
Ethical decision-making in audit: study of judgement, intent, and intensity.

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**ETHICAL DECISION-MAKING IN AUDIT:
STUDY OF JUDGEMENT, INTENT, AND
INTENSITY**

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Preface

This thesis is the conclusion of five years of studies at the University of Liege. It allows me to reach my goal of a master's degree in management. These studies are an investment that I am making for a life filled with challenges and discoveries. An investment that I did not make on my own. Indeed, so many people have helped and supported me, that it is impossible to mention them all here. However, I would like to deeply acknowledge those who have assisted me in the writing of this thesis.

First of all, I would like to thank my promoter, Benjamin Huybrechts, for his availability during the months of writing this thesis. I am extremely grateful for his insightful suggestions, patience, and expertise that he provided all along.

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Abstract

Our economic system is an interrelated system that can only hold together if each economic actor trusts the others. One of the key players is the auditor. He certifies the account and is the guarantor of the veracity of the financial information provided by companies to the world. This crucial role brings with it many dilemmas that the auditor has to face every day. Therefore, ethical decision-making is at the heart of the matter.

In view of the legal responsibilities and expectations on the auditing profession, several questions arise. Do auditors have a different moral judgement, a higher moral intent, or a higher moral intensity?

A study based on three cases of ethical dilemmas for comparing auditors, final year' students in finance and non-audit professionals may begin to provide an answer to those questions.

The model used to represent the ethical decision-making is based on theories known so far such as Rest (1986), Trevino (1986) or Jones (1991). The survey and analysis techniques used are largely based on Cohen, Pant and Sharp (2001) and Chaplais, Mard and Marsat (2016).

These analyses allow us to conclude that auditors do have a different moral judgement, a stronger moral intent to act ethically and a stronger moral intensity.

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Introduction

The economy of our society is a system that links a multitude of stakeholders who are dependent on each other and who influence each other greatly. Auditors are key player to the economy, due to their crucial role. The relevance of this actor, the auditor, has been increasingly in the spotlight following the financial crises and the numerous frauds in the recent years, such as the Enron scandal¹ or the Wirecard scandal², putting each time the auditor's work under scrutiny.

To better address the subject, it is necessary to introduce a simple definition of the work that is undertaken by an auditor :

« External audit means the examination of accounts and other activities, conducted from outside an organisation by an independent review body for the purpose of holding managers to account.»

(Hollingsworth, White and Harden, 2006, p.78)

By certifying their clients' accounts, auditors can ensure the reliability and authenticity of financial information that are needed from the investors to make informed investment decisions. However, the position of auditors is not a comfortable one. The very nature of audit leads these professionals to be confronted with ethical dilemmas on a daily basis. Indeed, it is a characteristic of their profession to represent the interests of several persons: those of the shareholders, of the creditors, of the company and of the state itself.

For the certification of company accounts to be meaningful, the public must have a high level of confidence in the auditors, and more broadly in the auditing company. Without this, the auditor's work has no weight, and the auditing company may even wither to the point of collapse.

As an example can be more revealing than an explanation, we will develop one of the most notable case of unethical behaviour : the scandal involving the company Enron and the audit firm Arthur Andersen.

¹ Example developed further in the introduction.

² It concerns a series of scandals that have led to the insolvency of Wirecard, German financial services provider. A major auditing firm, Ernst & Young, is implicated and failed to report Wirecard's financial arrangements.

The Enron scandal and the unethical behaviour it uncovered are considered by many authors such as Rockness and Rockness (2005) and Pluchart (2005) as a turning point in the regulation of the auditing profession.

To better understand the implications, it is relevant to give a summary of the Enron - Andersen case. Enron was a massive American energy and services company, and Arthur Andersen was a well-known audit company.

An author, Jamel Azibi (2014), gave a great short understanding of the situation in his work. The audit firm, Arthur Andersen, that was considered to be one of the five largest audit firms in the world and was commissioned to conduct the statutory audit of Enron since 1986.

Following the bankruptcy of Enron, an investigation was launched by the Security Exchange Commission³ and the US Congress to better understand the ins and outs of the scandal. Those investigations revealed that Arthur Andersen knowingly disregarded certain accounting practices⁴ in their auditing of Enron.

These findings have obviously created a remarkable distrust in the certifications of what was once the major international audit firm Arthur Andersen, which, combined with other reasons, led to the downfall of the company.

This example, among many others existing, shows the importance of irreproachable behaviour of auditors; on the one hand, to successfully accomplish their mission, and on the other hand, to keep the trust of the public opinion, which is vital to the auditor's mission.

In this research, we will focus on the difference in the process of ethical decision-making. To do so, we will compare the ethical decision-making of auditors with those of last year's finance students and with those of non-audit workers. We will compare the auditors to two different populations to highlight better the differences.

³ An independent US agency whose role is to enforce and verify the application of laws against financial market manipulation.

⁴ For example, creative accounting, i.e., techniques to make the accounts look more favourable to public expectations.

The comparison will be done on several aspects of ethical decision-making. We will observe differences from moral judgement to moral intent and moral intensity among auditors, last year's finance students and non-audit professionals in the framework of our research.

The research follows the same line of work that has been carried out over the years to better understand the ethical decision-making among auditors.

Firstly, in the practice of the profession today, it can be seen that every major auditing company emphasises the need for ethical auditors.

The case of the Enron scandal that led to the collapse of the auditing company Arthur Andersen showed the importance of public trust and of the ethical behaviour to them. It is in the interest of every auditor and every audit firm to know details of the ethical decision-making process.

Based on the outcome of this research, it will be possible to conclude whether the expectations in terms of good ethical behaviour of these companies are met. If not, the causes of this discrepancy should be analysed more precisely. Auditors are expected to demonstrate high ethical standards and to set an example for others in the accounting profession. Auditors regularly face ethical dilemmas when dealing with key stakeholders. Therefore, the quality of the ethical decision-making of the auditors directly influences the quality of the audits they carry out. And as explained before, audits are particularly important in our economy.

In the scientific literature, there is a lack of research on the ethical thinking of auditors. It will be interesting to compare theoretical expectations of auditors with the reality on the ground. Similar studies on the impact of ethics training on ethical decision-making have already been conducted by Chaplais, Mard and Marsat (2016). Research comparing auditors and finance students in Canada exists. Indeed, Cohen, Pant and Sharp (2001) investigated from a different angle than the one that will be taken in this study. They examined the ethical decision-making in three measures including ethical awareness where slight differences were found (auditors had a stronger judgement, judging the act as less ethical than students), ethical orientation where they found that these were similar between groups and finally, intention to perform questionable acts where remarkable differences were highlighted.

The notable differences showed that audit professionals were much less likely to act in ways that were not entirely ethical.

We will compare the ethical decision-making process from other angles, but our results may complement those of this study.

To summarise, this thesis may complement the known theory, as well as help in practice to better understand auditors and their ethical decision-making. This thesis will also help to see whether it is in line with legal expectations and previous research in this area. In practice, a better understanding of auditors may lead to better improvement of their behaviour or a better anticipation of unethical behaviour.

This paper will be divided in five chapter. Chapter 1, literature review is composed with detailed and in-depth presentation of the different aspects of the quality of an audit and the importance of ethics, followed by an examination of different known theories on the ethical decision-making, and finally, a quick review of the influence on the ethical decision-making. The objective of this first chapter is to analyse the different existing scientific theories on this subject, to deconstruct the variables and to create a simple but complete model to analyse the process of decision-making of the different actors of this study, as well as present the several sub-hypotheses in this research.

Chapter 2, methodology is structured with a presentation of the methodology used for the study carried out to answer the questions of this research. This include, among other elements, the research approach, research strategy and the techniques.

Following that, we will have chapter 3, it is a development of the results received as well as a statistical analysis and explanation of the techniques chosen for those analysis, either it is in term of programs or statistical theory.

Afterward we have chapter 4, the discussion is a more detailed and explanatory analysis of the results presented in the previous chapter. The aim is to answer the hypotheses.

Finally, chapter 5, conclusion composed with a short summary, a review of the theoretical and managerial contributions of this research as well as its limitations.

Chapter 1 : Literature review

1.1 Requirement of ethics for auditors

1.1.1 Legal requirements

In order to address the topic of ethical decision-making, and more broadly the topic of ethics within the auditing profession, it is necessary to consider first the importance of ethics in auditing.

As a first step, we will look at the different codes and standards required in the profession. Indeed, international standards are issued by The International Auditing and Assurance Standards Board (IAASB). The institution is an independent body that sets international standards for auditing, quality control, review, and other assurance. Their goal is to achieve greater uniformity in the audit practice worldwide and thereby improve confidence in the profession. As already covered in the introduction, public trust is a key element for auditors.

The Board issues the International Standards on Auditing (ISA) that are professional standards for the auditing of financial information. The standards cover all auditing stages and address the auditor's responsibility as well as the form and content of the auditor's report.

They are a multitude of standards issued by the IAASB, including ISA 200⁵ named “Overall objectives of the independent auditor and the conduct of an audit in accordance with international standards on auditing”, which covers the requirement of an auditor. As explained in the ISA 200 :

« The auditor shall comply with relevant ethical requirements, including pertaining to independence, relating to financial statement audit engagement. »

(International standard on auditing 200, p. 78)

⁵ ISA 200 is one of many standards published by the institution. It is the one that directly highlights the importance of auditor ethics. It should be noted that other standards also mention the importance of ethics but are less striking.

In this same standard, there are more detailed explanations on those relevant ethical requirements that refer us to the code issued by The International Ethics Standards Board for Accountants⁶ (IESBA) that sets international ethics standards for professional accountants.

They establish the fundamental principles of professional ethics for accountants, but these principles are also relevant to the profession of auditor. In the word of the IESBA International Code of Ethics for Professional Accountants in section 110 :

“ The fundamental principles with which the auditor is required to comply by the IESBA Code are

- 1) Integrity.*
- 2) Objectivity.*
- 3) Professional competence and due care.*
- 4) Confidentiality.*
- 5) Professional behaviour.”*

(Code of Ethics for Professional Accountants, 2020, p. 21)

In Belgium, the leading institution is the “ Institut des réviseurs d’entreprises⁷”. The institute has decided since 2009 to validate the use of those international standards in Belgium through the “Norme relative à l’application en Belgique des normes internationales d’audit (normes ISA) ”.

This review on the importance in the official standards of audit practice gives us the sense that an acceptable ethical behaviour is essential and is what the society expects from the practice of the auditing profession. This will be our starting point for further research.

