlation & Regression	QUES & 4 SCEN	226 Managers (USA)

Authors & Year	Factors	Stages of EDM*	Findings	Statistical Tests	Method	Sample, Field & Country
			affected significantly ethical intention. Managers in larger organizations were more ethical than those in smaller one.			
Marques et al. (2008)	Moral philosophy (ID & RE), Age, Gender and level of education.	- Judgment	Males were significantly more ethical than females. ID had no significant relationship with ethical judgment. RE, age, and level of education had significant impact on ethical judgment in only one scenario	MANOVA & Regression	QUES & 5 SCEN	276 Chartered Accountants (Portuguese)
Nguyen et al. (2008)	Gender, age and moral intensity (MC).	- Judgment	Females were significantly more ethical than males in judgments, whereas MC and age had no significant effect on ethical judgment	Correlations, ANCOVA & Factor structure	QUES & 3 SCEN	340 Business Students (USA)
Oumlil & Balloun (2008)	Moral philosophy (ID & RE), and gender.	- Intention	Idealism is good predictor for ethical intention, whereas relativism not. Gender affected significantly ethical intention. Females were more ethical than males.	ANOVA, Factor analysis, Correlation & Regression	QUES & 4 SCEN	172 Business Students (Morocco & USA)
Lund (2008)	Gender.	- Judgment	Overall, female marketing professionals evinced significantly higher ethics judgment than males.	MANOVA, ANOVA & T-tests	QUES & 27 Statements	360 Marketing professionals (USA)
Stedham et al. (2008)	Gender and age.	- Judgment	Gender had no significant impact on ethical judgment, whereas age affected significantly ethical judgment	MANCOVA, Correlations, ANCOVAs	QUES & 3 SCEN	176 Business Students (Japan & Taiwan)
Vitell & Patwardhan (2008)	Moral intensity (6 components) and Moral philosophy.	- Intention	MC and TI had significant relationship with ethical intention. SC had significant impact on ethical intention in three scenarios. Moral philosophy dimensions had few significant effects on ethical intention in two scenarios.	Regression	QUES & 4 SCEN	379 Marketing Executives (UK, Spain & China)
Bampton & Maclagan (2009)	Gender	- Judgment	Women judge situations differently from men in four of five scenarios. Women were more concern to the human welfare and protection the environment than men.	Chi-square	QUES & 5SCEN	98 Accounting Students (UK)
Seshadri & Broekemier (2009)	Gender	- Intention	Gender had significant impact on ethical intention.	ANOVA	QUES & 8 SCEN	1328 Mixed Academic Students (Panama & USA)

Authors & Year	Factors	Stages of EDM*	Findings	Statistical Tests	Method	Sample, Field & Country
Krambia-Kapardis & Zopiatis (2008)	Gender, age, educational level, and type of industry	- EDM	Females were significantly more ethical than males. Older managers were significantly more ethical than younger managers. Educational level and type of industry had no impact on EDM	ANOVA & T-test	QUES & 9 Statements	565 employees In different organizations (Cyprus)
Sweeney & Costello (2009)	Moral intensity (6 components) and gender	- Recognition - Judgment - Intention	MC, SC, and TI were significantly directly related to the three stages. Gender had no significant impact on the three stages.	Regression, Correlation & T-test	QUES & 4 SCEN	191 Accounting/None Accounting Students (Ireland)
Bernard & Sweeney (2010)	Gender, firm size, level of education, experience and age	- Judgment - Intention	Gender, firm size, and experience had significant impact on ethical judgment in only one scenario. Firm size, age, and experience had significant relationship with ethical intention. Gender and level of education had significant impact on ethical intonation in only one scenario. Age and level of education had no significant impact on ethical judgment.	ANOVA, MANOVA and T-test	QUES & 4 SCEN.	463 Auditing trainees (Ireland)

\* 1. Ethical decision making: (EDM). 2. Personal moral philosophy: (ID: Idealism; RE: Relativism). 3. Ethical climate types (CI: Company interest; LC: Law & Professional codes; SR: Social responsibility; PM: Personal morality). 4. Moral intensity components (SC: Social consensus; MC: magnitude of consequences; TI: Temporal immediacy). 5. QUES: Questionnaire. 6. SCEN: Scenarios

## **Chapter Three**

### **Research Methodology**

#### **3.1 Introduction**

In the last two chapters, the literature review related to management accounting ethics, the ethical decision making stages, and some issues regarding Libyan environment were presented and discussed. From this, a framework and the hypotheses of this study were developed. The purpose of this chapter is to describe the research methodology that has been applied for undertaking this study and the methods and the procedures that have been conducted to collect the research data. This chapter is organized as follows: it begins with a reminder of the study aims, since they play a key role in formulating the research methodology. Section three outlines the issues related to the research philosophy and methodology applied in this study. The populations and the samples are discussed in section four. Then, the following two sections provide a detailed description of the data collection methods including questionnaire and scenarios, the questionnaire design including wording and layout, question type and format, translation and piloting the questionnaire. Section seven discusses in detail the contents and measurement of the study variables. Sections eight and nine outline the reliability and validity issues and the administration of the questionnaire. The statistical techniques used in this study and conclusion are described in the last two sections.

#### **3.2 Research Aims**

As mentioned early in Chapter One, this study aims to gain a better understanding of the relationship between individual variables, organizational variables, and moral intensity dimensions and ethical decision making process within the field of accounting, particularly management accountants and accounting students in Libyan context. The study set out four specific aims:

1. To identify what types of ethical issues are faced by management accountants within Libyan companies;
2. To determine the relationship between individual variables (age, gender, educational level, work experience, and personal moral philosophy) and the decision making process of Libyan management accountants and accounting students;
3. To determine the relationship between organizational variables (codes of ethics, ethical climate, organizational size, and industry type) and the decision making process of Libyan management accountants; and
4. To determine the relationship between moral intensity dimensions (magnitude of consequences, social consensus, and temporal immediacy) and the decision making of Libyan management accountants and accounting students.

### **3.3 Methodology and Method**

Methodology and method have occasionally been used interchangeably. However, the distinction between them indicates substantially different meaning. While methodology refers to “the overall approach to the research process, from the theoretical underpinning to the collection and analysis of the data”, method refers to the “various means by which data can be collected and/or analysed” (Collis & Hussey, 2009, p. 73). Crotty (1998, p. 3) also defined the two terms: methods are “the techniques or procedures used to gather and analyse data related to some research questions or hypothesis”, whereas methodology refers to “the strategy, plan of action, process/design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes” . In general, methodology is concerned with several issues including: why one collected certain data, what data and from where has he/she collected these data, when and how he/she collected it, and how it would be analysed (Collis & Hussey, 2009). Experimental study, grounded theory, and ethnography are some examples of research methodology options.

Data can be collected and analysed by employing different methods including interviews, questionnaires, observations, etc. The choice between these techniques depends on the research philosophy and the aims of study or the research questions. In the context of social science, there are mainly two research philosophies (paradigms) (Creswell, 2009). Although this is a simplification of the possibilities, it characterizes much research in practice and helps to delineate the choices to be made. Terms such as positivistic, quantitative, objectivist, scientific, experimental and empirical are used to describe the first philosophy (approach). The second philosophy is referred to by terms such as phenomenological, radical, qualitative, subjectivist, interpretative and post-positivistic. The differences between the two approaches can be viewed in terms of the two major approaches to theory development - deductive theory testing and inductive theory building. The deductive approach represents the positivistic approach and the inductive approach represents the phenomenological approach (Perry, 1998).

The positivistic approach seeks to deduce or identify a testable hypothesis about the association between two or more variables from a theory, which is then tested empirically by collecting data relating to the variables and then performing statistical tests on the data to identify significant associations. The results may either support the theory or produce a modification of the theory based on the results obtained (Hussey & Hussey, 2003; Saunders, Lewis, & Thornhill, 2003). Cross-sectional studies, employed in this study, employing a survey methodology are often used in this approach. In contrast, the phenomenological approach emerged as a result of criticisms of the positivistic approach. Critics have argued that the positivistic approach made cause and effect links between variables without consideration of the way in which individuals interpreted their social world (Saunders et al., 2003). Easterby-Smith et al. (2002) explain that the philosophy behind the phenomenological approach views the “reality” as not objective and exterior, but as being socially constructed and given meaning by individuals. Accordingly, this approach takes into account individuals’ feelings, thinking, and the different interpretations and meanings which they give to various phenomena. This involves thoroughly explaining why and how individuals view different experiences instead of

searching for external reasons and fundamental laws to explain their behaviour (Easterby-Smith et al., 2002). Hussey and Hussey (2003) point out that the two philosophies, shown in Figure 3.1, must be viewed as two extremes of a continuum, and that neither of these two approaches is considered better than the other. Briefly, the most important difference between the two approaches is that adopting either approach leads the researcher to use a specific research methodology. The choice of either approach is determined partly by the current knowledge of the topic and research problem under investigation.

**Figure 3.1 Distinguishing Features of the Main Research Philosophies**

Positivist philosophy	Phenomenological philosophy
Tends to produce quantitative data	Tends to produce qualitative data
Uses large samples	Uses small samples
Concerned with hypothesis testing	Concerned with generating theories
Data is highly specific and precise	Data is rich and subjective
Generalizes from sample to population	Generalizes from one context to another

**Source: Hussey and Hussey (2003)**

Business ethics research has been dominated by the positivistic approach and by empirical research methods (Randall & Gibson, 1990; Treviño & Weaver, 1994). A positivistic approach is adopted here in order to achieve the aims and to provide a basis for generalizing results for specific situations. Several reasons were behind choosing this approach:

1. Generalization: survey-based research seeks to identify relationships that are common across organizations, and hence provide a general statement or theory about the phenomenon being researched (Bryman & Bell, 2007; Eldabi, Irani, Paul, & Love, 2002).
2. Saving in time and effort: adopting a cross-sectional survey methodology leads to a saving in time, effort and resources required compared to other methodologies such as longitudinal and lab experiment (Creswell, 2009).

3. Conducting multivariate analysis, as in this study, requires a fairly large number of cases, which can be reached by using a survey methodology (Field, 2009; Hair, Anderson, Tatham, & Black, 2006).
4. Prior studies provide the basis for developing a model and research constructs to use.

It should be noted that there are a number of ways (e.g., experimental or interview) to do this study; but, given the aims of this study, the way adopted here is considered a good and an appropriate way to conduct this study.

### **3.4 Research Populations and Samples**

Management accountants perform several functions for their organizations, including financial analysis, planning and budgeting, cost accounting, and general accounting. Therefore, they certainly have a variety of responsibilities to users, whether they are external to the organization such as creditors and investors or internal such as management (Loeb & Cory, 1989). Therefore, the decisions made by management accountants can affect themselves, shareholders, and the reputation of their organization. Management accounting, like any task within an organization, is faced with several ethical issues. Furthermore, management accountants encounter ethical conflicts in their work as a result of the dual responsibility to their employer and their profession (Etherington & Schulting, 1995). Research related to management accountants revealed that management accountants were responsible for, or had witnessed, cases where financial results had been changed (Mihalek et al., 1987). Also, Jones and Hildebeitel (1995) found that the ethical decision making of management accountants was clearly affected by organizational and individual factors.

Although there has been a significant increase in accounting ethics research in recent years, the research related to management accounting area is still very rare (see Chapter One, section 1.3). Therefore, this study tries to add new empirical evidence to the field of accounting in general and management accounting in particular. Hence, the population of this study consist, of: first, Libyan management accountants who work within only

Libyan companies, mainly manufactures, that have at least 50 employees or more; and second: senior accounting students (final year), who are expected to be the future Libyan accountants, from Libyan Universities.

With regard to the samples chosen from these populations, all management accountants who work in Libyan companies as defined above and all senior accounting students from four universities were targeted to participate in this study. Based on the list of Libyan companies provided by the department of Libyan companies at the Ministry of Industry and using the size of each company as a criterion (i.e. each company has at least 50 employees or more), only 113 companies were found to meet this criterion. Manufacturing companies that have 50 employees or more are expected to have a well designed accounting system in general and management accounting system in particular and therefore management accountants are certainly to be found working there. Moreover, it has been recommended that when the targeted population is small (less than 500) it is traditionally common to use 100 percent sample (Easterby-Smith et al., 2002). Therefore, all of these companies were chosen to be visited in order to distribute the questionnaires to their management accountants. The financial/management accounting manager at each company was asked to provide the number of their management accountants or those who do the tasks of management accounting in order to determine how many questionnaires should be distributed to each company. Therefore, the sample of Libyan management accountants was mainly based on the numbers provided by those managers.

In questionnaire survey design, Bryman and Bell (2007) maintain that 'sampling constitutes a key step in the research process'. They suggest that using convenience samples is very common in business and management research. Convenience samples such as administering questionnaires to student samples in class room have been widely employed in business ethics research (see Chapter Three). The main problem of using this method to collect data is the difficulties to generalize the results to a population. For example, using student samples as proxies for practitioners to complete a questionnaire

including business scenarios, students may not respond adequately since they have little practical knowledge about the given situation (Weber, 1992). However, using student samples is perfectly appropriate in many situations. In this respect, Randall and Gibson (1990, p. 463) state that “student samples are appropriate if they comprise the population of interest or if the population of interest is similar to the student sample”. Also, some have argued that a convenience sample might be very useful in pre-testing the research instruments (Bryman & Bell, 2007). Accounting student sample was used in this study to examine their ethical decision making as they are expected to be the future accountants. Any differences from current management accountants would indicate the possibility of change in the future, whereas similarities would point towards continuity, in spite of the many significant changes that have been occurring in Libya. Therefore, accounting students were investigated in this study only for the check. The scenarios included in the questionnaire of this study were clear and the educational experience should have prepared accounting students for these possible workplace ethical issues (Sweeney & Costello, 2009). In addition to my own university (Omer El-Moktahr univessity), I was able to obtain an access to three other Libyan universities (Garyounis University, Almargab University, and Mosrata University) to participate in this study. Four lecturers (friends) from the departments of accounting at the four Libyan universities agreed to distribute the questionnaire to all senior accounting students they teach.

### **3.5 Data Collection Methods and Research Type**

Survey has been the most common method utilized in the field of business ethics research compared to other techniques such as lab experiments and interviews (Ford & Richardson, 1994; Randall & Gibson, 1990). Also this was clearly noted in all recent empirical studies reviewed by this study (see Table 2.8). Robertson (1993) argued that other methods such as experiments and interviews should be performed more frequently to extend the methodological base of the research of business ethics. Greater depth can be offered by using interviews, although the access may be difficult (Liedtka, 1992). Several criticisms have emerged concerning ethics studies based on questionnaires (Cowton,

1998). These include poor questionnaire design, the use of convenience samples, low response rates, and using poor scenarios (Randall & Gibson, 1990; Weber, 1992). Although these issues have been considered as standard issue in survey design, business ethics research involves some specific difficulties (Cowton, 1998). Dalton and Metzger (1992, p. 207) stated that “virtually every empirical inquiry of issues relevant to applied business ethics involves the asking of questions that are sensitive, embarrassing, threatening, stigmatizing, or incriminating”. However, it would be noted that several of the problems cited are not fundamental to questionnaire survey but, rather, associated with the way they have been carried out.

Survey based research was adopted in this study. There were several practical reasons behind the choice of survey in this study: first, to be consistent with the research philosophy adopted (positivistic) and to achieve the research aims in terms of generalization, identifying associations between research variables, and conducting the required multivariate analysis, the survey was considered appropriate (Bryman & Bell, 2007; Collis & Hussey, 2009; Oppenheim, 2003; Saunders et al., 2003); second, the opportunity of analysing a large amount of information; third, it has been widely used as a prime data collection in business ethics research in general and ethical decision making studies in particular (Ford & Richardson, 1994; Randall & Gibson, 1990); finally, the limited time and resource available to the researcher. Accordingly, a questionnaire including scenarios was considered to be the most suitable data collection method for this study. The following sections discuss the research questionnaire; the four scenarios used in this study; and the operationalization of the questionnaire.

### **3.5.1 Questionnaire**

A questionnaire, which is defined as a list of carefully structured questions (Collis & Hussey, 2009), is the most popular method for collecting data (Collis & Hussey, 2009; Oppenheim, 2003; Sekaran, 2003). The questionnaire is a useful flexible tool for business ethics research, since it helps the researchers to gather information regarding unethical issues at workplace, individuals' perspectives about these issues, and the environment

characteristics at their workplace, as well as their demographic characteristics to be used in terms of the relationship they might have with the opinions individuals stated. Additionally, business ethics research, as discussed earlier, has been commonly questionnaire-based survey, this may be because it is classically cheap, quick and an easy tool to employ (Cowton, 1998). Although individuals' perspectives can be examined by using either questionnaires or interviews, questionnaires should be used when quantified information is required regarding a certain population and when individuals' own accounts of their behaviour and attitudes are acceptable as a source of information (Hussey & Hussey, 2003).

Types of questionnaire differ according to the method of its distribution; online questionnaire, post/mail questionnaire, telephone questionnaire, and personal administered questionnaire. Each of these types has its own advantages and disadvantages. With respect to the type adopted here (i.e. personal administered questionnaire), Oppenheim (2003) explains that the researcher himself or someone in an official position (i.e. the accounting lecturers at Libyan universities and financial/management accounting managers of Libyan companies in this study) usually distribute the questionnaire to the participants, explaining the research aim, and the participants are then left to complete the questionnaire.

Several advantages of using personal administered questionnaire that is they may be ensure the high rate of response, targets very precisely the most appropriate sample, the opportunity to introduce the research topic to motivate the participants to give their answers honestly, to clarify any ambiguous questions, and to collect completed questionnaire in a short time (Collis & Hussey, 2009; Oppenheim, 2003; Saunders, Lewis, & Thornhill, 2007). Additionally, there were additional reasons for choosing this type of questionnaire include the unreliable post services in Libya which could result in low response rate and wasted time and the difficulties of finding an accurate personal details such as emails, telephones number for the targeted participants at both Libyan companies and universities.

### **3.5.2 Scenarios**

Alexander and Becker (1978, p. 94) defined scenarios, or vignettes as they are sometimes called, as “short descriptions of a person or a social situation which contain precise references to what are thought to be the most important factors in the decision-making or judgment-making processes of respondents”. As they explain “the use of vignettes helps to standardise the social stimulus across respondents and at the same time makes the decision-making situation more real (p. 103)”. Also Cavanagh and Fritzsche (1985, p. 279) stated that “vignettes enable researchers to flush out the ethical problem, to place it in a more realistic setting, and to establish explicitly the level of a number of pertinent variables at one time”.

Scenarios have been commonly used as part of research instruments in business ethics research in general and ethical decision making studies specifically. The majority of ethical decision making empirical studies (see Tables 2.7 and 2.8) adopted this approach due to first: the ability of observing behaviours of interest in a field setting is not feasible; and second, to avoid the need for participants to report either their own real ethical/unethical behaviour or what they would do in the situation described. Robin et al. (1996) add that using scenarios allow researchers to present participants with actual problems that entail a minimal amount of effort for a response. Although scenarios have been successfully used in ethical decision making research, some limitations have been raised. In their critical review of methodology in business ethics research, Randall and Gibson (1990) pointed out that ambiguity and generality are the critical issues related to using scenarios. They add that all the scenarios they reviewed were likely not reflecting actual situations.

In the present study, the selection of the scenarios was considered as one of the vital elements of the research design. In his review, Weber (1992) made some recommendations that should be taken into account when researchers would like to adopt scenarios in their studies: firstly, ensuring that they are recognisable, salient and interesting to participants; secondly, scenarios should contain realistic ethical dilemmas

related to the investigated area, the scenarios should include an ethical issue or portray a practical business issue that is familiar to the participants; thirdly, a reasonable number of scenarios should be considered by avoiding using only one or two scenarios, which can limit the researcher's ability to manipulate critical variables, or using too many scenarios, which may lead to much information and fatigue for the participants; finally, using previously tested scenarios is recommended since they will allow the researchers to make comparisons for their results and in aid cross-validation of the results. Moreover, in relation to using previous scenarios, Robertson (1993) and Weber (1992) suggest that the use of pre-existing scenarios can contribute cumulatively to the knowledge of business ethics.

Following Weber's (1992) recommendations and Randall and Gibson's (1990) suggestions, four scenarios, which were originally developed and produced in a videotape by the Institute of Management Accountants (IAM) in the USA and abstracted by Flory et al. (1992) for their study, were adopted in this study to examine the ethical decision making stages and moral intensity dimensions. They have been used in several accounting studies (e.g., Leitsch, 2004, 2006; Sweeney & Costello, 2009). Accordingly, the scenarios considered illustrate practical accounting issues that should be familiar to Libyan management accountants and the final year accounting students. The educational experience should prepare the senior accounting students for likely workplace ethical issues (Sweeney & Costello, 2009). Even if it does not, the chosen scenarios are acceptable to any students with a reasonable knowledge of accounting. On average, each scenario consists of 200 words and ended with an action decision taken in response to the ethical issue to ensure all participants were reacting to the same stimulus (Flory et al., 1992). The full text of the four scenarios is shown in Appendix A. It should be mentioned here that some amendments were made to these scenarios to be familiar in the Libyan context. The names of all actors in the four scenarios were changed to be familiar to Libyan accountants and students. Additionally, the circumstances of the decision maker presented in scenario four was expected to be very rarely found in Libyan environment;

therefore it was decided to be replaced with different, but structurally similar, circumstances that are thought to be commonly found in a Libyan environment.

The first scenario, approving questionable expense reports, describes a superior who is involving in questionable expenditures that claims to be approved by upper management; the accountant approved those expenses that he knows should not be approved due to the pressure from the superior with lack of help from the management. The second scenario, manipulating company books, is concerned with a controller who is told by the chief financial officer to do whatever is necessary to present positive earnings; according to the suggestions of chief, the controller must defer certain transactions until the next accounting period. Although this may occur in some companies, it is agreed that it is wrong (Flory et al., 1992).

The third scenario, bypassing expenditure capital policy, involves an accounting manager who was asked to purchase a new computer system; this can be done only by classifying the computer system as an operating expense rather than as capital expenditure. The fourth scenario, extending questionable expenditure credit, involves extending questionable expenditure credit and shows that the accountant's personal difficulties play significant role in the decision made. Although the scenarios present different types of ethical issue, they mainly involve the violation of company policy. Flory et al. (1992) explained that scenarios 1, 2, and 3 all implicitly involve an accountant's job security but it seems that the individuals in each situations were worried about their company's interest; in contrast, scenario 4 highlights the accountant's personal circumstances and also the violation of the company policy was not clearly explained. Flory et al. (1992) suggested that scenarios 2 and 3 would be recognized as more unethical than scenarios 1 and 4. Six items followed each scenario, and for each of the six, the participants should indicate their agreement/disagreement on a five-point scale in each scenario, see section 3.7 below.

### **3.6 Questionnaire Design**

The design of the questionnaire can have a huge impact on many aspects of the study conducted. It provides a framework for the collection and analysis of data (Bryman, 2008). Oppenheim (2003, p. 8) states that “a poorly designed questionnaire will fail to provide accurate answers to the questions under investigation; it will leave too many loopholes in the conclusions; it will permit little generalization; and it will product much irrelevant information, thereby wasting case material and resources”. Thus, several considerations should be taken into account when building up the questionnaire. Oppenheim (2003) and Collis & Hussey (2009) recommend several considerations, include general appearance, clear instruction, question wording, ordering of question sequences within the questionnaire, type of question to be used (e.g., close-ended versus free response categories), and questions should not be too long (e.g., maximum 20 words). Taking these issues into account could result in maximizing the response rate and the reliability and the validity (Saunders et al., 2007). All of these issues are discussed below.

#### **3.6.1 Question Design, Wording, and Layout**

Much time and effort were given to the questionnaire’s construction and many drafts and a thorough assessment and pre-testing were conducted before reaching the final version of the questionnaire. Recommendations mentioned early were taken into consideration. In this study, these are some examples: the logo of the University of Huddersfield was printed on the coversheet letter of the questionnaire for the purpose of encouraging the participants to complete the questionnaire as evidence that this is for an academic purpose; ensuring the anonymity and confidentiality of the information revealed by participants; supporting letters from the University of Huddersfield, UK, where this research was conducted and the University of Omer El-Moktahr, Libya, where the researcher works and Libyan Cultural Affairs, London, which sponsored the researcher to conduct this research in the UK; the purpose of the study was explained to all participants; double-barrelled, leading, loading, and double negative questions were

avoided; simple, direct and familiar language was used to make the questionnaire applicable to all participants; scenarios were almost left to the end of the questionnaire as they represent a sensitive subject which may stop participants completing the questionnaire if included at the beginning; since demographic questions can be easier and quicker to answer, they were included at the beginning of the questionnaire to give them the feeling that they were making quick progress through the questionnaire; and finally the questionnaire was pre-test (see section 3.6.4 below) to reduce ambiguities and misunderstanding of the questions and scenarios.

### **3.6.2 Question Type and Format**

The type of question and format are another issue that should be considered when designing the questionnaire. Two types of questions can be used in constructing a questionnaire, closed and open questions. While open questions allow the participants to be free in providing the related answer using their own words and terms, closed questions offer the participants a choice of alternative answer to choose from. Each has its own advantages and disadvantage. Peterson (2000) claims that the advantages of open questions are usually the disadvantages of closed questions and vice versa. Open questions' advantages include that the researcher does not impact the participants' answers excessively and the questions are easy to ask and give the researcher more information. However, open questions have significant disadvantages including being demanding and time consuming for participants, which may result in incomplete answers or partially completed questionnaire; the response rate can be very low, requiring more paperwork and making the questionnaire seem longer; and difficulties in coding and analysing the answers.

With respect to closed questions, the main issue related to them is that they can produce false judgments, either by giving a limited range of options from which to choose, or by prompting the study participants with 'acceptable' answers (De Vaus, 2002). In business ethics research, the specific disadvantage is that closed questions fail to take into consideration the importance of the context in which ethical decision are made which

may result in low within subject reliability and external validity (Bain, 1995). However, well developed closed questions can result in a number of advantages. This approach is useful when the questionnaire is long or the participants' motivation to answer the questions is not high (Cooper & Schindler, 2008; De Vaus, 2002; Hair, 2003). Additionally they are useful in obtaining information and attitudes if they are designed well. The choice of open or closed questions depends on several factors and there is no right or wrong choice; these factors include the questions content, participants' motivation, methods of administration, type of participants, and the amount of time available to develop a set of unbiased answers (De Vaus, 2002).

Depending to the above discussion and the comprehensive nature of the questionnaire and its length to collect reliable and valid data on variables posited in the literature to be associated with ethical decision making stages, it was decided to adopt closed question type in this study instead of open questions. One open question was used in section D and only for management accountants; this open question required the participant to articulate their view regarding other ethical issues that might not be mentioned in the questionnaire (section D) and this would be provided in a short answers. This helps overcome the restrictive nature of a purely closed question. Another open question was used in the form of "other (please specify)" in questions A3 and A6 where it was not easy to list all possible answers. Mangione (1995) recommended to use such questions (open questions) in situations where questions required short and specific answers, or list of possible answers is too many. Several types of closed question exist. Saunders et al. (2007) suggested five types of closed questions: 1) list question, which offer the participants a list of answers to choose from; 2) category question, which is designed in a way where each participant's answer appropriates to only one category; 3) ranking questions, which ask participants to place things in rank order; 4) rating questions, which are usually used to obtain participants' opinions (Likert-scale); and 5) quantity questions, in which the participants are required to provide a number, giving the amount of features on behaviour or attribute.

In this study, three types of closed questions were used to achieve its aims. Firstly, the main question type adopted was the rating question in the form of Likert-scale, which has been widely used in business ethics studies, since it is easy and quick to answer, does not need much space, and enables a variety of statistical techniques (Easterby-Smith et al., 2002; Oppenheim, 2003; Sekaran, 2003). Elmore and Beggs (1975) indicated that a five-point scale is just as good as, and that an increase from five to seven or nine points on a rating scale does not improve the reliability of the ratings (cited in: Sekaran, 2003, p. 199). Thus, a five point Likert scale was used in measuring some of the study's variables specifically questions within sections B, C, and D, and also question A10; for these questions, participants were asked to tick or circle one of five choices on a sliding scale of agreement [from (1) 'strongly disagree' to (5) 'strongly agree'], scale of frequency [from (1) 'never' to (5) 'very frequently'], and scale of importance [from (1) 'not at all important' to (5) 'very important']; secondly, the category question type was used in questions A1, A2, A3, A4, A5, A6, A7 and A8-1; and finally, a list question was used in question A8-3.

### **3.6.3 Questionnaire Translation**

The questionnaire of this study was initially constructed and produced in English. Since Arabic is the official language in Libya and all participants are Arabic native speakers, it was decided to translate the questionnaire into Arabic in order to be clear and easy for participants to answer. Considerable attention was given to eliminate any problems and difficulties that may occur during the process of developing the Arabic draft of the questionnaire used in this study. The process of translating the questionnaire of the study was done as follows. Firstly, after discussing the final English draft of the questionnaire with the supervision team, the questionnaire was then translated by the researcher into Arabic (the researcher is a native Arabic speaker). In the second stage, the two versions (English and Arabic) were sent to three Arabic academics. Two of them are lecturers at the University of Omer El-Moktahar. The first holds a PhD in English with experience of more than 20 years teaching different types of English courses; the second is a PhD in

psychology who is fluent in English with an experience of more than 25 years teaching different courses of psychology; the third is an English language teacher at high school with experience of more than 20 years of teaching English language courses and work as a part time translator. After receiving the questionnaire from the translators, all their comments and suggestions were examined and discussed when necessary with them by phone to clarify any possible modification and amendments. Accordingly, a final draft of the questionnaire was produced after several modifications were made. The final Arabic questionnaire was sent to my older brother who is an Arabic teacher with more than 20 years of experience in teaching Arabic courses at high schools and this was for the purpose to check out the Arabic language grammar and wording to ensure that the final draft of the Arabic questionnaire is clear. Accordingly, the final draft of the Arabic questionnaire was produced (see Appendix B).

#### **3.6.4 Questionnaire Piloting**

Pre-testing the instrument is one of the methods that is commonly used to help increase reliability and validity of measures and ensure that the question wording is clear and understood by the participants of the study. Also pre-testing the questionnaire facilitates in eliminating any problems related to the length, sequencing of the questions and ambiguous items (Easterby-Smith et al., 2002). Oppenheim (2003) suggested that the questionnaire has to be constructed, tried out, improved and then tried out again, generally several times in order to ensure that it can do the job for which is produced. Although some (Randall & Gibson, 1990) argue that the pilot study should be undertaken on the population from which the sample is drawn, others (Collis & Hussey, 2009; Oppenheim, 2003; Saunders et al., 2007) suggest that it may involve friends, colleagues, similar group to the study sample, and people of different opinions to obtain different views and ideas. In this study, two samples were targeted to be surveyed, Libyan management accountants and accounting students. In this questionnaire, accounting students were not required to provide any information related to organizational variables due to that they are only full time students and have no work experience. Thus, the full

draft of the Arabic questionnaire was sent by email to thirteen Libyan friends doing a PhD in different subjects at four universities in the UK (University of Huddersfield, University of Gloucestershire, Liverpool John Moores University, and Swansea University); two of them are students in the subject of psychology and the remaining in business subjects (mostly accounting). Valuable comments and several suggestions regarding wording, presentation and format were obtained. Moreover, they confirmed that the scenarios are easy to read and the issues included are easily understandable.

In addition, the full draft of the English questionnaire was sent to one of the academics of the University of Huddersfield who holds a PhD in management accounting and has several years in supervising PhD accounting students. The feedback was very significant as it resulted in reordering some sections in the questionnaire and rewording some of the covering letter's sentences. Additionally, part of the Arabic questionnaire (including the four scenarios) was sent to a friend, who is a lecturer at the University of Omer El-Mokhtar and teaching management accounting course, to hand out the questionnaire to fifteen accounting students. The lecturer was asked to explain the purpose of the study and to note the time taken to complete the questionnaires, to ensure that the questionnaire was not too long. All the fifteen questionnaires were completed and sent back to the researcher. Discussion took place with the lecturer regarding any problems or issues related to the questionnaire and the included scenarios. Very useful feedback was gained indicating that the questionnaire was clear and easy to complete as well as the scenarios were understandable to the participated accounting students. After taking all the comments, suggestions, and the ideas, amendments were made, resulting in a final draft of the Arabic questionnaire (see Appendix B).

### **3.7 Contents, Measures, and the Sources of the Questionnaire**

The final draft of the questionnaire (see Appendix A) consists of four sections. Parts A and B were designed to obtain information regarding factors that may affect ethical decision making stages. Part C was developed to gain information about the three stages of ethical decision making and moral intensity dimensions. Part D was designed to obtain

information regarding the ethical issues that face management accountants at their workplace. In the next sections, the content of the questionnaire and the issue of measuring the study's variables are analysed and discussed.

### **Part A: Individual and Organizational Variables**

This part was designed to collect information about the participants regarding individual variables and organizational variables. Questions A1, A2, A3, and A4 were devoted to collecting demographic information about the participants; accounting students were required to provide only their age and gender. They were presented in categorical items. Slight differences were made between the two samples for designing the question of their age due to that most of the accounting students are aged less than thirty years and management accountants are older than this age.

In questions A5, A6 and A7, management accountants were asked to provide information about the type of companies they work for, their company's size, and the type of their company's ownership. All three questions were in the format of categorical items and one single item was constructed for each. Company size was categorized in three levels – small companies, medium companies, and large companies. The number of employees, which was adopted in this study, has been commonly used to measure organizational size (Kimberly, 1976; Paolillo & Vitell, 2002; Schminke, 2001). Seven types of industry were classified in the questionnaire according to the Libyan Central of Industrial Information and Documentation; they are food, textiles and furniture, engineering, metal and electric, oil and gas, chemicals, and cement and building materials. Due to the few cases that were found in some types, they were collapsed to form five types.

Question A8 was design to obtain information related to the existence of code of ethics within Libyan companies in terms of management accountants' standpoint. The type of yes and no question was used to measure the existence of code of ethics in Libyan companies. Several empirical ethics studies (e.g., Adams et al., 2001; Pflugrath et al., 2007; Rottig & Heischmidt, 2007; Stohs & Brannick, 1999) adopted a similar measure,

the participants were asked to report whether their organizations have a code of ethics. Question A8-3 was designed to ensure whether Libyan companies addressed the common ethical issues in their code of ethics. Several issues that should be included in any type of code of ethics were presented in the questionnaire; they were adopted from previous ethics research (Carasco & Singh, 2003; Coppage & Sriram, 1992; Farrell, 2000; Green & Weber, 1997; O'Dwyer & Madden, 2006; Schwartz, 2005; Singh, 2006; Singh et al., 2005; Weaver, 1993; Wood, 2000).

The last question in this section was constructed for the purpose of examining the ethical climate in Libyan companies. In this question, management accountants were asked to indicate the extent to which they agree or disagree with the sixteen statements regarding their companies. A scale of agreement based on a 6-point rating [from (5) 'completely true' to (0) 'completely false'] was used to complete this question. The Ethical Climate Questionnaire (ECQ) developed by Victor and Cullen (1993; 1987; 1988) has been the instrument most used in business ethics literature to assess employee perceptions of climate in their organizations. Since it has been adopted and validated in a number of prior studies, a pre-test of this measure was not required (e.g., Agarwal & Malloy, 1999; Cullen & Victor, 1993; Deconinck, 2004; DeConinck & Lewis, 1997; Fritzsche, 2000; Malloy & Agarwal, 2001; Shafer, 2007, 2009; Wimbush, Shepard, & Markham, 1997a; Wimbush et al., 1997b). Originally, the ECQ consists of thirty six items to investigate nine types of ethical climate (four items each) that are theoretically hypothesized to be found within any organization. Four of these nine types were adopted in this study to measure the ethical climate of Libyan companies; these four are organization interest, social responsibility, personal morality, and law and professional code. In their meta-analysis of ethical climate studies, Martin and Cullen (2006) concluded that in most organizations studied, not all distinct climate types exist. Company interest, personal morality, and laws and professional codes were among those which have been commonly found in organizations (Shafer, 2007). Treviño et al. (1998) argue that empirical studies' evidence show that a reduced number of ethical climate dimensions could be used to explain some characteristics of the ethical context within organizations. Several studies

investigated only some types of ethical climate (e.g., Elçi & Alpan, 2009; Shafer, 2007, 2009; Vardi, 2001). Therefore, four types with their sixteen items were adopted from the ECQ to measure the ethical climate of Libyan companies (see Appendix A). The Cronbach's alpha result of these items will be provided later on this chapter (see section 3.8)

### **Part B: Personal Moral Philosophy**

This part was design to collect information about the personal moral philosophy of all participants (Libyan management accountants and accounting students). The well-established Ethics Position Questionnaire (EPQ) constructed by Forsyth (1980) was adopted in this study to measure Libyan management accountants' and accounting students' personal moral philosophy (idealism and relativism). Research using the EPQ help explains a variety of individuals' ethical decisions made in organizations (Greenfield, Norman, & Wier, 2008). This instrument has been successfully used and validated by numerous ethics studies (e.g., Chan & Leung, 2006; Davis et al., 2001; Dubinsky et al., 2004; Marques & Azevedo-Pereira, 2008; Marta, Singhapakdi et al., 2008; Shafer, 2007; Singh et al., 2007; Singhapakdi & Vitell, 1993; Vitell & Patwardhan, 2008). The EPQ consists of two scales, each containing 10 items. The first is designed to measure idealism and the second to measure relativism. The twenty items (see Appendix A) were provided with a scale of agreement based on a 5-point rating [from (1) 'strongly disagree' to (5) 'strongly agree'] to measure personal moral philosophy (e.g., Al-Khatib et al., 1997; Cui et al., 2005; Swaidan et al., 2004). The Cronbach's alpha result of this instrument will be provided later on this chapter (see section 3.8).

### **Part C: Ethical Decision Making Stages and Moral Intensity Dimensions**

This part was divided into four sections. Each has one specific scenario with six items to measure the three ethical decision making stages and moral intensity dimensions. Scenarios have been commonly used as part of research instruments in business ethics studies (Singhapakdi & Vitell, 1993). Using multiple-scenarios has been considered as an

ideal way to test ethical decision making process (Morris & McDonald, 1995; Vitell & Hunt, 1990; Weber, 1992). The selected accounting scenarios, which were originally developed by Flory et al. (1992), have been used in prior accounting ethics research (e.g., Leitsch, 2004, 2006; Sweeney & Costello, 2009). Each includes an accounting ethical issue and judged to be representative of issues found in the workplace (Sweeney & Costello, 2009); they include ethical issues about approving a questionable expense report (Scenario 1), manipulating company books (Scenario 2), bypassing company policy (Scenario 3), and extending questionable credit (Scenario 4). These scenarios were discussed in detail earlier (see section 3.5.2) and the full text of them is on the final pages of the questionnaire in Appendix A. In order to assess participants' ethical decision making stages, they were asked to evaluate the hypothetical action taken by the decision maker regarding the ethical issues included in each scenario. Single item with different number of points of scale (e.g., 9 point, 7 points, and 5 point) has been widely and successfully used to measure ethical decision making stages (Singh et al., 2007; Singhapakdi et al., 1999). Table 3.1 below shows that several business ethics studies used single items with different number of points scale to measure the three stages of ethical decision making. Consistent with these studies, three items with a scale of agreement based on a 5-point rating [from (1) 'strongly disagree' to (5) 'strongly agree'] was used to measure the three stages of ethical decision making, single for each stage.