Following the qualities that are required and expected from auditors, we can look at the qualities that constitutes a good audit.

⁶ The International Ethics Standards Board for Accountants defends similar objectives as IAASB.

⁷ The institute works in collaboration with the “Conseil supérieur des Professions économiques” and the Minister of Economy in Belgium.

1.1.2 Requirement of ethics in an audit

The concept of audit quality has been widely studied and debated since the 1980s by many authors. The most accepted and used definition is the one presented by DeAngelo (1981) in his work “Auditor size and Audit Quality”. The author defined the audit quality through the combination of two concepts: the competence and the independence of its auditor. He defines competence by the auditor’s ability to detect material misstatements (related to the size of the audit firm), and independence is defined by the ability to report those detected misstatements.

Since then, many authors have accepted this definition, as Krishnan and Schauer (2000) in their work “The differentiation of quality among auditors” or Donald and Gary (1992) in their work “Determinants of Audit Quality in the public Sector”.

Some authors of the scientific literature such as Goldman and Barlev (1974) and Noël and Krohmer (2010) reflected on the fact that discovering a material misstatement is a probability that is fixed and positive, as all auditors are most likely to be adequately formed on the technical aspect, and this condition leaves the independence as a key factor of the quality.

Indeed, the knowledge of financial and accounting theory is not sufficient to be an auditor. Values and ethics play a large part in the quality of an auditor's work (Prat dit Hauret, 2003; Gonthier-Besacier, Hottegindre, Fine-Falcy, 2012).

In conclusion, fundamental principles such as independence, objectivity and integrity present an ethical ideal to strive for. Adherence to these principles is essential to maintain the credibility of the profession and the confidence of the public in it.

In this section we have analysed the importance of ethics in the standards, as well as studies and literature that have defined audit quality. To continue the literature review, we will consider the process of ethical decision-making.

1.2 Process of ethical decision-making

1.2.1 Different stages of ethical decision-making

In order to better understand the auditors' ethical decision-making, we need to break down and look at process in details.

The scientific literature does not offer any real consensus on the definitions of ethical behaviour, or decision as underlined by Morales-Sánchez, Orta-Pérez, and Rodríguez-Serrano (2020). Most authors, Dubinsky and Loken (1989); Hunt and Vitell (1986) or Trevino (1986) omitted the definitions or give an overly vague explanation. However, Jones (1991, p.367) defines the ethical decision as “a decision that is both legally and morally acceptable to the larger community”.

Other concepts that are useful to define in order to explore knowledge about ethical decision-making :

- Moral agent as defined by Jones (1991) is the individual who makes a decision, whether or not he or she recognises the moral issue.
- Moral issue as defined by Jones (1991) is the action or a decision that will have consequences for others and involve a choice on the part of the actor/decision maker.
- Ethical dilemma can be defined as a situation where the moral agent has to choose between several possible decisions (Trevino and Nelson, 2011).

The ethical decision-making process has been widely studied in recent decades by many authors such as Rest (1986), Jones (1991), Trevino (1986), Kelley and Ems (2003), Hunt and Vitell (1985) and Ferrell and Gresham (1985).

In this section we will try to review all the authors who have made important contributions to the study of ethical decision-making.

As a starting point, Rest (1986) developed a theory on individual ethical decision-making : a four components model. This model is the basis of most theories developed on this topic to this day. According to the author, ethical decision-making is done in four successive steps.

- The first step is moral sensitivity. This first stage corresponds to the moment when the individual should be able to recognize a moral issue that they are faced with. The recognition comes with the realisation that this ethical dilemma will require a decision-making process. The individual must become aware that there is a problematic situation arising and that it will require a decision that will have consequences.
- The second step is moral judgement. The moral agent must be able to recognize the actions that are possible and those that she/he considers fair. At this point, the person facing the dilemma will judge which lines of action are justifiable, good, or right.
- The third step is the moral intent. The individual has to decide what she/he wants to do as a result of the decision process he has undertaken from the situation.
- The fourth and final step is the moral behaviour. Finally, the moral agent actually carries out the action. This stage is largely influenced by the third one and it refers to personal perseverance, resoluteness, and competence to overcome impediments.

As Chan and Leung (2006) point out in order to decide whether or not to act ethically, each human being must go through at least these four psychologic processes. It should be noted that each step is independent from another, adequation in one stage will not automatically conduct to adequation in the other stages (Rest, 1986; Jones, 1991; Chan and Leung, 2006).

To address our research, there is a need for a model for the ethical decision-making process that is usable, meaning comprehensive but cannot be burdened to allow for analysis. In the first instance, as developed by Rest, the model will include the 4 stages of ethical decision-making as the author defined them.

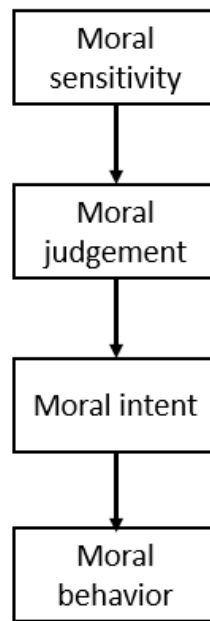


Figure 1 - Rest's (1986) model of ethical decision-making

Figure 1, illustrating the 4 steps of Rest, are the basis of the research model.

The first stage, moral sensitivity, will not be studied in this research for two main reasons. The act of presenting a case to participants relating a dilemma pre-interpreted with the actors, issues and consequences automatically increases their awareness of the ethical dilemma (Rest, 1986). Furthermore, it has been proven that there is no link between sensitivity and the rest of the process of ethical reasoning (Rest, 1986; Shaub, 1989; Chan and Leung, 2006). Therefore, for the purposes of our research, we will exclude the first step.

However, in order to present all the resources on this subject, it should be pointed out that some authors such as Shaub (1989) have tried to measure ethical sensitivity and have developed instruments for this purpose. However, this subject remains debatable, less studied, and less known in the scientific literature.

Moreover, the last step, moral behaviour, is exceedingly difficult to study in a survey. It would be necessary to confront and observe people in real life situations, as opposed to hypothetical ethical dilemmas on paper or presented verbally.

Therefore, we can consider that intent is a proxy for behaviour (Johnson and Coyle, 2012) and assert that “the best predictor of a person’s behaviour is his intention to perform the behaviour” (Fishbein and Ajzen, 1975, p. 381).

As Fishbein and Ajzen (1975) explained it is not only the intention that comes into play to influence the behaviour of an individual. Other factors such as power of will, time between intention and behaviour, and ability can have an impact as well.

Therefore, this last step brings into play many new factors that will not be taken into account in this study, as they are not relevant.

This preliminary model already highlights the sub-hypotheses that will be analysed :

H 1 (a) : The moral judgement of auditors differs from that of professionals outside audit.

H 1 (b) : The moral judgement of auditors differs from that of last year’s students in finance.

H 2 (a) : The moral intent of auditors is higher from that of professionals outside audit.

H 2 (b) : The moral intent of auditors is higher from that of last year’s students in finance.

Note that we have to be careful with the vocabulary and the wording used. Judgement can only be described as different; it is impossible to describe it as stronger or better without already expressing a judgement.

It was chosen to compare the auditors to two distinct populations. On one side, students in their final year of finance/audit/business, i.e. faculties with possible access to auditing functions, and on the other non-audit professionals.

Subsequently, as explained, several authors have taken the model presented below and expanded it. One of the first was Trevino (1986), who developed a new model. The model includes individual variables but also situational variables. However, the author continues with the Rest’s model and its main four steps but adds new components that were until then completely ignored.

The model explains that the ethical decision-making is influenced by the individual, with variables to consider such as ego strength, field dependence, and locus of control, but also by situational component as immediate job context, organizational culture, and characteristics of the work.

The influence of individual variables and especially locus of control is deeply explored by Tsu and Gul (1996). The authors have found similar results that both, locus of control and level of moral development translated in ethical reasoning are determinants in the ethical decision-making of auditors when confronted to moral dilemmas.

Their study examines only one variable. Trevino presents us with a model taking up other traits that may have an influence.

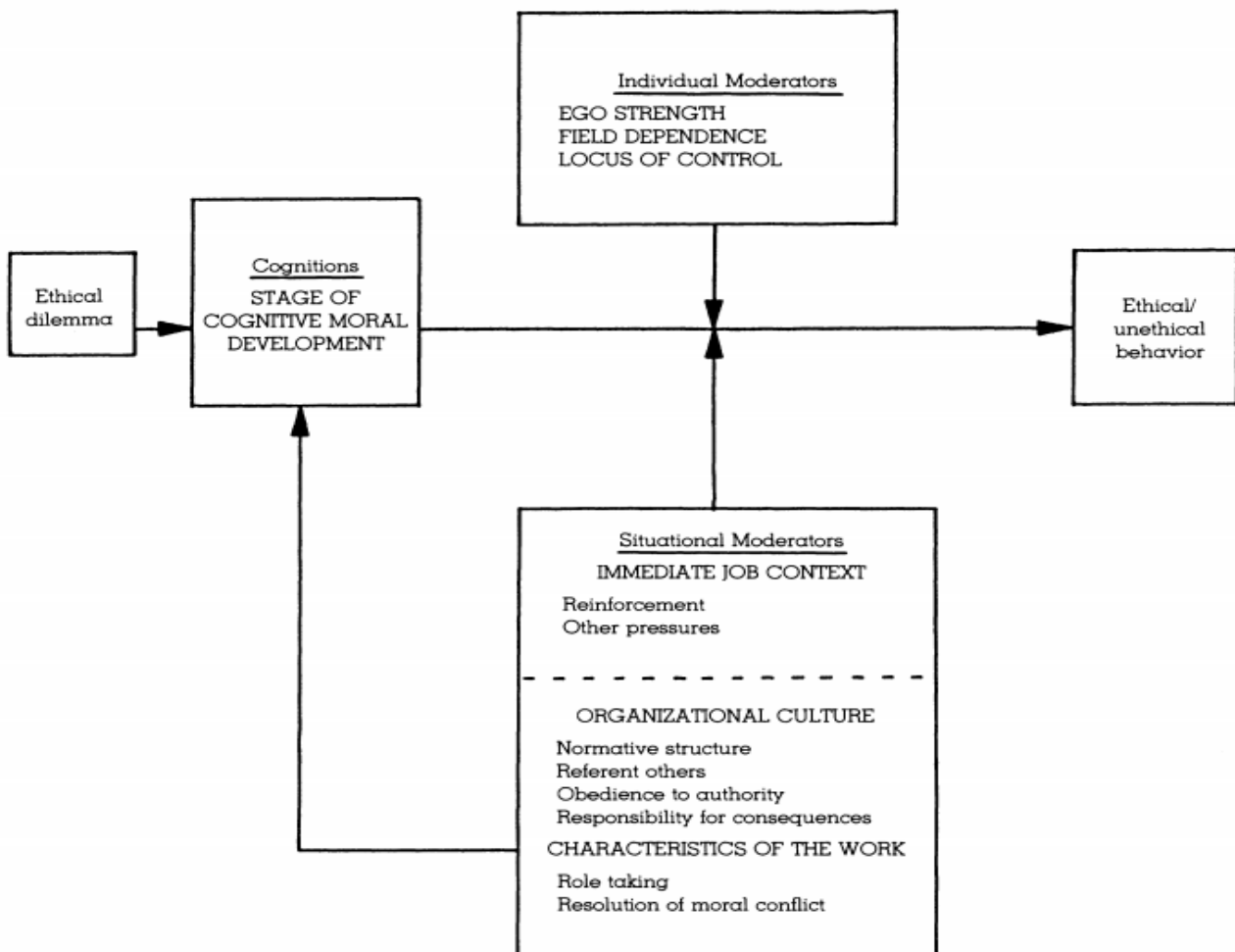


Figure 2 - Trevino's model of ethical decision-making (Trevino, 1986, p. 603)

To make figure 2 more comprehensible certain variables need to be defined. Three individual moderators are highlighted. All definitions of these variables are given by Trevino (1986).

- Ego strength is related to the strength of conviction. A moral agent with higher ego strength tends to defend and follow their beliefs more than the average.
- Field dependence can be observed when an individual is confronted to an ambiguous situation and needs help from external referents. The more a person is field independent, the more the person will have autonomy in its actions or decisions.
- Locus of control explains an individual perception of its control over events. Two types of locus of control exist: internal or external. An external locus of control believes that events, results, and consequences are beyond their control. In the opposite, an internal locus of control supports a belief that they have control and influence on events in their life.

Situational variables called situational moderators arising from the immediate job context, organizational culture and also characteristics of the work are also taken into account. We will briefly define these other new concepts introduced by Trevino (1986).

- Reinforcement contingencies: This refers to the fact that ethical or unethical behaviour is influenced by the punishments/rewards that may be in place in a company.
- Normative structure: In companies, there is a culture that can be used as a “guide” on how to act by the moral agent. Members of the same group/firm share usually some values and goals.
- Referent others: The perception of one's peers and their actions will influence the ethical behaviour of a person in the same company.
- Obedience to authority: In a company, most people will carry out the actions required by their authority, even if these go against their own personal principles.

- Responsibility for consequences: Depending on the culture of the company and the hierarchy in place, if the responsibility of each person is put forward, this influences the decision making of the person because she/he is more aware of his/her responsibility and therefore more preoccupied with the consequences of their actions.
- Role taking: This variable depends on the characteristics of the work. Two aspects are included, the importance of resolving moral conflicts and the fact that a person has to take into account the perspectives of others in his or her organization/firm in the course of work. These two characteristics influence the way in which ethical decisions are made by the individual in question.

Those variables will not be included in the model of our research. As explained by Trevino (1986), the situational moderators are applied to practical cases of moral dilemmas because these variables take into account the context surrounding the moral agent at the moment of the ethical decision-making process. These variables are also different depending on the company and the colleagues. In our study, we examine the auditors as a whole population. In a similar logic, the individual variables concern each individual separately and add many variables. Further studies should be carried out to analyse them separately.

Finally, the diagram (figure 2) includes another new component : the stage of cognitive moral development. This theory was developed by Kohlberg (1969). Trevino (1986) explains that individual decision making confronted to an ethical dilemma is determined by the moral development stage.

In order to better approach cognitive development, it is important to understand the work of Kohlberg (1969). The author has been deepening and refining his work over many years to present a model with 3 levels each composed of 2 stages. This theory emphasizes this time the reasoning of ethical decision-making. We look at the processes that take place, what reasons the person uses to justify their moral choices, rather than the decision itself. The reasoning put in place is influenced by the stage of cognitive moral development in which the individual is. The definition of each stage is explained and described by Kohlberg (1969).

- The first level called pre-conventional. It is divided in two stages of “obedience and punishment orientation” and “instrumental orientation”. On this level, individual moral decisions are only shaped by external rules to avoid punishment or to gain reward. The individual does not understand anything but their own desires.
- The second level is conventional. It contains “interpersonal accord and conformity” and “authority and social-order maintaining orientation”. In this moral development phase, the individual acts based on the norms of its social group. In addition, the person will obey to rules to maintain a functioning society. The individual means of motivations are to be accepted by others.
- The last level, post-conventional, is composed of “social contract orientation” and “universal ethical principles”. Finally, the individual determines their vision of “right” based on universal values or on abstract principles, he analyses beyond the perspective of his society.

This evolution is supposed to be done from middle childhood to adulthood. However, Kohlberg's theory found that some adults continue their cognitive moral development even after their school education (Colby, Kohlberg, Gibbs, Lieberman, Fisher, Saltzstein, 1983). The theory suggests that individuals continue their path in moral development through their professional career.

In the light of this theory, it would be easy to believe that any step forward to a higher stage is positive in the "right" decision making process. Nevertheless, this analysis has its exceptions. For example, an individual at stage 6 will put his or her own moral principles above the regulations of his or her work, which can be problematic from a legal and societal point of view (Shaub, 1994).

Thereafter, many other theories based on those presented above were developed in the following years. To facilitate development and to stay focused on variables that may be useful in our model, we will switch to the Jones's model (1991). His theory added new issue related variables: moral intensity.

Moreover, the author offers a synthesis of all the theories presented and developed before him, including Rest (1986), Trevino (1986), Dubinsky and Loken (1989), Ferrell and Gresham (1985), Hunt and Vitell (1986). Some of those authors have studied ethical decision-making but in the field of marketing. They are not directly relevant to this study in audit and therefore will not be developed separately. In spite of this, the variables they introduced will be explain in parallel of Jones' model as he used them to build his model.

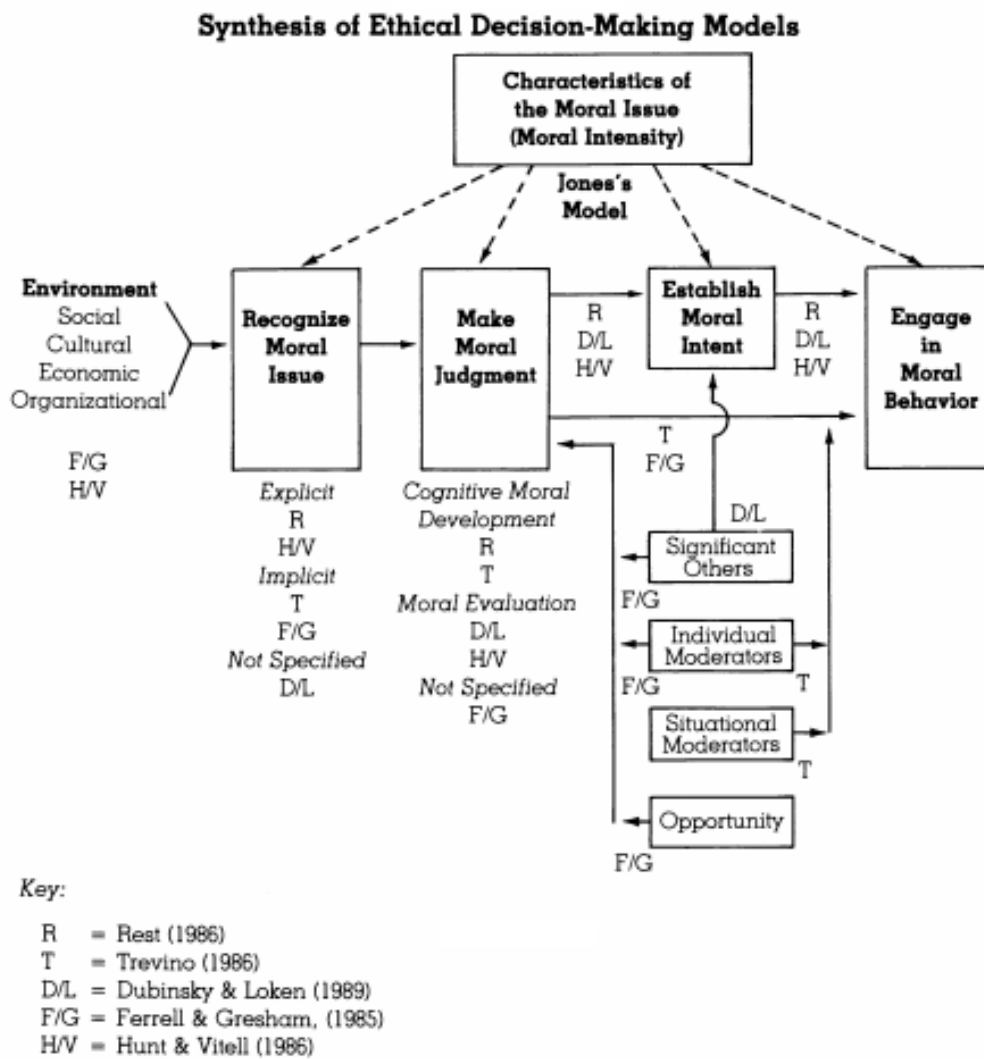


Figure 3 - Jones' model of ethical decision-making (Jones, 1991, p. 370)

The figure 3 shows a summary of the principles and variables taken from the different authors and their theories. Since some of the variables have already been analysed before in the previous paragraphs, we will highlight only the new ones visible in this figure. Opportunity can be defined as a situation with favourable conditions to limit punishments or provide rewards. For example, a situation with no punishment can be seen as an opportunity to act in an unethical way (Ferrell and Gresham, 1985). Moral evaluation as shown in the figure 3 is synonymous with the stage of moral judgement as defined in our work (Dubinsky and Loken, 1989).

It can be noted that most of the other contributions are only confirmations of models already developed before.

The most important aspect of this model raised by Jones is the lack of consideration so far of the characteristics of the dilemma presented and of the moral agent's interpretation of it. Indeed, none of the previous theories includes characteristics of the moral issue itself as a variable of the decision-making process, making it look like every situation or moral dilemma would have the same process of decision making.