For *ethical recognition*, the management accountants' and accounting students' ethical recognition was measured directly by asking them to respond to whether the situation in each scenario involves an ethical issue. They were asked to indicate their degree of agreement or disagreement regarding the statement, "the situation above involves an ethical problem" (Singhapakdi et al., 1996). With respect to *ethical judgment*, the management accountants' and accounting students' ethical judgment was measured directly by asking them to respond to their level of agreement with the action statement in each scenario. They were asked to indicate their degree of agreement or disagreement regarding the statement, "(The decision maker) should not do the proposed action" (May & Pauli, 2002). For *ethical intention*, the management accountants' and accounting

students' ethical intention was measured by asking them to indicate their degree of agreement or disagreement regarding the statement, "If I were (The decision maker), I would make the same decision" (reversed-coded) (Singhapakdi et al., 1996).

**Table 3.1 Scales Used in Previous Ethics Business Studies**

<b>Authors &amp; Year</b>	<b>Scale Used *</b>	<b>EDM Stages **</b>
Finegan (1994)	Not at all immoral to very immoral (7 points)	J
Kohut & Corriher (1994)	Never acceptable to always unacceptable (5 points)	J
Cohen et al.(1996)	Ethical 1 2 3 4 5 6 7 unethical (7 points)	R
Singhapakdi et al (1996)	Strongly agree to strongly disagree (9 points)	R
Boyle et al. (1998)	Ethical 1 2 3 4 5 6 7 unethical (7 points)	J
Singhapakdi (1999)	Strongly agree to strongly disagree (9 points)	R
Weeks et al. (1999)	Never acceptable to always acceptable (5 points)	J
Frey (Frey, 2000)	Ethically correct to ethically incorrect (9 points)	J & R
Larkin (2000)	Strongly agree to strongly disagree (7 points)	J
Lunsford (2000)	Absolutely ethical to absolutely unethical (7 points)	J
Douglas et al. (2001)	Strongly agree to strongly disagree (5 points)	J
Kaplan (2001)	Very ethical to very unethical (9 points)	J
Rogers & Smith (2001)	Very ethical to very unethical (6 points)	J
May & Pauli (2002)	Strongly agree to strongly disagree (7 points)	J & R
Cruz (2003)	Totally acceptable to totally unacceptable (5 points)	J
Barnett & Valentine (2004)	Completely agree to completely disagree (7 points)	R, J, & I
Leitsch (2004)	Strongly agree to strongly disagree (7 points)	R
Leonard et al. (2004)	Acceptable to unacceptable (5 points)	J
El-Astal (2005)	Very ethical 1 2 3 4 very unethical (4 points)	J
Pope (2005)	Strongly agree to strongly disagree (7 points)	J
Simga-Mugan et al. (2005)	Definitely ethical to definitely unethical (7 points)	R
Chia-Mei & Chin (2006)	Highly likely to highly unlikely (7 points)	I
Leitsch (2006)	Strongly agree to strongly disagree (7 points)	R
Brandon et al. (2007)	Very unethical -5 to very ethical 5 (11 points) Very likely -5 to un-very unlikely 5 (11 points)	J & I
Guffey et al. (2007)	Ethical 1 2 3 4 5 6 7 unethical (7 points)	J
Haines & Leonard (2007a)	Acceptable to unacceptable (5 points)	J & I
Haines & Leonard (2007b)	Acceptable to unacceptable (5 points)	J & I
O'Leary & Pangemanan (2007)	Unethical natural ethical (3 points)	J
O'Leary & Stewar (2007)	Extremely ethical to extremely unethical (9 points)	J
Shafer (2007)	Ethical to unethical (7 points)	J
Singh et al. (2007)	Strongly agree to strongly disagree (5 points)	J & I
Sweeney & Costello (2009)	Strongly agree to strongly disagree (5 points)	J & R

\*These studies used only one item to measure the ethical decision making stages.

\*\* R: Ethical recognition; J: Ethical judgment; I: Ethical intention

With regard to *moral intensity dimensions*, empirical research has been relatively limited due to the difficulties in measuring moral intensity dimensions (Barnett & Valentine, 2004). There has been a concern expressed by researchers about the issue of lack of consistency in measurement instruments (Bernard & Sweeney, 2010). Three items with a scale of agreement based on a 5-point rating [from (1) ‘strongly disagree’ to (5) ‘strongly agree’] was used to measure moral intensity dimensions (magnitude of consequence, social consensus, and temporal immediacy). The three single items were based on Jones’s (1991) work and adopted from prior business ethics research (May & Pauli, 2002; McMahon & Harvey, 2006; Singhapakdi et al., 1996). Although researchers have argued that measures should be improved as the research increases in an area, a single item to measure each dimension may appropriate for exploratory research (e.g., Carlson et al., 2002). *Magnitude of consequence* was assessed by “The overall harm (if any) as a result of the action would be very small” (reversed-coded). *Social consensus* was measured by “Most people would agree that the action is wrong”. *Temporal immediacy* was measured by “the decision maker’ action will not cause any harm in the immediate future” (reversed-coded).

Several previous accounting ethics studies used these items to measure both ethical decision making stages and moral intensity dimensions (e.g., Leitsch, 2004, 2006; Sweeney & Costello, 2009).

#### **Part D: Ethical Issues in Management Accounting**

This part was design to investigate what types of ethical issue face Libyan management accountant at their workplace. Based on the study of Fisher & Lovell (2000) and management accounting code of ethics research (e.g., Barlas, Curatola, Randall, & Williams, 1999; Coppage, 1992; Coppage & Sriram, 1992; Douglas & Otto, 2002; McGregor, Killough, & Brown, 1989; Weaver, 1993), eighteen ethical issues were developed to explore what types of ethical issue may face Libyan management accountants at their workplace. Libyan management accountants were asked to provide

their point of view towards these issues; they are fully provided in the final page of the questionnaire (see Appendix A).

The two questions provided in this part were designed to examine whether these ethical issues or problems are ethically important and how frequently they occur within Libyan companies in terms of management accountants' standpoint. A scale of frequency based on a 5-point rating [from (1) 'never' to (5) 'very frequently'], and scale of importance based on a 5-point rating [from (1) 'not at all important' to (5) 'very important'] were design to complete this questions.

### **3.8 Reliability and Validity**

Evaluating and examining the instrument used for collected data is an important part of any research to ensure that the measures which had been used were reasonably appropriate. The most prominent criteria for the evaluation of business research are validity and reliability. These measurements are the basic criteria for assessing the accuracy of quantitative research. Reliability is essentially concerned with the issues of consistency of measures, while validity is concerned with whether or not a measure of a concept actually measures that concept (Bryman & Bell, 2007). Accordingly, the measurement should be consistent across time and across the items used, that is, if a measurement is repeated on the same object, we should obtain similar results (Sekaran, 2003).

#### **3.8.1 Reliability**

The reliability of a measure refers to the extent to which it is without bias and therefore ensuring a consistent measurement over time and across the several items in the instrument (Sekaran, 2003). Reliability provides an indication of the stability and the consistency of the instrument. Stability is concerned with whether or not a measure is stable over time, that is, if an instrument is given to the same individual at two different occasions, it is not certain whether it will yield similar results (Bryman & Bell, 2007).

Consistency, or internal reliability, indicates whether or not the indicators that make up the scale or index are consistent- in other words, whether or not respondents' scores on any one indicator tend to be related to their scores on the other indicators (Bryman & Bell, 2007). Test-retest; internal consistency and parallel form reliability are different forms of measuring reliability. However, the most widely used form of reliability is internal consistency, assessed by Cronbach's coefficient alpha (Easterby-Smith et al., 2002). In this study, Cronbach's coefficient alpha was calculated to determine the overall reliability of the multiple items used in this study.

The only multiple item measures in the study were personal moral philosophy dimensions (idealism and relativism) and ethical climate types (law and code, company interest, social responsibility, and personal morality). For both to be classified as reliable, it is generally recommended that a Cronbach's coefficient alpha of 0.7 or greater should be obtained (Pallant, 2001). However, Nunnally (1978) suggested that a coefficient alpha of between 0.5 and 0.6 is an acceptable level of reliability. From Table 3.2, it can be seen that moral philosophy for both samples ranged from .61 to .79. Although the levels of reliability of idealism and relativism of management accountants were higher than those of accounting students, both levels are judged adequate for this exploratory research (Peter, 1979). Prior business ethics research obtained similar level of reliability for both idealism and relativism (Al-Khatib et al., 1997; Ruhi Yaman & Gurel, 2006; Swaidan, Rawwas, & Vitell, 2008; Swaidan et al., 2004). With respect to ethical climate, all types had a Cronbach's coefficient alpha ranging from .65 to .87, which is within the ranges obtained by the inventors, Victor and Cullen (1987), where the Cronbach's coefficient alpha ranged from .6 to .8. Also, it can be seen that the overall level of reliability of ethical climate is .87. Several previous business ethics studies obtained similar levels of reliability for the four types of ethical climate investigated in this study (Agarwal & Malloy, 1999; Shafer, 2007, 2009; Upchurch, 1998; VanSandt et al., 2006; Vardi, 2001; Venezia & Callano, 2008).

**Table 3.2 Cronbach's Coefficient Results**

Dimensions	Management Accountants			Accounting Students		
	Question	No. Items	Alpha	Question	No. Items	Alpha
Moral idealism	Section B 1-10	10	.74	Section B 1-10	10	.66
Moral relativism	Section B 11-20	10	.79	Section B 11-20	10	.61
Law and code	A9 (1-4)	4	.79	-	-	-
Company interest	A9 (5-8)	4	.72	-	-	-
Social responsibility	A9 (9-12)	4	.74	-	-	-
Personal morality	A9 (13-16)	4	.65	-	-	-
Overall of ethical climate	A9 (1-16)	16	.87	-	-	-

### 3.8.2 Validity

Validity is considered as one of the most crucial criteria of research (Bryman & Bell, 2007). It refers to the extent to which a test measures what we actually want to measure. Four types of instrument validity have been frequently discussed in research literature. The first is *content validity (or face validity)* which seeks to ensure that the measure includes adequate and representative items that represent the concept (Sekaran, 2003). It measures the extent to which the measurement scale reflects what is intended to be measured. According to Emory and Cooper (1991), content validity can be achieved by a careful definition of the research topic and the items included in the measurement scale. They further suggest that using a group of individuals or experts can help in judging how well the instrument meets the standard. Moreover, Bryman and Bell (2007) suggest that content validity might be established by asking other people whether or not the measure is apparently getting at the concept that is under consideration. It has been argued that there is a disagreement among social science researchers regarding the content of many concepts, and it is apparently difficult to develop measures that have agreed validity (De Vaus, 2002).

The second type of instrument validity of a measure is *construct validity*. According to this type of validity, the researchers are encouraged to deduce hypotheses from a theory that is relevant to the concept (Bryman & Bell, 2007). It is considered to be the most difficult type of validity to be understood, evaluated, and reported. Generally, construct validity is evaluated by tracking the performance of the instrument scale over years in

varied places and populations (Litwin, 1995; Oppenheim, 2003). To ensure construct validity, it has been recommended to use established constructs or measurement scales and take into account the opinion of experts (De Vaus, 2002).

***Concurrent validity*** is the third type of instrument validity. According to Oppenheim (2003), concurrent validity refers to the extent to which the measurement scale relates to other well-validated measures of the same subject. It can be assessed in terms of the extent to which results obtained from this scale are consistent with the results of other scales that are developed to measure similar objects (Litwin, 1995; Oppenheim, 2003).

***Predictive validity*** (the fourth type) is a related type of validity which refers to the ability of an instrument scale to predict future performance, events, behaviour, and attitude (Litwin, 1995; Oppenheim, 2003).

Several efforts were made to ensure questionnaire validity. Firstly, an extensive literature review was conducted to define the topic and the purpose of the study. Secondly, several questions, items and scales applied to different populations and within different settings such as ECQ and EPQ were adopted by this study, thus establishing construct validity (see discussion in section 3.7). According to Sekaran (2003), the development of a valid survey instrument involves drawing upon valid literature, to ensure that any survey questions collected from the literature are based on validated survey instruments. Thirdly, the questionnaire was also passed to friends, several doctoral students and expert, and a pilot study was conducted (see section 3.6.4).

### **3.9 Questionnaire Administration**

Researchers have suggested several recommendations to maximise questionnaire response rate (De Vaus, 2001; Oppenheim, 2003). These recommendations include, for example, pre-testing the questionnaire, ensuring the confidentiality of the information provided by participants, the design and the appearance of the questionnaire, and the features of the covering letter (see section 3.6). For accounting students, after the final version of the questionnaire was formed, contacts were made with friends at the four

Libyan universities (Omer El-Moktahr University, Garyounis University, Almagab University, and Mosrata University) to arrange the distribution of the questionnaires to Libyan accounting students. As mentioned early, the four friends are lecturers and members of accountancy departments at their universities and had agreed to distribute the questionnaires to their students. Once the arrangements were made, the survey packages were delivered to each of them. The lecturers were asked to explain several issues to their students prior to delivering the packages. These issues are related to the questionnaire structure, which included explaining the aim of the study, ensuring anonymity, stating participation is completely voluntary, and no personal information was required apart from participants' age and gender. Lecturers were asked to deliver the questionnaires during the class and to ask their students to return the completed questionnaires the following day. In April 2009, one month before accounting students' exams, the questionnaires were distributed. Each student was given a package, which included a covering letter, the questionnaire, supporting letters, and an envelope. A total of 168 questionnaires were distributed to Libyan accounting students, which resulted in receiving 152 usable questionnaires providing a response rate of 90.50% (see Table 3.3). Several accounting students' ethical decision making studies obtained very similar response rate (e.g., Elm, Kennedy, & Lawton, 2001; Fleming et al., 2010; Leitsch, 2004, 2006). Typically, the response rate of student samples is very high, which may due to administrating the questionnaires in classes.

With regard to the Libyan management accountants, a total of 71 Libyan manufacturing companies were visited during the period June-August 2009. In these companies, the financial/ management accounting managers were contacted and had agreed to deliver the packages of the questionnaires. The number of packages then delivered to the companies was based primarily on the list the financial or management accounting managers provided. Reasons for using those mangers within Libyan companies to distribute the questionnaires include: first, there were no contact details available for Libyan management accountants, whether on the companies' websites or any other kind of professional body; second, the number of Libyan management accountants was not

available to the researcher at the time of distributing of the questionnaires; third anonymity could be increased by using this method which might result in encouraging participants to complete the questionnaire. Once the number of management accountants in each company was determined, the packages were delivered to the financial manager/management accounting manager. Similar to the accounting students, each package consisted of a covering letter, the questionnaire, supporting letters, and an envelope. The managers were asked to ensure that participation was completely voluntary, anonymity was assured, and the management accountants should read carefully the covering letter and all the instructions related to each question before completing the questionnaire. Moreover, management accountants were required to complete the questionnaire, seal it in the envelope, and submit it to the financial manager/management accounting manager within one week. A total of 229 usable responses were received, providing a response rate of approximately 58.40% (see Table 3.3). It can be mentioned here that the majority of the returned questionnaires were received in two weeks; only 26 usable questionnaires were received after three weeks and they were considered as late responses. Randall and Gibson (1990) found that the response rate ranged commonly from 21% to 50% in business ethics literature. Bampton (2004) also found similar results in accounting ethics research. Also the literature suggests that a response rate between 60% and 70% is considered to be acceptable (Mangione cited in: Bryman & Bell, 2007, p. 244). Thus, the response rate of this study was felt to be more than satisfactory.

**Table 3.3 Survey Response Rate**

	Management accountants		Accounting students	
	No	%	No	%
Total distributed	392	100	168	100
No response	(148)	(37.75)	(11)	(6.55)
Total received	244	62.25	157	93.45
Unusable/partially completed	(15)	(3.85)	(5)	(2.95)
Usable	229	58.40	152	90.50

### **3.9.1 Non-Response Bias and Social Desirability**

It is crucial for any piece of social research to consider the non-response and social desirability bias effect due to the issue of generalizing the study results. Kervin (1992) defines *Non-responses* as biased “when cases with certain characteristics are more likely to be refusals or non-contacts”. Also non-responses can occur as a result of not obtaining usable responses from some sample members. There are several methods of overcoming this issue. The most common methods include first, comparing non-respondents with respondents by using an interview (Zaid, 1997) to investigate the reasons for non-respondents, and second comparing late responses to early responses for differences because late respondents are assumed to serve as a proxy for non-respondents in survey research (Armstrong & Overton, 1977; Nwachukwu & Vitell, 1997; Read & Rama, 2003). Regarding the first method, there was no possible way to know who the non-respondents were because of the anonymity provided to participants.

Since the issue of non-response could significantly impact the results of the study, it was seriously considered. Independent samples t-test and Chi-square were employed to assess the non-response bias issue. Only the non-response of management accountants was assessed because 37.75% did not return the questionnaire, whereas only 6.55% of accounting students did not respond. Dependent variables (ethical recognition, ethical judgment, and ethical intention in scenarios 2 and 4) and several independent variables investigated in this study (age, educational level, work experience, size of organization, moral philosophy dimensions, and ethical climate types) were examined. Twenty six questionnaires were received late after contacts were made to the financial/management accounting managers regarding those who had not replied. The results of Independent Sample t-test and Chi-square shown in Tables 3.4 and 3.5 revealed no statistical differences between the mean scores of the normal respondents and late respondents and also between any of the categorical variables and the type of response at a 0.05 level of significance.

**Table 3.4 Response and Non-Response: t-test Results**

<i>Variables</i>	<b>Response M (S.D)</b>	<i>Non-Response M (S.D)</i>	<i>df</i>	<i>t</i>
<b>Ethical recognition</b>				
Scenario 2	4.2 (.92)	4.3 (.90)	227	-.55
Scenario 4	3.4 (1.2)	3.8 (1.3)	226	-1.55
<b>Ethical judgment</b>				
Scenario 2	4.2 (.96)	4.3 (88)	227	-.73
Scenario 4	3.6 (1.0)	3.8 (1.3)	226	-.77
<b>Ethical intention</b>				
Scenario 2	2.3 (1.3)	2.3 (1.2)	227	-.07
Scenario 4	2.7 (1.2)	2.6 (1.1)	226	.12
<b>Moral philosophy dimensions</b>				
Moral idealism	4.3 (.5)	4.2 (.4)	226	.33
Moral relativism	3.1 (.8)	2.9 (.7)	226	1.31
<b>Ethical climate types</b>				
Law and professional code	3.7(.8)	3.9 (.9)	221	-.95
Company interest	3.3 (.9)	3.2 (1.0)	221	.27
Social responsibility	3.5 (.8)	3.5 (.9)	221	-.05
Personal morality	3.0 (.9)	3.1 (.9)	221	-.32

\*p < .05

**Table 3.5 Response and Non-Response: Chi-Square Test of Relatedness / Independent**

<i>Variables</i>	<b>Pearson Chi-Square</b>	<i>df</i>	<b>Asymp Sig.(2-tailed)</b>
Age	1.643	3	0.65
Experience	.972	3	0.80
Educational level	1.597	3	0.66
Organizational size	5.704	2	0.06

\*p < 0.05

*The social desirability effect* refers to evidence that some participants' answers to questions are related to their perception of the social desirability of those answers (Bryman & Bell, 2007). Social desirability bias has been demonstrated in studies of ethical behaviour and managerial decision making (Beams, Brown, & Killough, 2003; Davis et al., 2001; Fernandes & Randall, 1992; Weaver et al., 1999; Zerbe & Paulhus, 1987).

Several researchers have indicated that this issue should be considered due to the possible impact may have on individuals' ethical decision making process (e.g., Fernandes & Randall, 1992; Randall & Gibson, 1990; Watley & May, 2004; Weber, 1992). They also

have argued that this issue may have negative impact on the validity of the study results because of the sensitivity of ethics research.

Several common methods, including the Crowne-Marlowe Social Desirability Scale (Crowne & Marlowe, 1964) and the Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1984; Zerbe & Paulhus, 1987), have been recommended in business ethics research to measure social desirability bias (Flannery & May, 2000; Manley, Benavidez, & Dunn, 2007). Since there was no space in the questionnaire to include more questions and items to measure this issue, it was decided to adopt another technique to limit it. Several efforts were made to reduce or overcome the potential for social desirability response bias. First, actors were used in the scenarios (i.e. writing the scenarios in the third person), rather than having the participant takes the part of the decision maker (McMahon & Harvey, 2006; Ng et al., 2009; Ponemon & Gabhart, 1990; Simga-Mugan et al., 2005); second, in the covering letter attached to the questionnaire the anonymity and confidentiality were assured and maintained to all participants (Fritzsche, 2000; Nederhof, 1985; Ng et al., 2009; Sweeney & Costello, 2009; Watley & May, 2004); third, a self-administered questionnaire was used (Flannery & May, 2000; Nederhof, 1985; Sweeney & Costello, 2009; Watley & May, 2004); and finally, the questionnaire was submitted to Libyan management accountants through the financial manager in each company and to accounting students by the lecturer in each university.

### **3.10 Data Analysis**

Once the data was collected, it was reviewed and prepared for entering into SPSS. Consistent with several previous ethics studies on ethical decision making process (Table 2.8), parametric tests were used to analyse the data. All the assumptions required for parametric tests used in this study were met (see discussion in section 4.4.1 and 4.4.2). The following statistical techniques were used in analysing the data and achieving the research aims. Firstly, frequencies were used for some of the study demographic data including age, gender, educational level, work experience, organizational size, and type

of industry (see Table 4.1). Secondly, descriptive statistics, mainly means, were used to analyse research aim 1.

Thirdly, two types of independent variable were investigated in this study; categorical variables (e.g. age, gender, and industry type) and continuous variables (personal moral philosophy and moral intensity dimensions). Therefore, appropriate tests were used to test the hypotheses related to these variables. One-way between-groups Analyses of Variance (ANOVA) and Independent Samples t-test were used to test the impact of the categorical variables on ethical decision making stages; these variables include age, gender, educational level, work experience, industry type, organizational size, and code of ethics. Hierarchical Linear Multiple Regression was used to test the continuous variables; these variables include personal moral philosophy dimensions, ethical climate types, and moral intensity dimensions. Aims two, three, and four were achieved by using these tests.

Finally, additional tests were employed to investigate several issues, including differences between non-respondents and respondents (Chi-square and Independent Samples t-test), the reliability of some of the study variables such as personal moral philosophy dimensions and ethical climate types (Cronbach alpha test), and some of the assumptions of the parametric tests used in this study (e.g., Pearson Correlation).

### **3.11 Summary**

This chapter started with describing the philosophical debate of methodology and outlining the approach adopted in this study. A positivistic approach, cross-sectional, was adopted in this study to achieve the aims and provide a basis for generalizing its results. The study population and sample, which included Libyan management accountants and accounting students, were described. A questionnaire including four scenarios was the main method to collect data from a relatively large number of management accountants who work within Libyan companies and accounting students from four Libyan universities, achieving a satisfactory rate of response from accountants and a high

response rate from students. Issues related to the reliability and validity of the variables measurement and testing some of the adopted multidimensional scales was discussed. The last section identifies in details the statistical techniques employed in the study, including the one-way Analysis of Variance (ANOVA), Independent Sample t-test and Hierarchical Linear Multiple Regression to analyse the data collected.

In any research project, several judgments and compromises are always required. Designing an adequate study that would be feasible in Libya requires making some judgments, for example, not to make the questionnaire too long and to make it understandable and culturally appropriate. The next chapter presents the results and tests the study hypotheses.

## **Chapter Four**

### **Research Results and Testing Hypotheses**

#### **4.1 Introduction**

This chapter provides statistical analyses of the data and reports the results of hypothesis testing. The results of both management accountants and accounting students are presented but no comparisons will be made between the two samples in terms of their ethical decision making stages. The results presented in this chapter relate to the aims of the study as shown below:

1. To identify what types of ethical issues are faced by management accountants within Libyan companies;
2. To determine the relationship between individual variables (age, gender, educational level, work experience, and personal moral philosophy) and the decision making process of Libyan management accountants and accounting students;
3. To determine the relationship between organizational variables (codes of ethics, ethical climate, organizational size, and industry type) and the decision making process of Libyan management accountants; and
4. To determine the relationship between moral intensity dimensions (magnitude of consequences, social consensus, and temporal immediacy) and the decision making of Libyan management accountants and accounting students.

This chapter is organized into five sections as follows: section 4.2 provides basic demographic characteristics of the study's participants; Ethical issues facing management accountants in Libyan company are shown in section 4.3; Section 4.4 provides one-way between-groups analyses of variance (ANOVA), independent samples t-test and hierarchical linear multiple regression results related to certain individual, organizational factors and moral intensity dimensions that might affect ethical decision making stages

and also presented the related hypotheses. The summary of this chapter will be presented in section 4.5.

## **4.2 Basic Demographic Characteristics of Participants**

For demographic characteristics of participants, the eight questions in the first section of the questionnaires were devoted to gathering demographic information about the participants (management accountants and accounting students) and the companies they work for (only management accountants)<sup>1</sup>.

From Table 4.1, it can be seen that the majority of accounting students (87%) are aged 24 years or less. Males constitute 55% of the participants. For management accountants, all but half of management accountants (45%) are aged more than 40 years; approximately 75% of management accountants are males. Interestingly, from 102 management accountants who are aged more than 40 years only 9 management accountants are females; at the age less than 30 years, females are almost the same as their counterparts. These results may indicate that females have become more interested in studying and working within the accounting area.

With respect to educational level and work experience of management accountants, Table 4.1 indicates that approximately 58% of management accountant have Bachelor's and a minority have a master degree. Also from the same table, it can be seen that large number of participants (38%) has work experience between 5 and 15 years.

Regarding the industry type, Table 4.1 shows that management accountants work in diversity of manufacturing types. Large numbers of participants (28% and 31%) work for Food companies and Oil, Gas and Chemicals companies, while a minority of participants 4% work for Textiles and Furniture companies. With regard to company size, it can be

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<sup>1</sup> According to the knowledge of the researcher all accounting students surveyed are full time students and they have no work experience.

seen that the largest number (42%) work for small companies and (36%) of the participants work for large companies.

**Table 4.1 Demographic Characteristics of Participants**

<b>Accounting Students</b>											
<b>Age &amp; Gender</b>	24 Years or Less				More than 24 Years				Total		
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
Females	64	42%	5	3%	69	45%					
Males	68	45%	15	10%	83	55%					
Total	132	87%	20	13%	152	100%					
<b>Management Accountants</b>											
<b>Age &amp; Gender</b>	< 30 Years		30 - < 35 Years		35- 40 Years		> 40 Years		Total		
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
Females	18	8%	15	6%	13	7%	9	4%	55	25%	
Males	21	9%	24	11%	33	14%	93	41%	171	75%	
Total	39	17%	39	17%	46	21%	102	45%	226	100%	
<b>Educational Level</b>	High School or Equivalent		Higher Dep.		Bachelor's		Master's or more				
	Frequency		48		132		10				
Percentage		21%		58%		5%					
<b>Work Experience &amp; Gender</b>	< 5 Years		5- < 15 Years		15-25 Years		>25 Years		Total		
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
Females	26	11%	56	25%	55	25%	31	14%	168	75%	
Males	15	7%	26	12%	12	5%	2	1%	55	25%	
Total	41	18%	82	27%	67	30%	33	15%	223	100%	
<b>Industry Type<sup>2</sup></b>	Food	Textiles, Furniture		Engineering, Metal & Electric		Oil, Gas & Chemicals		Cement & Building Materials			
	Frequency	64	10	42	70	43					
Percentage		28%	4%	18%	31%	19%					
<b>Size of Organization</b>	50-499 Employees				500- 999 Employees				> 999 Employees		
	Frequency				50				83		
Percentage				22%				36%			
<b>Codes of Ethics</b>	Participants Who Said Yes				Participants Who Said No						
	Frequency				141						
Percentage				62%							
<b>Ownership</b>	State-owned Company		Joint Venture (State & Private)		Private Company		Joint Venture (State & Foreign)		Joint Venture (Private & Foreign)		
	Frequency		28		27		13		12		
Percentage		12%		12%		6%		5%			

Finally, more than (62%) of the participant reported that their companies have no code of ethics. Regarding the type of ownership of the companies the participant work for, almost

<sup>2</sup> Formal industry classification in Libya according to Central of Industrial Information and Documentation.

two-thirds of the participants (65%) work in companies that are owned 100% by the state and only (5%) of the participants are employees within companies that are joint venture between a private sector and a foreign partner.

### **4.3 Ethical Issues Facing Management Accountants**

In the last section of management accountants' questionnaire, participants were asked to provide their perceptions on some common ethical issues that might face them within Libyan companies in terms of their importance and frequency. This section is related to the aim one of the study.

Table 4.2 shows that the most important ethical issues for participants are Misuse of equipment and computer information system, Managers use discrimination and nepotism when dealing with accountants, Accountants fail to blow the whistle when something wrong happened to in the company, Disclosing confidential information to people outside the company and Injustice in distributing the company's resources and budgets between projects and programmes. These ethical issues have mean scores of 3.90<sup>3</sup> or above and they were ranked in the first five important ethical issues.

Moreover, participants report that they frequently face most of these issues, as most of them have mean score of 2.36 or above but not more than 2.75. Only the issue of disclosing confidential information to people outside the company has a mean score of 1.96 and ranked 12. Ethical issues such as Accountants recasting information to justify a particular budget allocation and Accountants breaking a rule where they think the advantages to the company are greater than the ethical cost have the lowest mean scores of all ethical issues, the mean scores are 3.69 and 3.55 with rank of 13 and 14 respectively. Interestingly, ethical issues such as Accountants' trustworthiness is suspected by management, Accountant deliberately did an illegal action and was given a

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<sup>3</sup> In this study, dependent variables were measured using a 5-point scale which has been commonly treated by scientists as approximately interval (Field, 2009).

second chance to work for the company and Accountant deliberately did an unethical action and was given a second chance to work for the company are similarly ranked in terms of their importance. They all are ranked 12 with a mean score of 3.74.

**Table 4.2 Ethical Issues' Importance and Frequency**

Ethical Issues Statements	Importance			Frequency		
	N	Mean	Rank	N	Mean	Rank
Injustice in distributing the company's resources and budgets between projects and programmes	223	3.90	5	216	2.75	2
Unfair distribution of the company's resources and budgets between individuals and groups within departments, divisions, subsidiaries etc	222	3.87	7	213	2.94	1
Manipulating accounting figures (e.g., through costing method) to achieve budgeted profit	224	3.88	6	220	2.15	8
Adjusting information or bending the rules to avoid being bullied by customer	217	3.79	10	211	1.77	17
Adjusting information or bending the rules to avoid being bullied by managers	223	3.79	10	217	1.80	16
Accountants using their skills to exploit or blackmail the company for personal gain	220	3.75	11	216	1.92	13
The use of power to distort or prevent open debate and discussion regarding company policies and decisions	220	3.74	12	215	2.39	5
Accountants breaking a rule where they think the advantages to the company are greater than the ethical cost	221	3.55	15	213	1.85	14
Disclosing confidential information to people outside the company	222	3.92	4	215	1.96	12
Accountants using insider information for personal gain	220	3.85	8	212	2.01	10
An accountant is forced to leave the company because of having different ethical principles	222	3.84	9	220	2.01	10
Accountants recasting information to justify a particular budget allocation	218	3.69	14	213	2.22	7
Accountants' trustworthiness is suspected by management	221	3.74	12	215	1.81	15
Accountant deliberately did an illegal action and was given a second chance to work for the company	217	3.72	13	210	2.00	11
Accountant deliberately did an unethical action and was given a second chance to work for the company	215	3.74	12	212	2.03	9
Accountants fail to blow the whistle when something wrong happened to in the company	220	3.93	3	216	2.36	6
Misuse of equipment, computer information system, etc by accountants	218	4.06	1	218	2.58	4
Managers use discrimination and nepotism when dealing with accountants	220	4.04	2	214	2.64	3

Overall, the importance of all ethical issues is ranged by management accountants within Libyan companies between a mean score of 3.55 and 4.04, whereas the frequency of all ethical issues is ranged between 1.77 and 2.94.

#### **4.4 Hypothesis Testing**

As mentioned above, this study aims to investigate the impact of certain individual and organizational factors and moral intensity dimensions on the ethical decision making process. Thus, several hypotheses were formulated to achieve this aim. Hypotheses 1, 2, 3, 4, and 8 were directed toward the second research aim. Hypotheses 5, 6, 7 and 9 were directed toward the third research aim. Hypothesis 10 was directed toward the fourth research aim. The following sections present the results of one-way between-groups analyses of variance (ANOVA) and independent samples t-test, and hierarchical linear multiple regression tests to examine these hypotheses.

##### **4.4.1 Analysis of Variance and Independent Samples T-Test of Categorical Variables**

In Chapter Three, section 3.10, it was mentioned that one-way between-groups analyses of variance (ANOVA) and independent samples t-test were used in this study to examine the impact of certain individual factors (age, gender, educational level, and work experience) and organizational factors (organizational size, type of industry, and codes of ethics) on ethical decision making stages. These tests were applied to these variables because they involve independent categories. Also used for the Post-hoc multiple comparison was Tukey's Honestly Significant Difference (HSD) Test to identify differences between management accountants as a function of their age, educational level, work experience, organizational size, and industry type.

Additionally, checking the assumptions of ANOVA and t-test has been recommended by many authors (e.g., Field, 2009; Tabachnick & Fidell, 2007). Normality, homogeneity of variance, and independence are the most common assumptions that should be addressed for both tests. No reason to suppose that data variables were not independent. The assumptions of normality, homogeneity of variance were checked using different types of methods such as statistically by applying Shapiro-Wilk (S-W) for normality, and Levene's tests for equality of variance and graphically by using histograms and normal probability plot (P-P). Although there were occasionally violations to these assumptions for example, in approximately 5% of cases Levene's test was significant, the tests are still

considered valid, as first ANOVA and t-test are reasonably robust tests, and second generally cases in each cell were reasonably large (i.e., greater than 30) which will reduce the detrimental effect of the violation of the normality assumption (Field, 2009; Tabachnick & Fidell, 2007).

Another issue that should be mentioned here is related to Type I errors. A large number of t-tests and ANOVAs were used to examine three dependent variables in four scenarios, and to look at all of the differences between groups for seven independent variables. Because of the multiple testing here, Type I errors are made more likely and therefore any results which are not consistently and strongly found should be treated with some caution (Field, 2009). Box plots were screened to check whether there were any outlying values in the data; there were only few cases looked distanced, but when they were removed no different results were obtained. Thus, it was decided to not remove them.

#### **4.4.1.1 Age Differences in EDM Stages**

The first set of hypotheses was related to how age affected each stage of the ethical decision making process. Table 4.3 below provides the descriptive analysis and the statistical results of one-way independent samples ANOVA (Libyan management accountants) and independent samples t-test (Libyan accounting students) in four scenarios.

##### **4.4.1.1.1 Age and Ethical Recognition**

###### ***H1a: Mean Ethical Recognition Scores Will Significantly Increase as Age Increases***

The results shown in Table 4.3 indicate that on average Libyan management accountants and accounting students recognize the ethical issue within each scenario as they had a mean score of 3 or above. It also shows that differences in ethical recognition mean scores based on age exist. However, ANOVA test indicates that these differences between the four groups of management accountants in scenario 1 and scenario 3 were not significant.

**Table 4.3 Age and EDM Stages: Mean (SD), ANOVA, and t-test Results**

<i>EDM Stages &amp; Scenarios</i>	<i>Management Accountants</i>						<i>Accounting Students</i>			
	< 30 M(SD)	30-<35 M(SD)	35-40 M(SD)	>40 M(SD)	<i>df</i>	<i>F</i>	<i>24orless</i>	<i>&gt;24</i>	<i>df</i>	<i>t</i>
<b>Ethical Recognition</b>										
Scenario 1	4.0(1.2)	4.2(1.0)	4.3(0.9)	4.2(1.0)	3 & 223	0.56	4.0 (1.1)	4.3 (1.2)	148	-0.92
Scenario 2	<b>3.9(1.1)</b>	4.1(1.0)	4.2(.09)	<b>4.4(0.8)</b>	3 & 223	<b>2.67*</b>	3.9 (1.2)	4.4 (1.3)	149	-1.34
Scenario 3	3.5(1.1)	3.6(1.2)	3.7(1.1)	3.5(1.1)	3 & 223	0.39	3.6 (1.3)	3.8 (1.1)	149	-0.51
Scenario 4	<b>3.0(1.2)</b>	3.3(1.2)	3.5(1.9)	<b>3.6(1.1)</b>	3 & 222	<b>3.50*</b>	3.3 (1.2)	3.5 (1.2)	150	-0.52
<b>Ethical Judgment</b>										
Scenario 1	4.3(1.0)	4.3(1.0)	4.5(0.7)	4.3(0.9)	3 & 223	0.73	4.5 (0.7)	4.5 (0.8)	149	0.35
Scenario 2	4.2(0.9)	4.0(1.1)	4.0(1.2)	4.3(0.8)	3 & 223	1.65	4.0 (1.3)	4.3 (1.1)	148	-0.82
Scenario 3	3.6(1.0)	3.8(1.0)	3.4(1.1)	3.8(1.0)	3 & 223	2.23	3.6 (1.2)	3.4 (1.2)	148	0.80
Scenario 4	3.5(1.1)	3.6(1.1)	3.6(1.0)	3.7(1.0)	3 & 222	0.48	2.3 (1.3)	3.1 (1.1)	150	0.61
<b>Ethical Intention</b>										
Scenario 1	4.1(1.0)	4.0(1.0)	3.9(1.2)	4.1(1.0)	3 & 222	0.65	<b>4.1 (1.2)</b>	<b>4.5 (0.6)</b>	145	<b>-2.25*</b>
Scenario 2	3.8(1.0)	3.7(1.3)	3.6(1.3)	3.7(1.4)	3 & 223	0.13	<b>3.6 (1.5)</b>	<b>4.3 (1.2)</b>	147	<b>-2.35*</b>
Scenario 3	3.5(1.1)	3.5(1.3)	3.3(1.2)	3.4(1.1)	3 & 223	0.31	3.3 (1.3)	3.4 (1.1)	147	-0.22
Scenario 4	3.3(1.2)	3.4(1.2)	3.5(1.2)	3.3(1.2)	3 & 222	0.34	3.3 (1.2)	3.7 (1.0)	148	-1.35

\*p < 0.05

With respect to scenario 2, Table 4.3 shows that there are significant differences in the ethical recognition mean scores based on age [ $F(3, 223) = 2.67, p < .05$ ]. However, these differences were only found between accountants who are aged less than 30 years and accountants who are aged more than 40 years ( $p < .05$ ). Similarly, the results of scenario 4 show significant differences in mean scores of accountants' ethical recognition based on age [ $F(3, 222) = 3.50, p < .05$ ]. These differences were found significantly between the same two groups who differed significantly in scenario 2 ( $p < .05$ ). For accounting students Table 4.3 shows that there were no statistical significant differences between the two groups for ethical recognition in the four scenarios.

From the above results it can be concluded that *H1a* was partially supported for management accountants but rejected for accounting students.

#### 4.4.1.1.2 Age and Ethical Judgment

##### *H1b: Mean Ethical Judgment Scores Will Significantly Increase as Age Increases*

Table 4.3 indicates that on average both management accountants and accounting students made an ethical judgment for all the four scenarios because their mean scores

were 3.1 or above. As reflected by ANOVA and t-test, there were no statistically significant results for both accountants and students. Therefore, *H1b* was rejected for both samples.

#### **4.4.1.1.3 Age and Ethical Intention**

##### ***H1c: Mean Ethical Intention Scores Will Significantl increase as Age Increases***

Table 4.3 depicts that on average both management accountants and accounting students had no intention to unethically behave; their mean scores were 3.3 or more. Despite the differences in ethical intention mean scores, the ANOVA test of management accountants indicates that these differences were not statistically significant in the four given scenarios. Regarding accounting students, t-test shows statistical significant differences between the two groups in scenario 1 [ $t(145) = 2.25, p < .05$ ] and scenario 2 [ $t(147) = 2.35, p < .05$ ]. Therefore, the results related to ethical intention revealed that *H1c* was partially supported for accounting students but rejected for management accountants.

In conclusion, ANOVA test and t-test revealed that there was very little evidence to hypothesize that the differences in the mean scores of ethical decision making stages were based on age. Therefore, there was very limited support for age differences

#### **4.4.1.2 Gender Differences in EDM Stages**

This hypothesis was related to how gender might affect each stage of ethical decision making process. Table 4.4 below depicts the descriptive analysis and the statistical result of independent samples t-test for Libyan management accountants and accounting students in four scenarios.

##### **4.4.1.2.1 Gender and Ethical Recognition**

##### ***H2a: Mean Ethical Recognition Scores of Females Will Be Significantly Higher than Males***

For management accountants, Table 4.4 illustrates that on average females and males recognize the ethical issue in each scenario, because their mean scores were 3.1 or above.

Also the same table shows that the mean scores of ethical recognition of females were significantly lower than those of their counterparts but only in scenario 2 [ $t(225) = -2.23$ ,  $p < .05$ ] and scenario 4 [ $t(224) = -2.24$ ,  $p < .05$ ]. With regard to accounting student, Table 4.4 depicts that there were no statistical significant results. Thus, **H2a** was partially supported for management accountants and rejected for accounting students.

**Table 4.4 Gender Differences in EDM Stages: Mean (SD) and t-test Results**

<i>EDM Stages &amp; Scenarios</i>	<i>Management Accountants</i>				<i>Accounting Students</i>			
	Females M (SD)	Males M (SD)	<i>df</i>	<i>t</i>	Females M (SD)	Males M (SD)	<i>df</i>	<i>t</i>
<b>Ethical recognition</b>								
Scenario 1	4.0 (1.1)	4.2 (1.0)	224	-1.40	4.1 (1.0)	4.0 (1.2)	148	0.26
Scenario 2	<b>4.0 (1.1)</b>	<b>4.3 (0.8)</b>	225	<b>-2.23*</b>	4.0 (1.3)	4.1 (1.2)	149	-0.46
Scenario 3	3.6 (1.1)	3.6 (1.1)	225	0.23	3.8 (1.2)	3.5 (1.3)	149	1.23
Scenario 4	<b>3.1 (1.3)</b>	<b>3.5 (1.1)</b>	224	<b>-2.24*</b>	3.4 (1.2)	3.3 (1.3)	150	0.29
<b>Ethical judgment</b>								
Scenario 1	4.4 (0.8)	4.3 (0.9)	225	0.39	4.4 (0.9)	4.6 (0.6)	149	-1.29
Scenario 2	4.1 (0.9)	4.2 (1.0)	225	-0.79	3.9 (1.3)	4.1 (1.2)	148	-0.89
Scenario 3	3.6 (1.1)	3.7 (1.0)	225	-0.80	3.7 (1.2)	3.5 (1.3)	148	1.30
Scenario 4	3.5 (1.1)	3.7 (1.0)	224	-0.66	3.4 (1.3)	3.2 (1.2)	150	0.97
<b>Ethical intention</b>								
Scenario 1	4.0 (0.9)	4.1 (1.1)	224	0.59	4.3 (1.0)	4.1 (1.2)	145	-0.85
Scenario 2	3.8 (1.0)	3.7 (1.4)	225	-0.88	3.8 (1.4)	3.5 (1.5)	147	-1.01
Scenario 3	3.5 (1.1)	3.4 (1.2)	225	-0.88	3.5 (1.2)	3.1 (1.4)	147	-1.50
Scenario 4	3.3 (1.1)	3.4 (1.2)	224	0.65	3.4 (1.2)	3.3 (1.2)	148	-0.64

\* $p < 0.05$

#### 4.4.1.2.2 Gender and Ethical Judgment

##### ***H2b: Mean Ethical Judgment Scores of Females Will Be Significantly Higher than Males***

The results provided by Table 4.4 indicate that on average all participants made an ethical judgment about each ethical issue within the four scenarios, their mean scores was 3.2 or above. No significant differences were found between females and males in the two samples (students and accountants). Therefore, **H2b** was rejected.

#### 4.4.1.2.3 Gender and Ethical Intention

##### ***H2c: Mean Ethical Intention Scores of Females Will Be Significantly Higher than Males***

From Table 4.4, it can be seen that on average both females and males have no intention to behave unethically since there were no mean scores less than 3.3. Similar to the result of ethical judgment, there were no significant differences between females and males in their mean scores of ethical intention of both samples. Therefore, *H2c* was rejected.

In conclusion, although there were some differences in ethical decision making stages mean scores, t-test reflected very little evidence to hypothesize that these differences were based on gender. Therefore, there was very limited support for gender differences.

#### **4.4.1.3 Educational Level Differences in EDM Stages**

The next three hypotheses were concerned with how the mean scores of ethical decision making stages of management accountants might be impacted by educational level. The statistical results related to these hypotheses are shown in Table 4.5 below.

##### **4.4.1.3.1 Educational Level and Ethical Recognition**

*H3a: Mean Ethical Recognition Scores Will Significantly Increase as Level of Education Increases*

Table 4.5 indicates that on average Libyan management accountants regardless of their level of education recognize the ethical issue within each scenario, the mean scores were higher than 3. From the same table, the one way ANOVA revealed no significant differences based on educational level. Therefore, *H3a* was rejected.

##### **4.4.1.3.2 Educational Level and Ethical Judgment**

*H3b: Mean Ethical Judgment Scores Will Significantly Increase as Level of Education Increases*

As shown in Table 4.5, on average Libyan management accountants judged unethically all ethical issues within the given scenarios; the mean scores were not less than 3.7. Similar to ethical recognition, no statistical significant differences in ethical judgments of

accountants and students were found related to the level of education. Therefore, *H3b* was rejected.

**Table 4.5 Educational Level and EDM Stages: Mean (SD) and ANOVA Results**

<i>EDM Stages &amp; Scenarios</i>	High School & ID M (SD)	Higher Dip. M (SD)	Bachelor's M (SD)	Master's or more M (SD)	<i>df</i>	F
<b>Ethical Recognition</b>						
Scenario 1	3.8 (1.1)	4.2 (1.0)	4.2 (0.9)	4.5 (0.7)	3&222	2.06
Scenario 2	4.1 (1.0)	4.3 (0.8)	4.2 (0.9)	4.2 (0.9)	3&222	0.23
Scenario 3	3.2 (1.0)	3.5 (1.2)	3.7 (1.1)	3.8 (1.1)	3&222	1.20
Scenario 4	3.4 (1.0)	3.2 (1.4)	3.5 (1.1)	3.9 (0.7)	3&221	1.30
<b>Ethical Judgment</b>						
Scenario 1	4.5 (0.6)	4.3 (0.9)	4.3 (0.9)	4.4 (0.8)	3&222	0.32
Scenario 2	4.3 (0.8)	4.2 (1.0)	4.1 (1.0)	4.0 (1.2)	3&222	0.24
Scenario 3	3.9 (1.0)	3.5 (1.1)	3.6 (1.0)	4.3 (0.7)	3&222	2.38
Scenario 4	3.7 (1.0)	3.4 (1.1)	3.7 (1.0)	3.7 (1.1)	3&221	0.87
<b>Ethical Intention</b>						
Scenario 1	3.9 (1.0)	4.1 (1.2)	4.0 (1.1)	4.3 (0.8)	3&221	0.44
Scenario 2	<b>3.2 (1.4)</b>	3.6 (1.3)	<b>3.9 (1.2)</b>	3.5 (1.4)	3&222	<b>3.23*</b>
Scenario 3	3.5 (1.5)	3.3 (1.2)	3.4 (1.1)	3.9 (1.0)	3&222	0.94
Scenario 4	<b>2.9 (1.1)</b>	3.2 (1.2)	<b>3.5 (1.1)</b>	3.3 (1.3)	3&221	<b>3.20*</b>

\*p < 0.05; ID: Intermediate Diploma

#### **4.4.1.3.3 Educational Level and Ethical Intention**

##### ***H3c: Mean Ethical Intention Scores Will Significantly Increase as Level of Education Increases***

The descriptive statistics provided by Table 4.5 depict that on average Libyan management accountants had no obvious intention to behave unethically; with the exception of scenario 4 for those who have level of education of high school and intermediate diploma (mean score = 2.9), no mean scores were less than 3.2. Significant differences between them based on their level of education were revealed by the ANOVA test in scenario 2 [F (3, 222) = 3.23, p < .05] and scenario 4 [F (3, 221) = 3.20, p < .05]. The mean scores of accountants who have high school or intermediate diploma were significantly lower than those who have Bachelor's in the two scenarios (p < .05). Thus, *H3c* was only partially supported.

From the above results, it can be concluded that the significant differences in ethical decision making stages mean scores of Libyan accountants based on their level of education are very limited.

#### 4.4.1.4 Work Experience Differences in EDM Stages

The three hypotheses presented below were concerned with how the work experience of management accountants can make differences in their mean scores of ethical decision making process. Descriptive and ANOVA results are shown in Table 4.6.

**Table 4.6 Work Experience and EDM Stages: Mean (SD) and ANOVA Results**

<i>EDM Stages &amp; Scenarios</i>	< 5 years M(SD)	5- <15years M(SD)	15-25 years M(SD)	>25years M(SD)	<i>df</i>	<i>F</i>
<b>Ethical Recognition</b>						
Scenario 1	4.1 (1.0)	4.3 (0.9)	4.0 (1.1)	4.3 (0.9)	3&221	1.09
Scenario 2	4.0 (1.2)	4.2 (0.9)	4.4 (0.7)	4.3 (1.0)	3&221	1.70
Scenario 3	3.6 (1.1)	3.8 (1.1)	3.5 (1.2)	3.5 (1.0)	3&221	1.03
Scenario 4	<b>2.7 (1.2)</b>	<b>3.5 (1.1)</b>	<b>3.6 (1.1)</b>	<b>3.7 (1.0)</b>	3&220	<b>7.80**</b>
<b>Ethical Judgment</b>						
Scenario 1	4.3 (0.9)	4.4 (0.9)	4.4 (0.9)	4.3 (0.8)	3&221	0.10
Scenario 2	4.1 (0.9)	4.1 (1.1)	4.3 (0.9)	4.3 (0.7)	3&221	0.66
Scenario 3	3.6 (1.0)	3.6 (1.1)	3.6 (1.1)	4.0 (0.9)	3&221	1.49
Scenario 4	3.5 (1.1)	3.5 (1.1)	3.7 (1.0)	3.9 (0.9)	3&220	1.18
<b>Ethical Intention</b>						
Scenario 1	4.2 (0.9)	4.0 (1.1)	3.9 (1.1)	4.3 (0.9)	3&220	1.63
Scenario 2	3.9 (1.0)	3.7 (1.3)	3.9 (1.2)	3.4 (1.6)	3&221	1.45
Scenario 3	3.5 (1.1)	3.4 (1.2)	3.5 (1.2)	3.4 (1.2)	3&221	0.37
Scenario 4	3.3 (1.1)	3.5 (1.2)	3.3 (1.2)	3.1 (1.2)	3&220	1.39

\*p < 0.05; \*\*p < .001

##### 4.4.1.4.1 Work Experience and Ethical Recognition

#### *H4a: Mean Ethical Recognition Scores Will Significantly Increase as Years of Experience Increases*

As depicted by Table 4.6, on average management accountants irrespective of their work experience recognize the ethical issue within each scenario, with the exception of mean score of those who have less than 5 years experience in scenario 4 (M (SD) = 2.7 (1.2)), no mean score was below 3.4. The significant differences in ethical recognition mean scores related to work experience were found only in scenario 4 [F (3, 220) = 7.80, p <

.001]. Additionally, these significant differences were found between this group (group of 5 years or less) and all of the other three groups,  $p < .001$ . Generally speaking, the results above indicated very limited supported *H4a*.

#### **4.4.1.4.2 Work Experience and Ethical Judgment**

##### ***H4b: Mean Ethical Judgment Scores Will Significantly Increase as Years of Experience Increases***

As can be seen from Table 4.6 on average all participants regardless of their years of experience judge unethically the ethical issues given in each scenario; no mean scores were below 3.5. The results of ANOVA indicate no statistical significant differences in ethical judgments of management accountants based on their work experience. Therefore, *H4b* was rejected.

#### **4.4.1.4.3 Work Experience and Ethical Intention**

##### ***H4c: Mean Ethical Intention Scores Will Significantly Increase as Years of Experience Increases***

The mean scores of ethical intention of management accountants provided by Table 4.6 were 3.1 or above which indicate that they had no intention to unethically behave. Differences in the mean scores of ethical intention of management accountants were not significantly different based on their years of experience. Therefore, *H4c* was rejected.

From the above results, one can conclude that there is no clear evidence that differences in ethical decision making stages were based on the work experience of management accountants.

#### **4.4.1.5 Organizational Size Differences in EDM Stages**

The impact of organizational size on ethical decision making process was examined by testing three hypotheses. Table 4.7 shows the descriptive and statistical results of ANOVA test.

#### **4.4.1.5.1 Organizational Size and Ethical Recognition**

##### ***H5a: Mean Ethical Recognition Scores Will Significantly Increase as the Size of Companies Increases***

From Table 4.7, it can be seen that on average all participants had ethical recognition's mean scores of 3.2 or above regardless of the size of company they work for which indicate clearly that they recognize ethical issues in each scenario. No significant differences in the mean scores of ethical recognition were found based on organizational size, thus *H5a* was rejected.

#### **4.4.1.5.2 Organizational Size and Ethical Judgment**

##### ***H5b: Mean Ethical Judgment Scores Will Significantly Increase as the Size of Companies Increases***

As depicted in Table 4.7, on average all participants judged unethically the ethical issues within each scenario since there were no mean scores less than 3.3. Differences in ethical judgment mean scores were significantly attributed to the size of company in one of the four scenarios, (scenario 1) [ $F(2, 225) = 4.70, p < .05$ ]. Additionally, the results showed that the mean score of ethical judgment of management accountants who work for medium companies were significantly lower than those who work for large companies ( $p < .05$ ). However, the overall result indicated a very limited support for *H5b*.

#### **4.4.1.5.3 Organizational Size and Ethical Intention**

##### ***H5c: Mean Ethical Intention Scores Will Significantly Increase as the Size of Companies Increases***

The mean scores depicted in Table 4.7 show that on average all management accountants had no intention to unethically behave as their mean scores were 3.2 or above. In one scenario (scenario 2), there was a significant difference in the mean scores of ethical intention based on the size of company [ $F(2, 225) = 6.58, p < .05$ ]. These differences were only significantly different between those who work for small companies and those

who work for large companies ( $p < .05$ ). However, the overall result indicated a very limited support for *H5c*.

In summary, the above results revealed very limited differences in ethical decision making process based on the size of companies. Therefore, there was very limited support for organizational size differences.

**Table 4.7 Organizational Size and EDM Stages: Mean (SD) and ANOVA Results**

<i>EDM Stages &amp; Scenarios</i>	<i>50 - 499</i> <i>M(SD)</i>	<i>500 - 999</i> <i>M(SD)</i>	<i>More than 999</i> <i>M(SD)</i>	<i>df</i>	<i>F</i>
<b>Ethical Recognition</b>					
Scenario 1	4.2 (1.0)	4.2 (1.1)	4.2 (0.9)	2&225	0.12
Scenario 2	4.3 (0.9)	4.0 (1.0)	4.3 (0.9)	2&225	1.90
Scenario 3	3.5 (1.2)	3.6 (1.2)	3.7 (1.1)	2&225	0.83
Scenario 4	3.5 (1.2)	3.2 (1.3)	3.5 (1.1)	2&224	1.56
<b>Ethical Judgment</b>					
Scenario 1	4.4 (0.9)	<b>4.1 (1.0)</b>	<b>4.5 (0.7)</b>	2&225	<b>4.70*</b>
Scenario 2	4.1 (1.0)	4.2 (0.9)	4.3 (0.9)	2&225	0.65
Scenario 3	3.5 (1.1)	3.7 (1.0)	3.8 (1.0)	2&225	1.30
Scenario 4	3.8 (0.9)	3.3 (1.2)	3.6 (1.0)	2&224	2.90
<b>Ethical Intention</b>					
Scenario 1	4.0 (1.1)	3.9 (1.0)	4.2 (1.0)	2&224	1.81
Scenario 2	<b>3.4 (1.4)</b>	3.6 (1.3)	<b>4.1 (1.0)</b>	2&225	<b>6.58*</b>
Scenario 3	3.3 (1.2)	3.3 (1.2)	3.6 (1.1)	2&225	1.00
Scenario 4	3.3 (1.2)	3.2 (1.2)	3.4 (1.1)	2&224	0.72

\* $p < 0.05$

#### **4.4.1.6 Code of Ethics Differences in EDM Stages**

Three hypotheses were set examine how code of ethics might affect each stage of ethical decision making process. Table 4.8 below shows the descriptive analysis and the statistical result of independent samples t-test for Libyan management accountants in four scenarios.

##### **4.4.1.6.1 Code of Ethics and Ethical Recognition**

*H6a: Mean Ethical Recognition Scores Will Be Significantly Higher for Those Who Work in Companies That Have Code of Ethics*

Table 4.8 illustrates that on average management accountants recognize the ethical issue in each scenario regardless of whether they work in companies that have code of ethics or do not have, the mean scores were 3.3 or above. However, there were no significant differences among management accountants based on the existence of code of ethics within the Libyan companies. Thus, *H6a* was rejected.

**Table 4.8 Code of Ethics and EDM Stages: Mean (SD) and t-test Results**

<i>EDM Stages &amp; Scenarios</i>	<i>Participants stated the company has code of ethics M(SD)</i>	<i>Participants stated the company has no code of ethics M(SD)</i>	<i>df</i>	<i>t</i>
<b>Ethical Recognition</b>				
Scenario 1	4.2(1.0)	4.2(1.0)	226	-0.34
Scenario 2	4.3(0.8)	4.2(1.0)	227	0.59
Scenario 3	3.7(1.1)	3.5(1.2)	227	1.40
Scenario 4	3.6(1.1)	3.3(1.2)	226	1.47
<b>Ethical Judgment</b>				
Scenario 1	4.2(0.8)	4.4(1.0)	227	-1.35
Scenario 2	4.1(1.0)	4.2(0.9)	227	-0.99
Scenario 3	3.7(1.0)	3.7(1.0)	227	0.01
Scenario 4	3.5(1.0)	3.7(1.1)	226	-1.35
<b>Ethical Intention</b>				
Scenario 1	3.9(1.1)	4.1(1.0)	226	-1.41
Scenario 2	3.6(1.3)	3.8(1.2)	227	-1.29
Scenario 3	3.4(1.2)	3.4(1.1)	227	-0.49
Scenario 4	3.1(1.2)	3.5(1.1)	226	-1.97

\*p < 0.05

#### **4.4.1.6.2 Code of Ethics and Ethical Judgment**

***H6b: Mean Ethical Judgment Scores Will Be Significantly Higher for Those Who Work in Companies That Have Code of Ethics***

Table 4.8 revealed that on average management accountants judged unethically the ethical issue in each scenario regardless of whether they work in companies that have code of ethics or do not have, the mean scores were 3.5 or above. However, there were no significant differences among management accountants based on the presence of code of ethics in Libyan companies. Thus, *H6b* was rejected.

#### 4.4.1.6.3 Code of Ethics and Ethical Intention

##### *H6c: Mean Ethical Intention Scores Will Be Significantly Higher for Those Who Work in Companies That Have Code of Ethics*

As shown in Table 4.8, on average management accountants had no intention to ethically behave regardless of whether they work in companies that have code of ethics or no, the mean scores were 3.1 or above. However, there were no significant differences among management accountants based on the presence of code of ethics within Libyan companies. Thus, *H6c* was rejected.

#### 4.4.1.7 Industry Type Differences in EDM Stages

**Table 4.9 Type of Industry and EDM Stages: Mean (SD) and ANOVA Results**

<i>EDM Stages &amp; Scenarios</i>	<i>Food M(SD)</i>	<i>Textiles, paper &amp; furniture M(SD)</i>	<i>Metal, electric &amp; Engineering M(SD)</i>	<i>Oil, Gas &amp; Chemicals M(SD)</i>	<i>Cement &amp; building M(SD)</i>	<i>df</i>	<i>F</i>
<b>Ethical Recognition</b>							
Scenario 1	4.1 (1.2)	4.5 (0.7)	4.2 (0.7)	4.2 (1.0)	4.1 (1.0)	4&223	0.58
Scenario 2	4.3 (0.9)	4.1 (1.1)	4.1 (0.9)	4.3 (0.9)	4.1 (1.0)	4&223	0.61
Scenario 3	3.6 (1.2)	4.2 (1.0)	3.5 (1.0)	3.6 (1.1)	3.6 (1.1)	4&223	0.83
Scenario 4	3.4 (1.3)	3.7 (1.3)	3.5 (1.1)	3.4 (1.1)	3.4 (1.1)	4&223	0.25
<b>Ethical Judgment</b>							
Scenario 1	4.3 (0.9)	4.3 (1.3)	4.3 (0.9)	4.5 (0.7)	4.2 (0.9)	4&223	1.40
Scenario 2	4.2 (0.8)	3.9 (1.3)	4.0 (1.1)	4.3 (0.9)	4.3 (1.0)	4&223	1.03
Scenario 3	3.8 (0.9)	3.6 (1.2)	3.6 (1.0)	3.7 (1.0)	3.4 (1.1)	4&223	1.39
Scenario 4	3.6 (1.1)	3.9 (1.0)	3.6 (1.0)	3.7 (1.1)	3.6 (1.0)	4&223	0.29
<b>Ethical Intention</b>							
Scenario 1	4.1 (1.0)	4.1 (1.3)	3.9 (1.0)	4.2 (1.0)	4.0 (1.1)	4&223	0.37
Scenario 2	3.7 (1.3)	3.2 (1.3)	3.6 (1.3)	4.0 (1.1)	3.6 (1.3)	4&223	1.26
Scenario 3	3.5 (1.2)	3.6 (1.3)	3.3 (1.3)	3.5 (1.0)	3.1 (1.1)	4&223	1.52
Scenario 4	3.2 (1.2)	3.4 (1.0)	3.2 (1.2)	3.5 (1.0)	3.4 (1.2)	4&223	0.63

\*p < .05; \*\*p < .001

##### *H7: Mean Ethical Decision Making Stages Scores Will Be Significantly Different Between Participants Based on the Type of Industry.*

The mean scores as shown in Table 4.9 revealed that on average all participants recognize the ethical issues within each scenario (M = 3.3 or above), judged them as unethical issues (M = 3.3 or above), and had no intention to unethically behave (M = 3.1 or above), regardless of the type of industry management accountants work for. However,

these results show no significant differences in the mean scores of the three stages of ethical decision making process based on industry type. Therefore, *H7* was rejected.

#### **4.4.2 Multiple Regression Analysis of Continuous Variables**

As discussed in Chapter Three, section 3.10, along with ANOVA and t-test, hierarchical linear multiple regression was also used in this study to examine the impact of individual factors (personal moral philosophy), organizational factors (ethical climate types), and moral intensity dimensions (magnitude of consequences (MC) social consensus (SC), and temporal immediacy (TI)) on the ethical decision making process (the first three stages). There are several important issues related to using multiple regression analysis such as examining data for outlying values and checking assumptions. These issues are discussed in the following sections.

##### **4.4.2.1 Variables Entered and Number of Cases Required**

As mentioned above, only some of the individual and organizational factors and the three dimensions of moral intensity were entered into the multiple regression model. One reason is that all categorical variables were tested earlier by applying ANOVA and t-test, and there were very few significant results found suggesting that inclusion of recoded categorical variables in the regression would show very little significant results. Therefore, it was decided to not dummy code the categorical variables and only enter the non-categorical independent variables into the model. Also correlation metric was conducted between the non-categorical independent variables and dependent variables and a large number of significant results, see Appendix D, were obtained. With regard to the cases required, Hair et al.(1998) suggested that the desired cases that should be entered into the model of multiple regression for each independent variable are between 10 and 20 cases. In this study there were at least 15 cases for each variable entered into the model.

#### **4.4.2.2 Choice of Regression Type and Order of Variable Entry**

Hierarchical linear multiple regression was chosen here for several reasons. One reason is that this study aims to look at the impact of several factors (individual factors, organizational factors, and moral intensity dimensions) on ethical decision making process and how can these factors predict each stage of ethical decision making. Which predictors should be entered first into the model is an important issue that should be considered as a result of the values of the regression coefficients depend on how the variables are entered in the model (Field, 2009). Theoretically, an important variable should be entered first into the model. However, past research, see Chapter Two, has shown that all the variables examined in this study are very important to ethical decision making stages. One logical order adopted here is to start with individual differences and then to look at the impact of the organizational situation, and finally the impact of specific moral issues within a particular scenario. Therefore, the two components of personal moral philosophy (idealism and relativism) were entered first, then the four types of ethical climate came second (law and professional code, company interest, social responsibility, and personal morality), and finally the three dimensions of moral intensity (magnitude of consequences, social consensus, and temporal immediacy). Several previous studies (e.g., Dubinsky et al., 2004; Marques & Azevedo-Pereira, 2008; Marta, Heiss, & De Lurgio, 2008; McMahon & Harvey, 2007; Sweeney & Costello, 2009; Vitell & Patwardhan, 2008) have also chosen this order of variable entry.

#### **4.4.2.3 Examining Data for Outlying and Influential Values**

Examining data for any specific outliers or influential cases is an important issue that should be taken in account in order to accurately generalize and interpret the results of the regression model. For outlying issue, the standardized residuals were checked to see whether there are any cases fall above  $\pm 2.5$  (Field, 2009). Casewise Diagnostics provided by the multiple regression analysis was used to assess this issue and found some cases were fallen outside this range. For this study, it is reasonable to expect about 12 cases (i.e. 5% of the 229 useable questionnaires) to have standardized residuals outside of

these limits for management accountants and 8 (i.e. 5% of the 152 useable questionnaires) cases for accounting students (Field, 2009). For both groups, all cases were for all scenarios within these limits but some of them were probably large enough to be investigated further. Therefore, further investigation was done, especially for cases of  $\pm 3$  or above, and found no evidence for concern; they were judged as legitimate data cases and should be retained in principle. For influential values, three tests have been commonly used to check this issue: Mahalanobis Distance, Cook's Distance, and Centred Leverage Value. Authors (e.g., Brace, Kemp, & Snelgar, 2006; Field, 2009) have suggested that, for Mahalanobis Distance, a value of 15 or less is acceptable, Cook's Distance's value greater than 1 may be cause for concern, and finally the average leverage can be calculated as  $3(k+1/n) = 3(10/229)$  for accountants and  $3(6/152)$  for students and looking at values three times as large (0.13) for management accountants and (.12) for accounting students (Field, 2009). Instead of looking at particular outlier values to identify any possible influential cases, it was decided to scan all cases to see if they exerted an extreme influence on the model. With respect to Cook's Distance, no extreme cases were found. Centred Leverage Value and Mahalanobis Distance's values show no more than one or two cases to violate its assumption for each dependent variable in the four scenarios. Therefore, further investigation was undertaken to examine whether these cases would cause any problem to the model. Multiple regression was run again with those values removed and found they did not make any difference from the results that were already obtained, thus all values were retained.

#### **4.4.2.4 Checking of Regression Assumptions**

It has been recommended that there are several assumptions that must be met in order to interpret and generalize the results of hierarchical linear multiple regression accurately. One of the initial assumptions is that all predictors must be quantitative (measured on a continuous scale such as interval or ratio) or categorical (with two categories such as gender: female and male). In this study, dependent variables in the regression analysis

were measured using a 5-point scale which has been commonly treated by scientists as approximately interval (Field, 2009).

Normality, linearity, and homoscedasticity are also regarded very important assumptions for multiple regression that have to be checked. The assumption of normality refers to the errors of prediction that are normally distributed around each and every predicted dependent variable score (Tabachnick & Fidell, 2007). The residuals in scatterplots of standardized residuals by standardised predicted values should show an accumulation of residuals in the centre of the plot at each value of predicted score if they normally distributed. With respect to the assumption of linearity, it assumes that the relationship between the dependent variables and the independent variables is linear and here scatterplots would show linearity by being rectangular scatterplots rather than a curved one. Utilizing a linear model for a non-linear relationship will limit the generalizability of the study's results and the accuracy of prediction in the model (Field, 2009). Homoscedasticity refers to the assumption that dependent variables show equal levels of variance across the range of independent variables (Hair et al., 2006). Accordingly, the residuals at each level of the independent variables should have the same variance (homoscedasticity), and in the scatterplots this would be shown by residuals; when the variances are very unequal there is evidence of the existence of the heteroscedasticity, the scatterplots are funnel shaped rather than rectangular (Field, 2009).

Examination of scatterplots of standardized residuals by standardized predicted values have been commonly used to test the assumptions of normality, linearity, and homoscedasticity (Tabachnick & Fidell, 2007). As shown in Appendix G, the large majority of the scatterplots show no failure of normality, no clear evidence for non-linear curvature in the relationship between the independent and dependent variables, and also no obvious evidence of the existence of heteroscedasticity. It could be mentioned here that there were some deviations in the scatterplots for example, accountants' ethical judgment in scenario 1 and ethical intention in scenario 3 and also students' ethical

intention in scenario 2. However we should not discount the fact that regression is reasonably robust any way (Howell, 2006).

Multicollinearity is another important assumption that should be addressed. It refers to the correlation between the independent variables. Strong relationships between two or more independent variables will cause problems when trying to draw inferences about the relative contribution of each independent variable to the success of the model (Brace et al., 2006). According to Cooper and Schindler (2008), very high correlations of .80 or above are cause for concern. Appendix C shows that there are no strong correlations among the predictors examined in this study. Also by looking at the variance inflation factor (VIF), which should be less than 10, Appendix E shows no value reached 10. Thus, multicollinearity did not exist within the data.

The final assumption that should be checked is independence of the outcome variables values. It assumes that for any two observations the residual terms should be unrelated (Hair et al., 2006). Appendix E provides the Durbin-Watson results which indicate no correlation between the adjacent residuals (all values are very close to 2). Therefore, the assumption was almost certainly met.

#### **4.4.2.5 Regression Results**

Tables 4.10, 4.11, and 4.12 provide the results of hierarchical linear multiple regression regarding the impact of personal moral philosophy (individual variables), ethical climate types (organizational variables), and moral intensity dimensions on ethical decision making stages for both management accountants and accounting students in the four scenarios. For each stage of ethical decision making process, the fit of the regression model will be assessed using the results shown in those tables. With respect to testing the hypotheses related to the ethical decision making stages of the two samples, the individual coefficient variables will be considered by looking at model 2 for accounting students and model 3 for management accountants with all variables included.

#### 4.4.2.5.1 Ethical Recognition

For management accountants, the multiple regression consists of three models starting with individual variables (model 1), adding organizational variables (model 2), and finally adding moral intensity dimensions (model 3).  $R^2$  is a measure of how much of the variability in the dependent variables is explained by the independent variables (Field, 2009). As shown in Table 4.10, model 1 indicates that personal moral philosophy (idealism and relativism) accounts for 7% to 9% of the variation in ethical recognition of management accountants in the first three scenarios, also the model was significant in these scenarios ( $p < .001$ ). When the ethical climate types were included (model 2), these proportions increased to be ranged from 10% to 12% also this was in the first three scenarios, the model was better and significant in scenarios 1 and 3 ( $p < .001$ ) and scenario 2 ( $p < .05$ ). However, these increases ( $\Delta R^2$ ) were only significant in scenario three ( $p < .05$ ). Finally, by adding moral intensity dimensions to the model (model 3), the proportions again were improved, they explained 14% to 32% of the variation in ethical recognition of management accountants; the model was again significant for the four scenarios ( $p < .001$ ). With the exception of scenario 1, all increases ( $\Delta R^2$ ) were statistically significant ( $p < .001$ ).

Regarding accounting students, the model of multiple regression consists of two models starting with individual variables (model 1) and then adding moral intensity dimensions (model 2). As shown in Table 4.10, model 1 depicts that personal moral philosophy accounts for 5% to 18% of the variation in ethical recognition of accounting students in all scenarios, the model was significant in scenarios 1 and 2 ( $p < .001$ ) and in scenarios 3 and 4 ( $p < .05$ ). When adding moral intensity dimensions to the model (model 2), the proportions were improved, they explained 16% to 22% of the variation in ethical recognition of accounting students. In two out of four scenarios, the increases ( $\Delta R^2$ ) were statistically significant ( $p < .001$ ).

**Table 4.10 Hierarchical Regression Results of Ethical Recognition**

<b>Management Accountants</b>													
<i>Variables &amp; Scenarios</i>		<i>Scenario 1</i>			<i>Scenario 2</i>			<i>Scenario 3</i>			<i>Scenario 4</i>		
		B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$
<b>Model one</b>	Constant	2.46	.58		2.85	.54		2.59	.67		3.73	.71	
	Idealism	.54	.13	<b>.27**</b>	.49	.12	<b>.27**</b>	.46	.15	<b>.21*</b>	.02	.16	.01
	Relativism	-.20	.09	<b>-.15*</b>	-.24	.08	<b>-.19*</b>	-.32	.10	<b>-.21*</b>	-.13	.11	-.09
	R <sup>2</sup> (F)	<b>.08 (9.34**)</b>			<b>.09 (10.29**)</b>			<b>.07 (7.91**)</b>			.01 (0.76)		
<b>Model two</b>	Constant	2.67	.61		2.69	.57		2.24	.70		3.59	.75	
	Idealism	.55	.13	<b>.28**</b>	.48	.13	<b>.26**</b>	.42	.15	<b>.19*</b>	.01	.17	.01
	Relativism	-.18	.10	<b>-.13*</b>	-.26	.09	<b>-.21*</b>	-.35	.10	<b>-.29*</b>	-.14	.11	-.09
	LC	-.11	.10	-.10	.05	.09	.05	.31	.11	<b>.23*</b>	.16	.12	.11
	CI	-.04	.10	-.03	.10	.09	.10	.08	.11	.07	-.02	.12	-.01
	SR	.23	.11	<b>.20*</b>	.01	.10	.01	-.13	.12	-.10	-.02	.14	-.01
	PM	-.19	.08	<b>-.18*</b>	-.08	.07	-.08	-.12	.09	-.10	-.08	.10	-.06
	R <sup>2</sup> (F)	<b>.12 (4.73**)</b>			<b>.10 (4.03*)</b>			<b>.12 (6.69**)</b>			.02 (.64)		
$\Delta$ R <sup>2</sup> (FA)	.04 (2.31)			.02 (0.91)			<b>.05 (2.94*)</b>			.01 (0.58)			
<b>Model three</b>	Constant	2.62	.64		1.34	.58		.20	.67		2.43	.72	
	Idealism	.55	.13	<b>.28**</b>	.38	.12	<b>.21*</b>	.33	.14	<b>.15*</b>	-.10	.15	-.04
	Relativism	-.20	.10	<b>-.15*</b>	-.16	.08	-.12	-.26	.09	<b>-.17*</b>	-.19	.10	-.12
	LC	-.13	.10	-.10	-.03	.09	-.01	.30	.10	<b>.21*</b>	.10	.11	.07
	CI	-.04	.10	-.03	.05	.09	.05	.07	.10	.06	.01	.11	.01
	SR	.21	.11	<b>.18*</b>	.04	.10	.04	-.19	.11	-.15	-.05	.12	-.03
	PM	-.20	.08	<b>-.18*</b>	-.05	.07	-.05	-.01	.08	-.01	-.08	.09	-.06
	MC	-.04	.07	-.05	.24	.06	<b>.27**</b>	.19	.08	<b>.17*</b>	-.06	.09	-.05
	SC	-.03	.05	-.04	.05	.05	.06	.20	.07	<b>.19*</b>	.39	.07	<b>.36**</b>
	TI	.14	.06	<b>.16*</b>	.14	.06	<b>.16*</b>	.26	.08	<b>.25*</b>	.28	.09	<b>.24*</b>
	R <sup>2</sup> (F)	<b>.14 (3.77**)</b>			<b>.25 (7.77**)</b>			<b>.32 (11.14**)</b>			<b>.24 (7.29**)</b>		
$\Delta$ R <sup>2</sup> (FA)	.02 (1.77)			<b>.15 (13.79**)</b>			<b>.21 (21.36**)</b>			<b>.22 (20.26**)</b>			
<b>Accounting Students</b>													
<i>Variables &amp; Scenarios</i>		<i>Scenario 1</i>			<i>Scenario 2</i>			<i>Scenario 3</i>			<i>Scenario 4</i>		
		B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$
<b>Model one</b>	Constant	1.12	.74		1.14	.81		.44	.88		.90	.85	
	Idealism	.83	.17	<b>.39**</b>	1.03	.18	<b>.43**</b>	.64	.20	<b>.26*</b>	.41	.19	<b>.18*</b>
	Relativism	-.14	.15	-.08	-.40	.16	<b>-.19*</b>	.16	.18	.08	.22	.17	.11
	R <sup>2</sup> (F)	<b>.15 (12.44**)</b>			<b>.18 (16.12**)</b>			<b>.09 (6.80*)</b>			<b>.05 (4.04*)</b>		
<b>Model two</b>	Constant	0.78	.83		1.02	.92		-1.0			.09	.87	
	Idealism	.81	.17	<b>.39**</b>	.99	.19	<b>.42**</b>	.46	.19	<b>.19*</b>	.24	.19	.11
	Relativism	-.12	.15	-.07	-.37	.17	<b>-.17*</b>	.22	.17	.10	.22	.17	.11
	MC	.09	.08	.09	-.05	.08	-.05	.14	.09	.12	-.02	.09	-.02
	SC	-.03	.06	-.04	-.04	.08	-.03	.16	.08	.15	.16	.09	.14
	TI	.04	.07	.05	.13	.08	.12	.27	.09	<b>.26*</b>	.31	.09	<b>.29*</b>
	R <sup>2</sup> (F)	<b>.16 (5.41**)</b>			<b>.20 (6.95**)</b>			<b>.22 (8.26**)</b>			<b>.16 (5.61**)</b>		
$\Delta$ R <sup>2</sup> (FA)	.01 (0.76)			.02 (0.87)			<b>.14 (8.54**)</b>			<b>.11 (6.36**)</b>			

LC: Law and codes; CI: Company interest; SR: social responsibility; PM: Personal morality; MC: Magnitude of consequence; SC: Social consensus; TI: Temporal immediacy; \*p < .05; \*\*p < .001

#### **4.4.2.5.1.1 The Relationship between Personal Moral Philosophy and Ethical Recognition**

The relationship between personal moral philosophy and ethical recognition was examined by testing two hypotheses. Based in the literature review presented in chapter two (see section 2.3.1.5), it was hypothesized that while moral idealism will have a positive relationship with ethical recognition, moral relativism will have a negative relationship with ethical recognition. Tables 4.9 showed the statistical results of hierarchical linear multiple regression of moral personal philosophy (idealism and relativism).