It is not rational to admit that, for example, our society would judge and act the same either the dilemma concerns people that they care about or unknown people that lives a hundred kilometres away. Therefore, Jones (1991) present a new model of ethical decision-making that includes the characteristics of moral issue called moral intensity.

The figure also shows the introduction of a variable : the moral intensity. It is composed of six dimensions defined by the Jones (1991) as such :

- Magnitude of consequences being the sum of the harms/benefits done to the people impacted by the moral act. Individuals estimate the magnitude of the consequences before estimating the moral dilemma. Some moral issues will not reach a sufficient magnitude to be considered as such.
- Social consensus is defined as the social agreement that defines if an act is considered bad or good. Individuals base their analysis of a given situation on what they know to be ethically right.

- Probability of effect is the probability that the decided act will happen and will impact the people in question with the predicted harm/benefit. Moral agents estimate the chances that the predicted consequences will come true. The lower the chances, the lower the moral intensity.
- Temporal immediacy is the time between the act itself and its consequences. As expected, the longer the time, the less immediacy. As logic dictates, the further away the consequences are, the more the magnitude of the consequences is diminished.
- Proximity is defined as the feeling of nearness psychologically, culturally, or even physically with the impacted people of the act. As explained by the law of proximity in journalism: the more remote the information, the less people feel concerned.
- Concentration and effect are together an inverse function of the number of people affected by the decided act and the magnitude of the action.

Those components are interacting and have effects on each other (Jones, 1991; Marshall and Dewe, 1997; Kelley and Elm, 2003; Leitsch, 2006). For instance, in the theory of Kelley and Elm's (2003), magnitude of consequences, probability of effect and temporal immediacy were the ones interacting mostly.

Moral intensity interacts with the four-components⁸. As the moral intensity goes higher, either because of the greater magnitude of consequences, or because the moral agent feels closer emotionally to the issue, the individual will tend to recognize more easily a moral dilemma, judge, or act on an issue. Those theories were later confirmed by Leitsch (2006), May and Pauli (2002), Chaplais, Mard and Marsat (2016).

In the same vein, Kelley and Elm (2003) revisited Jones' model. The new hypothesis presented by the professors considers that organizational factors directly influence not only the moral intent and behaviour, but also the moral intensity. Following their study on social service administrators, the conclusion offered is that organization factor affects the process by influencing the moral intensity.

⁸ Moral sensitivity, moral judgement, moral intent, and moral behaviour.

However, it is important to consider that these observations were made in the context of public service workers and, according to the authors, cannot be completely validated on the private sector.

Yu's work (2014) enables a comparison of the two models presented above. On the one hand, Jones' model, presenting the two variables moral intensity and organizational factors, both separately and directly affecting the decision making with no connection relation between the two components. They are presented as independent and uncorrelated as showed in the figure 4.

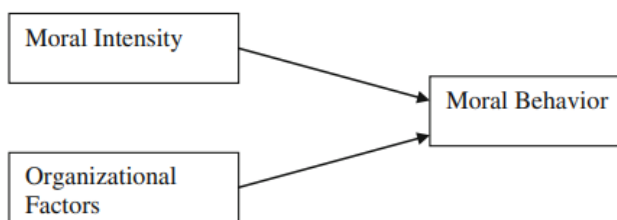


Figure 4 - Yu's model of moral intensity and organizational factor (Yu, 2014, p. 577)

On the other hand, Kelley and Elm's model which presents organizational factors influencing decision making process through moral intensity as illustrated in figure 5.

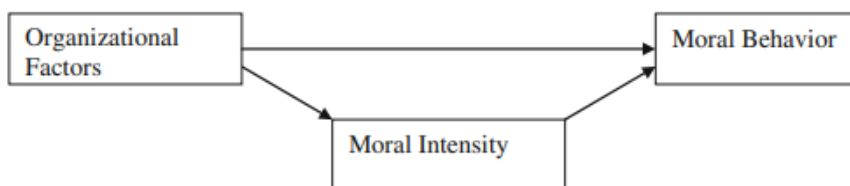


Figure 5 - Yu's model of moral intensity and organizational factor (Yu, 2014, p. 577)

Yu concludes that Kelley and Elm's decision model was more fitted to represent the accurate and real decision-making process of moral agents, but it is important to note that Jones' model is rational and acceptable.

In light of the many different theories and models on ethical decision-making, it is evident that each author contributes to the understanding of the ethical decision-making process by adding new variables and new possible approaches of the ethical decision-making process.

To keep the study feasible, it was undeniably necessary to keep the more realistically analysable and relevant variables for the hypothesis in a study of the size and capacity of a university thesis. Organizational factors and individual factors will be put aside, as the study aims to analyse auditors and their ethical decision-making when facing ethical dilemmas as a population.

The new variable that will be added to our model for this research is moral intensity, as it is known to influence the steps we already have in the model. The variable being multidimensional, it will include 6 dimensions as defined by Jones (1991). This new variable provides our last sub-hypotheses :

H 3 (a) : The moral intensity of auditors is higher from that of professionals outside audit.

H 3 (b) : The moral intensity of auditors is higher from that of last year's students in finance.

After considering the different models of ethical decision-making, the model of this research develops to this phase:

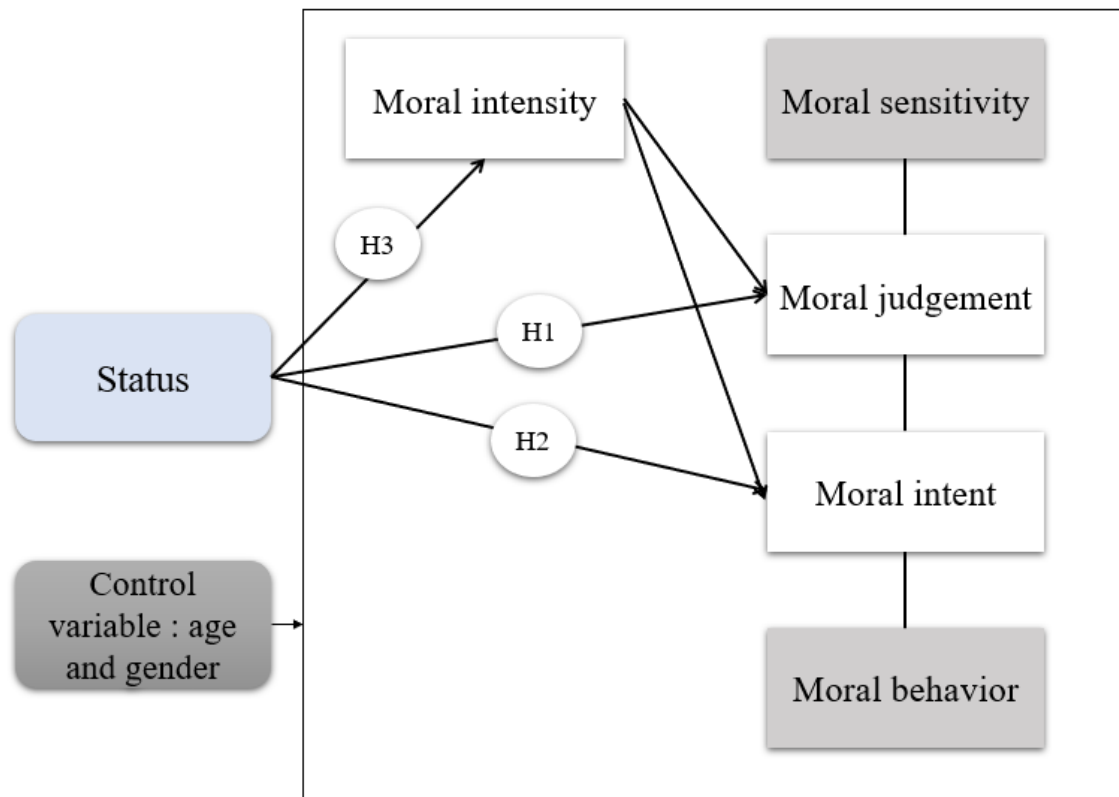


Figure 6 - Our research model

The model that will be used in our study, presented in figure 6, or very similar ones were validated and used many times by various authors, such as Lincoln and Holmes (2011) and Chaplais, Mard and Marsat (2016).

1.2.2 Influence of ethical decision-making

There are a multitude of variables that may come into play in the ethical decision-making of moral agents, whether they are internal to the individual or external. However, in our study, we are investigating the major differences in the process of ethical decision-making of auditors.

Nevertheless, we will study the scientific literature on the influence of the age and gender of the moral agent. There is no perfect consensus on these, so we will review results of previous research on these two variables.

First of all, the gender of the moral agent. As Pierce (2014) suggests, researchers mostly used gender as a control variable and so we rarely have rigorous tests on it in the ethical decision-making. However, we can find some research on the subject. Gilligan (1982) defends that men and women have different moral orientations, as well as Jones and Hildebrandt (1995) and Fallon (1999) demonstrate that gender can have an influence on ethical decision-making.

On the contrary, Sweeney and Costello (2009) conclude that the impact of gender is insignificant as did Kish-Gephart, Harrison and Treviño (2010) and also Sikula and Costa (1994), who found that the difference is insignificant though it might depend on the type of analysis.

In 2005, O'Fallon and Butterfield brought into the scientific literature their work "A Review of The Empirical Ethical Decision-Making Literature: 1996–2003". They conclude that the results on gender are mostly consistent and insignificant. Most of the time, there are often no differences found between males and females, but when differences are found, females were more ethical than males, as it was underline in Gilligan's (1982) work. In conclusion, we will assume that gender has no significant impact on ethical decision-making, so this variable will be used as a control variable.

Secondly, the age of the moral agent. We will proceed in the same way as we did for the gender variable to examine it. We have a similar situation, there is no consensus on the impact of this variable. However, it is necessary to quickly review the two different opinions that exist.

On one side, we have authors as Barnett and Valentine (2004) that found out there was no significant relation between age and ethical decision-making. On the other side, we have authors as Ruegger and King (1992) that suggest otherwise by saying that age is a determining factor in making ethical decision.

In our study, the age variable will be strongly related to the status variable. In fact, the average age of students will be around 22-23 years old, while that of professionals will be higher. This distinction will be taken into account in the analysis.

Moreover, O'Fallon and Butterfield (2005, p.392) suggest that "mixed results may suggest a more complex relationship between age and ethical decision-making than is captured by these studies". Recently, a study conducted on the effect of age on ethical decision making of accountants by Nikoomaram, Rahnamay, Toloie, Hoseinzadeh, Taghipourian, (2013) showed a non-significant relationship between the two.