##### ***H8a1: Moral Idealism Has a Significant Positive Relationship with Ethical Recognition***

For management accountants, the values of the standardized regression coefficient  $\beta$  depicted in Table 4.10 indicate that moral idealism had a positive significant relationship with ethical recognition in scenario 1 [ $\beta = .28, p < .001$ ], scenario 2 [ $\beta = .21, p < .05$ ], and scenario 3 [ $\beta = .15, p < .05$ ].

For accounting students, the  $\beta$  provided by Table 4.10 showed that moral idealism had a positive significant association with ethical recognition in scenario 1 [ $\beta = .39, p < .001$ ], scenario 2 [ $\beta = .42, p < .001$ ], and scenario 3 [ $\beta = .19, p < .05$ ]. Depending on the above results, it can be concluded that moral idealism had a positive significant relationship with ethical recognition. Therefore, ***H8a1*** was accepted for both samples.

##### ***H8a2: Moral Relativism Has a Significant Negative Relationship with Ethical Recognition***

For management accountants, as it was expected, the values of the standardized regression coefficient  $\beta$  shown in Table 4.10 revealed that moral relativism had a negative significant relationship with ethical recognition in scenario 1 [ $\beta = -.15, p < .05$ ] and scenario 3 [ $\beta = -.17, p < .05$ ]. For accounting students, the  $\beta$ -values depicted by Table 4.10 indicate that moral relativism had a negative significant relationship with ethical recognition but only in scenario 2, [ $\beta = -.17, p < .05$ ].

Depending on the above results, it can be concluded that moral relativism had partial negative significant relationship with ethical recognition for management accounting and very limited results for accounting students. Therefore, *H8a2* was partially supported for accountants, whereas there was very limited support for it regarding students.

#### **4.4.2.5.1.2 The Relationship between Ethical Climate Types and Ethical Recognition**

Past research has concluded that ethical climate has a positive relationship with ethical decision making process. Therefore, it was expected that ethical climate types within Libyan companies will have a significant positive relationship with ethical recognition. Table 4.10 showed the statistical results of multiple regression analysis of ethical climate types.

#### ***H9a: Ethical Climate Types Have a Significant Positive Relationship with Ethical Recognition***

Table 4.10 shows the values of the standardized regression coefficient  $\beta$  of the four types of ethical climate within Libyan companies. There were only very few significant results related to ethical climate types; law and professional codes had only one positive significant relationship in scenario 3 [ $\beta = .21, p < .05$ ], social responsibility had similar results in scenario 1 [ $\beta = .18, p < .05$ ], and finally personal morality had negative results in scenario 1 [ $\beta = -.18, p < .05$ ]. Thus, there was very limited support for *H9a*.

#### **4.4.2.5.1.3 The Relationship between Moral Intensity Dimensions with Ethical Recognition**

Three hypotheses were devoted to examine the relationship between moral intensity three dimensions with ethical recognition. A large number of previous empirical studies (see chapter two, section 2.3.3) revealed positive relationship between magnitude of consequences and social consensus and ethical recognition, whereas temporal immediacy has been found to have limited relationship or positive impact. Therefore, it was expected that all the three examined dimensions will have positive significant relationship with ethical recognition.

***H10a1: Magnitude of Consequences Has a Significant Positive Relationship with Ethical Recognition***

A table 4.10 illustrates the results of both Libyan accountants and students. For accountants, the values of the standardized regression coefficient  $\beta$  of magnitude of consequences indicated a significant positive relationship with ethical recognition in scenario 2 [ $\beta = .27, p < .001$ ] and scenario 3 [ $\beta = .17, p < .05$ ]. For students no statistical significant relationship was found. These results provide only partial support for ***H10a1*** for accountants. Thus, ***H10a1*** was partially supported for accountants and rejected for students.

***H10a2: Social Consensus Has a Significant Positive Relationship with Ethical Recognition***

From table 4.10, it can be seen that the values of the standardized regression coefficient  $\beta$  of social consensus showed positive significant relationship between social consensus and ethical recognition of management accountant in scenario 3 [ $\beta = .19, p < .05$ ] and scenario 4 [ $\beta = .36, p < .001$ ] and no significant results regarding the ethical recognition of accounting students. Therefore, ***H10a2*** was partially supported for accountants and rejected for students.

***H10a3: Temporal Immediacy Has a Significant Positive Relationship with Ethical Recognition***

The values of the standardized regression coefficient  $\beta$  of temporal immediacy shown in Table 4.10 revealed a significant positive relationship between temporal immediacy and ethical recognition for Libyan management accountants in the four scenarios, scenarios 1 and 2 [ $\beta = .16, p < .05$ ], scenario 3 [ $\beta = .25, p < .05$ ], and scenario 4 [ $\beta = .24, p < .05$ ]; for accounting students, the positive significant relationships were related to scenarios 3 [ $\beta = .26, p < .05$ ] and scenario 4 [ $\beta = .29, p < .05$ ]. Based on these results, ***H10a3*** was accepted for accountants and partially supported for students.

#### **4.4.2.5.2 Ethical judgment**

Table 4.11 shows the three models of hierarchical linear multiple regression of Libyan management accountants. This Table indicates that personal moral philosophy (idealism and relativism) explained 3% to 11% of the variation in ethical judgment in the first three scenarios, the model was significant for scenario 1 and 3 ( $p < .05$ ) and scenario 2 ( $p < .001$ ). By including ethical climate types (model 2), these proportions enhanced to become ranging from 6% to 12% also in the same scenarios, the model also was significant in the three scenarios. Nevertheless,  $\Delta R^2$  showed that only scenario 1 was significantly increased ( $p < .05$ ). Adding moral intensity dimensions led to statistical significant improvement in all scenarios, the model was more significant ( $p < .001$  for all scenarios).  $\Delta R^2$  for the new model (model 3) indicated a significant increase for all scenarios ( $p < .001$ ).

Regarding accounting students, the model of multiple regression consists of two models starting with individual variables (model 1) and then adding moral intensity dimensions (model 2). As depicted in Table 4.11, model 1 showed that personal moral philosophy (idealism and relativism) accounts for 10% of the variation in ethical judgment of accounting students in scenarios 1 and 2, the model was significant ( $p < .001$ ). By adding moral intensity dimensions (model 2), the proportions were improved, they explained 11% to 19% of the variation in ethical judgment of accounting students, and the model was more significant. The improvements ( $\Delta R^2$ ) were statistically significant in three scenarios (p-values of scenarios 1 and 3  $< .05$  and p-value of scenario 4  $< .001$ ).

##### **4.4.2.5.2.1 The Relationship between Personal Moral Philosophy and Ethical Judgment**

The relationship between personal moral philosophy and ethical judgment was examined by testing two hypotheses. Based on previous empirical studies results shown in chapter two, section 2.3.1.5, it was expected that while moral idealism will have a positive significant relationship with ethical judgment, moral relativism will have a negative significant relationship with ethical judgment. Tables 4.11 provided the results regarding

the relationship between personal moral philosophy and ethical judgment of Libyan management accountants and accounting students.

**Table 4.11 Hierarchical Regression Results of Ethical Judgment Management Accountants**

Management Accountants													
Variables & Scenarios		Scenario 1			Scenario 2			Scenario 3			Scenario 4		
		B	St.E	β	B	St.E	β	B	St.E	β	B	St.E	β
Model one	Constant	2.73	.52		2.17	.55		2.46	.62		2.74	.63	
	Idealism	.41	.12	.24*	.62	.13	.32**	.37	.14	.18*	.22	.14	.11
	Relativism	-.04	.08	-.04	-.21	.09	-.16*	-.19	.10	-.09	-.02	.10	-.01
	R <sup>2</sup> (F)	.05 (6.08*)			.11 (13.37**)			.03 (3.66*)			.01 (1.20)		
Model two	Constant	2.85	.54		2.13	.59		2.12	.65		2.43	.67	
	Idealism	.41	.12	.24*	.62	.13	.32**	.32	.14	.15*	.17	.15	.08
	Relativism	-.04	.08	-.03	-.22	.09	-.17*	-.13	.10	-.10	-.02	.10	-.02
	LC	.09	.09	.09	.08	.10	.07	.15	.11	.12	.25	.11	.19*
	CI	.04	.09	.04	.04	.10	.04	.01	.11	.01	-.11	.11	-.10
	SR	.03	.10	.03	-.03	.11	-.03	.11	.12	.09	.04	.12	.03
	PM	-.24	.07	-.25*	-.09	.08	.08	-.11	.08	-.10	-.06	.09	-.05
	R <sup>2</sup> (F)	.11 (4.27**)			.12 (4.76**)			.06 (2.35*)			.04 (1.45)		
	ΔR <sup>2</sup> (FΔ)	.05 (3.23*)			.01 (0.51)			.03 (1.67)			.03 (1.58)		
Model three	Constant	2.49	.56		.88	.61		.48	.63		.43	.58	
	Idealism	.40	.12	.23*	.53	.12	.28**	.24	.13	.12	.04	.12	.02
	Relativism	-.06	.08	-.05	-.12	.08	-.10	-.05	.09	-.03	.03	.08	.02
	LC	.08	.09	.07	.01	.09	.01	.11	.10	.09	.19	.09	.15*
	CI	.01	.09	.01	-.01	.09	-.01	-.01	.10	-.01	-.11	.09	-.10
	SR	.02	.10	.02	.01	.10	.01	.02	.11	.02	.06	.10	.05
	PM	-.22	.07	-.24*	-.05	.07	-.05	-.01	.08	-.01	-.05	.07	-.05
	MC	-.01	.06	-.01	.15	.07	.17*	.08	.08	.08	.26	.07	.26**
	SC	.04	.05	.05	.11	.05	.13*	.32	.06	.33**	.27	.06	.28**
	TI	.16	.05	.21*	.15	.07	.17*	.18	.07	.19*	.22	.07	.22*
R <sup>2</sup> (F)	.15 (4.16**)			.22 (6.63**)			.26 (8.16**)			.38 (14.25**)			
ΔR <sup>2</sup> (FΔ)	.04 (3.64*)			.10 (9.28**)			.20 (18.63**)			.34 (38.33**)			
Accounting Students													
Variables & Scenarios		Scenario 1			Scenario 2			Scenario 3			Scenario 4		
		B	St.E	β	B	St.E	β	B	St.E	β	B	St.E	β
Model one	Constant	2.57	.50		2.02	.85		2.23	.88		1.46	.87	
	Idealism	.40	.11	.29**	.76	.19	.32**	.31	.20	.13	.42	.20	.18*
	Relativism	.09	.10	.07	-.33	.17	-.16*	.03	.18	.01	.03	.18	.01
	R <sup>2</sup> (F)	.10 (8.07**)			.10 (8.18**)			.02 (1.4)			.03 (2.50)		
Model two	Constant	2.80	.54		1.61	.97		1.43	.94		.16	.86	
	Idealism	.39	.11	.28*	.76	.20	.32**	.16	.20	.07	.23	.19	.10
	Relativism	.08	.10	.06	-.32	.18	-.15	.05	.18	.03	.07	.16	.03
	MC	.09	.06	.14	.06	.09	.06	.02	.09	.20	.12	.09	.11
	SC	-.11	.04	-.20*	.08	.08	.07	.13	.09	.13	.12	.09	.11
	TI	-.04	.05	-.06	-.02	.09	-.02	.25	.09	.24*	.33	.09	.31**
	R <sup>2</sup> (F)	.15 (5.30**)			.11 (3.55*)			.11 (3.51*)			.19 (6.92**)		
ΔR <sup>2</sup> (FΔ)	.06 (3.21*)			.01 (0.51)			.09 (4.83*)			.16 (9.57**)			

LC: Law and codes; CI: Company interest; SR: social responsibility; PM: Personal morality; MC: Magnitude of consequence; SC: Social consensus; TI: Temporal immediacy; \*p < .05; \*\*p < .001

***H8b1: Moral Idealism Has a Significant Positive Relationship with Ethical Judgment***

For management accountants, the values of the standardized regression coefficient  $\beta$  depicted in Table 4.11 indicate that moral idealism had a positive significant relationship with ethical judgment in scenario 1 [ $\beta = .23$ ,  $p < .05$ ] and scenario 2 [ $\beta = .28$ ,  $p < .001$ ]. With respect to accounting students'  $\beta$ -values provided by Table 4.11 revealed that moral idealism had a positive significant relationship with ethical judgment in scenarios in scenario 1 [ $\beta = .28$ ,  $p < .05$ ] and scenario 2 [ $\beta = .32$ ,  $p < .05$ ]. Since the above results for both accountants and students were statistically significant in scenarios 1 and 2, ***H8b1*** was partially supported for both samples.

***H8b2: Moral Relativism Has a Significant Negative Relationship with Ethical Judgment***

The values of the standardized regression coefficient  $\beta$  depicted in Table 4.11 indicated no significant relationship between moral relativism and ethical judgment for both Libyan management accountants and accounting students. Therefore, ***H8b2*** was rejected.

**4.4.2.5.2.2 The Relationship between Ethical Climate Types and Ethical Judgment**

Based on the literature of business ethics, it was expected that ethical climate types within Libyan companies will have a positive significant relationship with ethical judgment. Table 4.11 shows the statistical results of multiple regression analysis of ethical climate types.

***H9b: Ethical Climate Types Have a Significant Positive Relationship with Ethical Judgment***

As depicted in Table 4.11, the values of the standardized regression coefficient  $\beta$  of the four types of ethical climate within Libyan companies revealed very limited results. Only two significant results were found, one related to law and code in scenario 4 [ $\beta = .15$ ,  $p < .05$ ] and the other related to personal morality in scenario 1 [ $\beta = -.24$ ,  $p < .05$ ]. Thus, there was very limited support for ***H9b***.

#### 4.4.2.5.2.3 The Relationship between Moral Intensity Dimensions and Ethical Judgment

The relationship between moral intensity dimensions and ethical judgment was examined through setting three hypotheses. Similar to ethical recognition, much research showed that the three moral intensity dimensions examined here have statistical significant positive relationship with ethical judgment (see chapter two, section 2.3.3). Accordingly, it was hypothesized that the three dimensions will have a positive significant relationship with ethical judgment.

##### ***H10b1: Magnitude of Consequences Has a Significant positive Relationship with Ethical Judgment***

Table 4.11 shows the values of the standardized regression coefficient  $\beta$  of magnitude of consequences of both accountants and students. The results were only statistically significant for management accountants in scenario 2 [ $\beta = .17, p < .05$ ] and scenario 4 [ $\beta = .26, p < .001$ ]. Therefore, ***H10b1*** was partially supported for accountants and rejected for students.

##### ***H10b2: Social Consensus Has a Significant Positive Relationship with Ethical Judgment***

From table 4.11, it can be seen that the values of the standardized regression coefficient  $\beta$  of social consensus showed significant positive relationship with ethical judgment for management accountants in scenario 2 [ $\beta = .13, p < .05$ ], scenario 3 [ $\beta = .33, p < .001$ ], and scenario 4 [ $\beta = .28, p < .001$ ]. For accounting students, there was only one negative significant relationship in scenario 1 [ $\beta = -.20, p < .05$ ]. Therefore, ***H10b2*** was accepted for accountants and rejected for accounting students.

##### ***H10b3: Temporal Immediacy Has a Significant Positive Relationship with Ethical Judgment***

The values of the standardized regression coefficient  $\beta$  of temporal immediacy shown in Table 4.11 indicate a positive significant relationship between temporal immediacy and ethical judgment in all scenarios for Libyan management accountants, scenario 1 [ $\beta = .21, p < .05$ ], scenario 2 [ $\beta = .17, p < .05$ ], scenario 3 [ $\beta = .19, p < .05$ ], and scenario 4 [ $\beta = .22,$

$p < .05$ ]; for accounting students, there were positive significant results in scenario 3 [ $\beta = .24, p < .05$ ] and scenario 4 [ $\beta = .31, p < .001$ ]. Therefore, *H10b3* was accepted for management accountants and partially supported for accounting students.

#### **4.4.2.5.3 Ethical Intention**

The three models depicted in Table 4.12 indicate the impact of personal moral philosophy (idealism and relativism), ethical climate types, and moral intensity dimensions on ethical intention of Libyan management accountants. It can be seen that personal moral philosophy explained 4% to 10% of the variation in ethical intention in all scenarios, the model was significant for all scenarios ( $p < .001$  for scenario 1 and  $p < .05$  for the other three scenarios). When ethical climate types were added (model 2), the proportions were improved and explained the variation of 8% to 14% in management accountants' ethical intention in the first three scenarios, the model for these scenarios was still significant ( $p < .001$  in scenario 1 and  $< .05$  in scenarios 2 and 3. Only the increase in scenario 3 was significant ( $p < .05$ ). By adding the dimensions of moral intensity enhanced the model of multiple regression (model 3), the three variables together account for 21% to 40% of the variation of ethical intention. These increases ( $\Delta R^2$ ) were statistically significant in all scenarios ( $p < .05$  in scenario 1 and  $< .001$  in scenarios 2, 3 and 4). Additionally, Table 4.12 indicates that while adding ethical climate types enhanced slightly the ability to predict the ethical intention of management accountants, including the dimensions of moral intensity improved largely the ability to predict the ethical intention of management accountants, the model was more significant ( $p < .001$  in scenarios 2, 3, and 4 and  $< .05$  in scenario 1)

With respect to accounting students, model 1 as shown in Table 4.12 revealed that personal moral philosophy (idealism and relativism) explained little variation in their ethical intention; the model was significant in only scenario 2. When moral intensity dimensions were added, they largely explained 20% to 25% of the variation in the ethical intention of students; the model was more significant for all scenarios ( $p < .001$ ). The increases ( $\Delta R^2$ ) were statistically significant in all scenarios ( $p < .001$ ).

**Table 4.12 Hierarchical Regression Results of Ethical Intention**

<b>Management Accountants</b>													
<i>Variables &amp; Scenarios</i>		<i>Scenario 1</i>			<i>Scenario 2</i>			<i>Scenario 3</i>			<i>Scenario 4</i>		
		B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$
<b>Model one</b>	Constant	1.97	.60		4.16	.75		2.27	.69		4.56	.70	
	Idealism	.65	.14	<b>.32**</b>	.21	.17	.08	.40	.16	<b>.17*</b>	-.07	.16	-.03
	Relativism	-.23	.09	<b>-.16*</b>	-.43	.11	<b>-.25**</b>	-.19	.11	-.12	-.28	.11	<b>-.18*</b>
	R <sup>2</sup> (F)	<b>.10 (12.54**)</b>			<b>.06 (7.15*)</b>			<b>.04 (4.04*)</b>			<b>.04 (3.93*)</b>		
<b>Model two</b>	Constant	1.95	.63		.79			1.77	.72		4.50	.74	
	Idealism	.64	.14	<b>.31**</b>	.17	.17	.07	.34	.16	<b>.15*</b>	-.08	.16	-.04
	Relativism	-.23	.10	<b>-.16*</b>	-.46	.12	<b>-.27**</b>	-.22	.11	<b>-.14*</b>	-.29	.11	<b>-.18*</b>
	LC	-.02	.11	-.02	.17	.13	.11	.19	.12	.13	.01	.12	.01
	CI	.09	.12	.08	.11	.13	.08	.10	.12	.08	.08	.12	.06
	SR	.14	.12	.11	-.03	.14	-.02	.07	.13	.05	.08	.13	.06
	PM	-.21	.08	<b>-.18*</b>	-.09	.10	-.07	-.13	.09	-.10	-.14	.09	-.11
	R <sup>2</sup> (F)	<b>.14 (5.62**)</b>			<b>.08 (3.20*)</b>			<b>.08 (3.01*)</b>			<b>.05 (1.85)</b>		
$\Delta$ R <sup>2</sup> (F $\Delta$ )	<b>.03 (2.04)</b>			<b>.02 (1.20)</b>			<b>.04 (2.43*)</b>			<b>.01 (0.81)</b>			
<b>Model three</b>	Constant	1.25	.65		1.38	.76		-.64	.65		2.05	.65	
	Idealism	.60	.13	<b>.29**</b>	.01	.15	.01	.22	.13	.10	-.23	.13	-.10
	Relativism	-.23	.09	<b>-.16*</b>	-.28	.11	<b>-.16*</b>	-.11	.09	-.07	-.21	.09	<b>-.14*</b>
	LC	-.06	.10	-.05	.03	.12	.02	.15	.10	.11	-.04	.10	-.03
	CI	.09	.11	-.07	.02	.12	.01	.07	.10	.06	.08	.10	-.06
	SR	.11	.11	-.09	.06	.13	.04	-.01	.11	-.01	.11	.11	-.08
	PM	-.17	.08	<b>-.15*</b>	-.02	.09	-.02	.02	.08	.02	-.12	.08	-.09
	MC	.13	.07	<b>.14*</b>	.29	.08	<b>.25*</b>	.33	.08	<b>.31**</b>	.27	.08	<b>.24*</b>
	SC	.02	.05	-.03	.36	.07	<b>.33**</b>	.23	.06	<b>.22**</b>	.23	.06	<b>.21**</b>
	TI	.16	.06	<b>.17*</b>	.16	.08	.13	.21	.08	<b>.20*</b>	.35	.08	<b>.31**</b>
	R <sup>2</sup> (F)	<b>.21 (5.98**)</b>			<b>.30 (9.98**)</b>			<b>.37 (13.80**)</b>			<b>.40 (15.94**)</b>		
$\Delta$ R <sup>2</sup> (F $\Delta$ )	<b>.07 (5.92*)</b>			<b>.22 (21.68**)</b>			<b>.29 (32.72**)</b>			<b>.36 (42.02**)</b>			
<b>Accounting Students</b>													
<i>Variables &amp; Scenarios</i>		<i>Scenario 1</i>			<i>Scenario 2</i>			<i>Scenario 3</i>			<i>Scenario 4</i>		
		B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$	B	St.E	$\beta$
<b>Model one</b>	Constant	4.23	.79		3.45	1.02		2.55	.93		1.64	.86	
	Idealism	.24	.18	.12	.51	.23	<b>.18*</b>	.45	.21	<b>.18*</b>	.47	.20	<b>.20*</b>
	Relativism	-.31	.16	<b>-.17*</b>	-.56	.21	<b>-.23*</b>	-.32	.19	-.14	-.07	.17	-.04
	R <sup>2</sup> (F)	<b>.03 (2.30)</b>			<b>.06 (4.83*)</b>			<b>.04 (2.94)</b>			<b>.04 (2.83)</b>		
<b>Model two</b>	Constant	3.76	.79		.95	1.06		.94	.94		.05	.83	
	Idealism	.16	.16	.08	.32	.22	.11	.26	.20	.10	.28	.18	.12
	Relativism	-.27	.14	-.14	-.36	.19	<b>-.15</b>	-.25	.18	-.11	-.03	.16	-.02
	MC	.21	.08	<b>.21*</b>	.29	.10	<b>.19*</b>	.16	.09	.14	.16	.09	.15
	SC	-.25	.06	<b>-.31**</b>	.13	.09	.11	.15	.09	.14	.19	.08	<b>.17*</b>
	TI	.19	.07	<b>.22*</b>	.37	.10	<b>.30**</b>	.32	.09	<b>.29*</b>	.32	.09	<b>.30**</b>
	R <sup>2</sup> (F)	<b>.22 (7.96**)</b>			<b>.22 (8.15**)</b>			<b>.20 (7.26**)</b>			<b>.25 (9.43**)</b>		
$\Delta$ R <sup>2</sup> (F $\Delta$ )	<b>.19 (11.40**)</b>			<b>.16 (9.78**)</b>			<b>.17 (9.79**)</b>			<b>.21 (13.35**)</b>			

LC: Law and codes; CI: Company interest; SR: social responsibility; PM: Personal morality; MC: Magnitude of consequence; SC: Social consensus; TI: Temporal immediacy; \*p < .05; \*\*p < .001

#### **4.4.2.5.3.1 The Relationship between Personal Moral Philosophy and Ethical Intention**

Two hypotheses were set to investigate the relationship between personal moral philosophy and the ethical intention of Libyan management accountant and accounting students.

Similar to the first two stages of ethical decision making, most previous empirical studies (see Chapter two, section 2.3.1.5) indicate that moral idealism has a positive relationship with ethical intention, whereas moral relativism has a negative relationship with ethical intention. Table 4.12 shows the statistical results of multiple regression analysis of personal moral philosophy (idealism and relativism).

##### ***H8c1: Moral Idealism Has a Significant Positive Relationship with Ethical Intention***

The values of the standardized regression coefficient  $\beta$  shown in Table 4.12 indicates that moral idealism had a positive significant relationship with ethical intention in scenario 1 [ $\beta = .29, p < .001$ ] for management accountants and no significant results for accounting students. Therefore, there was very limited support for ***H8c1*** for management accountants and no support for accounting students.

##### ***H8c2: Moral Relativism Has a Significant Negative Relationship with Ethical Intention***

The values of the standardized regression coefficient  $\beta$  depicted in Table 4.12 show, as expected, a negative significant relationship between moral relativism and ethical intention in scenarios 1 [ $\beta = -.16, p < .05$ ], 2 [ $\beta = -.16, p < .05$ ], and 4 [ $\beta = -.14, p < .05$ ] for accountants and scenario 2 [ $\beta = -.15, p < .05$ ] for students. Therefore, ***H8c2*** was supported for management accountants and very limited supported for accounting students.

#### **4.4.2.5.3.2 The Relationship between Ethical Climate Types and Ethical Intention**

Based on the literature of business ethics related to the impact of ethical climate on ethical decision making presented in chapter two, it was expected that ethical climate

types in Libyan companies will have a positive relationship with ethical intention of Libyan accountants. Table 4.12 provides the statistical results of multiple regression analysis of ethical climate types.

***H9c: Ethical Climate Types Have a Significant Positive Relationship with Ethical Intention***

The results shown in Table 4.12 depicted the values of the standardized regression coefficient  $\beta$  of the four types of ethical climate within Libyan companies. Only one negative significant result was found in relation to the relationship between ethical climate types and ethical intention; this result was related to personal morality (type 4) in scenario 1 [ $\beta = -.15, p < .05$ ]. Therefore ***H9c*** was rejected.

**4.4.2.5.3.3 The Relationship between Moral Intensity Dimensions and Ethical Intention**

Three hypotheses were set to test the relationship of moral intensity dimensions with ethical intention of Libyan accountants and students. Similar to the results related to the relationship of moral intensity dimensions with both ethical recognition and ethical judgment, past research indicates a positive significant relationship with ethical intention. Based on this, it was expected to find out a positive significant relationship between the dimensions of moral intensity and ethical intention.

***H10c1: Magnitude of Consequences Has a Significant positive Relationship with Ethical Intention***

From Table 4.12, it can be seen that the values of the standardized regression coefficient  $\beta$  of magnitude of consequences indicated a positive significant relationship with ethical intention of management accountants in the four scenarios, scenario 1 [ $\beta = .14, p < .05$ ], scenario 2 [ $\beta = .25, p < .05$ ], scenario 3 [ $\beta = .31, p < .001$ ], and scenario 4 [ $\beta = .24, p < .05$ ]; for accountants there were positive significant relationships in scenarios 1 [ $\beta = .21, p < .05$ ] and scenario 2 [ $\beta = .19, p < .05$ ]. Thus, ***H10c1*** was accepted for management accountant and partially supported for accounting students.

### ***H10c2: Social Consensus Has a Significant Positive Relationship with Ethical Intention***

Similar to the results of the relationship of magnitude of consequences with ethical intention, the results shown in Table 4.12 indicate that social consensus had a positive significant relationship with ethical intention for management accountants in scenarios 2 [ $\beta = .33, p < .001$ ], 3 [ $\beta = .22, p < .001$ ], and 4 [ $\beta = .21, p < .001$ ]. For accounting students, social consensus had a negative significant relationship with ethical intention in scenario 1 [ $\beta = -.31, p < .001$ ] and a positive significant relationship in scenario 4 [ $\beta = .17, p < .05$ ]. Therefore, ***H10c2*** was supported for accountants and there was very limited support for students supported.

### ***H10c3: Temporal Immediacy Has a Significant Positive Relationship with Ethical Intention***

The values of the standardized regression coefficient  $\beta$  of temporal immediacy depicted by Table 4.9 indicated that temporal immediacy had a positive significant relationship with ethical intention for accountants in scenario 1 [ $\beta = .17, p < .05$ ], scenario 3 [ $\beta = .20, p < .05$ ], and scenario 4 [ $\beta = .31, p < .001$ ]; for accounting students, there were positive relationships in the four scenarios, scenario 1 [ $\beta = .22, p < .05$ ], scenario 2 [ $\beta = .30, p < .001$ ], scenario 3 [ $\beta = .29, p < .05$ ], and scenario 4 [ $\beta = .30, p < .001$ ]. Thus, it can be concluded that ***H10c3*** was supported for both groups.

## **4.5 Summary**

This chapter presented the results of the impact of individual factors, organizational factors, and moral intensity dimensions on ethical decision making process. Ten hypotheses were mainly set and tested by using one-way between-groups analyses of variance (ANOVA), independent samples t-test, and hierarchical linear multiple regression analysis. Table 4.13 provides a summary of the hypotheses results which show that the majority of moral intensity dimensions hypotheses were accepted. Generally speaking, the results indicated that moral intensity dimensions (magnitude of consequences, social consensus, and temporal immediacy) and personal moral idealism were the strongest predictors of ethical decision making stages among all variables examined in this study. However, these results generally show only weak to moderate

relationships with ethical decision making stages. Moreover, age, gender, educational level, and moral relativism had limited relationships with ethical decision making process. The next chapter are devoted to discuss in depth and interpret these results.

**Table 4.13 Hypotheses Summary**

Variables & EDM stages	Ethical Recognition		Ethical Judgment		Ethical Intention	
	Accountants	Students	Accountants	Students	Accountants	Students
<b>Individual Variables</b>						
Age	<b>PS</b>	FR	FR	FR	FR	<b>PS</b>
Gender	<b>PS</b>	FR	FR	FR	FR	FR
Educational Level	FR	-	FR	-	<b>PS</b>	-
Work Experience	<b>LS</b>	-	FR	-	FR	-
Idealism	<b>FS</b>	<b>FS</b>	<b>PS</b>	<b>PS</b>	<b>LS</b>	FR
Relativism	<b>PS</b>	<b>LS</b>	FR	FR	<b>FS</b>	<b>LS</b>
<b>Organizational Variables</b>						
size	FR	-	<b>LS</b>	-	<b>LS</b>	-
Type of Industry	FR	-	FR	-	FR	-
Code of Ethics	FR	-	FR	-	FR	-
Ethical Climate	<b>LS</b>	-	<b>LS</b>	-	FR	-
<b>Moral intensity Dimensions</b>						
Magnitude of Consequences	<b>PS</b>	FR	<b>PS</b>	FR	<b>FS</b>	<b>PS</b>
Social Consensus	<b>PS</b>	FR	<b>FS</b>	FR	<b>FS</b>	<b>PS</b>
Temporal Immediacy	<b>FS</b>	<b>PS</b>	<b>FS</b>	<b>PS</b>	<b>FS</b>	<b>FS</b>

FR: Fully rejected; LS: Limited support; PS: Partially supported; FS: Fully supported

## **Chapter Five**

### **Discussion and Conclusion**

#### **5.1 Introduction**

The purpose of this study was to gain a better understanding of the association of individual variables, organizational variables, and moral intensity dimensions with ethical decision making process within the field of accounting, particularly management accountants and accounting students in Libya. The study set out four specific aims:

1. To identify what types of ethical issues are faced by management accountants within Libyan companies;
2. To determine the relationship between individual variables (age, gender, educational level, work experience, and personal moral philosophy) and the decision making process of Libyan management accountants and accounting students;
3. To determine the relationship between organizational variables (codes of ethics, ethical climate, organizational size, and industry type) and the decision making process of Libyan management accountants; and
4. To determine the relationship between moral intensity dimensions (magnitude of consequences, social consensus, and temporal immediacy) and the decision making of Libyan management accountants and accounting students.

The aim of this chapter is to discuss and interpret the results concerning these aims and to identify and discuss the study's contribution to knowledge. The chapter is organized in five sections. The first section is devoted to discussing the results related to the ethical issues that were recognized by Libyan management accountants as frequently facing them at their workplace. The second section discusses the results concerning the association of individual variables, the impact of organizational variables, and the

influence of moral intensity dimensions on ethical decision making process of Libyan management accountants and accounting students. Section three is concerned with the contribution this study has made. Section four discusses some of the limitations of this study and the opportunities for future research. The conclusion is presented in the last section.

## **5.1 Discussion of Results**

In an attempt to achieve the aims of the study, an extensive review of the relevant theoretical and empirical literature was conducted (see Chapters One and Two). Several variables have been hypothesized, and some found, to have different levels of relationship with the process of ethical decision making. Along with identifying the relationship between the stages of ethical decision making, the literature of ethics has come to a conclusion that there are several factors that can be grouped into three main categories of variables (individual variables, organizational variables, moral intensity dimensions) which have different type and level of relationship with the stages of ethical decision making (see Chapter Two). A questionnaire including four scenarios was developed and distributed to participants for data collection to achieve the aims of the study (see Chapter Three). The study used descriptive analysis (means and standard deviation) and advanced statistical techniques (e.g., ANOVA and Hierarchal Multiple Regression) to analyse the data collected (Chapter Four). A summary and discussion of the major results emerging from the analysis in Chapter Four is presented in the following three sections.

### **5.1.1 Ethical Issues within Libyan Management Accounting Environment**

One of the aims of this study was to find out what kind of ethical issues might exist within the Libyan management accounting context. Several ethical issues were presented to the Libyan management accountants to see how important these issues are and to what extent they occur. On average, the presented ethical issues were seen by Libyan

management accountants as important ethical issues. They indicated that some of these issues are quite often found at their workplace. The following issues were highlighted:

1. Unfair distribution of the company's resources and budgets between individuals and groups within departments, divisions, and subsidiaries.
2. Injustice in distributing the company's resources and budgets between projects and programmes.
3. The use of power to distort or prevent open debate and discussion regarding company policies and decisions.
4. Misuse of equipment and computer information systems.
5. Managers' use of discrimination and nepotism when dealing with accountants.

In their qualitative and quantitative study, Fisher & Lovell (2000) reported several common ethical issues (or ethical problems as they sometimes call them) that face CIMA members at their workplace. They classified these issues into eight categories (see Chapter One, section 1.3). In general, the results indicate that the ethical issues within Libyan companies do not differ from those which have been found in the UK. For example, the first two points shown above are similar to ethical issues reported and classified by Fisher and Lovell under the distributive justice category. Also, issues related to the use of power within the company to gain personal benefit relate to the fifth category of Fisher and Lovell classification (i.e. bullying). Possible explanation of these issues may be because management accountants perform similar tasks within their organizations regardless of the country they live in, with similar issues emerging.

Using discrimination and nepotism, however, is an additional issue reported by the Libyan management accountants. This issue was not reported by Fisher and Lovell study. As mentioned earlier in Chapter One that family, clan, and tribe play a significant role in the Libyan society's life and individuals' relationships with each other. In fact, this structure, which is part of the Islamic culture and Arabic tradition, can be considered a very good thing. However, these relationships and family connections can play a more important role in many decisions regarding business and career promotion than practical

experience or academic qualification. Thus, individuals' ethical behaviours are more likely to be influenced by many members within the society. This can be possible explanation of finding this issue within Libyan companies.

Although Libyan management accountants indicated that most of the remaining presented ethical issues occasionally exist within Libyan companies, they indicated that there are several ethical issues that occur more than occasionally within their companies. These ethical issues are related to:

1. Leaving the company because of having different ethical principles;
2. Manipulating books (e.g., through costing method) for personal interest;
3. Using insider information for personal gain;
4. Accountants recasting information to justify a particular budget allocation; and
5. Accountant deliberately did an illegal or an unethical action and was given a second chance to work for the company.

Similar to Fisher and Lovell's classification, these issues can be categorized into issues related to matter of principle (point 1), rule-bending (point 2), confidentiality (point 3), economy with the truth (points 4), and giving and withdrawing trust (point 5).

Although Libyan management accountants perceived all the presented issues as important ethical issues, they indicated that some of these issues were not frequently occur within Libyan companies. Adjusting information or bending the rules to avoid being bullied by customer, accountants' trustworthiness is suspected by management, adjusting information or bending the rules to avoid being bullied by managers, and disclosing confidential information to people outside the company are examples of these issues. The difference between this result and Fisher and Lovell study may be because of the method used for collecting data by both studies. For example, only some of the interviewees reported these issues. Economic and cultural factors could be another reason; while the UK is a developed and western country that has different aspect of cultural factors, Libya is a developing and an African country shaped by Islamic religion and Arabic traditions.

### **5.1.2 Individual Variables and Ethical Decision Making**

Several individual variables have been hypothesized, and some found, to have a positive or negative significant relationship with ethical decision making stages (see Chapter Two, section 2.3.1). The data of this study indicate that, on average, Libyan management accountants and accounting students recognized the ethical issues within each scenario, judge them as unethical issues, and had no intention to behave unethically regardless of the effect of their individual categories.