Due to those facts, we decided to use the age variable as a control variable to facilitate the analysis.

To conclude the literature review section, we can go over its major contributions to this research. We have established the crucial aspect of an ethical behaviour within the audit profession. Furthermore, we have developed the different theories on ethical decision-making. For the purpose of this work, we have kept the most relevant variables to create a model that we will use in a study to answer the six sub-hypotheses put forward.

Finally, we have highlighted some variables as age and gender that may come into play and we decided to use them as control variables in our study.

Chapter 2: Methodology

To expose the methodology in a more articulated way, it will be presented according to the recent and reworked model of Saunders, Lewis, and Thornhill (2019). The authors have developed a method for presenting the methodology in a layered form through the different stages of research reflection. At each stage, several possibilities can be considered, and it is necessary to choose those that make the most sense for the research in question.

This structure consists of 6 layers, from the most global to the most precise.

2.1. Research Philosophy

The position for this research is in line with positivism. It is based on the study of facts as they exist in an objective way. The result of this kind of research can be done by others and we should find similar results from a statistical point of view.

2.2. Research approach

This research is using a deductive approach. In theory, it means that we start from existing theories, we formulate hypothesis on them and finally test in practice to check if those hypotheses are confirmed or not. In this research, we started by exploring the requirements and expectations regarding the profession of auditing, then we reviewed the existing scientific literature on the ethical decision-making and the influence on the ethical decision making. The approach enables us to formulate sub-hypotheses based on those existing research and theories.

Throughout the development and research process, the research was further divided into 6 sub-hypotheses in order to answer the main question :

- H 1 (a) : The moral judgement of auditors differs from that of professionals outside audit.
- H 1 (b) : The moral judgement of auditors differs from that of last year's students in finance.
- H 2 (a) : The moral intent of auditors is higher from that of professional outside audit.
- H 2 (b) : The moral intent of auditors is higher from that of last year's students in finance.

- H 3 (a) : The moral intensity of auditors is higher from that of professionals outside audit.
- H 3 (b) : The moral intensity of auditors is higher from that of last year's students in finance.

Finally, the objective was to test those sub-hypotheses through a quantitative research. In this case, the method is to observe and collect a large number of answers/observations and then to make a statistical representation of them. The statistical representation needs to be reliable enough in order to reject or support the hypothesis.

The choice of a quantitative method is the most suitable option for several reasons:

- Majorities of authors studying and searching on similar subjects such as Cohen, Pant and Sharp (2001)⁹, Gowthorpe, Blake, and Dowds (2002)¹⁰ or Chaplais, Mard, and Marsat (2016)¹¹ have conducted quantitatively research as well.
- This survey aims to generalize results from a sample of a target population. Indeed, the large number of answers given by the survey will allow to collect enough observations to be able to make a statistical treatment and answer the question reliably.
- To allow a comparison between the different sub-populations, it is necessary to be able to extract comparable statistical data from the collected data, which is only possible in a quantitative study.

⁹ Studying the differences in the ethical decision-making between students and professional accountants.

¹⁰ Studying the ethical orientation of auditors.

¹¹ Studying the effect of ethics training on compliance with the code of ethics using a model similar to our research for the ethical decision-making.

2.3. Research strategy

In order to collect a large number of useful answers for the quantitative study, it was decided to create a self-administered survey using the website "Questionpro"¹². The site allows us to create a survey and to distribute it via a link to be shared. Screenshots of the entire survey as seen on the website are in Appendix 4.

The aim is to present participants with ethical dilemmas and then ask them various questions to measure their moral judgement, moral intent, and moral sensitivity. Quantitative study was then the easiest and most feasible way of doing for so many participants.

The survey itself will be developed further away.

2.4. Choice

This research is based on a mono-method, as the study goal is to assess the ethical decision-making among auditors and make a generality as well as a comparison out of the data collected, it would have been nonproductive to analyse their processes using a qualitative method as opposed to a quantitative one.

2.5. Time horizon

The study is cross-sectional, meaning that we are aiming to compare different populations at one single point in time. Indeed, the research is not aiming to compare the ethical decision making along the time. On the contrary, its objective is to compare data on the ethical decision-making at a given time and place across different populations in order to compare and assess them.

2.6. Techniques and procedures

2.6.1 Instrument

As mentioned, a survey was used to collect data on the ethical decision-making, which was modeled by the presented model in the literature review section. The survey consists of six questions.

It starts with three short answer-questions to identify the moral agent and continues with three cases of moral dilemmas:

¹² The data is collected by the site and transmitted via a platform.

- The first question is about status, and it offers three possible answers in order to assign the subcategory of population for each participant: auditors, students in finance, or professional outside audit.
- The second question is about gender and works as a control variable. The scientific literature is quite divided and uncertain on the influence of gender may have on the ethical decision-making.
- The third question concerns the age. As developed in the literature review, after a certain age, our ethical decision-making does not fluctuate that much. It was however also used as a control variable.
- Remaining questions are dilemmas taken from the work and research of Cohen, Pant and Sharp (2001). They present ambiguous situations that test the ethics of the participants.

The authors used eight cases of moral dilemmas to study the differences in ethical decision-making between business students and professional accountants in Canada. For this study, only three cases were selected. The main reason for this was to have a fairly high level of commitment from respondents to the survey.

During the preliminary stages of the questionnaire launch, there were four cases. Unfortunately, it was noted that after the second or third moral case, there was a drop-out rate of over 70%. At the end of the survey, participants were given access to my email address and invited to contact me if they had any comments. Several respondents suggested reducing the number of questions, explaining that moral dilemmas required a great deal of concentration and reflection which was hard to maintain for a long time.

For these reasons, the following three cases were finally presented:

Moral dilemma 1 : “A firm has been hard hit by recessionary times and the partners realize that they must scale back. An analysis of productivity suggests that the person most likely to be terminated is a long-time employee with a history of absenteeism due to illness in the family. Action: Instead, the partner-in-charge lays off a younger, but very competent, recent hire.”

(Cohen, Pant and Sharp, 2001, p. 333)

	1. Strongly disagree	2. Disagree	3. Partly disagree	4. Neutral	5. Partly agree	6. Agree	7. Strongly agree
The manager should have dismissed the frequently absent employee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were the manager, I would have fired the frequently absent employee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall harm caused by the manager's decision will be small.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people would agree that the decision made by the manager is the wrong decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a low probability that the manager's decision will actually cause harm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the immediate future, the manager's decision will not have negative consequences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Very few (if any) people will be harmed by the manager's decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The manager's decision is likely to harm the people close to him.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 7 - Questions asked in the survey following the first ethical dilemma

Moral dilemma 2 : “A company has just introduced a highly successful new kitchen appliance. The sales manager, who is paid partly on a commission basis, discovers that there has been insufficient product testing to meet government guidelines. The tests so far indicate no likelihood of any safety problem. Action: The sales manager continues to promote and sell the product.”

(Cohen, Pant and Sharp, 2001, p. 333)

	1. Strongly disagree	2. Disagree	3. Partly disagree	4. Neutral	5. Partly agree	6. Agree	7. Strongly agree
The manager should have stopped selling the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were the manager, I would have stopped selling the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall harm caused by the manager's decision will be small.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people would agree that the decision taken by the manager is the wrong decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a low probability that the manager's decision actually causes harm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For the immediate future, the manager's decision will not have negative consequences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Very few (if any) people will be harmed by the manager's decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The manager's decision is likely to harm those close to him.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 8 - Questions asked in the survey following the second ethical dilemma

Moral dilemma 3 : “A Canadian manager of a company eager to do more business abroad has been requested to make an undisclosed cash payment to a local distributor in a foreign country. The payment is requested as a “good will gesture” that will allow the Canadian company to introduce its products in that foreign country. This practice is considered normal business procedure in that country, and no laws prohibit such a payment there. Action: The Canadian manager verbally authorises the payment.”

(Cohen, Pant and Sharp, 2001, p. 333)

	1 Strongly disagree	2 Disagree	3 Partly disagree	4 Neutral	5 Partly agree	6 Agree	7 Strongly agree
The manager should not have authorised the payment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had been in the manager's shoes, I would not have authorised the payment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall harm caused by the manager's decision will be small.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people would agree that the decision taken by the manager is the wrong decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a low probability that the manager's decision actually causes harm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the immediate future, the manager's decision will not have negative consequences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Very few (if any) people will be harmed by the manager's decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The manager's decision is likely to harm the people close to him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 9 - Questions asked in the survey following the third ethical dilemma

As explained by the authors, those cases were relevant because none of them were blatantly unethical, leaving readers facing cases that are located in "grey area". For example, for moral dilemma 2, the manager knows that not enough tests have been carried out to meet the legal requirements in that regard, but there is no sign of danger or safety issues. This dilemma puts the manager in a situation where he had to choose between personal and corporate interest, or following legal regulations.

During the preliminary part of the research, the idea of proposing cases directly related to the audit was also tested. But it was found that far fewer people completed the survey, that for some it was too long and for others not detailed enough to answer the questions correctly. In fact, presenting specific cases to the audit practice

in this type of survey is very difficult because the cases must be very specific in order to give enough information to make a considerate decision.

As illustrated, with extracts from the questionnaire from the Questionpro website, each moral dilemma was followed by 8 questions on the moral judgement, moral intent and moral intensity felt by the respondent.

The questions are adapted to the specific case presented but the same logic remains. They are largely inspired by the questions used by Chaplais, Mard and Marsat (2016).

The first question always refers to moral judgement, asking how the moral agent views the action that was done. The second question studies the moral intent, asking the individual to reflect on what they would have done in the same situation. The remaining questions are related to moral intensity, as reviewed in the previous section. This variable is multi-dimensional, which explains the multiple question to analyse it. Each question treats in this order of the magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity and concentration and effect.

Moreover, the moral agent had the possibly to answer on a 7-Likert scale. As done in the Chaplais, Mard and Marsat (2106), we asked some questions with a reversed logic, in order to avoid automatic answers from. This is taken into account in the analysis of the data in the next section.

2.6.2 Data collection

As mentioned earlier, it was decided to target three different population groups. The one studied will be the auditors, but it was essential to have comparison groups.

In order to decide on the sample size, it was necessary to find out what is customary in this field through the scientific literature. There are two schools of thought, determining the sample size needed for one's study with statistical instruments or following precedents in the scientific literature. In the case studies on ethical decision-making among auditors, a sample size of on average 100 was always considered satisfactory for a first study.

This was the approach taken in this research, with the aim of having approximately 100 individuals in each of the three groups.

We used random sampling to get the sample of each population. Every member of the population had an equal chance of being selected. As it will be detailed in the following paragraph, the lists of people to whom the survey was sent were searched by status (students, non-audit workers, auditor) and then the survey was sent to each person on that list.

The data collection techniques were diverse in order to maximise the chance of having large number of respondents. There was a real difficulty in contacting and getting a large number of responses from auditors. For this reason, the survey was launched at the beginning of February and was open until the end of April.

There were four means of contact to distribute the survey:

- Distributed via HEC newsletter¹³,
- Disseminated in my audit internship company¹⁴,
- Disseminated via LinkedIn¹⁵, groups of HEC alumni or others,
- Disseminated via private messages on LinkedIn to a list of people searching with keywords as "senior manager", "senior auditor" and "junior audit". We were always using a similar message not giving much information on the aim of the study to not influence in any way.

For the student group, the same approach was used:

- Publication on various Belgian university groups: Liège, Brussels, Gent, Namur etc.,
- Contact via LinkedIn in search of "student in audit", "student in financial analysis" and "master's in finance".

¹³ The university has a large network of alumni, some of whom are auditors.

¹⁴ My internship was at Deloitte Belgium in the audit department.

¹⁵ The site is in the form of a social network but is geared towards creating a professional network where everyone shares their CVs.

For the last group, the workers outside of the auditing field, the targeting was most accessible because it is the largest population:

- Publication on various Facebook groups,
- Dissemination in various circles of acquaintances.

The survey was available in French but also in English to allow all citizens of Belgium to participate.

2.6.3. Data analysis

Once the data was collected, it had to be processed and analysed. For this, two programs were used. Firstly, Excel where the raw data was collected and adjusted, and unfinished or inconsistent survey responses were removed. Afterwards, calculations for descriptive statistics and model analyses were done in Python (further explanation will be given in the following chapters).

Chapter 3: Results

3.1 Data received as a result of the survey

As explained in the previous section, the survey was disseminated on many platforms and through various means. More than 670 people clicked on the link to participate in the survey. Of these 670 people, 450 started the survey answering at least the first question. Out these 450 people, 309 people finished the test by answering all the questions. This gives us a completion rate of about 68%. The average time spent on the survey is five minutes.

In order to analyse the collected data, the variables were coded in the following manner :

Variable	Measure
Gender	Men : 0 Women : 1
Status	Student : 1 Professional : 2 Auditors : 3
Age	Average of age category
Judgement	D 123_1 : Average of responses to question 1 for the three dilemmas
Intent	D 123_2 : Average of responses to question 2 for the three dilemmas
Intensity	D123_3_8 : Average of responses to question 3 to 8 for the three dilemmas

Figure 10 - Variables and their measurements

As illustrated in figure 10, the first control variable is gender, coded as a binary variable. Either male coded 0, or female, coded 1. The second is age, each time we took the mean of the age category mentioned in the survey.

The independent variable is the status, this time a number has been assigned to the three possible statuses in this study: students are coded as 1, professionals coded as 2 and auditors as 3.

As for the dependant variables that we are trying to study, each time we took the average of the answers to the questions concerning the stage studied. Each answer range is between 1 and 7.

3.2 Descriptive statistic

To start an analysis of the raw data, it is interesting to get a view of the descriptive statistics of each sample:

Full – 304		Auditors - 102		Professionals - 100		Students - 102	
Gender	0.4802	Gender	0.4803	Gender	0.5000	Gender	0.4607
Age	28,6842	Age	29,5098	Age	35,5000	Age	21,1765
D123_1	4,6239	D123_1	4,88889	D123_1	4,4633	D123_1	4,5163
D123_2	4,7533	D123_2	5,01634	D123_2	4,6733	D123_2	4,5686
D123_3_8	4,3129	D123_3_8	4,46841	D123_3_8	4,1783	D123_3_8	4,2892

Figure 11 – Descriptive statistics of each sample

As explained, the gender is either 1 if it is a woman or 0 if it is a man. We can see in figure 11 that in the three samples, the proportion of men and women is similar in each sample and the average is close to 0.5.

The average age follows a logical pattern. Students have a lower average age than professionals and auditors. It can be seen that the professional sample is older than the auditor sample. There is an explanation for this. In fact, the auditors we were able to contact were mainly juniors¹⁶ or seniors¹⁷ who are mostly between 25 and 35 years old, whereas the professionals had a larger range.

¹⁶ Junior is the status of a person being in an audit firm for the first two-three years.

¹⁷ Senior being the status following the junior stage.

In terms of the variables we seek to study, there is already a trend. Auditors have a higher average than students and non-audit workers on all three variables.

Another comparison can be made between the non-audit professionals and the students. It can be seen that the sample of non-audit professional has higher scores in average for moral judgement and moral intent but lower scores in average for moral intensity.

This analysis can be made even more detailed:

Total sample				
Size =304				
	average	min	max	medium
Gender	0,5	0	1	0
Age	28,7	20	70	30
D123_1	4,6	1,33	7	4,67
D123_2	4,8	1,67	7	4,67
D123_3_8	4,3	2,22	6,44	4,33

Figure 12 - Key numbers in total sample.

Figure 12 shows the descriptive statistics for the total sample of our research. It shows an equal representation of men and women. It can also be seen that the average age is fairly young, it can be explained by the influence of the student's sample and the auditor's sample as explained.

A similar table was made for each sample separately, as well as in-depth analysis to observe differences between the populations.

	Auditors Size = 102						Professionals Size = 100						Student test between auditors and professionals	
	average	min		max		medium	average	min		max		medium	T-student	P-value
Gender	0,48	0	1	0	0	0,5	0	1	0,5	0,5	0,5	-0,2773	0,7818	
Age	29,51	20	60	30	30	35,5	20	70	30	30	30	-4,2198	3,7068	
D123_1	4,89	2,33	7	5	5	4,46	1,33	7	4,5	4,5	4,5	2,6843	0,0039	
D123_2	5,02	3	6,67	5	5	4,67	1,67	7	4,67	4,67	4,67	2,4396	0,0078	
D123_3_8	4,47	2,61	6,44	4,5	4,5	4,18	2,22	6,22	4,19	4,19	4,19	2,6939	0,0038	

42	Auditors Size = 102						Students Size = 102						Student test between auditors and students	
	average	min		max		medium	average	min		max		medium	T-student	P-value
Gender	0,48	0	1	0	0	0,46	0	1	0	0	0	0,2792	0,7804	
Age	29,51	20	60	30	30	21,18	20,00	30	20	20	20	10,9797	2,6935	
D123_1	4,89	2,33	7	5	5	4,52	2	6,67	4,67	4,67	4,67	2,6219	0,0047	
D123_2	5,02	3	6,67	5	5	4,57	2,00	6,33	4,67	4,67	4,67	3,3809	0,0004	
D123_3_8	4,47	2,61	6,44	4,5	4,5	4,29	2,94	5,78	4,33	4,33	4,33	1,9034	0,0292	

Figure 13 - Student-Test and P-value

In figure 13, we can see the results of the student-test that we have carried out for each variable we are testing. The student test is a statistical one that allows us to compare the means of the two groups of sample. It allows to see if the difference between the means of the two groups is significant or not. As the comparison can only be made between two groups, it was done between auditors and professionals outside audit, and between auditors and last year's students in finance. We tested whether the differences between the sample was significantly different for the control variables and also whether the mean of the dependent variables was higher in the auditor's sample, rather than in the students and professionals sample.

The t-test is calculated, applying with the following formula:

$$t = \frac{(X_1 - X_2)}{\sqrt{\frac{(S_1)^2}{n_1} + \frac{(S_2)^2}{n_2}}}$$

where X1 and X2 are the means of each variable and S1 and S2 are the variances.

The formula calculations are done by Python, it gives us the P-value. Further information on using python for these calculations can be found in the appendix 1-2-3.

The P-value is the probability of rejecting the null hypothesis if it were true. As developed, the smaller the P-value, the stronger the evidence that the null hypothesis should be rejected in our analysis. We will consider one type of significance of 5% (0.05), it is a measure that is accepted in statistical practice and scientific literature.

In our analysis in figure 13, between auditors and professionals we find that the difference in means is significant at the 5% level for the three explained variables tested. Indeed, auditors' moral judgement differs from that of professionals in significant ways, as well as moral intent and moral intensity that is significantly higher than the professionals.

In the same figure, between auditors and students we find that the difference in means is significant as well as the 5% level for the three explained variables tested. As a matter of fact, we find the same results as between auditors and professionals.

That is to say that the moral judgement differs and that the moral intent and moral intensity is higher for the auditors than for the last year's students in finance.

When it comes to the control variables, we do not see a significant difference between the three samples.

3.3 Modelling

Once we had these results, we looked for a way to respond to the model presented in the literature review section. We decided to use the Structural Equation Modeling called SEM. This is a very comprehensive technique that encompasses two main theories: factor analysis and multiple regression analysis.

- Factor analysis is useful when the model includes variables that are not directly measurable. Those are called latent variables, and we need observable variables to measure them. In our model, we only have observable variables, so it is not for this aspect that we decided to use the SEM.
- Multiple regression analysis allows to understand the relationship between a dependent variable and several predictor variables. Thus, SEM makes it possible to study not only the direct effects of one variable on another, but also the indirect effects of one variable on another (Fan, Chen and al, 2016). This is a much more complex analysis especially useful in cases where a variable influence directly, but also indirectly via another variable.

We absolutely needed this aspect in our research. In fact, hypothesis 3 (a) and 3 (b) concerning moral intensity had to be studied by taking into account that it also influences the other two variables: moral judgement and moral intent.

Once the model used was chosen, it was necessary to find a program to use it as quoted by Professor Sturgis from the *National Centre for Research Methods*; there are a multitude of them. The choice quickly turned to Python, which is more intuitive to use. The choice was made for two main reasons. The package we used for SEM is Semopy, it is open source, and it is written in a popular programming language.

Moreover, Meshcheryakov and Igolkina (2019) explain that SEM is used a lot in the fields of economics, psychology, and sociology and the authors give a quick review on the use of the Python version of SEM.

The package used is called Semopy that stands for Structural Equation Models Optimization in Python.

The logic is the same that lies behind the linear regression, as for example : $aX + bY = Z$

In this case, a and b are the coefficients that we are trying to find. They will tell us how important the X and Y in predicting the Z. Here, X and Y are independent variables and Z is the dependant variable.