The results depicted in Chapter Four indicate that moral idealism was the individual variable that had the strongest positive significant relationship with the three stages of ethical decision making for both management accountants and accounting students. Moral relativism was found to be negatively related (less strongly than idealism) to the ethical decision making of Libyan management accountants and accounting students. These results are consistent with the results in prior studies (e.g., Dubinsky et al., 2004; Sparks & Hunt, 1998; Yetmar & Eastman, 2000). O'Fallon and Butterfield (2005) in their review of the empirical ethical decision making literature came to the conclusion that idealism and relativism revealed fairly consistent results over the last few decades of ethical research. They concluded that idealism was positively related to ethical decision making, while relativism was negatively associated with ethical decision making.

Since Libyan management accountants and accounting students tend to give higher weight to idealistic rather than to relativistic moral philosophies when making their ethical decisions, this indicates that they would be labelled as “absolutists” (high idealism and low relativism) or those who believe that their actions should respect universal moral rules, and produce positive consequences for all those involved (Forsyth, 1992).

Several empirical ethics studies regarding personal moral philosophy conducted in Muslim countries such as Egypt (Attia, Shankarmahesh, & Singhapakdi, 1999; Marta et al., 2003), Jordan and Saudi Arabia (Marta et al., 2004), UAE (Al-khatib, Rawwas, & Swaidan, 2005), Morocco (Oumlil & Balloun, 2008), and Indonesia (Lu & Lu, 2010)

have shown similar results that Muslim people are more idealistic and less relativistic. The Islamic tradition places ethical/social activity ahead of individual profit maximization (Beekun et al., 2008; Rice, 1999). Also, Islam urges strict compliance with the moral dictates of the Quran; therefore, followers of this belief tend to be more idealistic and less relativistic (Abeng, 1997). In Libya, Islam is the major source of the written laws and most of the legal environment surrounding business transactions (Kilani, 1988). Therefore, the strict adherence to the tradition of Islamic religion in Libya would strengthen deontological norms and codes of ethics in the individuals' ethical system.

The influence of Islam could be one possible explanation of that idealism had a positive relationship with ethical decision making stages but actually when this result are compared with the results that have been found in non-Muslim countries (Al-Khatib et al., 1997; Erffmeyer, Keillor, & LeClair, 1999; Van Kenhove, Vermeir, & Verniers, 2001), this explanation might be questioned.

In their study, Sparks and Hunt (1998) also found similar results, especially the negative relationship of moral relativism with ethical decision making stages. They suggested two reasons to explain this relationship. First, the disbelief in moral absolutes might reduce the likelihood of ethical violations standing out among other issues. In a world where all issues are relativistic shades of gray, ethical issues might blend in with everything else. Second, relativists might consider ethical issues in general to be less important than idealists.

These results imply that one approach that could be considered is to enhance the ethical decision making process within Libyan business environment is to encourage idealistic philosophy and discourage relativistic philosophy among Libyan accountants.

In relation to demographic variables, there were only a few significant differences in ethical recognition and ethical intention of management accountants based on their age, gender, and level of education. These differences were found in scenarios 2 (manipulating company books) and 4 (extending questionable expenditure credit). This

provides an indication that these differences might be attributed to the characteristics of these scenarios; this will be discussed later in this chapter.

Age had very limited significant relationship with ethical decision making stages; older management accountants were different from younger accountants only in ethical recognition stage (scenarios 2, 4) and older accounting students were different from younger students in the stage of ethical intention (scenarios 1, 2). Several researchers have investigated the relationship of age with ethical decision making stages and reported few or no significant results too (e.g., Barnett & Valentine, 2004; Cagle & Baucus, 2006; Callan, 1992; Izraeli, 1988; Jones & Gautschi, 1988; Marta et al., 2004; McMahan & Harvey, 2007). Additionally, In their meta-analysis, Borkowski & Ugras (1998) reviewed 35 business ethics studies and found that 29% indicated positive a association between age and ethical decision making, while 20% reported mixed results and the majority 51% showed no significant relationship.

The result of educational level also does not conflict with several empirical studies (e.g., Chan & Leung, 2006; Sparks & Hunt, 1998). Educational level was found to have only significant relationship with the stage of ethical intention of management accountants in scenarios 2 and 4, whereas it had no significant relationship with ethical recognition and ethical judgement.

Moral development might be one reason of no difference based on age and education level. The literature of moral cognitive development indicated that without intervention or an appropriate environment, the majority of adult people will never exceed the conventional level suggested by Kohlberg's model (Steven et al., 2006). Also, past research has demonstrated that accountants tend to be at Stage 4 of moral development or lower (Green & Weber, 1997; Hildebeitel & Jones, 1992; Jones & Hildebeitel, 1995). This might indicate that the results of the study provide only limited support for Kohlberg's theory that age and education have positive relationship with ethical decision making process. One reason may be that younger accountants and students are already mature or, on the other hand, the older accountants and students did not develop, which means that

the accountants did not change much as they aged. It is worth mentioning here that we do not know which stages Libyan participants are at since this study was not interested to investigate their cognitive moral development. Another reason might be that the Libyan accounting education failed to prepare Libyan accountants to deal with such issues. Formal education is regarded as one means of intervention conducive to moral development. Researchers have repeatedly reported that moral development is highly associated with the level of education (Armstrong et al., 2003; Steven et al., 2006), but this presumably depends on the nature of the education. Moreover, it has been argued that if there are ethical failures in accounting practice it is therefore probable that at least some of the responsibility must be laid at the door of the education (Gray et al., 1994). Libyan accounting education (personal experience, over five years), as in many developing countries, tends to be mechanistic and emphasizing rote learning. One criticism for this kind of education is that students thinking may not be critically encouraged and developed and therefore their abilities and skills to recognize several issues including ethical issues may be limited.

The dearth of integrating ethics into accounting education has been debated in recent years in many countries where big names such as Enron, HealthSouth, Tyco, and WorldCom have collapsed as a result of accounting scandals. Integrating ethics into the accounting curriculum has been theoretically and empirically investigated in the literature of business ethics for decades (Awasthi & Staehelin, 1995; Bampton & Cowton, 2002b; Cowton & Cummins, 2003; Hildebeitel & Jones, 1991; Loeb, 1988; Ponemon, 1993; Ponemon & Glazer, 1990).

Researchers have argued that the inclusion of ethics in accounting curricula may help practitioner cope better with real ethical issues they encounter (Ward, Ward, & Deck, 1993). Loeb (1988) suggested several possible goals of including ethics in accounting education. These include: 1) relate accounting education to ethical issues, 2) encourage students to recognize issues in accounting that involve ethical content, 3) develop the abilities to deal with ethical conflicts, and 4) set the stage for a change in ethical

behaviour. In this respect, also Wright (1995) claims that education is the best means of developing good ethical behaviour in the modern business environment. Moreover, Bampton and Maclagan (2005) suggest that ethical thinking is a generic competence, and ideally should be part of every curriculum.

The present results may suggest that integrating courses of ethics in accounting education or revising educational practice in higher education and paying more attention to ethical training within Libyan companies could enhance the process of ethical decision making of Libyan accountants. It should be mentioned here that this issue may not have been yet considered by the Libyan higher education. For example, the Centre for Quality Assurance and Accreditation for Higher Education Institutions in Libya, which was recently established, did not include any type of ethical material in its suggested curricula for Libyan universities (Centre for Quality Assurance and Accreditation for Higher Education Institutions, 2008).

There were no significant differences in the ethical decision making process of Libyan management accountants based on work experience. Several empirical ethics studies have reported similar results (Nill & Schibrowsky, 2005; Roozen et al., 2001). O'Leary & Stewart (2007) found a little evidence of the possible impact of work experience but argued that the direction of the relationship is still ambiguous. In their review, O'Fallon and Butterfield (2005) came to the conclusion that the literature of business ethics in relation to the relationship of work experience with individuals' ethical decision making reports inconsistent results. This result also may indicate that there are other reasons such as religion and cultural factors (e.g., collectivism/collectivism, power distance and uncertainty avoidance) that might relate to the process of ethical decision making. Another possible explanation may be Libyan companies did not pay any attention to the unethical issues, that contributed to the collapse of many organizations around the world, when training their employees.

Regarding the differences in ethical decision making based on gender, female and male accounting students here react similarly to ethically sensitive situations in an accounting

context. The result is consistent with a large number of previous studies of no gender differences in ethical decision making (e.g., Barnett & Valentine, 2004; Conroy & Emerson, 2004; Fleischman & Valentine, 2003). Also, the result supports the study of Sweeney and Costello (2009), which used similar scenarios to examine accounting students' ethical decision making stages and found no significant gender differences in ethical decision making process. Loe et al. (2000) have argued that the impact of using student samples on gender differences in previous studies has been questioned, as students are inexperienced in both life and the workplace. This seems to be true within Libyan accounting universities context as all accounting students participated in this study had no work experience. Therefore, it may be the case here that this inexperience has so significant impact on both genders that it prevents any gender differences emerging.

However, any significant results that are reported tend to be that females are ethically more sensitive than males (see Chapter Two), yet female management accountants were significantly less sensitive than their male counterparts in recognizing the ethical issues in two of the four scenarios – though no significant difference was found in ethical judgment and ethical intention based on gender. The significant result of this study, especially ethical recognition, is only consistent with the study of Marques and Azevedo-Pereira (2008), who found that chartered accountants males were significantly more ethical than chartered accountants females in two of five scenarios. It is argued that ethical gender differences may be attributed to other reasons such as age or years of experience (Dawson, 1997). The majority of female management accountants (14% out of 25%) who participated in this study seem to be younger than their male counterparts; their ages were 35 years or less. Also, there were only 6% out of 25% of them who have 15 years of work experience, whereas 39% out of 75% who were males have 15 years or more of work experience. Future research is needed to see whether these differences are likely based on these variables or not.

### **5.1.3 Organizational Variables and Ethical Decision Making**

The literature of business ethics indicates that individuals' ethical decision making processes can be significantly different depending on the environment the individuals work in. Although several organizational variables such as ethical climate, code of ethics, and level of management have been found to have significant relationship with ethical decision making process (O'Fallon & Butterfield, 2005; Treviño et al., 1998), this seems not to be true within Libyan companies. The results of the four variables investigated here (i.e., ethical climate, code of ethics, industry type, and organizational size) revealed that only very limited significant relationships were found between ethical climate types and the stages of ethical decision making in one scenario (scenario 1). This result does not mean that management accountants did not recognize the ethical issues within each scenario since they, on average, achieved a mean score of 3 or above in the level ethical recognition and ethical judgment and a mean score of 2.9 or less for ethical intention in the four scenarios regardless of the effect of these variables.

There was no difference in ethical decision making stages between those who stated that their companies have a code of ethics and those who stated not. Also, there were no differences based on size or industry type. Several researchers (Cooper & Frank, 1997; Laczniak & Inderrieden, 1987; Verschoor, 2002) have argued that a code of ethics per se may not be sufficient to significantly influence the ethical decision making process. Laczniak and Inderrieden (1987) claim that code of ethics may associate with the process of ethical decision making only when combined with sanctions. Rottig & Heischmidt (2007), who found no significant relationship between the existence of code of ethics and ethical decision making, suggested that code of ethics should be systematically and empirically examined in conjunction with additional determinants of ethical decision making such as ethical training. Thus, along with code of ethics, future research within Libyan context should include other organizational factors such as rewards and sanctions, and ethical training.

An alternative explanation for this result may be related to the other factors such as ownership and type of market (planned market such as in Libya). In state-owned organizations, Agarwal and Malloy (1999) found that organizational variables were not a significant determinant of ethical decisions. They suggested that the organizations may have relatively limited control or influence over their members. As seen in Chapter Four, the majority of management accountants (65%) work within companies that are owned 100% by the state and (18%) joint venture with other parties. Therefore, this could be a possible reason for no significant relationships between organizational variables and management accountants' ethical decision making stages. Traditionally, different organizations in the public sector may be quite similar in terms of their culture regardless of their types (banks, manufacturers, non-profit organizations, etc.). This may be because they are resourced by similar means. If these companies operate in a free market where their features are different from those that operate in a non-free market, code of ethics, size, and type of industry may have significant relationship with the ethical decision making process. Most past research has shown that these variables have significant positive relationship with ethical decision making stages within organizations that operate in a free market (e.g., Barnett et al., 1993; Granitz, 2003; Pflugrath et al., 2007; Weeks & Nantel, 1992).

Past research shows that ethical climate types (9 types) as suggested by Victor and Cullen (1987; 1988) have a significant relationship with ethical decision making process (see Chapter Two, section 2.3.2.2). However, some have argued that these types do not always exist within organizations (Martin & Cullen, 2006). In this study, only four of the nine types of ethical climate were examined and limited significant results related to them were found. The focus was only to investigate company interest, social responsibility, personal morality, and law and professional codes. Only personal morality was found to have a significant relationship with ethical decision making stages in one of four scenarios, scenario 1 particularly; law and professional codes had a very limited relationship with ethical recognition in scenario 1 and ethical judgment in scenario 4. Several empirical studies have shown similar results, that ethical climate has limited or

no significant relationship with ethical decision making stages. For example, Buchan (2005) and DeConinck & Lewis (1997) found no significant relationship between ethical climate types and ethical intention. Also, Shafer (2007), who examined similar types that were examined by this study, found no significant association between the four types of ethical climate and ethical judgment.

Although the result related to personal morality is limited, it indicates some support for the results of personal moral philosophy, discussed above. Similar to personal moral philosophy, personal morality suggests that individuals tend to follow their own moral principles to make the decision regarding ethical issues. As discussed early in Chapter Two, Victor and Cullen (1987; 1988) used moral philosophy theories and moral psychology theories to develop their construct. The limited result related to personal morality may be due only to the items used to measure it (i.e. methodological issue). While personal moral philosophy (idealism and relativism) was measured by using twenty items, personal moral as a type of ethical climate was only measured using four items.

In conclusion, the results related to the four types of ethical climate show very little evidence that differences in ethical decision making stages are based on ethical climate. The environment surrounding Libyan companies (i.e. public sector) or the other types of ethical climate may be better predictors of ethical decision making scores.

#### **5.1.4 Moral Intensity Dimensions and Ethical Decision Making**

Prior to Jones's (1991) model of moral intensity, the focus was almost exclusively on examining the relationship of individual and organizational variables with ethical decision making stages. According to Jones (1991), the moral intensity construct relates exclusively to the characteristics of the ethical issue and consists of six dimensions. Three of these six dimensions (i.e., magnitude of consequences, social consensus, and temporal immediacy) were examined in terms of their relationships with the first three ethical decision making stages, as developed by Rest (1986). Four scenarios were used here:

scenario one (approving questionable expense reports), scenario two (manipulating company books), scenario three (bypassing expenditure capital policy), and scenario four (extending questionable expenditure credit).

All the issues included in the four scenarios were clear and represent unethical actions, of varying degrees, which could be commonly found in the work setting (Leitsch, 2006; Sweeney & Costello, 2009). Jones (1991) maintained that large differences in ethical intensity between scenarios are required to observe differences in the impact of moral intensity. Flory et al. (1992), a first developer of these scenarios, suggested that scenarios two and three would be recognized as more unethical than scenarios one and four. Result related to accounting students, as shown in Appendix F, indicated similar results that scenarios two and three seem to be more intense than the remaining two. This result was obtained by Leitsch (2004; 2006) and Sweeney and Costello (2009) who used similar scenarios to investigate the ethical decision making of accounting students. However, results related to management accountants showed a slight difference; they perceived scenarios two and four as more intense than the remaining two. The results related to scenario four may be because the decision maker made his decision according to mainly his personal interest at the expense of other interests which might conflict with the characteristics of idealistic people. Scenario 3 was considered by the management accountants as less intense. This might be because it only involved bypassing capital expenditure policy to solve an issue which is solely emphasizing the company's interest. Therefore, Libyan management accountants may perceive that this issue is not wrong.

In general, moral intensity dimensions predicted significantly the ethical decision making process, management accountants in particular. This result provides an indication that Libyan management accountants tend to be situationists. The result supports Jones's (1991) issue-contingent model of ethical decision-making and is consistent with several empirical studies (Barnett, 2001; Flory et al., 1992; Leitsch, 2004, 2006; Sweeney & Costello, 2009).

Magnitude of consequences predicted significantly the ethical recognition of management accountants in issues involving manipulating company books (scenario 2) and violating company policy (scenario 3); it also was associated significantly with their ethical judgment in issues involving manipulating company books (scenario 2) and extending questionable expenditure credit (scenarios 4); finally, magnitude of consequences was related significantly to the ethical intention in all scenarios. The results related to accounting students showed a different story in that magnitude of consequences did not predict their ethical recognition and ethical judgment, whereas it predicted ethical intention in issues containing approving questionable expense reports (scenarios 1) and manipulating company books (scenario 2).

The perceived social consensus was associated with management accountants' ethical judgment and ethical intention in the issues presented in scenarios 2, 3, and 4, whereas it was related to management accountants' ethical recognition in the issues presented in scenarios 2 and 3. With regard to accounting students, their ethical recognition and ethical judgment were not predicted by the perceived social consensus, whereas their ethical intention was predicted by social consensus in issues involving approving questionable expense reports (scenarios 1) and extending questionable expenditure credit (scenarios 4).

Temporal immediacy was associated with ethical decision making stages of management accountants in the four scenarios, whereas it was associated with the ethical recognition and ethical judgment of accounting students in issues involving violating company policy (scenario 3) and extending questionable expenditure credit (scenarios 4) and with their ethical intention in all the four scenarios.

Although the results for management accountants are consistent with several previous studies (e.g., Barnett & Valentine, 2004; Leitsch, 2006; Nill & Schibrowsky, 2005; Sweeney & Costello, 2009; Watley & May, 2004) that found magnitude of consequences and social consensus relate significantly to ethical decision making stages, the results of accounting student did not support these studies. One possible explanation is that students

did not have to consider the moral intensity dimensions in deciding the moral nature of the conflict since the issues within scenarios were clear.

Also, since Libyan accounting students did not have work experience, this may be an additional possible variable in their ethical decision making process because there were large number of significant results related to Libyan management accountants. Jones (1991) discussed the importance of previous experience with ethical issues and its effect on an individual's ability to recognize an ethical issue. Moreover, possible explanation for this result might be related to accounting students' age and their moral development where younger individuals look at others for guidance on right and wrong (Sweeney & Costello, 2009).

The importance of social consensus indicates that management accountants' perceptions of society's attitudes to issues may influence their ethical decisions. According to Kohlberg's (1969) model, at conventional levels of ethical reasoning individuals are impacted by rules laid down by society, which reflect the consensus of the community on the ethicality of particular actions. Also Jones (1991) argued that individuals look at societal norms to reduce ambiguity when faced with ethical issues. If societal consensus exists, individuals are more likely than not to make judgments consistent with societal norms. Moreover, Sweeney and Costello (2009) point out that organizational consensus is likely to have a significant impact on perceived social consensus. This might be the case within the Libyan context as social consensus predicted the three stages of ethical decision making of management accountant and only the ethical intention of accounting students. The post conventional level of moral reasoning in Kohlberg's theory suggests that as individual progress, general ethical principles and the fairness of rules will be applied to guide actions. Barnett (2001) claimed that when participants are students with an average age of around 20, it is expected that their beliefs about societal opinion would be a vital effect. However, this was only true with the stage of ethical intention of accounting students. The result of accounting students is consistent with several studies (Flannery & May, 2000; May & Pauli, 2002; Singhapakdi et al., 1996). Fishbein and

Ajzen (1991) pointed out that the relationship between the dimensions of moral intensity and ethical intention is very important given that intentions are one of the most significant predictors of subsequent behaviour, especially if they are specific in nature.

The temporal immediacy dimension shows an interesting result for both management accountants and accounting students. Previous empirical studies on temporal immediacy has been limited and yielded mixed results, with some studies finding that it has little or no association with ethical decision making process (Barnett, 2001) and other studies finding that it is associated significantly with ethical decision making stages (Singer et al., 1998; Singhapakdi, 1999; Singhapakdi et al., 1996; Vitell & Patwardhan, 2008). Also the result is consistent with the findings of Leitsch (2006) who used similar scenarios and found temporal immediacy formed its own dimension.

Interestingly, temporal immediacy had a strongest significant relationship with the three stages of ethical decision making of both samples than the other two dimensions (magnitude of consequences and social consensus). Most of the past research (see Chapter Two) shows different story that magnitude of consequences and social consensus had always significant results more than temporal immediacy. This result could be attributed to the adequate information provided in each scenario regarding the onset of consequences.

To sum up, moral intensity dimensions explained a significant portion of the variance in management accountants' ethical recognition, ethical judgment, and ethical intention, although there was only partial support in some scenarios. Along with personal moral philosophy components, moral intensity dimensions were the variables most strongest related to Libyan accountants and students' ethical decision making process. These results suggest that individuals perceive some situations as being more morally intense, supporting Jones's (1991) theory. Although this study showed several significant differences in ethical decision making stages based on some of the variables investigated here, the results showed that relationships between these variables and ethical decision

making stages were generally weak. Past research reported similar results showing weak relationship between a range of variables and ethical decision making stages.

## **5.2 Contribution to Knowledge**

This study has contributed to the literature of business ethics in general, accounting ethics and management accounting ethics in particular, as well as having implications for researchers and practitioners. These are summarised as follows:

1. This research first sought to extend previous research regarding ethical decision making process and the role that individual variables, organizational variables and moral intensity dimensions play in this process. Previously, several variables have been found to have different levels of association with the four stages of ethical decision making. In this study, the differences in ethical decision making process based on a range of these variables were investigated. Therefore, the study has added new evidence for the ethical decision making literature.
2. By investigating some of the ethical issues that have been identified in the area of management accounting (e.g., Fisher & Lovell, 2000), this study has increased the limited body of knowledge of management accounting ethics and provided both academics and practitioners with some information about the ethical issues management accountants perceive themselves to face in Libyan companies.
3. More than forty empirical studies regarding ethical decision making process conducted between 2003 and 2010 were reviewed by this study. This contributes to the literature of business ethics by updating and renewing the three previous comprehensive reviews (see Chapter Two). This will provide researchers with an insight for understanding organizational ethical decision constructs by indicating where the current theory of ethical decision making stands and the future direction of ethical decision making research.

4. Studies concerning business ethics in general and accounting ethics in particular in emerging and transitional economics have received little attention and are still rare compared with those that have been done in developed countries. Therefore, one of the major contributions of this study is studying management accounting ethics in one of the developing countries which is a transition economy. The results of this study show a replication of some variables such as gender, personal moral philosophy, and moral intensity dimensions. However, no significant results related to the organizational variables may be because, as mentioned earlier, public sector dominates the Libyan market or Libya is a developing country since most of the significant results related to organizational variables were found in developed countries.
5. Although much research has been done related to business ethics, most of this research was undertaken especially in marketing, management, and auditing areas. Very limited empirical research has been conducted in the area of management accounting in developed and developing countries alike (see Chapter One). Thus, this study has contributed to the business ethics literature in general and management accounting in particular by adding further evidence related to the process of ethical decision making.
6. With respect to significant results found here, this study contributes to knowledge by providing evidence related to the significant relationship of personal moral philosophy components (idealism and relativism) as suggested by Forsyth (1980) with ethical decision making process within a Libyan context. Past research showed that, while idealism has been found to have positive relationship with ethical decision making process, relativism has been found to have negative association with the process of ethical decision making. The result of this study also confirms the model of ethical decision making developed by Hunt and Vitell (1986) that ethical ideology (i.e. personal moral philosophy) has a significant relationship with ethical decision making stages. Moreover, it provides additional support for Jones's

(1991) model that different situations will elicit moral intensity dimensions “weightings” that change, depending on the situation and context of the moral issue.

7. While previous studies focused only on the relationship of a few sub-variables such as age, gender, and code of ethics with only one or two stages of ethical decision making, this study examines a range of more than nine sub-variables related to three of the four stages of ethical decision making as theorized by Rest (1986). Thus, the study is more comprehensive than many previous empirical studies. In addition, this study answers many calls in the literature of business ethics by examining the existing models rather than developing new one (e.g., Bernard & Sweeney, 2010; O'Fallon & Butterfield, 2005).
8. Although this study showed several significant differences and relationships in ethical decision making stages based on some of the variables investigated, the results showed that relationships between these variables and ethical decision making stages were generally weak. However, the results of this study support past research and show that the differences between individuals in ethical decision making process are in effect based on a variety of variables including individual variables, organizational variables and moral intensity dimensions and are not based on a certain limited range of variables.
9. Scenarios used in this study, which were originally designed by Flory (1991) and used by several studies (e.g., Leitsch, 2004, 2006; Sweeney & Costello, 2009), were slightly developed and modified to fit the Libyan context. The experience of using these adapted scenarios has not been found to cause any problems. This has contributed to the literature of accounting ethics in that they can be used for future research in other developing countries, especially Arabic countries that have similar characteristics to Libya.

10. Much of business ethics literature has used student samples to examine several variables that associated with ethical decision making stages. Using students sample has been questioned (Loe et al., 2000) due to their age and work experience, especially when using them to examine organizational variables. In this study, a student sample was used only to investigate individual variables and moral intensity dimensions. Thus, comparisons of the impact of individual variables and moral intensity dimensions in ethical decision making stages between the two samples (students and practising management accountants) could be logically made. In addition, the role of the student sample within the overall research design was clear; by examining the senior accounting students' ethical decision making stages within a Libyan context, the study provides an indication about future Libyan management accountants. It was found that, in spite of the significant changes that have been taking place as the students have been growing up, they are not very different from the current generation of management accountants.

### **5.3 Limitations and Future Research**

The study has achieved its aims. However, as is the case with all research in business ethics and other areas, it is subject to several limitations. These limitations and some recommendations for future research are presented below.

As mentioned in Chapter Four, the samples of the study are representative of the populations and the results of the survey can be generalized to the whole populations. However, the samples were limited to accounting students at universities and management accountants work for manufacturing companies; for example, the results may not be generalized to management accountants who work for other organizations such as banks or public sectors. Given that management accountants, in general, have similar tasks regardless of the organizations they work for, this limitation should not be a big concern. Moreover, the student sample was used here only as a check, since the focus of this study is basically on management accountants.

In addition, accounting students may have experienced difficulties related to scenarios as a result of a lack of work experience, even though it would be expected that their courses would prepare them for responding to likely unethical issues within the work place; senior students would seem the most likely to be able to cope with the scenarios.

The method of using single item measures for each stage of ethical decision making process and each dimension of moral intensity was adopted in this study; one of the limitations of this study might arise from this issue, that one single item might be not sufficient to measure each stage of ethical decision making and thus the results should be interpreted with caution. However, most empirical business ethics studies have adopted this method and provide significant results.

The study depended entirely on using a questionnaire which included four scenarios as the main tool for collecting data, and then the quantitative data were analyzed statistically; thus, the disadvantages of using this method of data collection and the statistical techniques used add to the limitations of this research. However, the technique of using a questionnaire including scenarios is standard practice when doing such research. Further, since scenarios are artificial, responses represent, at best, subject's reported ethical decisions tendencies and may not coincide with ethical decisions in actual situations. However, scenarios have been widely used in business ethics research and considered to be an appropriate method to collected data related to individuals' ethical decisions. Because of the sensitivity of the issues involved, they are thought to be more insightful than direct questions about experience or hypothetical questions about what a respondent would actually do.

Social desirability response bias is another issue that may raise some concerns; however several efforts (e.g., ensuring anonymity and using third person to distribute the questionnaires) were used to limit and reduce the risk of this issue.

In addition to the above, several questions have arisen from the results and related discussions, which would indicate the need for more empirical research to be conducted

in this area. Many opportunities for future research are suggested in this study. Future empirical studies may also find it fruitful to investigate other potential covariates of ethical decision making stages such as religion and culture; these were not possible to investigate in the current study because of the religious and cultural homogeneity of the samples. There has also been limited research regarding the contribution of personal values to individuals' ethical decision making process.

Given the dearth of management accounting ethics research across countries (see Chapter One), and the important role that management accountants play, especially within manufacturing companies, more research is needed regarding the area of management accounting ethics in general and organizational factors effecting management accountants' ethical decision making process in particular. It would also be useful to compare management accountants working in different sectors, such as manufacturing, banks and public services. If, as it is thought might be the case in Libya, management accountants in developing, formerly planned economies show great similarities because of their common background, it would be interesting to undertake longitudinal research to track any industry effects that might develop over time.

Although, as explained, students were not the prime focus of this study, the establishment of a set of results provides the opportunity to compare students from different countries and so provide insights into potential differences and similarities on an international basis. For example, Libyan accounting students could be compared with students in developed countries such as the UK or Spain, and with other Muslim Arab countries.

Since this study attempted to investigate only the first three stages of ethical decision making process, the stage of ethical behaviour, which was excluded, could be an interesting area for future research. Ethical behaviour is regarded as the most important stage in ethical decision making process since it represents the outcome of multiple and complex process; however, this stage is not easy to be examined due to its sensitive nature and some methodological reasons (e.g., measurement and data collecting).

Therefore, future research should address this stage by, for example, conducting qualitative research (e.g., participant observation)

Furthermore, the relationships between the stages of ethical decision making were not considered in this study. Much research (O'Fallon & Butterfield, 2005) showed that there are significant relationships between these stages that can explain some variations in the process of ethical decision making; thus, future research in the management accounting area should consider this issue too. Although the data of this study can be used to examine several relationships including this issue, it was decided only to focus on addressing the association of a range of individual variables, organizational variables and moral intensity dimensions on the three stages.

Moreover, Libya management accountants have indicated their point of view regarding only the eighteen presented ethical issues. Future research could investigate this question more deeply by using a different method, such as semi-structured interviews or focus groups.

Four of the nine types of ethical climate as suggested by Victor and Cullen (1987; 1988) were examined in this study and very limited significant relationships were found between them and the three stages of ethical decision making. Although it is thought unlikely, including the remaining five types of ethical climate in future research could yield an interesting results related to ethical decision making process. Moreover, investigating the remaining three dimensions of moral intensity may result in significant results.

#### **5.4 Summary**

This chapter presented the discussion and the conclusion of the study results. Several explanations and interpretations were made regarding the association of individual variables, organizational variables and moral intensity dimensions with management accountants and accounting students' ethical decision making process within one of the

developing countries that at a transition economy, namely Libya. Additionally, several ethical issues in Libyan management accounting area were identified and discussed. Moreover, this chapter presented several contributions to knowledge that this study has made; these include updating and renewing the literature of ethical decision making, confirming some of the ethical decision making models (Jones, 1991; Hunt and Vitell 1986), showing a replication of some variables such as gender, personal moral philosophy and moral intensity dimensions, and adding additional results to the literature of business ethics in general and management accounting in particular. Finally, some limitations were discussed and several areas and opportunities of future research were recommended.

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## **Appendices**

### **Appendix A: The Questionnaire**

#### **Appendix A<sub>1</sub>: Management Accountants Questionnaire**



*University of*  
**HUDDERSFIELD**

The Business School

### **The Role of Individual Variables, Organizational Variables, and Moral Intensity Dimensions in Accountants' Ethical Decision Making: A study of management accounting in Libya**

**Dear management accountant,**

My name is Ahmed. I am conducting research concerning ethics in accounting for my PhD at the University of Huddersfield in the UK. The prime purpose of this research project is to investigate the influence of some individual and situational factors and moral intensity on management accountants' ethical decision making within Libyan companies; also to investigate what types of ethical issues management accountants face at their workplace.

You are therefore cordially invited to participate in a short questionnaire survey that is part of this research. The survey covers general information about you and your company and also four accounting scenarios. It will take you approximately 10 to 15 minutes to answer the questions. There are no right or wrong answers. I am only interested in your opinions.

This questionnaire is completely confidential and has no identifying marks. All answers will be aggregated and summarized into one report. Your individual responses and all information derived from this questionnaire will remain with me and be kept secure and only used for the purposes of this research project.

Should you need further information, please feel free to contact me at [U0775392@hud.ac.uk](mailto:U0775392@hud.ac.uk).

Yours Sincerely,

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## **Section A**

<b>A1. Age</b> Please mark one <input type="checkbox"/> Less than 30 years <input type="checkbox"/> 35- 40 years	<input type="checkbox"/> 30 -< 35 years <input type="checkbox"/> more than 40 years	<b>A2. Gender</b> Please mark one <input type="checkbox"/> Female <input type="checkbox"/> Male
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<b>A3. Academic Qualification</b> Please mark the highest one <input type="checkbox"/> High school level <input type="checkbox"/> Higher Diploma <input type="checkbox"/> Master's (or its equivalent) Other, please specify: _____	<input type="checkbox"/> Intermediate Diploma <input type="checkbox"/> Bachelor's <input type="checkbox"/> PhD (or its equivalent)
--	--

<b>A5. Experience</b> Please mark one <input type="checkbox"/> Less than 5 years <input type="checkbox"/> 15 - 25 years	<input type="checkbox"/> 5- < 15 years <input type="checkbox"/> More than 25years
--	--

<b>A6. Type of industry</b> Please mark one to indicate your company's main industrial sector: <input type="checkbox"/> Food <input type="checkbox"/> Metal <input type="checkbox"/> Oil and gas <input type="checkbox"/> Chemicals	<input type="checkbox"/> Textiles, Furniture and paper <input type="checkbox"/> Engineering and electric <input type="checkbox"/> Cement and building materials Other, please specify: _____
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<b>A7. Number of employees</b> Please mark one <input type="checkbox"/> 50- 499 employees <input type="checkbox"/> 500 -999 employees <input type="checkbox"/> More than 999 employees
--

<b>A8. Type of company ownership</b> Please mark one <input type="checkbox"/> State-owned company (100% owned by the state) <input type="checkbox"/> Private company (100% owned by the private sector) <input type="checkbox"/> Joint venture (shared ownership between the state and private sector) <input type="checkbox"/> Joint venture (shared ownership between the state and a foreign partner) <input type="checkbox"/> Joint venture (shared ownership between the private sector and the a foreign partner)
---

<b>A9. Code of ethics</b>  <b>1.</b> Does your company have formal explicit written down ethical guidance? For example in standalone thing (e.g., Code of conduct, Operating principles, ethical guidelines) Or in something else (e.g., Business conduct guidelines, Staff handbook)  <input type="checkbox"/> Yes <input type="checkbox"/> No  <b>2.</b> If <b>Yes</b> please answer the following question, if <b>No</b> please go to question (A10)
---

3. Are the following issues mentioned in the company's code of ethics or other documents?	Yes	No
1. Purpose of code or statement	<input type="checkbox"/>	<input type="checkbox"/>
2. Administration of the code or statement; compliance measures; sanctions	<input type="checkbox"/>	<input type="checkbox"/>
3. Responsibilities to shareholders	<input type="checkbox"/>	<input type="checkbox"/>
4. Employee /company responsibilities to each other	<input type="checkbox"/>	<input type="checkbox"/>
5. Substance abuse; employee health	<input type="checkbox"/>	<input type="checkbox"/>
6. Rights of employees (e.g., privacy, termination issues)	<input type="checkbox"/>	<input type="checkbox"/>
7. Harassment, intimidation, bullying , etc.	<input type="checkbox"/>	<input type="checkbox"/>
8. Workplace safety (e.g., smoking policies, working hours)	<input type="checkbox"/>	<input type="checkbox"/>
9. Conflicts of interest, nepotism	<input type="checkbox"/>	<input type="checkbox"/>
10. Basis for determining salary and benefit	<input type="checkbox"/>	<input type="checkbox"/>
11. "Moonlighting", other external activities	<input type="checkbox"/>	<input type="checkbox"/>
12. Whistle-blowing	<input type="checkbox"/>	<input type="checkbox"/>
13. Misuse of company equipment, computer information system, supplies, good name, etc.	<input type="checkbox"/>	<input type="checkbox"/>
14. Misuse of proprietary information (e.g., intellectual property)	<input type="checkbox"/>	<input type="checkbox"/>
15. Misuse of confidential information (e.g., insider trading)	<input type="checkbox"/>	<input type="checkbox"/>
16. Relationships with government agencies and officials	<input type="checkbox"/>	<input type="checkbox"/>
17. Policies on gifts, entertainment, travel, etc.	<input type="checkbox"/>	<input type="checkbox"/>
18. Bribes, kickbacks, etc. (domestic or foreign)	<input type="checkbox"/>	<input type="checkbox"/>
19. Compliance with law (e.g., antitrust, non-discrimination, etc)	<input type="checkbox"/>	<input type="checkbox"/>
20. Firm reputation and integrity	<input type="checkbox"/>	<input type="checkbox"/>
21. Competition, treatment of competitors	<input type="checkbox"/>	<input type="checkbox"/>
22. Purchasing, sales and negotiation policies	<input type="checkbox"/>	<input type="checkbox"/>
23. Product safety and quality	<input type="checkbox"/>	<input type="checkbox"/>
24. Marketing practices, advertising (e.g., honesty)	<input type="checkbox"/>	<input type="checkbox"/>
25. Environmental protection, hazardous waste, energy use	<input type="checkbox"/>	<input type="checkbox"/>

#### A10. Ethical climate

Please indicate the extent to which you agree with each of the following statements about your company. In answering, use the following response scale and circle the number corresponding to your level of agreement with each statement.

Completely true	Mostly true	Somewhat true	Somewhat false	Mostly false	Completely false	
5	4	3	2	1	0	
1. In this company, people are expected to strictly follow legal or professional standards	5	4	3	2	1	0
2. In this company, the law or ethical code of their profession is the major consideration	5	4	3	2	1	0
3. People are expected to comply with the law and professional standards above all other considerations	5	4	3	2	1	0
4. The first consideration is whether a decision violates any law	5	4	3	2	1	0
5. Decisions here are primarily viewed in terms of contributions to profit	5	4	3	2	1	0
6. People are concerned with the company's interests - to the exclusion of all else	5	4	3	2	1	0
7. People are expected to do anything to further the company's interests	5	4	3	2	1	0
8. Work is considered sub-standard only when it hurts the company's interests	5	4	3	2	1	0
9. It is expected that you will always do what is right for the customer and public	5	4	3	2	1	0
10. People in this company are actively concerned about the customer's, and the public's interest	5	4	3	2	1	0
11. People in this company have a strong sense of responsibility to the outside community	5	4	3	2	1	0
12. The effect of decisions on the customer and the public are a primary concern in this company	5	4	3	2	1	0
13. Each person in this company decides for himself what is right and wrong	5	4	3	2	1	0
14. In this company, people are expected to follow their own personal and moral beliefs.	5	4	3	2	1	0
15. In this company, people are guided by their own personal ethics	5	4	3	2	1	0
16. The most important consideration in this company is each person's sense of right and wrong	5	4	3	2	1	0

**Section B**

**Instructions:**

Statements 1–20 are designed to allow you to indicate the extent to which you agree with each statement. Each represents a commonly held opinion and there is no right or wrong answers. I am interested in your reaction to such matters of opinion. In answering, use the following response scale and circle the number corresponding to your level of agreement with each statement.

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
	5	4	3	2	1
1. People should make certain that their actions never intentionally hurt another, even to a small degree.	5	4	3	2	1
2. Risks to another should never be tolerated, irrespective of how small the risks might be.	5	4	3	2	1
3. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.	5	4	3	2	1
4. One should never psychologically or physically harm another person.	5	4	3	2	1
5. One should not perform an action which might in any way threaten the dignity and welfare of another individual.	5	4	3	2	1
6. If an action could harm an innocent other, then it should not be done.	5	4	3	2	1
7. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.	5	4	3	2	1
8. The dignity and welfare of people should be the most important concern of any society.	5	4	3	2	1
9. It is never necessary to sacrifice the welfare of others.	5	4	3	2	1
10. Moral behaviours are actions that closely match ideals of the most “perfect” action.	5	4	3	2	1
11. There are no ethical principles that are so important that should be a part of any code of ethics.	5	4	3	2	1
12. What is ethical varies from one situation and society to another.	5	4	3	2	1
13. Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person.	5	4	3	2	1
14. Different types of moralities cannot be compared as to “rightness.”	5	4	3	2	1
15. Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.	5	4	3	2	1
16. Moral standards are simply personal rules which indicate how a person should behave, and are not to be applied in making judgments of others.	5	4	3	2	1
17. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.	5	4	3	2	1
18. Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustments.	5	4	3	2	1
19. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.	5	4	3	2	1
20. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.	5	4	3	2	1

**Section C:** In this section four scenarios about ethical issues in accounting are presented.

(Using the scale under each scenario, please indicate your answer for each one.)

**Scenario C1**

Muftah Salem is a young management accountant at a large, public company. After some experience in accounting at headquarters, he has been transferred to one of the company's recently acquired divisions, run by its previous president, Abdalganee Ahmed. Abdalganee has been retained as vice president of this new division, and Muftah is his accountant. With a marketing background and a practice of calling his own shots, Abdalganee seems to play by a different set of rules than those to which Muftah is accustomed. So far it is working, as earnings are up and sales projections are high.

The main area of concern to Muftah is Abdalganee's expense reports. Abdalganee's boss, the division president, approves the expense reports without review, and expects Muftah to check the details and work out any discrepancies with Abdalganee. After a series of large and questionable expense reports, Muftah challenges Abdalganee directly about charges to the company for delivering some personal furniture to Abdalganee's home. Although company policy prohibits such charges, Abdalganee's boss again signed off on the expense.

Muftah feels uncomfortable with this and tells Abdalganee that he is considering taking the matter to the audit department at the headquarters for review. Abdalganee reacts sharply, reminding Muftah that "the department will back me anyway" and that Muftah's position in the company would be in jeopardy.

**Action:** Muftah decides not to report the expense charge to the department of auditing of public companies.

Please evaluate this action of Muftah Salem by circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Muftah) should report the expense charge to the audit department	5	4	3	2	1
3. If I were Muftah, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Muftah's Action will not cause any harm in the immediate future	5	4	3	2	1

## Scenario C2

Suaad Mabrok, a company controller, is told by the chief financial officer that in an executive committee meeting the chief executive officer (CEO) told them that the company “has to meet its earnings forecast, is in need of working capital, and that’s final.” Unfortunately, Suaad does not see how additional working capital can be raised, even through increased borrowing, since income is well below the forecast sent to the bank.

Kaled suggests that Suaad review bad debt expense for possible reduction and holding sales open longer at the end of the month. He also brushes off the management letter request from the outside auditors to write down the spare parts inventory to reflect its “true value.”

At home at the weekend, Suaad discusses the situation with her husband, Nasser, a senior manager of another company in town. “They’re asking me to manipulate the books,” she says. “On the one hand,” she complains, “I am supposed to be the conscience of the company and on the other, I ‘m supposed to be absolutely loyal.” Nasser tells her that companies do this all the time, and when business picks up again she’ll be covered. He reminds her how important her salary is to help maintain their comfortable lifestyle, and that she shouldn’t do anything drastic that might cause her to lose her job.

**Action:** Suaad decides to go along with the suggestions proposed by her boss.

Please evaluate this action of Suaad Mabrok circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Suaad) should not go along with the suggestions proposed by her boss	5	4	3	2	1
3. If I were Suaad, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Suaad’s Action will not cause any harm in the immediate future	5	4	3	2	1

### Scenario C3

Osama Zahed, the plant's chief accountant, is having a friendly conversation with Fasal Jamal, operations manager and old college buddy, and Hassan Haron, the sales manager. Fasal tells Osama that the plant needs a new computer system to increase operating efficiency. Hassan adds that with the increased efficiency and decreased late deliveries their plant will be the top plant next year. However, Fasal wants to bypass the company policy which requires that items greater than five thousands Dinars receive prior Board approval and be capitalized.

Fasal would prefer to generate purchase orders for each component part of the system, each being under the five thousands Dinars limit, and thereby avoid the approval "hassle." Osama knows this is clearly wrong from a company and an accounting standpoint, and he says so. Nevertheless, he eventually says that he will go along.

Six months later, the new computer system has not lived up to its expectations. Osama indicates to Hassan that he is really worried about the problems with the computer, and the auditors will disclose how the purchase was handled in the upcoming visit. Hassan acknowledges the situation by saying that production and sales are down and his sales representatives are also upset. Fasal wants to correct the problems by upgrading the system (and increasing the expenses), and urges Osama to "hang in there."

Action: feeling certain that the system will fail without the upgrade, Osama agrees to approve the additional expense.

Please evaluate this action of Osama Zahed Zahed by circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Osama) should not approve the additional expense	5	4	3	2	1
3. If I were Osama, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Osama's Action will not cause any harm in the immediate future	5	4	3	2	1

## Scenario C4

Yusuf Ali is the assistant controller at Bader Electronics, a medium-sized manufacturer of electrical equipment. Yusuf is in his late fifties and plans to retire soon. His daughter has a very rare kind of illness which needs lots of money to help her get an operation abroad. Therefore, financial concerns are weighing heavily on his mind. Yusuf's boss is out of the office recuperating from health problems, and in his absence Yusuf is making all decisions for the department.

Yusuf receives a phone call from an old friend requesting a sizable amount of equipment on credit for his new business. Yusuf is sympathetic but cognizant of the risk of extending credit to a new company, especially under Manam's strict credit policy for such transactions.

When Yusuf mentions this conversation to Fayez, the general manager, he is immediately interested. Fayez notes that the company needs an additional 250,000 Dinar in sales to meet the quarterly budget and, thus, ensure bonuses for management, including Yusuf.

Action: Yusuf decides to make the sale to his friend's new business.

Please evaluate this action of Yusuf Ali by circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Yusuf) should not decide to make the sale to his friend	5	4	3	2	1
3. If I were Yusuf, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Yusuf's Action will not cause any harm in the immediate future	5	4	3	2	1

**Section D**

Accountants sometimes face the following issues, incidents and problems at their workplace. These might raise questions of rightness or wrongness, bad or good behaviour, honesty or dishonesty etc. The question has two columns for you to complete.

(Please use the scale below each question to indicate your answer for the statements)

**D1. To what extent do you think these issues, incidents or problems are ethically important?**

Very important 5	Important 4	Moderately important 3	Not important 2	Not at all important 1
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**D2. How frequently have you observed these issues at your workplace?**

Very frequently 5	Frequently 4	Quite often 3	Occasionally 2	Never 1
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Statements	Importance					Frequency				
	5	4	3	2	1	5	4	3	2	1
1. Injustice in distributing the company's resources and budgets between projects and programmes	5	4	3	2	1	5	4	3	2	1
2. Unfair distribution of the company's resources and budgets between individuals and groups within departments, divisions, subsidiaries etc	5	4	3	2	1	5	4	3	2	1
3. Manipulating accounting figures (e.g., through costing method) to achieve budgeted profit	5	4	3	2	1	5	4	3	2	1
4. Adjusting information or bending the rules to avoid being bullied by customer	5	4	3	2	1	5	4	3	2	1
5. Adjusting information or bending the rules to avoid being bullied by managers	5	4	3	2	1	5	4	3	2	1
6. Accountants using their skills to exploit or blackmail the company for personal gain	5	4	3	2	1	5	4	3	2	1
7. The use of power to distort or prevent open debate and discussion regarding company policies and decisions	5	4	3	2	1	5	4	3	2	1
8. Accountants breaking a rule where they think the advantages to the company are greater than the ethical cost	5	4	3	2	1	5	4	3	2	1
9. Disclosing confidential information to people outside the company	5	4	3	2	1	5	4	3	2	1
10. Accountants using insider information for personal gain	5	4	3	2	1	5	4	3	2	1
11. An accountant is forced to leave the company because of having different ethical principles	5	4	3	2	1	5	4	3	2	1
12. Accountants recasting information to justify a particular budget allocation	5	4	3	2	1	5	4	3	2	1
13. Accountants' trustworthiness is suspected by management	5	4	3	2	1	5	4	3	2	1
14. Accountant deliberately did an illegal action and was given a second chance to work for the company	5	4	3	2	1	5	4	3	2	1
15. Accountant deliberately did an unethical action and was given a second chance to work for the company	5	4	3	2	1	5	4	3	2	1
16. Accountants fail to blow the whistle when something wrong happened to in the company	5	4	3	2	1	5	4	3	2	1
17. Misuse of equipment, computer information system, etc by accountants	5	4	3	2	1	5	4	3	2	1
18. Managers use discrimination and nepotism when dealing with accountants	5	4	3	2	1	5	4	3	2	1
19. Other, please specify: .....	5	4	3	2	1	5	4	3	2	1
.....	5	4	3	2	1	5	4	3	2	1
.....	5	4	3	2	1	5	4	3	2	1
.....	5	4	3	2	1	5	4	3	2	1
.....	5	4	3	2	1	5	4	3	2	1
.....	5	4	3	2	1	5	4	3	2	1
.....	5	4	3	2	1	5	4	3	2	1

**THE END. THANK YOU FOR YOUR HELP.**

## Appendix A<sub>2</sub>: Accounting Students Questionnaire



*University of*  
**HUDDERSFIELD**

The Business School

### **The Role of Individual Variables, Organizational Variables, and Moral Intensity Dimensions in Accountants' Ethical Decision Making: A Study of Management Accounting in Libya**

**Dear student,**

My name is Ahmed. I am conducting research concerning ethics in accounting. The prime purpose of this research is to investigate the influence of some individual factors and moral intensity's components on accounting students' ethical decision making within the UK and Libyan universities.

You are therefore cordially invited to participate in a short questionnaire survey. The survey covers general information about you and four accounting scenarios. It will take you approximately 10 to 15 minutes to answer the questions. There are no right or wrong answers. I am only interested in your opinions.

This questionnaire is completely confidential and has no identifying marks. All answers will be aggregated and summarized into one report. Your individual responses and all information derived from this questionnaire will remain with me and be kept secure and only used for the purposes of this research project.

Should you need further information, please feel free to contact me at [U0775392@hud.ac.uk](mailto:U0775392@hud.ac.uk).

Yours Sincerely,

Ahmed Y S Musbah Business School University of Huddersfield Queensgate Huddersfield HD1 3DH UK <a href="mailto:u0775392@hud.a.uk">u0775392@hud.a.uk</a>	Prof C. J. Cowton, PhD Dean of the Business School University of Huddersfield Queensgate Huddersfield HD1 3DH UK <a href="mailto:c.j.cowton@hud.ac.uk">c.j.cowton@hud.ac.uk</a>
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## **Section A**

### **A1. Age**

Please mark one  24 years or less  More than 24 years

### **A2. Gender**

Please mark one  Female  Male

## **Section B**

### **Instructions:**

Statements 1–20 are designed to allow you to indicate the extent to which you agree with each statement. Each represents a commonly held opinion and there is no right or wrong answers. I am interested in your reaction to such matters of opinion. In answering, use the following response scale and circle the number corresponding to your level of agreement with each statement.

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
	5	4	3	2	1
1. People should make certain that their actions never intentionally hurt another, even to a small degree.	5	4	3	2	1
2. Risks to another should never be tolerated, irrespective of how small the risks might be.	5	4	3	2	1
3. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.	5	4	3	2	1
4. One should never psychologically or physically harm another person.	5	4	3	2	1
5. One should not perform an action which might in any way threaten the dignity and welfare of another individual.	5	4	3	2	1
6. If an action could harm an innocent other, then it should not be done.	5	4	3	2	1
7. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.	5	4	3	2	1
8. The dignity and welfare of people should be the most important concern of any society.	5	4	3	2	1
9. It is never necessary to sacrifice the welfare of others.	5	4	3	2	1
10. Moral behaviours are actions that closely match ideals of the most “perfect” action.	5	4	3	2	1
11. There are no ethical principles that are so important that should be a part of any code of ethics.	5	4	3	2	1
12. What is ethical varies from one situation and society to another.	5	4	3	2	1
13. Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person.	5	4	3	2	1
14. Different types of moralities cannot be compared as to “rightness.”	5	4	3	2	1
15. Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.	5	4	3	2	1
16. Moral standards are simply personal rules which indicate how a person should behave, and are not to be applied in making judgments of others.	5	4	3	2	1
17. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.	5	4	3	2	1
18. Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustments.	5	4	3	2	1
19. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.	5	4	3	2	1
20. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.	5	4	3	2	1

**Section C:** In this section four scenarios about ethical issues in accounting are presented.

(Using the scale under each scenario, please indicate your answer for each one.)

**Scenario C1**

Muftah Salem is a young management accountant at a large, public company. After some experience in accounting at headquarters, he has been transferred to one of the company's recently acquired divisions, run by its previous president, Abdalganee Ahmed. Abdalganee has been retained as vice president of this new division, and Muftah is his accountant. With a marketing background and a practice of calling his own shots, Abdalganee seems to play by a different set of rules than those to which Muftah is accustomed. So far it is working, as earnings are up and sales projections are high.

The main area of concern to Muftah is Abdalganee's expense reports. Abdalganee's boss, the division president, approves the expense reports without review, and expects Muftah to check the details and work out any discrepancies with Abdalganee. After a series of large and questionable expense reports, Muftah challenges Abdalganee directly about charges to the company for delivering some personal furniture to Abdalganee's home. Although company policy prohibits such charges, Abdalganee's boss again signed off on the expense.

Muftah feels uncomfortable with this and tells Abdalganee that he is considering taking the matter to the audit department at the headquarters for review. Abdalganee reacts sharply, reminding Muftah that "the department will back me anyway" and that Muftah's position in the company would be in jeopardy.

**Action:** Muftah decides not to report the expense charge to the department of auditing of public companies.

Please evaluate this action of Muftah Salem by circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Muftah) should report the expense charge to the audit department	5	4	3	2	1
3. If I were Muftah, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Muftah's Action will not cause any harm in the immediate future	5	4	3	2	1

## Scenario C2

Suaad Mabrok, a company controller, is told by the chief financial officer that in an executive committee meeting the chief executive officer (CEO) told them that the company “has to meet its earnings forecast, is in need of working capital, and that’s final.” Unfortunately, Suaad does not see how additional working capital can be raised, even through increased borrowing, since income is well below the forecast sent to the bank.

Kaled suggests that Suaad review bad debt expense for possible reduction and holding sales open longer at the end of the month. He also brushes off the management letter request from the outside auditors to write down the spare parts inventory to reflect its “true value.”

At home at the weekend, Suaad discusses the situation with her husband, Nasser, a senior manager of another company in town. “They’re asking me to manipulate the books,” she says. “On the one hand,” she complains, “I am supposed to be the conscience of the company and on the other, I ‘m supposed to be absolutely loyal.” Nasser tells her that companies do this all the time, and when business picks up again she’ll be covered. He reminds her how important her salary is to help maintain their comfortable lifestyle, and that she shouldn’t do anything drastic that might cause her to lose her job.

**Action:** Suaad decides to go along with the suggestions proposed by her boss.

Please evaluate this action of Suaad Mabrok circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Suaad) should not go along with the suggestions proposed by her boss	5	4	3	2	1
3. If I were Suaad, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Suaad’s Action will not cause any harm in the immediate future	5	4	3	2	1

### Scenario C3

Osama Zahed, the plant's chief accountant, is having a friendly conversation with Fasal Jamal, operations manager and old college buddy, and Hassan Haron, the sales manager. Fasal tells Osama that the plant needs a new computer system to increase operating efficiency. Hassan adds that with the increased efficiency and decreased late deliveries their plant will be the top plant next year. However, Fasal wants to bypass the company policy which requires that items greater than five thousands Dinars receive prior Board approval and be capitalized.

Fasal would prefer to generate purchase orders for each component part of the system, each being under the five thousands Dinars limit, and thereby avoid the approval "hassle." Osama knows this is clearly wrong from a company and an accounting standpoint, and he says so. Nevertheless, he eventually says that he will go along.

Six months later, the new computer system has not lived up to its expectations. Osama indicates to Hassan that he is really worried about the problems with the computer, and the auditors will disclose how the purchase was handled in the upcoming visit. Hassan acknowledges the situation by saying that production and sales are down and his sales representatives are also upset. Fasal wants to correct the problems by upgrading the system (and increasing the expenses), and urges Osama to "hang in there."

Action: feeling certain that the system will fail without the upgrade, Osama agrees to approve the additional expense.

Please evaluate this action of Osama Zahed Zahed by circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Osama) should not approve the additional expense	5	4	3	2	1
3. If I were Osama, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Osama's Action will not cause any harm in the immediate future	5	4	3	2	1

## Scenario C4

Yusuf Ali is the assistant controller at Bader Electronics, a medium-sized manufacturer of electrical equipment. Yusuf is in his late fifties and plans to retire soon. His daughter has a very rare kind of illness which needs lots of money to help her get an operation abroad. Therefore, financial concerns are weighing heavily on his mind. Yusuf's boss is out of the office recuperating from health problems, and in his absence Yusuf is making all decisions for the department.

Yusuf receives a phone call from an old friend requesting a sizable amount of equipment on credit for his new business. Yusuf is sympathetic but cognizant of the risk of extending credit to a new company, especially under Manam's strict credit policy for such transactions.

When Yusuf mentions this conversation to Fayez, the general manager, he is immediately interested. Fayez notes that the company needs an additional 250,000 Dinar in sales to meet the quarterly budget and, thus, ensure bonuses for management, including Yusuf.

Action: Yusuf decides to make the sale to his friend's new business.

Please evaluate this action of Yusuf Ali by circling the extent of your agreement or disagreement with each of the following statements

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
5	4	3	2	1

1. The situation above involves an ethical problem	5	4	3	2	1
2. The decision maker (Yusuf) should not decide to make the sale to his friend	5	4	3	2	1
3. If I were Yusuf, I would make the same decision	5	4	3	2	1
4. The overall harm (if any) as a result of the action would be very small	5	4	3	2	1
5. Most people would agree that the action is wrong	5	4	3	2	1
6. Yusuf's Action will not cause any harm in the immediate future	5	4	3	2	1

**THE END. THANK YOU FOR YOUR HELP.**

## Appendix B: Arabic Questionnaire



University of  
HUDDERSFIELD

The Business School

العوامل الشخصية و التنظيمية المؤثرة على صنع القرار الأخلاقي للمحاسبين الإداريين:  
المحاسبة الإدارية في ليبيا "دراسة حالة"

رقم الإستبانة.....  
أخي المحاسب الإداري

السلام عليكم ورحمة الله وبركاته

الباحث أستاذ محاضر بقسم المحاسبة /جامعة عمر المختار، يقوم حالياً بإجراء بحث الدكتوراة بجامعة هادرسفد بالمملكة المتحدة. إن الهدف الأساسي للبحث يتمثل في دراسة و تحديد العوامل الشخصية والعوامل التنظيمية المؤثرة على صنع القرار الأخلاقي للمحاسبين الإداريين بالشركات الصناعية الليبية بالإضافة إلى محاولة التعرف على أهم القضايا والمشاكل الأخلاقية التي قد تواجههم أثناء تأدية اعمالهم المحاسبية بالشركات.

تتضمن هذه الإستبانة مجموعة من الأسئلة الشخصية، بالإضافة إلى مجموعة من القضايا أو المشاكل العملية والتي قد تواجه المحاسبين الإداريين داخل الشركات عند تأديتهم لأعمالهم المحاسبية.

إن الإجابة على كل الأسئلة الموجودة بهذه الإستبانة ستستغرق تقريباً من 10 الي 15 دقيقة، مع العلم بأنه لا توجد إجابات صحيحة أو خاطئة لأي منها. الباحث فقط مهتم بوجهة نظركم تجاه القضايا والحالات المعروضة والتي حتماً تمثل غاية في الأهمية لتحقيق أهداف البحث. كما يمكنني التأكيد لكم بأن كل الإجابات والمعلومات المعطاة سيتم التعامل معها بسرية تامة وكاملة وأنها سوف تستخدم فقط لخدمة أهداف هذا البحث.

أشكركم جزيل الشكر على حسن تعاونكم

والسلام عليكم ورحمة الله وبركاته

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**الجزء الأول : الرجاء إختيار الإجابة المناسبة بوضع علامة (✓) بالمربع المناسب.**

<b>1. العمر</b> إختر واحدة فقط من فضلك <input type="checkbox"/> أقل من 30 سنة <input type="checkbox"/> من 30 – 35 سنة <input type="checkbox"/> أكثر من 40 سنة	<b>2. الجنس</b> أختر واحدة فقط من فضلك <input type="checkbox"/> ذكر <input type="checkbox"/> أنثى
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<b>3. المستوى العلمي (الدراسي)</b> إختر أعلى مستوى فقط متحصل عليه (تملكه حالياً) من المستويات التالية: <input type="checkbox"/> الشهادة الثانوية العامة <input type="checkbox"/> بكالوريوس /ليسانس <input type="checkbox"/> دبلوم متوسط <input type="checkbox"/> شهادة الماجستير <input type="checkbox"/> دبلوم عالي <input type="checkbox"/> شهادة الدكتوراة <input type="checkbox"/> أخرى ، حدد من فضلك:.....
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<b>5. الخبرة</b> إختر واحدة فقط من فضلك <input type="checkbox"/> أقل من 5 سنوات <input type="checkbox"/> من 5- > 15 سنوات <input type="checkbox"/> من 15- 25 سنة <input type="checkbox"/> أكثر من 25 سنة
---

<b>6. نوع الصناعة التي تنتمي إليها الشركة (المصنع)</b> إختر واحدة فقط من فضلك <input type="checkbox"/> الصناعات الغذائية <input type="checkbox"/> صناعة المعادن <input type="checkbox"/> النفط والغاز <input type="checkbox"/> الصناعات الكيماوية <input type="checkbox"/> المنسوجات والأثاث والورق <input type="checkbox"/> الصناعات الهندسية والالكترونية <input type="checkbox"/> صناعة الأسمنت والمباني <input type="checkbox"/> أخرى ، حدد من فضلك:.....
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<b>7. عدد العاملين بالشركة (المصنع)</b> إختر واحدة فقط من فضلك <input type="checkbox"/> من 50 – 499 عامل <input type="checkbox"/> من 500 – 999 عامل <input type="checkbox"/> أكثر من 999 عامل
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<b>8. نوع ملكية الشركة (المصنع)</b> إختر واحدة فقط من فضلك <input type="checkbox"/> قطاع عام (مملوكة للدولة بنسبة 100%) <input type="checkbox"/> ملكية مشتركة بين الدولة وشركاء محليين <input type="checkbox"/> ملكية مشتركة بين قطاع خاص وشريك أجنبي <input type="checkbox"/> قطاع خاص (مملوكة لشخص أو أشخاص بنسبة 100%) <input type="checkbox"/> ملكية مشتركة بين الدولة وشريك أجنبي
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<b>9. قواعد السلوك</b> أ. هل يوجد بالشركة (المصنع) إرشادات للسلوك الأخلاقي مكتوبة، على سبيل المثال في شكل كتيب مُفضل (تحت اسم مثلاً قواعد السلوك الأخلاقي، قواعد السلوك المهني، الخ) أو في شكل آخر (مثلاً ضمن دليل الموظف، أو جزءاً من كتيب قواعد ولوائح العمل بالشركة.. الخ) <input type="checkbox"/> نعم <input type="checkbox"/> لا ب. إذا كانت الإجابة بنعم الرجاء الإجابة على السؤال التالي (ج) ، أما إذا كانت الإجابة بلا، من فضلك إنتقل للسؤال (10).
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ج. هل تمت الإشارة في كتيب قواعد السلوك الأخلاقي أو في أي أجزاء أخرى من مستندات أو لوائح وقوانين الشركة الي أي من العبارات التالية:

لا	نعم	
<input type="checkbox"/>	<input type="checkbox"/>	1. الإشارة إلى الغاية أو الهدف من وجود دليل قواعد السلوك
<input type="checkbox"/>	<input type="checkbox"/>	2. الإشارة إلى طريقة إبلاغ العاملين عن القواعد أو التوجيهات وكيفية تقييم امتثال العاملين لها وما العقوبات الرادعة للمتجاوزين
<input type="checkbox"/>	<input type="checkbox"/>	3. المسؤولية تجاه الملاك .
<input type="checkbox"/>	<input type="checkbox"/>	4. مسؤولية الشركة تجاه العاملين وكذلك العاملين تجاه الشركة .
<input type="checkbox"/>	<input type="checkbox"/>	5. تعاطي المخدرات، والأشياء التي تؤثر على صحة العاملين .
<input type="checkbox"/>	<input type="checkbox"/>	6. حقوق العاملين ( خصوصية العمال، مسألة الاستغناء عن العمال) .
<input type="checkbox"/>	<input type="checkbox"/>	7. المضايقة، التخويف، الإرهاب الذي قد يمارس ضد العاملين من قبل علي سبيل المثال المٌدراء، المُراجعين، الزبائن...الخ.
<input type="checkbox"/>	<input type="checkbox"/>	8. احتياطات الأمان في العمل والسلامة والجودة في موقع العمل (مثل سياسات التدخين، ساعات العمل... الخ).
<input type="checkbox"/>	<input type="checkbox"/>	9. المحسوبة، تعارض وتضارب المصالح بين الشركة والعاملين والعاملين والزبائن، الخ .
<input type="checkbox"/>	<input type="checkbox"/>	10. الأسس التي تحكم تقدير و تحديد المرتبات بالنسبة للعاملين .
<input type="checkbox"/>	<input type="checkbox"/>	11. مزاوله العامل لأي عمل آخر ليس لصالح الشركة أثناء عقد عمله مع الشركة .
<input type="checkbox"/>	<input type="checkbox"/>	12. التبليغ عن الممارسات غير الصحيحة والسلوكيات المنافية لأعراف ولوائح الشركة وقوانينها .
<input type="checkbox"/>	<input type="checkbox"/>	13. استخدام معدات والآت وأنظمة الحاسب الآلي بالإضافة إلى سمعة الشركة لتحقيق أغراض خاصة .
<input type="checkbox"/>	<input type="checkbox"/>	14. الإستخدام السيئ للمعلومات المملوكة للشركة كالمعلومات الفكرية وحقوق الاختراع .
<input type="checkbox"/>	<input type="checkbox"/>	15. الإستخدام السيئ للمعلومات الخاصة ( المعلومات السرية والمتداولة داخلياً فقط ) .
<input type="checkbox"/>	<input type="checkbox"/>	16. علاقة الشركة بالدوائر الحكومية والشركات والمؤسسات والهيئات الأخرى .
<input type="checkbox"/>	<input type="checkbox"/>	17. السياسات المتعلقة بحصول العاملين على الهدايا وتذاكر السفر المجانية و تذاكر الترفيه المقدمة لهم من خارج الشركة...الخ.
<input type="checkbox"/>	<input type="checkbox"/>	18. الرشوة والعمولات سواء كانت محلية أو خارجية.
<input type="checkbox"/>	<input type="checkbox"/>	19. احترام القانون ( مثل قضايا الاحتكار، التمييز العنصري أو الديني أو القبلي بين الموظفين...الخ).
<input type="checkbox"/>	<input type="checkbox"/>	20. سمعة ونزاهة الشركة .
<input type="checkbox"/>	<input type="checkbox"/>	21. التنافس، التعامل مع المتنافسين من الشركات الأخرى .
<input type="checkbox"/>	<input type="checkbox"/>	22. سياسات البيع والشراء والمفاوضات مع البائعين والمشتريين .
<input type="checkbox"/>	<input type="checkbox"/>	23. سياسات جودة وسلامة منتجات الشركة.
<input type="checkbox"/>	<input type="checkbox"/>	24. الأمانة والصدق في التعامل مع بعض القضايا مثل الدعاية والإعلان والترويج لمنتجات الشركة .
<input type="checkbox"/>	<input type="checkbox"/>	25. حماية البيئة وقضايا النفايات الكيميائية للشركة و قضايا استخدام الطاقة .

#### 10. مناخ العمل بالشركة (المصنع)

العبارات المدونة أدناه تمثل مجموعة من السلوكيات أو التصرفات التي تعكس طبيعة مناخ العمل داخل الشركات (المصانع). الرجاء إبداء رأيكم حول هذه العبارات من خلال استخدام المقياس المدون أدناه وذلك بوضع دائرة على أحد الأرقام المدونة أمام كل منها.

صحيحة تماماً	صحيحة في معظمها	صحيحة إلى حد ما	خاطئة إلى حد ما	خاطئة في معظمها	خاطئة تماماً	
5	4	3	2	1	0	
						1. من المتوقع أن العاملين في هذه الشركة يتبعون وبدقة المعايير القانونية أو المهنية عند أدائهم لأعمالهم.
						2. تمثل القوانين أو قواعد السلوك الأخلاقي لمهنة المحاسبة شيئاً مهماً وأساسياً بهذه الشركة.
						3. من المتوقع أن يكون امتثال العاملين للقوانين والمعايير المهنية بالشركة أكبر من كل الأعتبارات الأخرى .
						4. من الأولويات الأساسية بالشركة أن أي قرار يصدر يجب أن لا ينتهك أي قانون .
						5. يتم تقييم القرارات التي تصدر داخل الشركة بشكل أساسي من حيث مدى مساهمتها في الأرباح.
						6. العاملون بالشركة يهتمون بمصلحة الشركة أكثر من أي شيء آخر.
						7. من المتوقع أن يقوم العاملين بهذه الشركة بأي شيء يعزز مصلحتها.
						8. يتم تقييم أداء أي عمل على إنه دون المستوي إذا كان يضر بمصلحة الشركة .
						9. من المتوقع إنك ستقوم بعمل ما هو مناسب وملئم لكل من العميل (الزبون) وعمامة الناس .
						10. بكل حيوية ونشاط و جدية يهتم العاملون بالشركة بمصلحة العملاء (الزبائن) وعمامة الناس على السواء.
						11. العاملون في هذه الشركة لديهم إحساس كبير بالمسؤولية تجاه المجتمع بشكل عام.
						12. معرفة أثر القرارات على الزبائن وعمامة الناس يعتبر من الأولويات الرئيسية بالشركة .
						13. كل فرد في هذه الشركة يقرر بنفسه ما هو الصحيح وما هو الخطأ.
						14. من المتوقع أن يتبع العاملين في هذه الشركة معتقداتهم الأخلاقية و الشخصية.
						15. العاملون في هذه الشركة يسترشدون بمبادئهم الأخلاقية.
						16. من الأولويات الرئيسية بهذه الشركة هي إحساس كل شخص بالصح والخطأ .

الرجاء إبداء رأيكم في العبارات المدونة أدناه وذلك بوضع دائرة على أحد الأرقام المدونة أمام كل منها مع العلم بأنه لا توجد إجابات صحيحة أو خاطئة لأي من هذه العبارات . يرجى استخدام المقياس التالي عند التقويم

موافق جداً	موافق	محايد	غير موافق	غير موافق جداً
5	4	3	2	1

1. يجب على أي فرد أن يتأكد من إن سلوكه المتعمد لا يؤدي أي فرد آخر حتى ولو كان بدرجة قليلة جداً .  
1 2 3 4 5
2. تعريض أي فرد آخر للمخاطر، يجب أن لا يُسمح به بغض النظر عن احتمالية صغر تلك المخاطر.  
1 2 3 4 5
3. إمكانية وجود الضرر للغير تعتبر دائماً خطأ بغض النظر عن الفوائد أو المنافع المحققة من ذلك .  
1 2 3 4 5
4. يجب على أي فرد أن لا يقوم بأي سلوك أو عمل يؤدي بالضرر العضلي أو النفسي لأي فرد آخر.  
1 2 3 4 5
5. يجب على الفرد أن لا يقوم بأي سلوك قد يؤدي بأي طريقة من الطرق إلى تهديد كرامة وسعادة فرد آخر .  
1 2 3 4 5
6. إذا كان القيام بسلوك معين يؤدي براءة شخص آخر، فإنه يجب عدم القيام به .  
1 2 3 4 5
7. إن اختيار القيام بسلوك أو تصرف معين أو عدم القيام به بناءً على موازنة نتائجه السلبية بالإيجابية التي قد يحدثها يعتبر سلوكاً غير أخلاقي .  
1 2 3 4 5
8. كرامة ورفاهية الناس يجب أن تكون من أهم أولويات أي مجتمع .  
1 2 3 4 5
9. لا يكون أبدأ من الضروري التضحية بسعادة ورفاهية الآخرين .  
1 2 3 4 5
10. السلوكيات الأخلاقية هي الأفعال أو التصرفات التي تتشابه إلى حد كبير مع مفاهيم السلوك المثالي .  
1 2 3 4 5
11. ليست هناك أية مبادئ أخلاقية معينة ومهمة جداً يفترض أن توجد في أي دليل أو ميثاق للسلوك الأخلاقي  
1 2 3 4 5
12. ما هو أخلاقي يختلف من حالة معينة إلى أخرى ومن مجتمع إلى آخر.  
1 2 3 4 5
13. المعايير الأخلاقية يجب أن يُنظر إليها من زاوية فردية، حيث ما يعتبر سلوكاً أخلاقياً من وجهة نظر شخص ما قد يكون غير أخلاقياً من وجهة نظر شخص آخر.  
1 2 3 4 5
14. الأنواع المختلفة من المبادئ الأخلاقية لا يمكن أن تُقارن من حيث الصحة أو الصواب .  
1 2 3 4 5
15. التساؤلات حول ما هو أخلاقي لأي شخص ما لا يمكن أبداً حلها، نظراً لأن ما يعتبر أخلاقي أو غير أخلاقي يعتمد على الشخص نفسه.  
1 2 3 4 5
16. المبادئ الأخلاقية ببساطة عبارة عن قواعد ومبادئ شخصية توضح للفرد كيف يجب عليه أن يتصرف ، ولكنها لا تستخدم في إصدار الأحكام على الآخرين .  
1 2 3 4 5
17. الإعتبارات الأخلاقية في العلاقات المتبادلة بين الناس هي من التعقيد بحيث ينبغي أن يُسمح لكل فرد بصياغة دليله أو قواعده الأخلاقية الخاصة به .  
1 2 3 4 5
18. التقنين الشديد والصارم للموقف الأخلاقي والذي سيمنع حدوث بعض أنواع السلوكيات يمكن أن يكون عقبة في طريق التأقلم وإقامة العلاقات الطيبة بين الناس .  
1 2 3 4 5
19. لا يوجد مبدأ أو قاعدة معينة تتعلق بالكذب يمكن أن تُصاغ ، حيث أن جواز الكذب من عدمه يعتمد بشكل كلي على الحالة التي يوجد فيها الفرد .  
1 2 3 4 5
20. اعتبار الكذب أمراً أخلاقياً أو غير أخلاقي يعتمد على الظروف المحيطة بالتصرف أو السلوك نفسه .  
1 2 3 4 5

الآتي بعض الحالات العملية الافتراضية التي قد تواجه المحاسبين عند أدائهم لأعمالهم المحاسبية داخل الشركات والمطلوب قراءة كل حالة وإجابة الأسئلة المطروحة على كل منها مستخدماً المقياس المدون قرين كل حالة:

### الحالة العملية الأولى

الأستاذ مفتاح هو أحد المحاسبين الإداريين المعينين حديثاً بإحدى الشركات الصناعية الكبرى والتابعة للدولة (شركة المعدات الزراعية). فبعد قضاءه فترة من الوقت بالمركز الرئيسي للشركة، نُقل المحاسب مفتاح إلى أحد فروع الشركة والذي أشتريته حديثاً من إحدى الشركات الأخرى .

شركة المعدات الزراعية أبطت على كثير من الموظفين السابقين بالفرع المشتري ومن بينهم الأستاذ عبد الغني الذي كان يشغل منصب رئيس الفرع في السابق أي قبل عملية الشراء على أن يكون نائباً لرئيس الفرع في الوقت الحالي كما عُين الأستاذ مفتاح محاسباً له.

الأستاذ عبد الغني وبخبرته في مجال التسويق، واعتماداً على عدد من ممارساته الخاصة في العمل يبدو أنه يستخدم بعضاً من الأساليب والقواعد المحاسبية والإدارية والتي تعتبر غير مألوفة للمحاسب مفتاح، إلا إنه يمكن القول إن هذه الأساليب تعمل بشكل جيد إلى الآن، إذ أن إيرادات الشركة في تزايد والمبيعات يتوقع أن تكون عالية ، غير أن مصدر القلق الوحيد للمحاسب مفتاح هو تقارير مصروفات الأستاذ عبد الغني حيث أن مدير الفرع الأستاذ سليمان يقوم بتوقيع واعتماد تلك المصروفات معتمداً على المحاسب مفتاح في مراجعتها بالتفصيل ومطابقتها مع الأستاذ عبد الغني.

ونظراً لتزايد العديد من تقارير المصروفات الكبيرة والمشتبه في دقتها و صحة ارقامها ومدى علاقتها بالشركة قام المحاسب مفتاح بمواجهة الأستاذ عبد الغني بقيامه بعملية تحميل الشركة ببعض المصروفات الغير مسموح بها والتي منها على سبيل المثال مصروفات الطباعة الخاصة ببعض أعمال الشركة والتي قامت بها زوجته في البيت، إذ أن الشركة تمنع القيام بمثل هذه الأعمال. وعلى إثر ذلك أبلغ مفتاح الأستاذ عبد الغني بأنه سيرفع الأمر إلى إدارة المراجعة بالشركة. إلا إن الأستاذ عبد الغني رد عليه بشكل حاد وأخبره أن تلك الإدارة سترد إليه الأمر وإنه سيتفاهم معها بطريقته الخاصة وإن منصبك يا أستاذ مفتاح بالشركة سيكون في خطر.

السلوك(القرار) : المحاسب مفتاح يقرر عدم تبليغ إدارة المراجعة عن عملية تحميل تلك المصروفات للشركة .

الرجاء تقييم المدى الذي (تتفقون أو لا تتفقون) مع قرار المحاسب مفتاح وذلك بوضع دائرة على أحد الأرقام المدونة أمام العبارات المبينة أدناه مستخدمين المقياس التالي في عملية التقييم.

موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
5	4	3	2	1

1	2	3	4	5	1. الحالة المبينة أعلاه تتضمن مشكلة أخلاقية
1	2	3	4	5	2. يجب على المحاسب (مفتاح) تبليغ إدارة المراجعة عن عملية تحميل تلك المصروفات للشركة
1	2	3	4	5	3. إذا كنت مكان المحاسب (مفتاح) فإنك لن تبلغ إدارة المراجعة عن عملية تحميل تلك المصروفات
1	2	3	4	5	4. الضرر الناتج عن سلوك (أو قرار) المحاسب (مفتاح) إن وجد يعتبر بشكل عام صغيراً جداً
1	2	3	4	5	5. معظم الناس سيتفقون علي أن قرار المحاسب (مفتاح) هو قرار خاطئ
1	2	3	4	5	6. سلوك (أو قرار) المحاسب (مفتاح) لن يسبب أي ضرر في المستقبل القريب

## الحالة العملية الثانية

الأستاذ عبد الكريم (مدير الشؤون المالية بإحدى الشركات الصناعية) يبلغ رئيس القسم المالي الأستاذ سالم بأن المدير التنفيذي للشركة قد أخبرهم بأنه تم الاتفاق في اجتماع مجلس إدارة الشركة علي ضرورة أن تحقق الشركة الإيرادات المقدره لهذا العام، كما إن الشركة في حاجة الي زيادة رأس المال العامل وإن هذا قرار نهائي غير قابل للنقاش .

إلا أن رئيس القسم المالي الأستاذ سالم لا يرى أي وسيلة ممكنة لزيادة رأس المال العامل حتى ولو عن طريق الاقتراض من المصرف نظراً لأن رصيد صافي الدخل الفعلي أقل بكثير من رصيد صافي الدخل المقدر بقائمة الدخل والتي أرسلت صورة منها إلى المصرف في السابق، الأمر الذي يجعل الحصول على قرض من المصرف يبدو أمراً مستحيلاً.

خالد يقترح على الأستاذ سالم بأنه من الممكن أن يتم تحقيق رغبة الإدارة، وذلك من خلال مراجعة حسابات الديون المشكوك في تحصيلها و تخفيضها، بالإضافة إلى إرجاء قفل بعض حسابات المبيعات، كذلك التغاضي عن الرسالة الموجهة من المراجع الخارجي للإدارة والتي تقضي بضرورة إظهار قيمة مخزون قطع الغيار بالصورة الصحيحة لتعكس قيمتها الحقيقية بالدفاتر.

في البيت ناقش سالم هذا الموضوع مع أخيه الأكبر أحمد والذي يشغل منصب مدير إحدى الشركات بالمدينة واخبره بأن مدراء شركته يطلبون منه التلاعب بالدفاتر المالية. مع العلم بأن سالم يرى بأنه من المفترض عليه أن يكون الضمير الحي للشركة باعتباره رئيس القسم المالي للشركة، كما إنه من المفترض أن يكون على درجة عالية من الإخلاص في العمل.

إلا أن أحمد يخبر أخاه الأصغر سالم إن الشركات غالباً ما تقوم بفعل هذه الأشياء، وإنه عندما تتحسن الظروف التجارية لشركته سيتم تغطية ما قام بفعله من تلاعبات بالدفاتر. بالإضافة إلى ذلك قام أحمد بتذكير أخيه سالم بمدى أهمية مرتبه بالنسبة لحياته ومستقبله في ظل ندرة فرص العمل وإنه يفترض عليه عدم ارتكاب إي حماقة تؤدي إلى فقدانه لعمله الحالي بالشركة .

**السلوك(القرار):** الأستاذ سالم (رئيس القسم المالي) يقرر المضي في ما طلبه رئيسه المباشر( مدير الشؤون المالية) بالتلاعب بالدفاتر.

الرجاء تقييم المدى الذي (**تتفقون أو لا تتفقون**) مع قرار الأستاذ سالم (رئيس القسم المالي) بالشركة وذلك بوضع دائرة على أحد الأرقام المدونة أمام العبارات المبينة أدناه مستخدمين المقياس التالي في عملية التقييم.

موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
5	4	3	2	1

1. الحالة المبينة أعلاه تتضمن مشكلة أخلاقية .
2. يجب على الأستاذ سالم أن لا يتصرف او يسلك السلوك المقترح .
3. إذا كنت مكان الأستاذ سالم فإنك ستتخذ نفس القرار.
4. الضرر الناتج عن سلوك (أو قرار) الأستاذ سالم إن وجد يعتبر بشكل عام صغيراً جداً .
5. معظم الناس سيتفقون علي أن قرار الأستاذ سالم هو قرار خاطئ .
6. سلوك (أو قرار) الأستاذ سالم لن يسبب أي ضرر في المستقبل القريب .

## الحالة العملية الثالثة

الأستاذ صابر (المدير المالي بالمصنع) وفي جو ودي يتحدث مع صديقه وزميله أيام الدراسة الجامعية الأستاذ فيصل (مدير التشغيل بالمصنع) وكذلك الأستاذ حسن (مدير المبيعات بالمصنع)، الأستاذ فيصل (مدير التشغيل بالمصنع) يُخبر الأستاذ صابر بأن المصنع في حاجة إلى منظومة كمبيوتر وذلك لزيادة كفاءة التشغيل. وتعقيباً على ذلك يقول الأستاذ حسن (مدير المبيعات بالمصنع) بأن زيادة كفاءة التشغيل وتقليل وقت تسليم المنتجات للزبائن سيجعل المصنع الأفضل بين المصانع في العام القادم .

إحدى سياسات الشركة المالية تقضي بضرورة رسملة مبالغ المشتريات التي تتجاوز 5000 دينار لأي أمر شراء وأن لايسمح بعمليات الشراء التي تتجاوز هذا المبلغ إلا بعد الحصول على موافقة مجلس الإدارة. لكن الأستاذ فيصل (مدير التشغيل بالمصنع) يريد أن يتجاوز ذلك من خلال عملية تجزئة أمر الشراء الخاص بمنظومة الكمبيوتر الجديدة إلى مجموعة من الأوامر بحيث لايتجاوز أي من هذه الأوامر مبلغ 5000 دينار لكل قطعة من قطع منظومة الكمبيوتر الجديدة ومن ثم يتجنب الصراع الطويل والمشاحنات مع الإدارة للموافقة على عملية الشراء.

الأستاذ صابر (المدير المالي بالمصنع) يعلم جيداً إن القيام بذلك يعتبر خطأ كبيراً من وجهة نظر الشركة وكذلك من الناحية المحاسبية وهو يصرح ويقر بهذا، وعلى الرغم من ذلك كله فإنه في النهاية يوافق على عملية الشراء.

بعد ستة أشهر من العمل بالمنظومة الجديدة تم اكتشاف أنها لم تصل إلى المستوى المتوقع لها. الأستاذ صابر يُخبر الأستاذ حسن إنه قلق جداً بشأن مشكلة المنظومة الجديدة وإن المراجعين الخارجيين سيكتشفون الكيفية التي تمت بها عملية الشراء في زيارتهم القادمة للشركة. الأستاذ حسن (مدير المبيعات بالمصنع) يعترف بوجود المشكلة وذلك بقوله إن الإنتاج والمبيعات على السواء في هبوط حاد وإن مندوبي مبيعاته هم أيضاً قلقون جداً.

الأستاذ فيصل يريد تصحيح الأمر وذلك من خلال التحديث الفني لمنظومة الكمبيوتر (الأمر الذي سيؤدي حتماً إلى زيادة المصروفات) كما إنه يطلب من الأستاذ صابر بأن يستمر في دعمه في ذلك.

**السلوك (القرار):** الأستاذ صابر يوافق على الاستمرار في دعم الأستاذ فيصل وذلك لشعوره الأكيد بأن المنظومة ستفشل إذا لم يتم دفع المصروفات الإضافية الخاصة بعملية التحديث الفني للمنظومة .

الرجاء تقييم المدى الذي **(تتفقون أو لا تتفقون)** مع قرار الأستاذ صابر (المدير المالي بالمصنع) وذلك بوضع دائرة على أحد الأرقام المدونة أمام العبارات المبينة أدناه مستخدمين المقياس التالي في عملية التقييم .

موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
5	4	3	2	1

1. الحالة المبينة أعلاه تتضمن مشكلة أخلاقية
2. يجب على الأستاذ صابر (المدير المالي بالمصنع) أن لا يتصرف أو يسلك السلوك المقترح من الأستاذ فيصل
3. إذا كنت مكان الأستاذ صابر فإنك ستتخذ نفس القرار .
4. الضرر الناتج عن سلوك (أو قرار) الأستاذ صابر إن وجد يعتبر بشكل عام صغيراً جداً .
5. معظم الناس سيتفقون على أن قرار الأستاذ صابر هو قرار خاطئ .
6. سلوك (قرار) الأستاذ صابر لن يسبب أي ضرر في المستقبل القريب.

## الحالة العملية الرابعة

يشغل يوسف منصب مساعد المراقب المالي في شركة البدر، إحدى الشركات الصناعية المتوسطة الحجم والمتخصصة في مجال تصنيع المعدات الإلكترونية التي تدخل في تصنيع أجهزة الحاسب الآلي.

الأستاذ يوسف في نهاية الخمسينات من العمر وهو يخطط للإحالة إلى التقاعد في الفترة القريبة القادمة، وتعاني ابنته الوحيدة ثريا من مرض عضال ونادر جداً و يحتاج إلى مبلغ مالي كبير للسفر للخارج لإجراء عملية جراحية. لذا فإن هذه الظروف المالية الصعبة تشغل بال الأستاذ يوسف كثيراً جداً في هذه الفترة.

المراقب المالي للشركة الأستاذ عمر (الرئيس المباشر للأستاذ يوسف) غير موجود هذه الأيام بالشركة بسبب بعض المشاكل الصحية التي أدت الي خروجه في إجازة طبية، الأمر الذي أدى إلى أن يقوم الأستاذ يوسف بالوكالة عنه وتأدية مهامه وإتخاذ كل القرارات المتعلقة بالقسم.

أحد الأصدقاء القدامى للأستاذ يوسف يتصل به ويطلب منه الموافقة على عملية بيع كمية كبيرة من منتجات الشركة على الحساب حتى يستطيع أن يبدأ نشاطه التجاري الجديد. مع أن الأستاذ يوسف مؤيد لعملية البيع، لكنه في نفس الوقت مدرك لمخاطر زيادة حجم الديون بالنسبة لشركة جديدة حديثة التكوين، خاصة في ظل قيود سياسة الإنتمان الصارمة لشركة البدر بالنسبة لهذا النوع من العمليات.

عندما أخبر الأستاذ يوسف الأستاذ عبدالسلام (المدير العام للشركة) عن المحادثة التي تمت بينه وبين صديقه القديم، على الفور أهتم الأستاذ عبد السلام بالموضوع، وأشار للأستاذ يوسف بأن الشركة في حاجة إلى 250,000 دينار من المبيعات لتحقيق رقم الموازنة الربع السنوية (الموازنة التقديرية للمبيعات الربع سنوية) ومن ثم الحصول على المكافآت المالية للإدارة والتي تشمل الأستاذ يوسف أيضاً.

**السلوك(القرار):** الأستاذ يوسف يوافق على عملية بيع المنتجات لشركة صديقه الجديدة.

الرجاء تقييم المدى الذي (تتفقون أو لا تتفقون) مع قرار الأستاذ يوسف مساعد المراقب المالي بالشركة وذلك بوضع دائرة على أحد الأرقام المدونة أمام العبارات المبينة أدناه مستخدمين المقياس التالي في عملية التقييم .

موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
5	4	3	2	1

1. الحالة المبينة أعلاه تتضمن مشكلة أخلاقية .
2. يفترض على الأستاذ يوسف أن لا يتخذ القرار المشار إليه .
3. إذا كنت مكان الأستاذ يوسف فإنك ستتخذ نفس القرار .
4. الضرر الناتج عن سلوك (أو قرار) الأستاذ يوسف إن وجد يعتبر بشكل عام صغيراً جداً .
5. معظم الناس سيتفقون على أن قرار الأستاذ يوسف هو قرار خاطئ .
6. سلوك(قرار) الأستاذ يوسف لن يسبب أي ضرر في المستقبل القريب .



## Appendix C: Correlation Results of Independent Continuance Variables

### Appendix C1: Management Accountants

Variables	Gender	Idealism	Relativism	LC	CI	SR	PM	MC <sub>1</sub>	SC <sub>1</sub>	TI <sub>1</sub>	MC <sub>2</sub>	SC <sub>2</sub>	TI <sub>2</sub>	MC <sub>3</sub>	SC <sub>3</sub>	TI <sub>3</sub>	MC <sub>4</sub>	SC <sub>4</sub>	TI <sub>4</sub>	
Gender	1.00																			
Idealism	.00	1.00																		
Relativism	.12	<b>.19*</b>	1.00																	
LC	-.04	<b>.19**</b>	.13	1.00																
CI	-.13	<b>.13*</b>	<b>.18**</b>	<b>.56**</b>	1.00															
SR	-.07	<b>.18**</b>	.09	<b>.57**</b>	<b>.68**</b>	1.00														
PM	-.04	.12	.09	<b>.27**</b>	<b>.33**</b>	<b>.39**</b>	1.00													
MC <sub>1</sub>	.00	.06	-.11	.07	.04	.05	-.11	1.00												
SC <sub>1</sub>	-.03	.04	.01	.02	.10	-.01	-.07	.11	1.00											
TI <sub>1</sub>	-.05	.09	.04	<b>.14*</b>	.12	.12	.04	<b>.38**</b>	.07	1.00										
MC <sub>2</sub>	-.02	.08	<b>-.18*</b>	.07	.05	.03	-.05	<b>.38**</b>	-.12	<b>.22**</b>	1.00									
SC <sub>2</sub>	-.04	.06	-.11	<b>.16*</b>	.10	.04	-.02	.08	<b>.37**</b>	<b>.16*</b>	.08	1.00								
TI <sub>2</sub>	.05	.09	-.07	.08	.05	.00	-.02	<b>.26**</b>	-.07	<b>.25**</b>	<b>.56**</b>	.08	1.00							
MC <sub>3</sub>	.06	.05	-.05	.02	.01	-.01	<b>-.16*</b>	<b>.23**</b>	-.01	<b>.19**</b>	<b>.37**</b>	.06	<b>.23**</b>	1.00						
SC <sub>3</sub>	-.03	.08	-.06	<b>.20**</b>	<b>.16*</b>	<b>.21**</b>	-.02	-.06	<b>.22**</b>	-.03	-.01	<b>.20**</b>	-.09	<b>.30**</b>	1.00					
TI <sub>3</sub>	.11	.03	-.08	-.08	-.08	-.04	<b>-.15*</b>	.17**	-.05	<b>.21**</b>	<b>.29**</b>	.05	<b>.34*</b>	<b>.63**</b>	<b>.24**</b>	1.00				
MC <sub>4</sub>	-.01	.03	<b>-.14*</b>	-.01	-.04	-.06	-.03	.09	-.09	<b>.15*</b>	<b>.38**</b>	.06	<b>.38*</b>	<b>.37**</b>	.01	<b>.40**</b>	1.00			
SC <sub>4</sub>	-.04	.13	<b>.14*</b>	<b>.18**</b>	.11	<b>.13*</b>	<b>.14*</b>	-.04	.12	<b>.17*</b>	.05	<b>.15*</b>	.10	.06	<b>.20**</b>	<b>.16*</b>	<b>.30**</b>	1.00		
TI <sub>4</sub>	-.05	.04	-.05	-.04	-.06	-.05	-.12	.12	.01	<b>.16*</b>	<b>.19**</b>	<b>.13*</b>	<b>.30*</b>	<b>.27**</b>	.05	<b>.34**</b>	<b>.60**</b>	<b>.33**</b>	1.00	

LC: law and professional code; CI: company interest; SR: social responsibility; PM: personal morality; MC1: magnitude of consequences; SC: social consensus; TI: temporal immediacy; 1: scenario 1; 2: scenario 2; 3: scenario 3; 4: scenario 4.

### Appendix C<sub>2</sub>: Accounting Students

Variables	Gender	Idealism	Relativism	MC <sub>1</sub>	SC <sub>1</sub>	TI <sub>1</sub>	MC <sub>2</sub>	SC <sub>2</sub>	TI <sub>2</sub>	MC <sub>3</sub>	SC <sub>3</sub>	TI <sub>3</sub>	MC <sub>4</sub>	SC <sub>4</sub>	TI <sub>4</sub>
Gender	1.00														
Idealism	-.01	1.00													
Relativism	-.01	<b>.26*</b>	1.00												
MC <sub>1</sub>	.02	.03	-.03	1.00											
SC <sub>1</sub>	-.06	-.06	-.05	.10	1.00										
TI <sub>1</sub>	-.04	.04	-.10	.13	.14	1.00									
MC <sub>2</sub>	.06	.09	-.07	<b>.30*</b>	-.05	.07	1.00								
SC <sub>2</sub>	-.07	-.05	-.03	.14	<b>.20*</b>	.09	.11	1.00							
TI <sub>2</sub>	.09	.14	-.15	.15	.10	<b>.21*</b>	<b>.24*</b>	-.01	1.00						
MC <sub>3</sub>	-.03	-.04	<b>-.16*</b>	.15	-.07	.02	<b>.20*</b>	.14	.10	1.00					
SC <sub>3</sub>	-.01	.07	<b>-.16*</b>	<b>.17*</b>	.05	.02	.08	.14	-.08	.09	1.00				
TI <sub>3</sub>	-.01	<b>.23*</b>	-.06	<b>.35*</b>	.02	.14	<b>.22*</b>	.08	<b>.30*</b>	<b>.26*</b>	<b>.25*</b>	1.00			
MC <sub>4</sub>	.05	.03	-.11	.11	-.07	-.02	<b>.28*</b>	-.03	.12	<b>.26*</b>	.04	.13	1.00		
SC <sub>4</sub>	-.06	.15	.05	<b>.20*</b>	-.01	-.01	.04	.14	.03	.09	<b>.27*</b>	.01	.15	1.00	
TI <sub>4</sub>	.00	<b>.17*</b>	.03	<b>.24*</b>	-.10	.03	<b>.19*</b>	-.06	<b>.23*</b>	<b>.29*</b>	.08	<b>.31*</b>	<b>.42*</b>	<b>.22*</b>	1.00

MC1: magnitude of consequences; SC: social consensus; TI: temporal immediacy; 1: scenario 1; 2: scenario 2; 3: scenario 3; 4: scenario 4.

## Appendix D: Correlation Results of Continuance Independent and Dependent Variables

### Appendix D<sub>1</sub>: Management Accountants

EDM Stages and Variables	Ethical Recognition				Ethical Judgment				Ethical Intention			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Idealism	<b>.25**</b>	<b>.23**</b>	<b>.16*</b>	-.01	<b>.22*</b>	<b>.30**</b>	<b>.16*</b>	.10	<b>.28**</b>	.04	<b>.15*</b>	.07
Relativism	-.09	<b>-.13*</b>	-.13	-.04	.01	-.08	-.02	.03	-.10	<b>-.23**</b>	-.08	<b>-.15*</b>
LC	-.01	.10	<b>.19**</b>	.07	.09	.09	<b>.16*</b>	<b>.15*</b>	.08	.09	<b>.19**</b>	.01
CI	.03	.11	.08	.02	.08	.06	.09	.01	.11	.05	<b>.14*</b>	.03
SR	.11	.10	.06	.02	.07	.06	<b>.13*</b>	.06	<b>.14*</b>	.04	<b>.15*</b>	.04
PM	<b>-.14*</b>	-.03	-.05	-.06	<b>-.20**</b>	-.04	.01	-.01	.11	.03	.01	.09
MC	.06	<b>.41**</b>	<b>.41**</b>	<b>.24**</b>	<b>.15*</b>	<b>.31**</b>	<b>.31**</b>	<b>.47**</b>	<b>.27*</b>	<b>.38**</b>	<b>.51**</b>	<b>.52**</b>
SC	-.01	.13	<b>.34**</b>	<b>.42**</b>	.102	<b>.1**</b>	<b>.43**</b>	<b>.45**</b>	.08	<b>.36**</b>	<b>.40**</b>	<b>.36**</b>
TI	<b>.17*</b>	<b>.36**</b>	<b>.42**</b>	<b>.34**</b>	<b>.23*</b>	<b>.32**</b>	<b>.32**</b>	<b>.46**</b>	<b>.26**</b>	<b>.31**</b>	<b>.44**</b>	<b>.53**</b>

EDM: Ethical Decision Making; LC; Law and Professional Code; CI: Company Interest; SR: Social Responsibility; PM: Personal Morality; MC: Magnitude of Consequences; SC: Social Consensus; TI: Temporal Immediacy.

### Appendix D<sub>2</sub>: Accounting Students

EDM Stages and Variables	Ethical Recognition				Ethical Judgment				Ethical Intention			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Idealism	<b>.38**</b>	<b>.38**</b>	<b>.28**</b>	<b>.20*</b>	<b>.31**</b>	<b>.28**</b>	.14	<b>.18*</b>	<b>-.08</b>	-.14	-.14	<b>-.19*</b>
Relativism	.03	-.08	.14	.15	.15	-.08	.05	.06	<b>.13</b>	<b>.17*</b>	.10	-.02
MC	.11	.03	<b>.18*</b>	.12	.11	.10	.09	<b>.26**</b>	<b>-.25**</b>	<b>-.29**</b>	<b>-.25**</b>	<b>-.31**</b>
SC	-.05	-.06	<b>.25**</b>	<b>.21**</b>	<b>-.22**</b>	.06	<b>.20*</b>	<b>.20*</b>	<b>.27**</b>	-.13	<b>-.22**</b>	<b>-.28**</b>
TI	.09	<b>.19*</b>	<b>.37**</b>	<b>.32**</b>	-.05	.06	<b>.30**</b>	<b>.39**</b>	<b>-.26**</b>	<b>-.39**</b>	<b>-.40**</b>	<b>-.43**</b>

EDM: Ethical Decision Making; MC: Magnitude of Consequences; SC: Social Consensus; TI: Temporal Immediacy.

### Appendix E: Multiple Regression Results of VIF and Durbin-Watson

Ethical Decision Making Stages and Scenarios	Management Accountants		Accounting Students	
	VIF (range)	Durbin - Watson	VIF (range)	Durbin - Watson
<b>Ethical Recognition</b>				
Scenario 1	1.05 – 2.08	2.05	1.03 – 1.13	2.15
Scenario 2	1.06 – 2.16	2.02	1.02 – 1.12	2.00
Scenario 3	1.05 – 2.18	2.14	1.10 – 1.22	1.86
Scenario 4	1.10 – 2.16	1.78	1.07 – 1.29	2.01
<b>Ethical Judgment</b>				
Scenario 1	1.10 – 2.08	2.05	1.03 – 1.12	2.10
Scenario 2	1.06 – 2.16	1.95	1.02 – 1.12	1.97
Scenario 3	1.09 – 2.19	1.81	1.11 – 1.22	1.90
Scenario 4	1.10 – 2.16	2.09	1.07 – 1.29	2.00
<b>Ethical intention</b>				
Scenario 1	1.03 – 2.35	1.73	1.02 – 1.13	2.05
Scenario 2	1.06 – 2.16	1.95	1.02 – 1.12	1.98
Scenario 3	1.10 – 2.18	1.64	1.11 – 1.20	2.09
Scenario 4	1.10 – 2.16	2.01	1.06 – 1.30	1.92

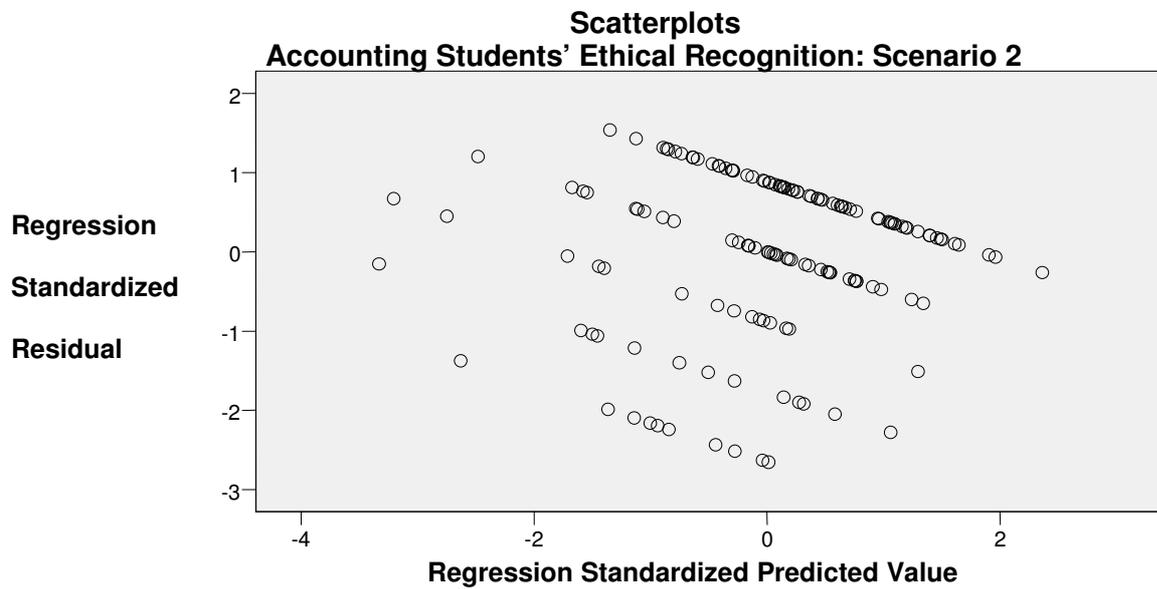
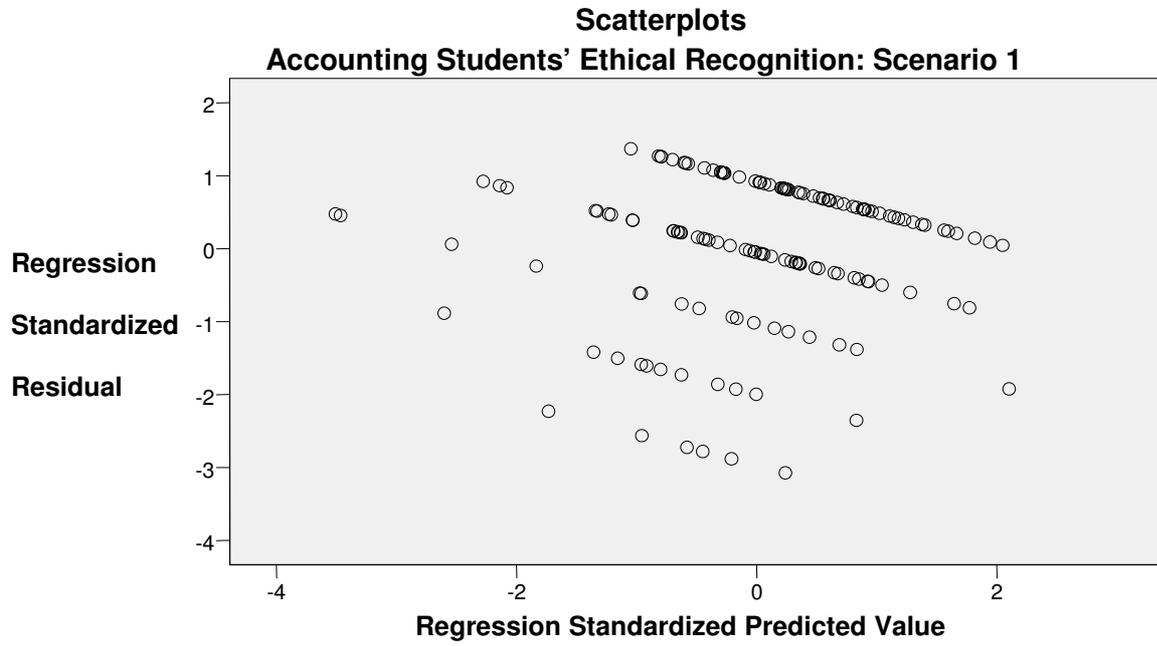
### Appendix F: Moral Intensity: Mean (SD), ANOVA Repeated Measure Results

Moral Intensity Dimensions & Scenarios	Scenario 1 M(S.D)	Scenario 2 M(S.D)	Scenario 3 M(S.D)	Scenario 4 M(S.D)	df	F
<b>Management Accountants</b>						
Magnitude of Consequences	3.3 (1.1)	3.7 (1.2)	3.4 (1.1)	3.5 (1.0)	3	9.279**
Social Consensus	3.3 (1.2)	3.5 (1.2)	3.2 (1.1)	3.2 (1.1)	3	3.779*
Temporal Immediacy	3.4 (1.2)	3.6 (1.0)	3.4 (1.1)	3.4 (1.0)	3	3.214*
<b>Accounting Students</b>						
Magnitude of Consequences	3.4 (1.1)	3.7 (1.2)	3.4 (1.1)	3.4 (1.1)	3	2.478
Social Consensus	2.9 (1.4)	3.2 (1.2)	3.1 (1.2)	3.1 (1.1)	3	2.368
Temporal Immediacy	3.5 (1.3)	3.7 (1.2)	3.5 (1.2)	3.4 (1.2)	3	1.302

\*p < 0.05; \*\*p < .001

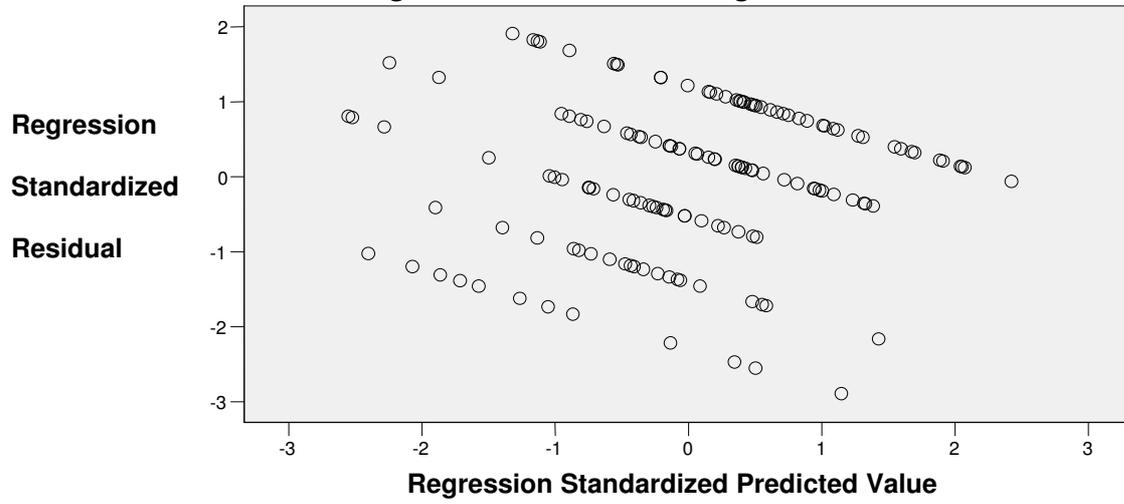
# Appendix G: Scatterplots (Dependent Variables)