In the Semopy syntax, the notation is little bit different. To note that one can predicted the other, we use the sign” ~”¹⁸

Each step was carried out by following the tutorials available on the Semopy website. From that point on, we can construct our model in Semopy:

```

"""D123_3_8 ~ status

    D123_1 ~ D123_3_8 + status

    D123_2 ~ D123_3_8 + status

    DEFINE(ordinal) D123_3_8 D123_2 D123_1 status """

```

To better understand the modeling, here is the model without any control variable.

The first three lines are to express that the variable status will predict in this order moral intensity (D123_3_8), moral judgement (D123_1) and moral intent (D123_2). The last line indicates which type of variables we are working with.

Two types exist:

- Categorical: It is a variable that that has two or more categories, but there is no intrinsic ordering to the categories. For example, two categories : yes or no, where clearly there is no order to those categories.

¹⁸ Example : $Z \sim X + Y$

- Ordinal : It is a variable that is similar to a categorical variable. The difference is that there is a possible logical ordering of the categories. For example, for a variable assessing the economic status. It could have with three categories in order : low, medium, and high.

In fact, we can't specify in the Semopy categorical variables, so what we do is treat them as ordinal variables, but keep in mind the reality for the analysis. The reality of the analysis being that status is a categorical variable. This is one of the biggest limitations of this model for our research. However, ordinal variables should be indicated explicitly as it is done in the last line.

Subsequently, we have included the control variables. In this research, we are also modelling control variable data along with other variables. Thus, the results will be the ethical decision-making depending on the status and taking into account the control variable that are not supposed to have an impact. To specify this relation in the model, we tell the model that the variables have a common variance with the independent variables and predict dependant variables. The “~~” is used to specify common variance between the variables.

The model with the two control variables is presented as follows :

```

""D123_3_8 ~ status + gender + age

D123_1 ~ D123_3_8 + status + gender + age

D123_2 ~ D123_3_8 + status + gender + age

status ~~ gender

status ~~ age

gender ~~ age

DEFINE(ordinal) D123_3_8 D123_2 D123_1 status gender ""

```

For the control variable age, we noticed inconsistencies in the result. On closer inspection of the data, age is too strongly related to status. In fact, students have an age that is much lower and different from that of auditors or professionals. In a way, the age variable followed the status variable, which confused the model.

For the gender variable. As developed in the scientific literature, there are two schools of thought on this subject. We decided to consider gender as a control variable in line with other authors who have conducted similar studies.

However, the model shows that gender does have a significant impact. Therefore, we have to acknowledge that gender is an explanatory variable and not a control variable.

Following these two observations, we decided to keep the model without the age variable, but with the gender variable, which is the following:

```

""D123_3_8 ~ status + gender
  D123_1 ~ D123_3_8 + status + gender
  D123_2 ~ D123_3_8 + status + gender
  status ~~ gender
  DEFINE(ordinal) D123_3_8 D123_2 D123_1 status gender

```

As explained earlier, the model says that moral intensity is predicted by status and gender. The moral judgement is predicted by moral intensity, status and gender, and the moral intent is predicted by moral intensity, status, and gender.

This encoding gives us the following model and results:

	lval	op	rval	Estimate	Standard Error	P-value
0	D123_3_8	~	status	0,4601	0,1499	0,0021
1	D123_3_8	~	gender	0,3776	0,1499	0,0118
2	D123_1	~	D123_3_8	-0,4597	0,0288	0
3	D123_1	~	status	0,7117	0,0764	0
4	D123_1	~	gender	0,6050	0,0760	0
5	D123_2	~	D123_3_8	-0,4597	0,0288	0
6	D123_2	~	status	0,7117	0,0764	0
7	D123_2	~	gender	0,6050	0,0760	0
8	status	~~	gender	0,9773	0,0018	0
9	D123_3_8	~~	D123_3_8	0,3063	0,0248	0
10	D123_1	~~	D123_1	0,0771	0,0063	0
11	D123_2	~~	D123_2	0,0771	0,0063	0

Figure 14 – Results of the model

Figure 14 shows us the relationships between the different variables. Similar to the explanations given in the descriptive statistics section, it is by looking at the p-value, close to 0, that we know that these relationships are significant.

The Estimate column defines the relationship between the two variables in the "lval" and "rval" columns.

First of all, let us review the meaning of each line in Figure 14 :

- Line 0 – 1 : Moral intensity is predicted by status and gender.
- Line 2 – 4 : Moral judgement is predicted by status, gender, and intensity.
- Line 5 – 7: Moral intent is predicted by status, gender, and intensity.
- Line 8 – 11: Take in account the covariances between the variables itself.

The model also tells us that the influence of the moral intensity variable is negative on the other two variables, the moral judgement variable, and the intent variable (line 2 and line 5).

Finally, the Standard Error column indicates how reliable a mean is. The smaller the standard error, the more certain we can be that the average of the sample presented is close to the average of the real population. In our case, it is relatively small for each variable, which is a good indicator for our research.

These data transposed on our model presented in the literature review (figure 6) gives us the following :

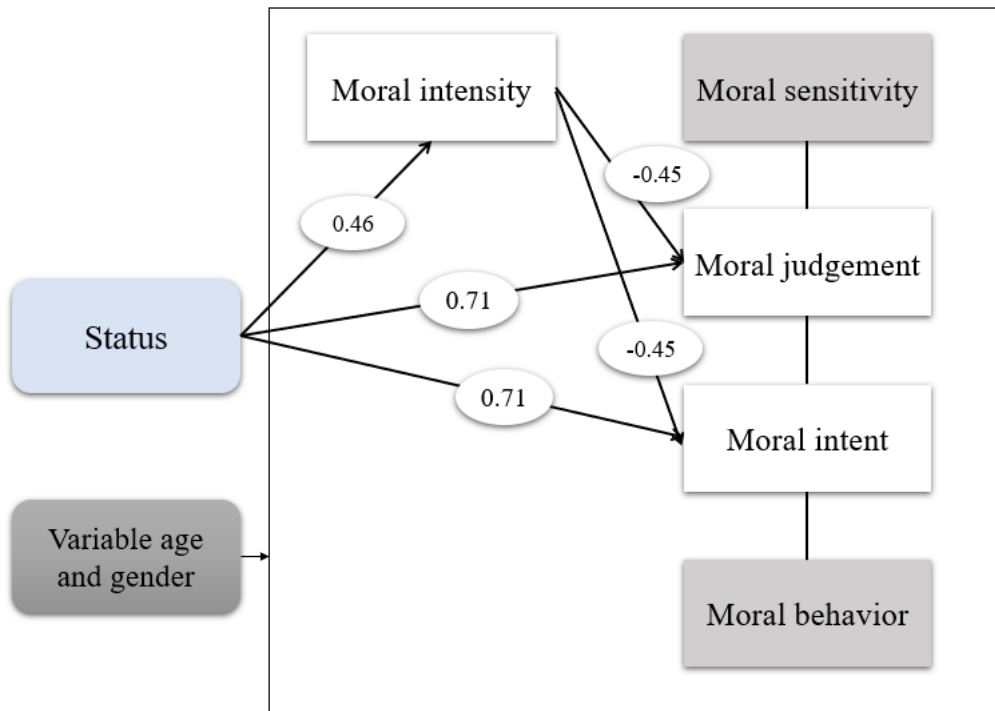


Figure 15 - Model with results

On the figure 15, the relationships between variables are more clearly readable. It can be seen that the status has significant and positive influence on the moral judgement (Coefficient of 0.71 and p-value of 0). This means that the higher the status (the closer to the value of 3 - auditors), the higher the moral judgement.

The results then show that status also positively influences the moral intent (Coefficient of 0.71 and p-value of 0). Again, the higher the status, the higher the moral intent to act ethically is.

Finally, status has a significant positive influence on the moral intensity of moral agents (Coefficient of 0.46 and p-value of 0).

The last point is the relationship between moral intensity and the two variables it influences. Surprisingly, the relationship is negative and significant (Coefficient of -0.45 and p-value of 0). Even if we notice this negative aspect, we also see that the direct influence of status on moral judgement and moral intent is positive and more important.

Thus, in the end, status has a positive relationship with the variables, even if indirectly there may be a negative impact via the influence of moral intensity.

Chapter 4: Discussion

Thanks to the analysis of the data with descriptive statistics, but also to the model we have built, we can now extract the main ideas.

The auditors showed a different moral judgement and a higher score on the first question that was designed to analyse the moral judgement. This first question asked the participant whether the person in the dilemma case should have done the more ethical act. On this question, the auditors had a higher average response than the non-audit professionals and last year's students in finance. This shows us the beginnings of a different decision-making process for auditors.

Subsequently, auditors showed a higher moral intent to act ethically than non-audit professionals and last year's students in finance. Question number two asked the participants whether they themselves would have chosen the more ethical act. A higher score on this question reflects a higher moral intent. This means that auditors have a stronger moral intent to follow the path of more ethical behaviour than professionals outside audit or last year's students in finance.

Finally, the moral intensity was tested with the remaining questions. Here again the auditors showed higher results than the other two populations. Their responses were on average higher. This moral intensity illustrates the interpretation that a moral agent makes of a moral dilemma. The intensity takes into account the extent of the consequences, the probability of the consequences, the temporality, the proximity, the social consensus and the concentration and effect. This variable also influenced moral judgement and moral intent.

With the observation of these three variables, we have the answer to our hypotheses. Hypothesis 1, that the moral judgement of auditors would differ from that of students and professionals, is well confirmed. Hypothesis 2, assuming that the moral intention to act ethically would be higher for auditors than for professionals or students, is also confirmed. Finally, hypothesis 3 concerning moral intensity, which assumes a higher intensity in the auditors than in the other two populations, is also confirmed.

We have also highlighted some issues with our control variables.

Age did not have a logical effect in our model and research. In fact, it is too closely related to status. Therefore, it is difficult to study it separately as it is intrinsically linked to students who are obviously younger and auditors and professionals being older. For this reason, and for the purposes of this study, we decided to remove age from our research at posteriori.

Gender had been treated as a control variable, but it was found through the model that gender does influence the model. As pointed out in the scientific literature, there were two schools. This study is in line with the one that states that gender does have an impact on ethical decision making. No further analysis was carried out as this was not the objective of this paper, but it remains an interesting topic for further exploration.

The results of this work are in line with the expectations that are placed on auditors. They are asked to verify the work of other professionals, but also to be the guarantor of the truth, to sign reports that are synonymous with veracity and that must inspire the confidence of all the actors of our economy. Our study is also consistent with the study that was conducted by Cohen, Pant and Sharp (2001). Indeed, we found that the auditors' judgement differed from that of the students. Their score was on average higher which is consistent with the results of the study by Cohen and al. As for intent, we have our conclusions in the same line. Auditors have a lower intent to perform ethically questionable acts.