## Appendix G1: Accounting Students



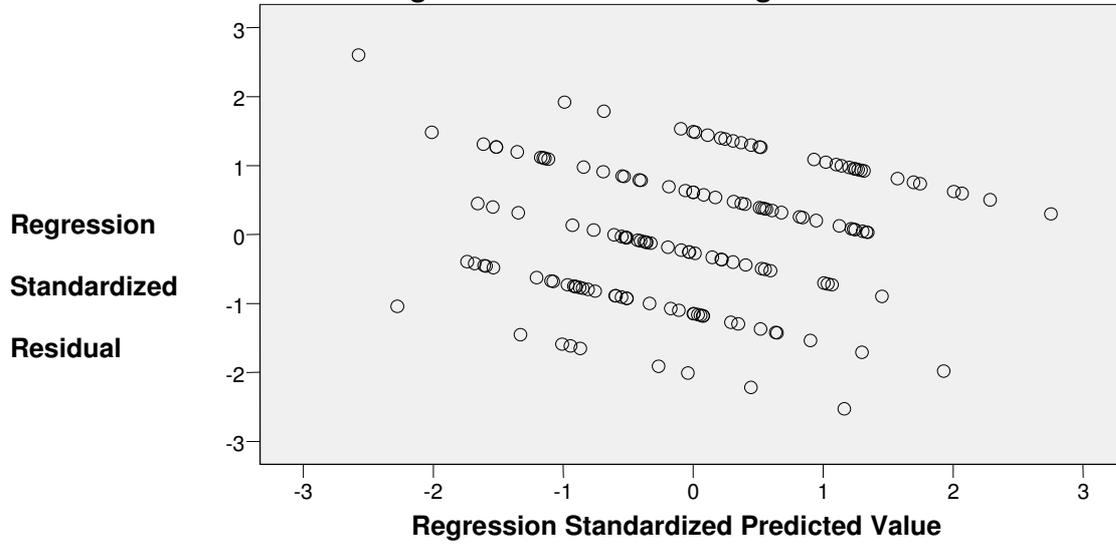
### Scatterplots

#### Accounting Students' Ethical Recognition: Scenario 3



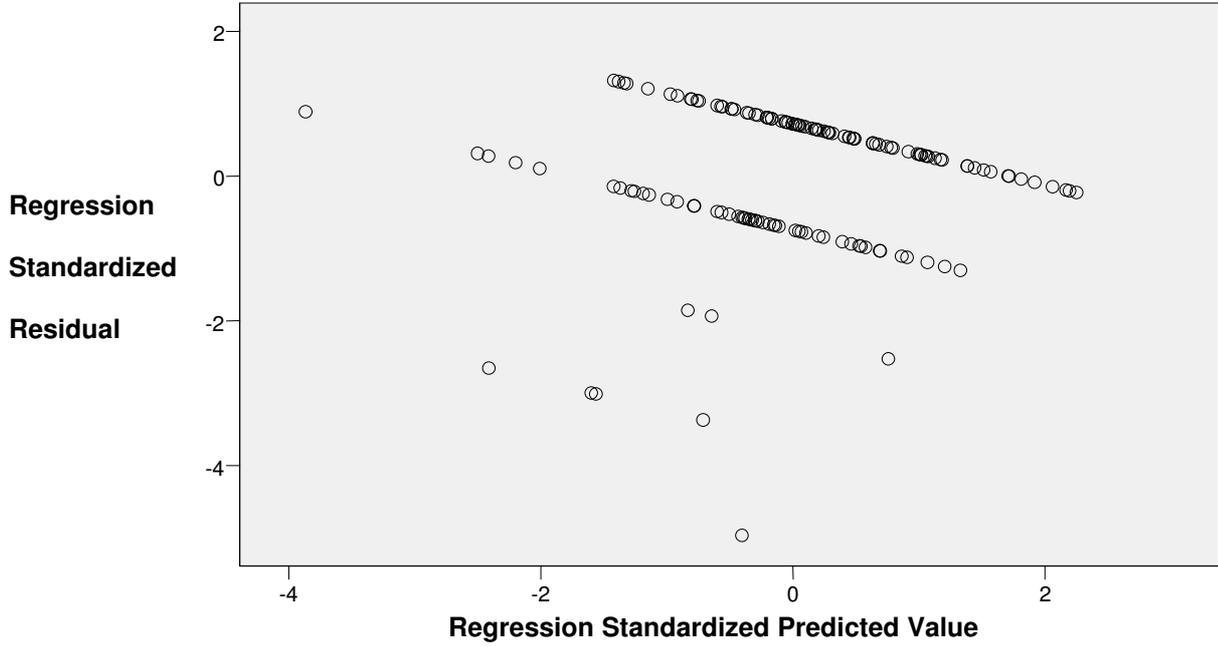
### Scatterplots

#### Accounting Students' Ethical Recognition: Scenario 4



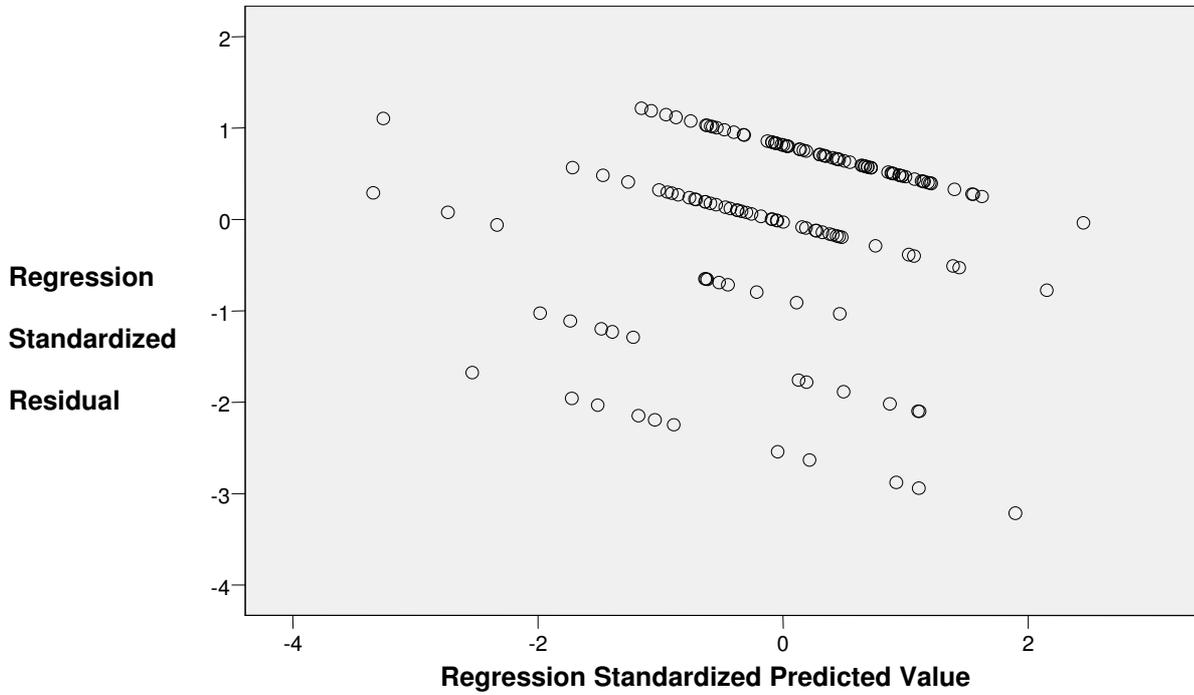
### Scatterplots

#### Accounting Students' Ethical Judgment: Scenario 1



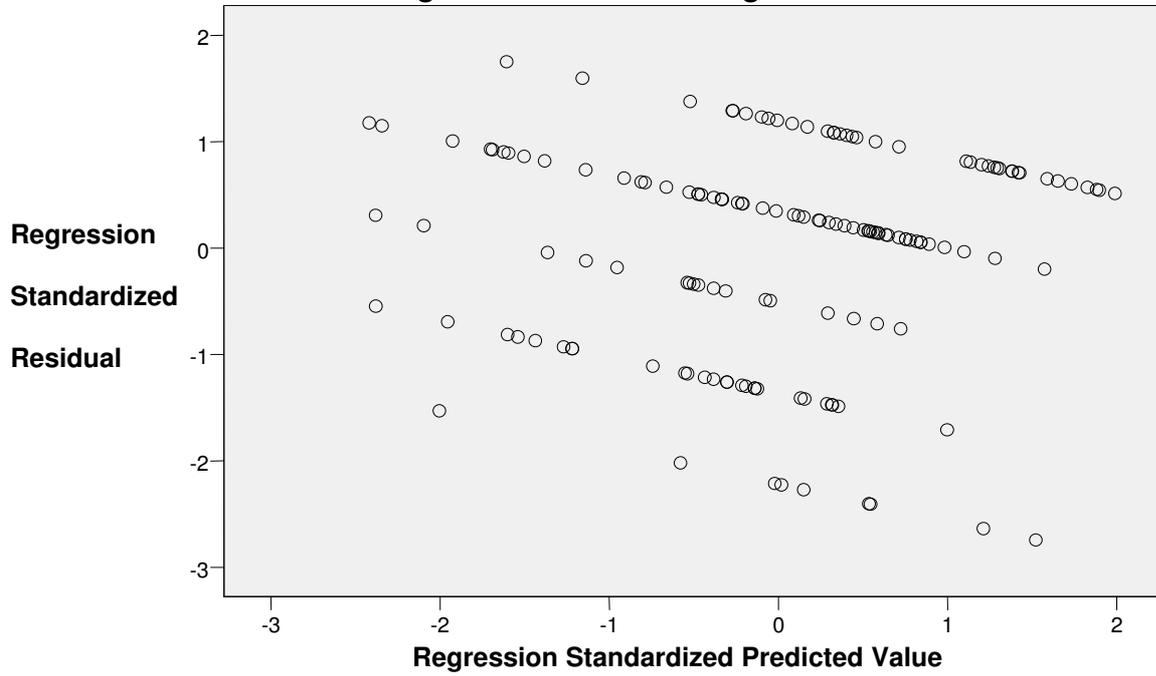
### Scatterplots

#### Accounting Students' Ethical Judgment: Scenario 2



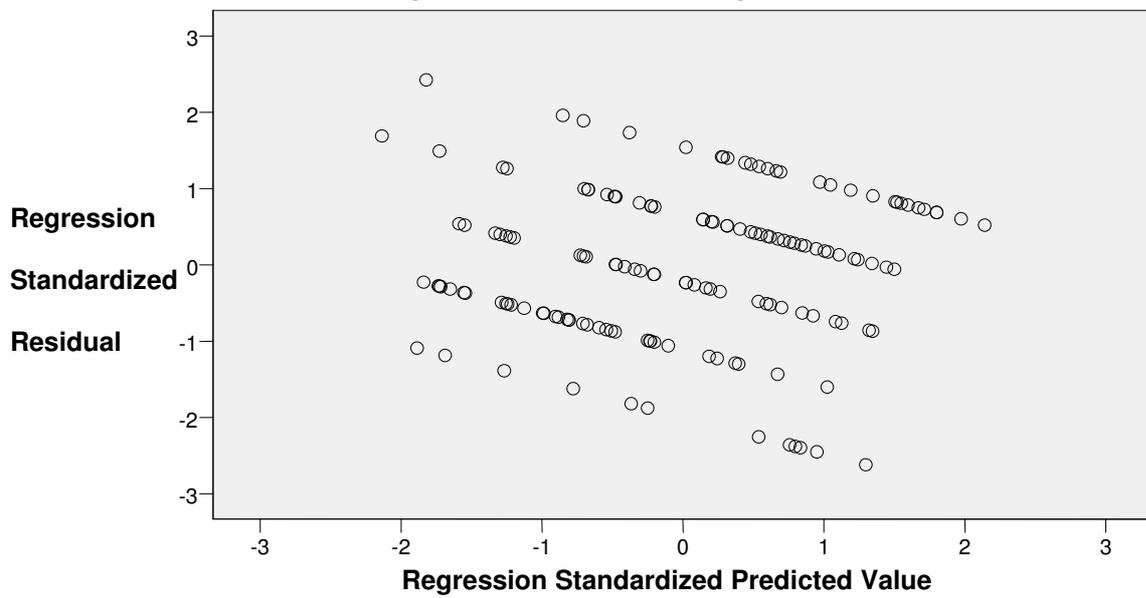
### Scatterplots

#### Accounting Students' Ethical Judgment: Scenario 3

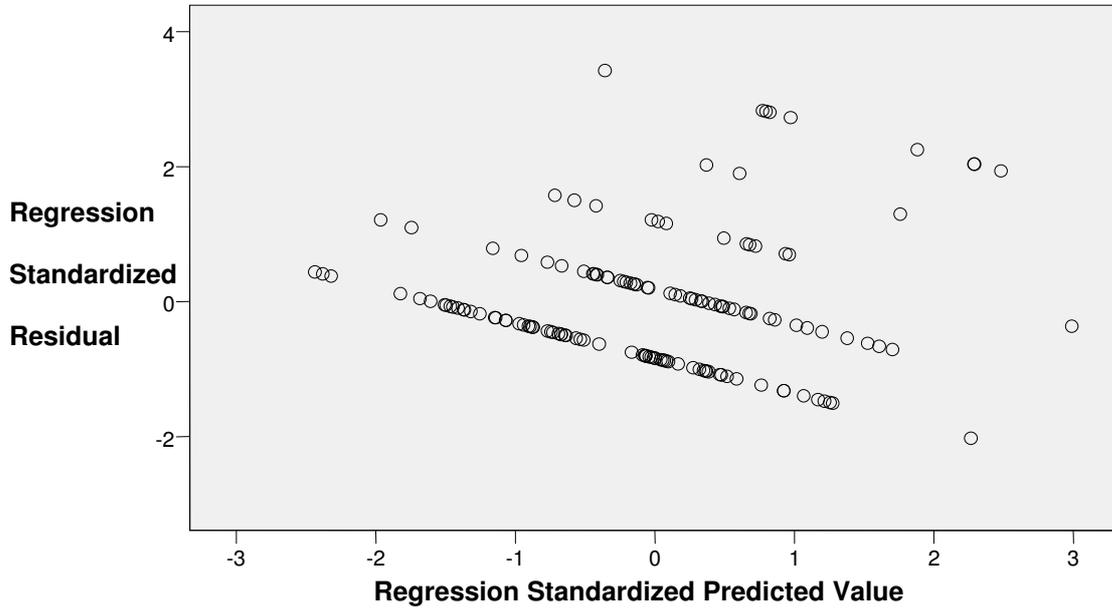


### Scatterplots

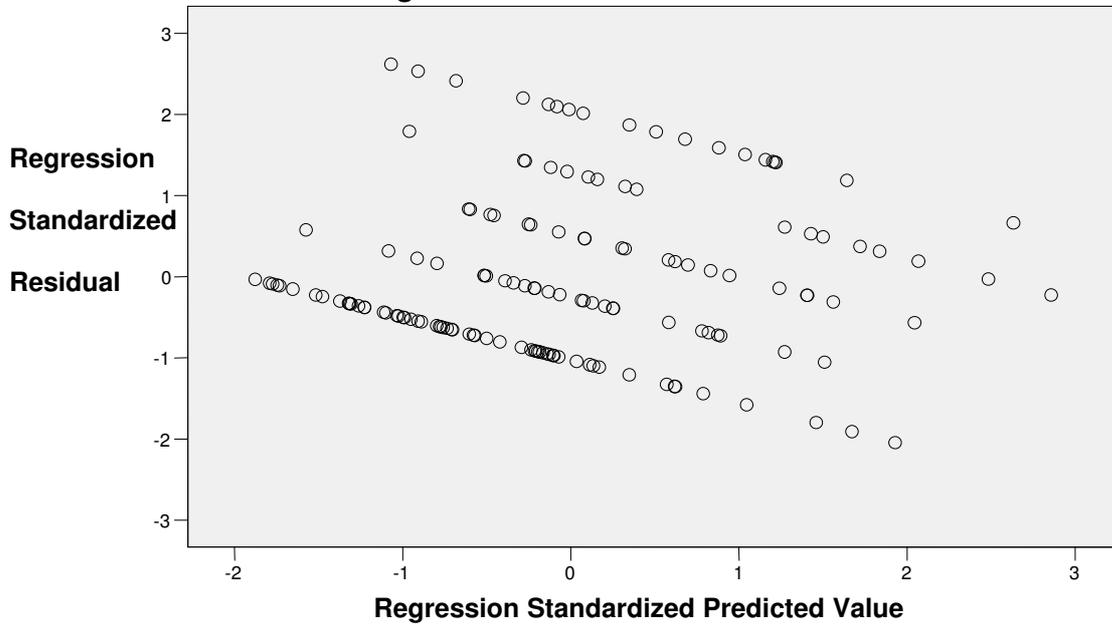
#### Accounting Students' Ethical Judgment: Scenario 4



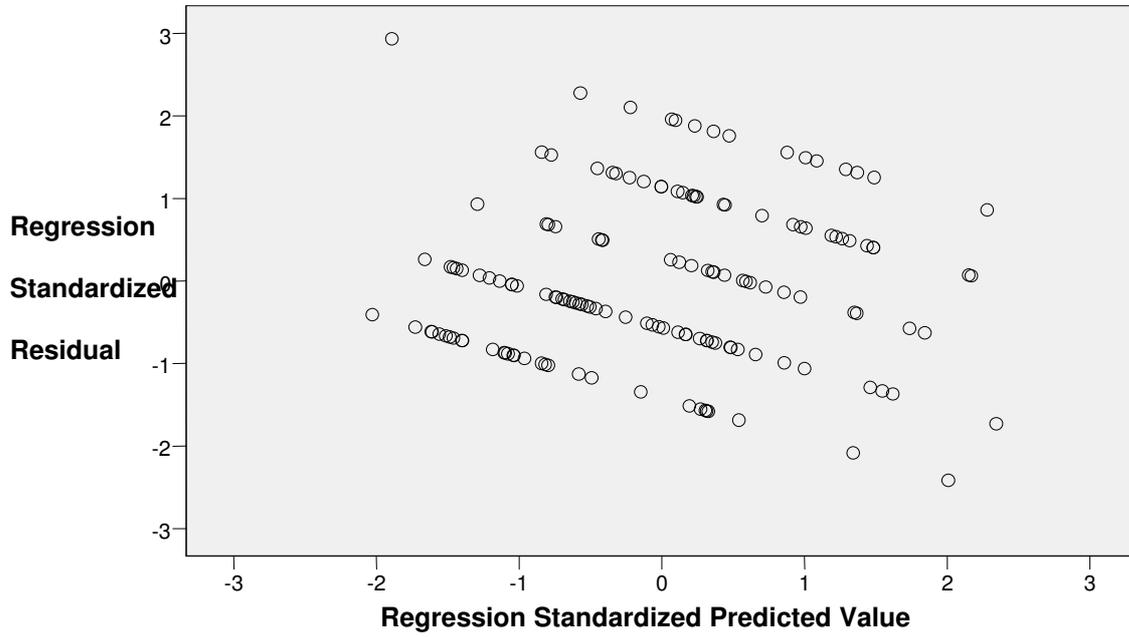
**Scatterplots**  
**Accounting Students' Ethical Intention: Scenario 1**



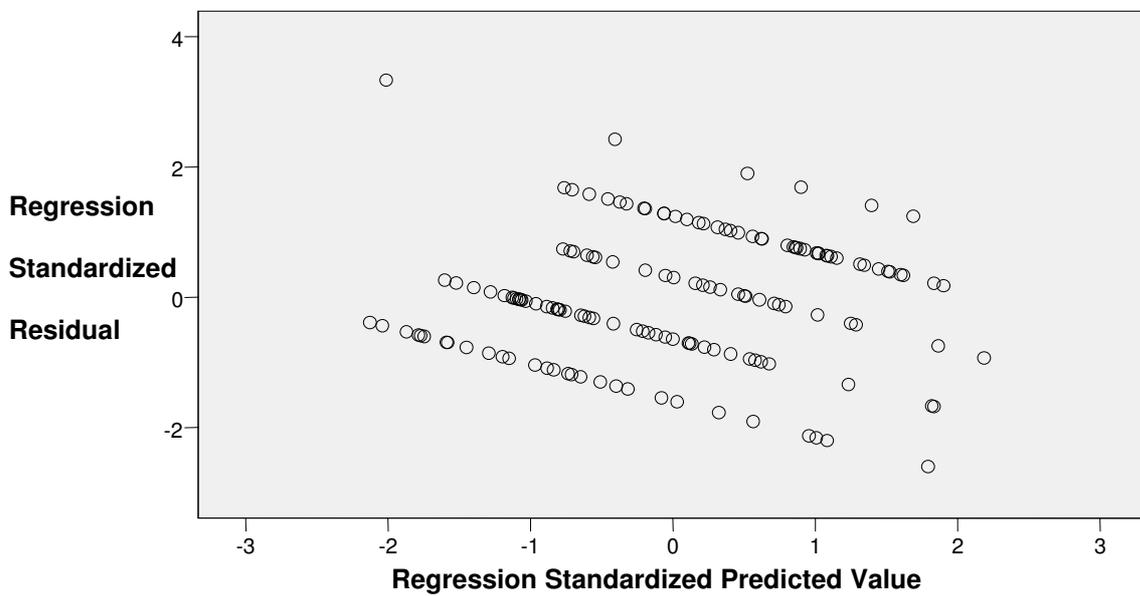
**Scatterplots**  
**Accounting Students' Ethical Intention: Scenario 2**



**Scatterplots**  
**Accounting Students' Ethical Intention: Scenario 3**



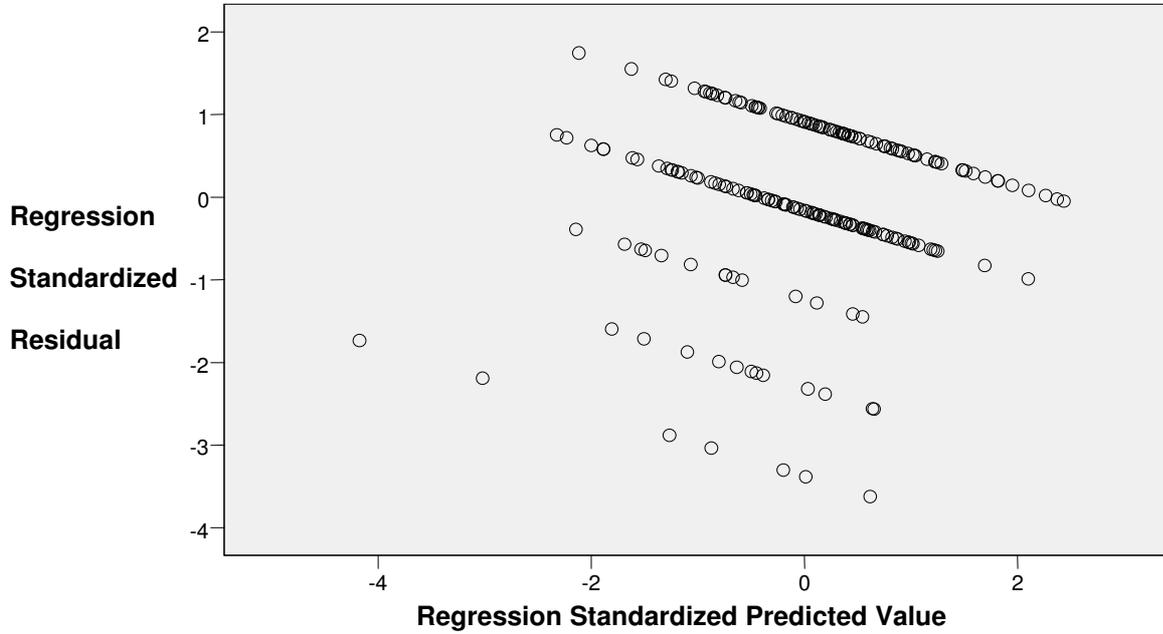
**Scatterplots**  
**Accounting Students' Ethical Intention: Scenario 4**



## Appendix G<sub>2</sub>: Management Accountants

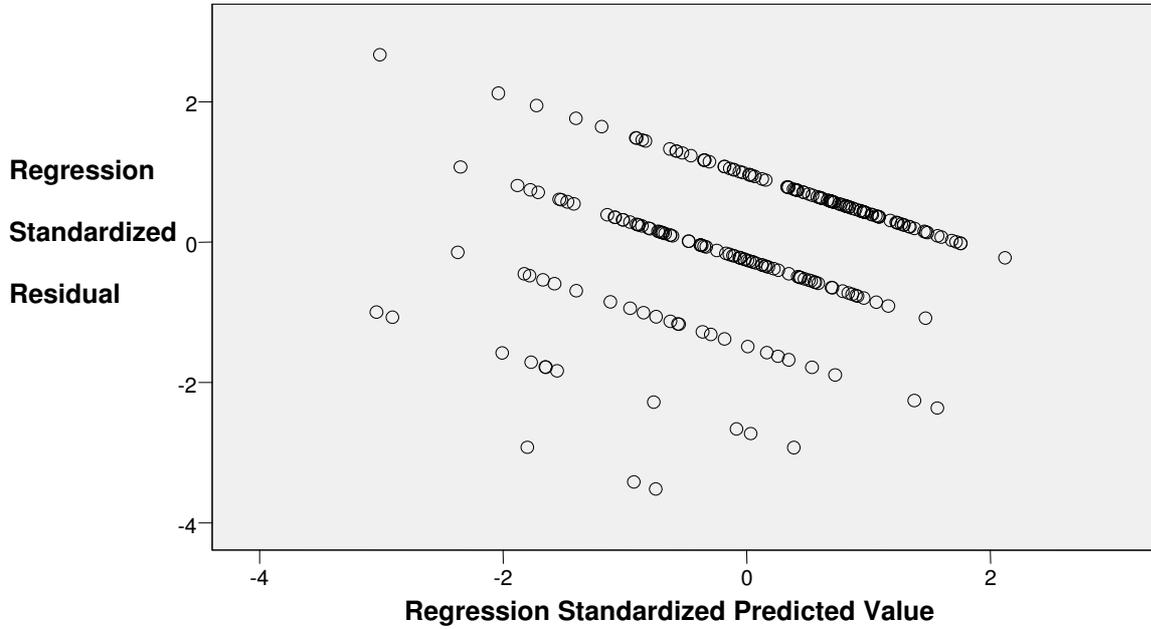
### Scatterplots

Management Accountants' Ethical Recognition: Scenario 1



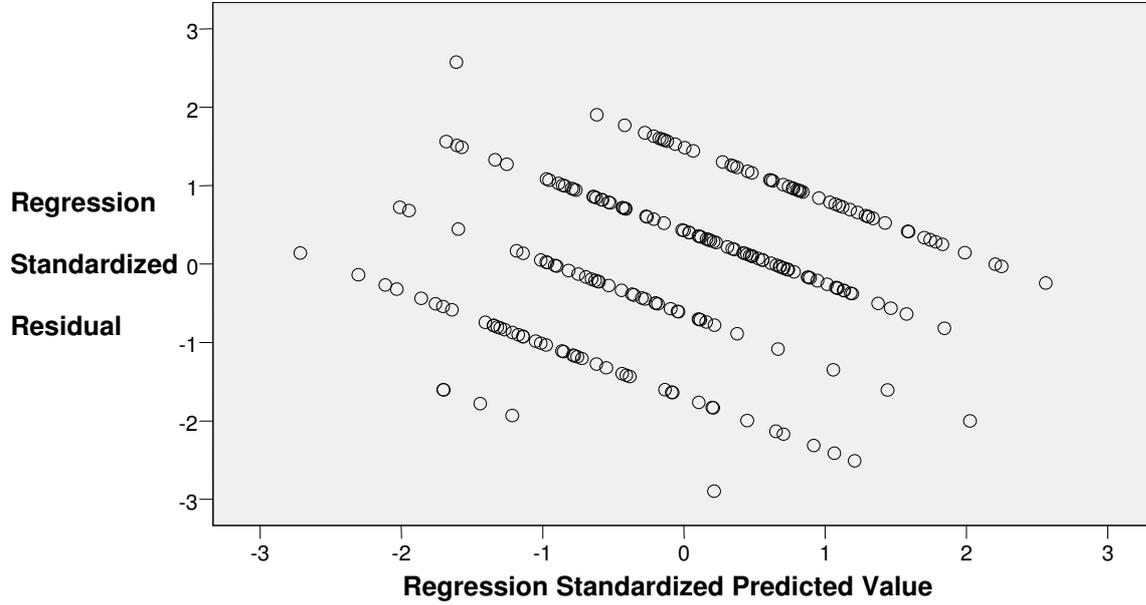
### Scatterplots

Management Accountants' Ethical Recognition: Scenario 2



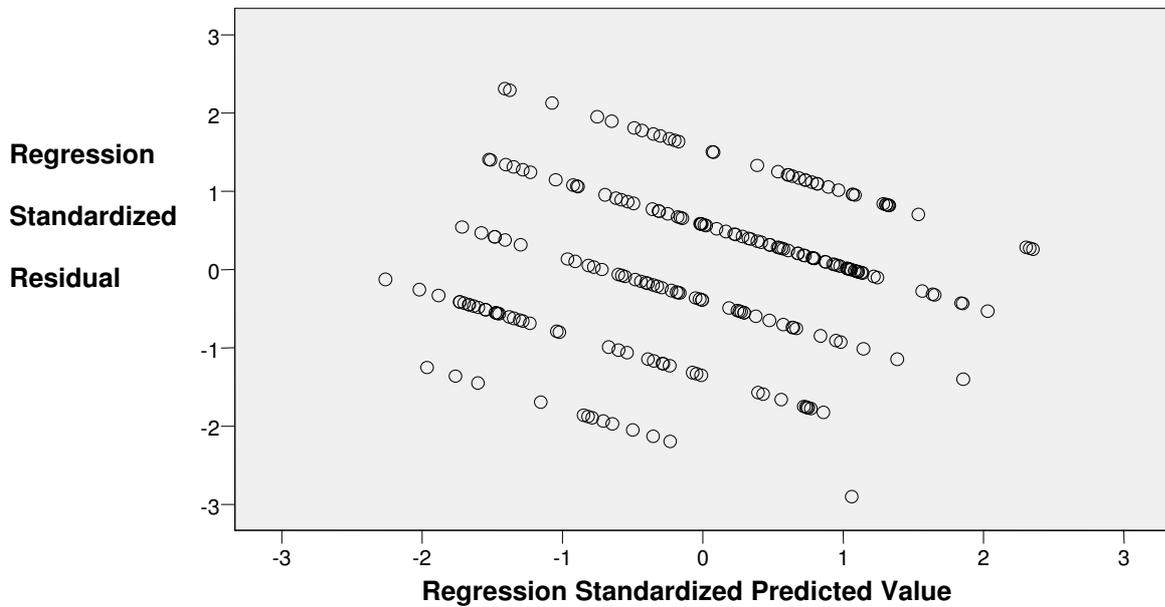
### Scatterplots

#### Management Accountants' Ethical Recognition: Scenario 3



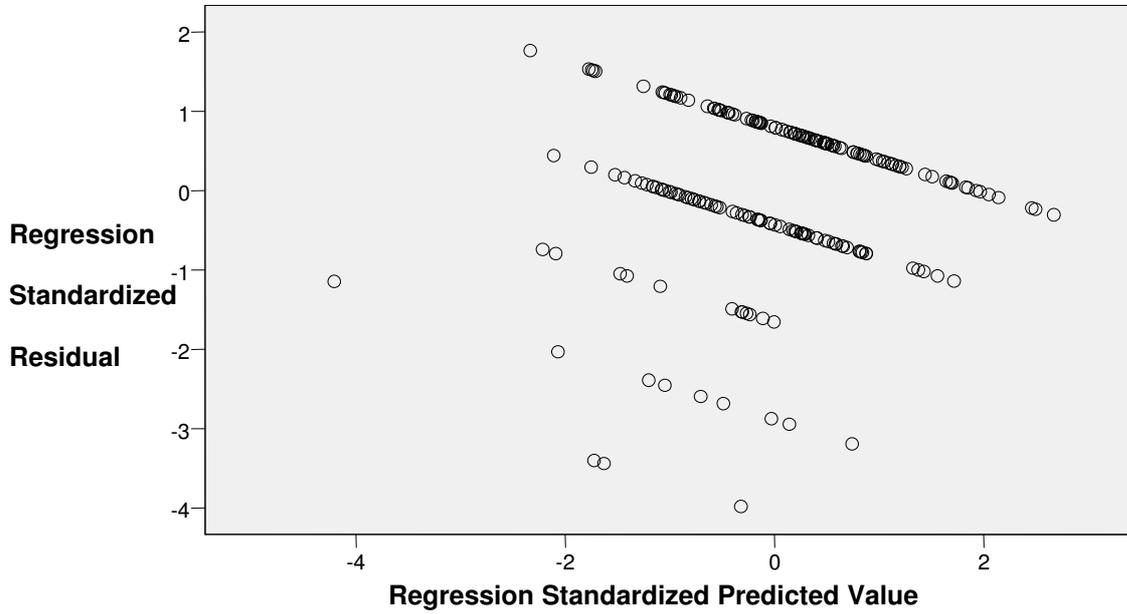
### Scatterplots

#### Management Accountants' Ethical Recognition: Scenario 4



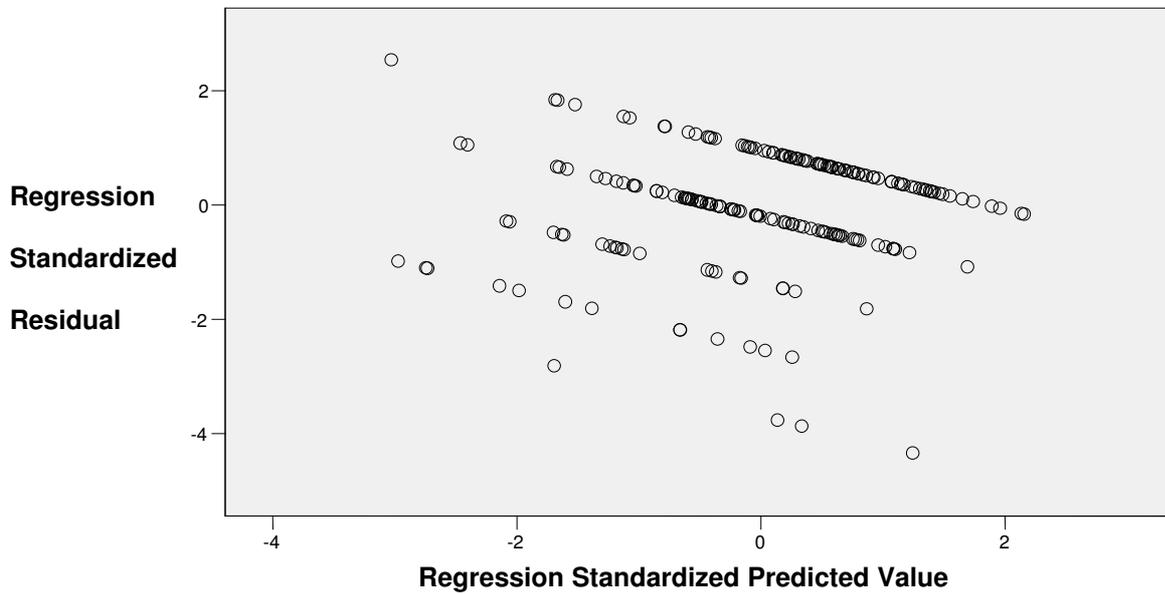
### Scatterplots

#### Management Accountants' Ethical Judgment: Scenario 1



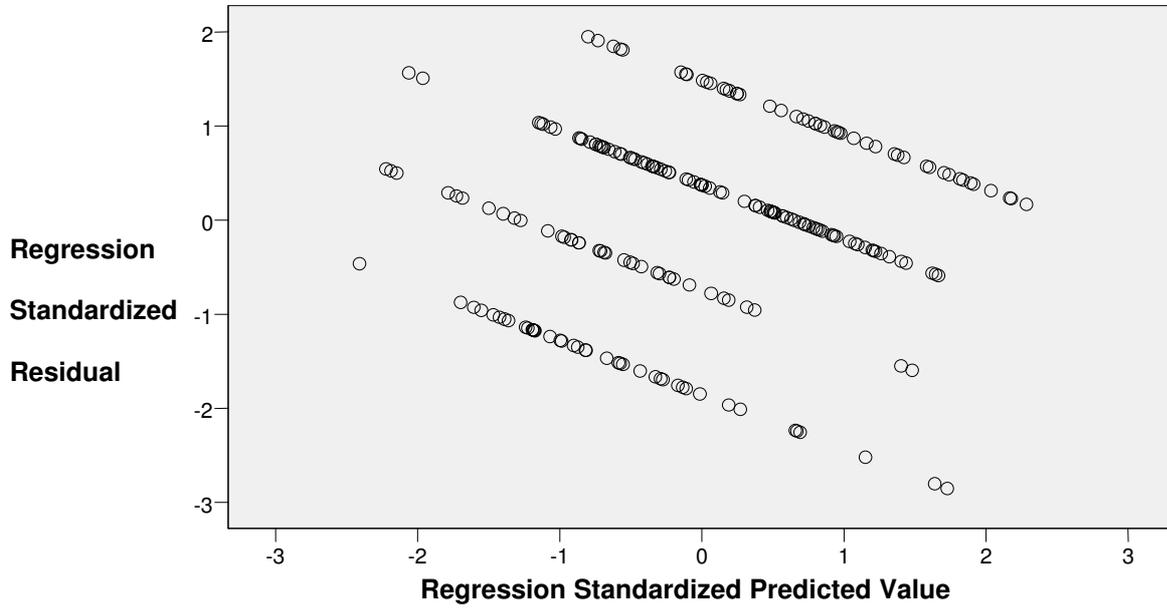
### Scatterplots

#### Management Accountants' Ethical Judgment: Scenario 2



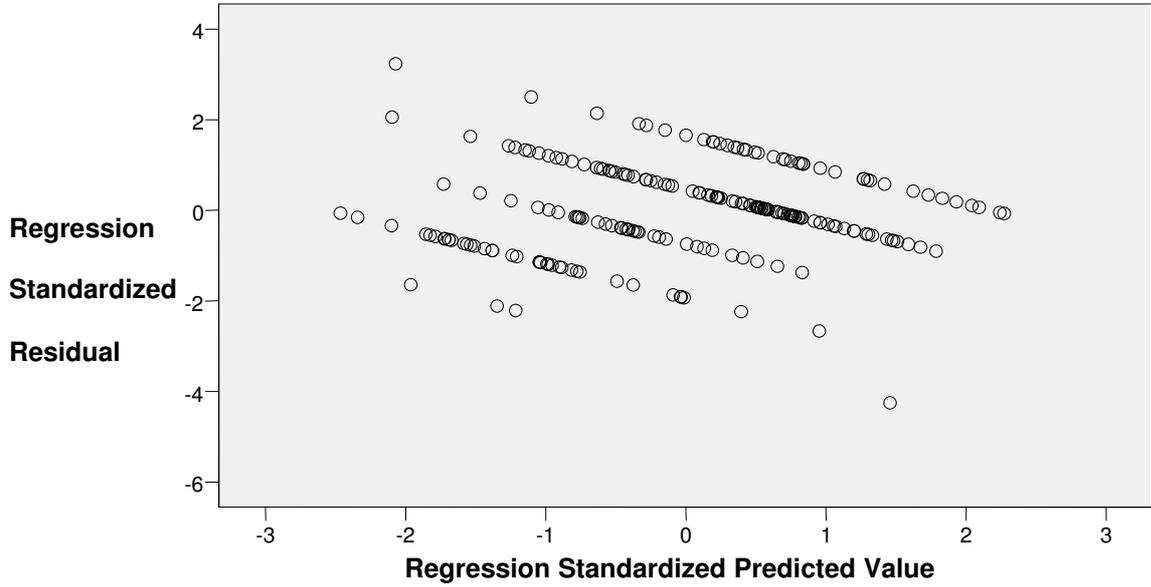
### Scatterplots

#### Management Accountants' Ethical Judgment: Scenario 3



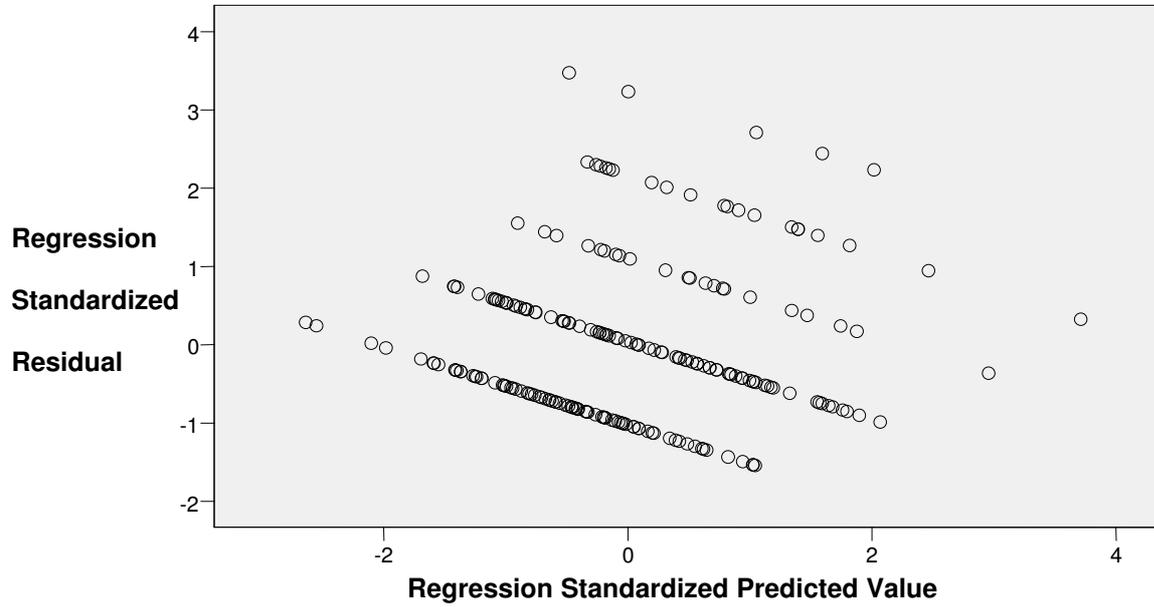
### Scatterplots

#### Management Accountants' Ethical Judgment: Scenario 4



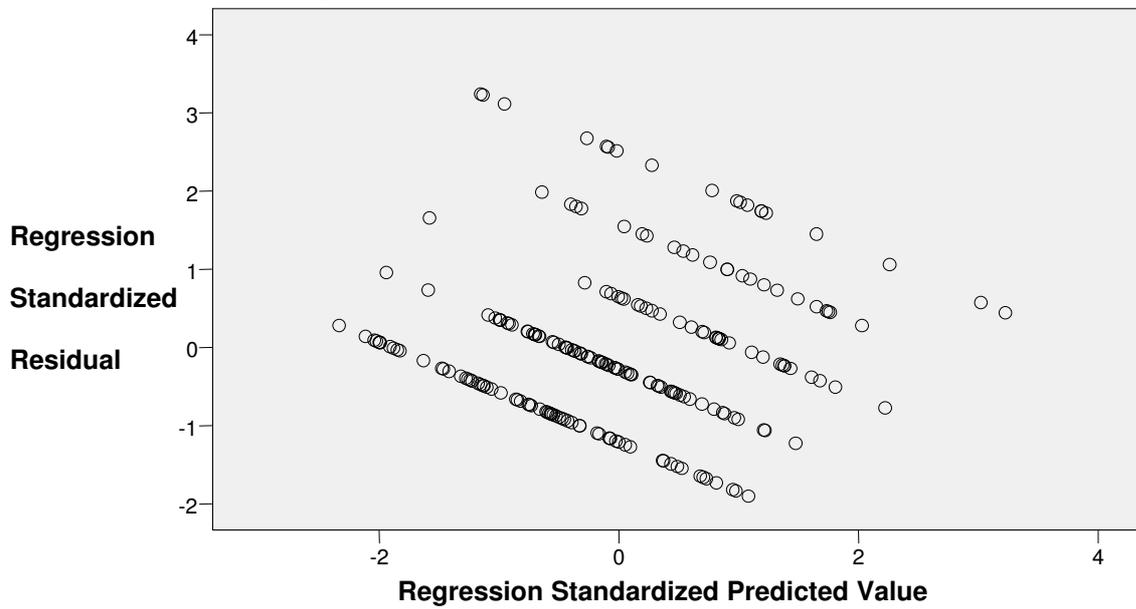
### Scatterplots

#### Management Accountants' Ethical Intention: Scenario 1



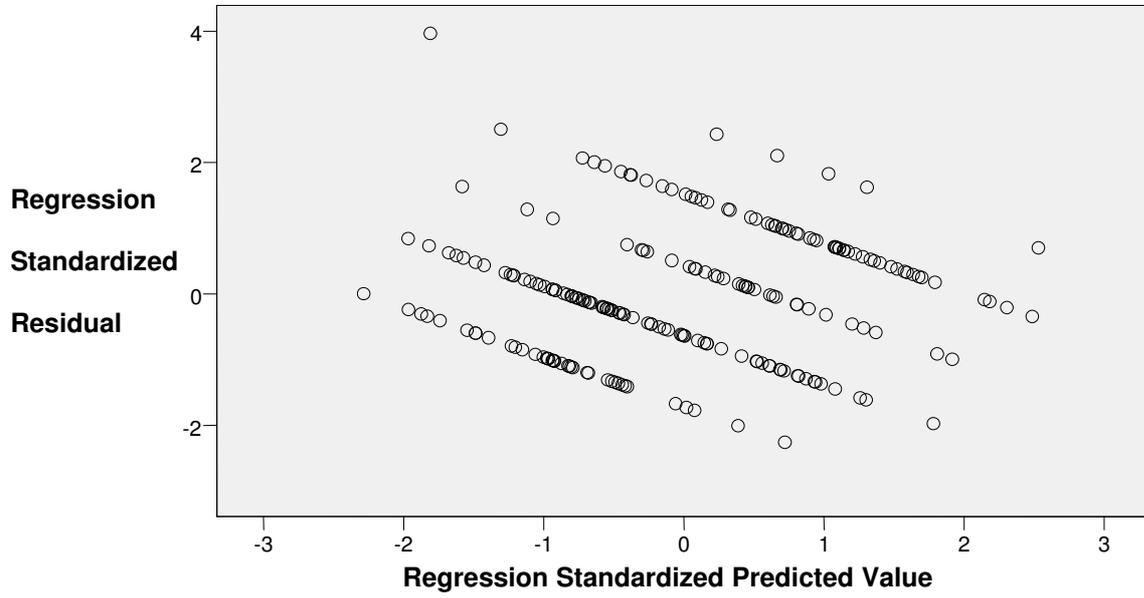
### Scatterplots

#### Management Accountants' Ethical Intention: Scenario 2



### Scatterplots

#### Management Accountants' Ethical Intention: Scenario 3



### Scatterplots

#### Management Accountants' Ethical Intention: Scenario 4