It is clear that status has an influence on moral judgement and moral intent. The influence is the same on both variables.

Then, we see that status does have an influence on moral intensity, although less than on moral judgement and moral intent. The most surprising point is that status via moral intensity has a negative influence on moral judgement and moral intent. We noted that, although status positively influences moral intensity, it in turn negatively influences moral judgement and moral intent.

Combining this model with descriptive statistics, we find that status does influence the three variables studied in our hypotheses, and that these variables are significantly higher for auditors than for last year's students in finance or non-audit professionals.

We had two populations to compare the auditors to. The goal was to avoid confusing the status variable with another variable.

If we had taken only the non-audit professionals, it might have been thought that the difference came simply from the education or ethical education that had been given to the auditors. A study on this subject was already conducted in 2016 by Chaplais, Mard and Marsat on the impact of ethical training on the ethical decision-making . This study concluded that ethics training could have a significant impact on several stages of the ethical decision-making.

Given the similarities with this research on some points, we drew heavily on this work, both for the model and for the survey.

If we had only taken only a comparison with last year's students in finance, age or the discovery of professional life could have been a variable to be taken into account.

By comparing the two populations and finding that the auditors have a higher average on all three variables, we can really take the auditors out as a separate category by rejecting the simple explanation of age or education.

It can be concluded that the six hypotheses of this work are validated by our research. On a reduced scale, we found evidence that auditors have an ethical decision-making process that is different and higher from the rest of the population. Their process is distinguished by a different moral judgement, a higher moral intent, and a higher moral intensity as well

Chapter 5: Conclusions

5.1. Summary

The aim of this thesis was to investigate the difference that auditors could have in terms of ethical decision-making compared to final year's students and non-auditing professionals. A model based on previous research has been designed to facilitate this comparison.

On this model, three main points were studied: moral judgement, moral intent, and moral intensity. For this purpose, we developed 6 sub-hypotheses:

- H 1 (a) : The moral judgement of auditors differs from that of professionals outside audit.
- H 1 (b) : The moral judgement of auditors differs from that of last year's students in finance.
- H 2 (a) : The moral intent of auditors is higher from that of professionals outside audit.
- H 2 (b) : The moral intent of auditors is higher from that of last year's students in finance.
- H 3 (a) : The moral intensity of auditors is higher from that of professionals outside audit.
- H 3 (b) : The moral intensity of auditors is higher from that of last year's students in finance.

We used a quantitative study with the 3 population groups: auditors, last year's students in finance, and professionals. The collected data was then processed with descriptive statistics and then with a SEM model. Both treatments showed us that all the proposed sub-hypotheses were found to be correct.

Indeed, auditors have a different moral judgement from last year's students in finance or non-audit workers. In addition, they have a stronger moral intent to act ethically and a stronger moral intensity than last year's students in finance and non-audit workers.

This confirms that the profession is well on its way to meeting the legal requirements of the profession, as well as the conditions that defines the quality of an audit.

5.2. Managerial implications

The findings of this work provide additional insights into the ethical decision-making process of auditors.

As discussed in the introduction, auditors are confronted with ethical dilemmas on a regular basis; and the quality of their decision-making has a significant impact. The impacts can be seen in the quality of the audit, the public's trust in the profession, and even the viability of the audit firm where they practice.

It has been found that the ethical decision-making of auditors stands out based on the six hypotheses on moral judgement, moral intent, and moral intensity. The auditors show higher scores which indicates that they are judged differently, but also have a lower intent to perform questionable acts and feel the intensity of moral dilemmas more strongly.

These facts are positive for society and logically related to what is expected of authors in view of the legal demands made on their profession.

Evidently, in practice, what is important is also the action that will be taken as a result of this ethical decision making. Behaviour is the fourth step in the process. As explained, it has not been studied in this research because it is hard to study it without a field observation. However, as quoted in the scientific literature, Ajzen and Fishbein (1975) state that intent can be defined as the proxi of behaviour. In view of the significant results on the studied stages of ethical decision making, which showed that the auditors stood out positively, it can be assumed that their behaviour would also be different. This last point remains debatable and should be studied separately to draw a conclusion.

5.3. Theoretical implications

Theoretically, the results of this research support various research on ethical decision-making in general or specifically those on auditors. It confirms the use of the model as it has already been taken by several authors. Similarly, it confirms the use of the ethical dilemmas taken up as well as the questions. The more a model/analysis is used, the more reliable it can be considered.

As for the concrete results, we can highlight two main points. On the one hand, on the ethical decision-making of auditors, the conclusions are consistent with the literature. Indeed, as found by Cohen, Pant and Sharp (2001), we confirm that auditors have a different moral judgement, judging the act as less ethical than students and auditors have a stronger intent to act ethically.

On the other hand, our work joins the trend of seeing gender as significant variable in the ethical decision-making process. This is a vast and still much debated topic.

This study also reveals a negative influence of the moral intensity and the moral judgement and moral intent. The auditor status increases moral intensity, but indirectly decreases the intent to act ethically and the moral judgement. This is a remark that has not been found in the scientific literature so far.

It is difficult to find an explanation for this rather unexpected relationship. In the scientific literature, there is little analysis solely on the influence of moral intensity on the ethical decision process, but in general a positive relationship is found. As presented in chapter 2, the higher the intensity, the easier it should be for the moral agent to judge or act ethically on an issue. However, it should be kept in mind that here we see the influence of status on moral intensity and then this indirect influence on the other variables. It is possible that this case changes the influences. As this was not part of the hypotheses of this work or the aim of this research, we can simply note and admit that we do not have the tools to better understand or confirm this relationship which seems to contradict the previous literature and thus contradicts logic.

Lastly, our results are also in line with the theories developed in the scientific literature by Colby, Kohlberg, Gibbs, Lieberman, Fisher, Saltzstein in 1983 who stated that moral development continues after school. They suggest that individuals evolve during their professional careers.

The results of our research show that the evolution depends on the type of professional career. It is found that auditors have evolved differently than other professions. However, it should be noted that here all other occupations are put in the same population.

5.4. Limitations and suggestions for future research

As with any work or research, our study also has its limitations, which are important to note.

Firstly, the model presented is limited. In order to make the study feasible, we had to ignore some variables. However, it should be noted that there are very few studies that can present models that include all existing variables.

Secondly, the sample sizes are limited. Indeed, given the resources of this study, we have tried to have the largest samples, but this is not sufficient to draw definitive conclusions. The same hypotheses should be studied with larger samples.

Thirdly, the study is based on the idea that people actually say what they are going to do. This is not a true reflection of reality. People may be wrong in their estimation or simply their intent and action may differ.

Finally, the statistical analyses carried out show their limits when defining the variables as explained above. There may therefore be a margin of error that we cannot control.

Despite its limitations, this study provides an initial view of the situation. It would be interesting to explore the auditors more precisely.

A first step could be comparing the changes that may occur with the length of the audit experience. In fact, here we have put all the auditors in the same group. But it might be possible to divide this group according to seniority and compare the evolution of ethical decision-making according to the number of years practising auditing.

In a second step, it might be possible to separate the auditors of the different companies in order to conclude whether the company of the experience can influence the ethical decision-making process. Given that the market is dominated by less than five companies, it would be possible to compare those auditors' populations with each other.

Finally, we have found a negative influence of moral intensity on moral judgement and moral intent. It would be interesting to further explore this relationship to verify this relationship and if it is confirmed, to understand the reasons.

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Appendix

Appendix 1 : Treating the data

```
df_new['status'] = df['status']
```

```
df_new['gender'] = df['Genre']
```

```
df_new['age'] = df['Age']
```

```
df_new['D123_1'] = (df['D1-1'] + df['D2-1'] + df['D3-1'])/3
```

```
df_new['D123_2'] = (df['D1-2'] + df['D2-2'] + df['D3-2'])/3
```

```
df_new['D123_3_8'] = (df['D1-3'] + df['D2-3'] + df['D3-3'] + df['D1-4'] + df['D2-4'] + df['D3-4'] + df['D1-5'] + df['D2-5'] + df['D3-5'] + df['D1-6'] + df['D2-6'] + df['D3-6'] + df['D1-7'] + df['D2-7'] + df['D3-7'] + df['D1-8'] + df['D2-8'] + df['D3-8'])/18
```

```
df_new["status"].replace({"student": 1 , "Professional": 2, "auditors":3 }, inplace=True)
```

```
df_new["gender"].replace({"Femme": 1 , "Homme": 0 }, inplace=True)
```

```
df_new["age"].replace({"18-24": 20 , "25-34": 30, "35-44": 40, "45-54": 50, "55-64": 60, "Above 64": 70 }, inplace=True)
```

Appendix 2 : Descriptive statistics

```
student = df_new[df_new['status'] == 1]
```

```
student_mean = professional.mean()
```

```
student_min = professional.min()
```

```
student_max = professional.max()
```

```
student_meamiam = professional.median()
```

```
professional = df_new[df_new['status'] == 2]
```

```
professional_mean = professional.mean()
```

```
professional_min = professional.min()
```

```
professional_max = professional.max()
```

```
professional_meamiam = professional.median()
```

```
auditors = df_new[df_new['status'] == 3]
```

```
auditors_mean = auditors.mean()
```

```
auditors_min = auditors.min()
```

```
auditors_max = auditors.max()
```

```
auditors_meamiam = auditors.median()
```

Appendix 3 : T-test

The variables to check : 'gender' 'age' 'D123_1' 'D123_2' 'D123_3_8'

```
t_stat, p = ttest_ind(auditors['gender'], professional['gender'])
```

Appendix 4 : Survey on Questionpro

LIÈGE université

Ethics in audit

As part of my thesis at HEC-Liège, I am studying ethics.
The survey is based on small scenarios and it takes less than 10 minutes.
All answers are anonymous and will only be used for the purpose of this thesis, under the supervision of the university.

Thank you very much for your time and support.
If you have any questions or comments, please contact me at ani.gasitashvili@student.uliege.be

Next

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Ethics in audit

Questions marked with a * are required

• Status

- Professional outside auditing
- Professionnal in audit
- Student in audit/finance

< Next

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Ethics in audit

Questions marked with a * are required

• Gender

- Men
- Women

< Next

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Ethics in audit



Questions marked with a * are required

* Age ?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- Above 64



Next

Ethics in audit



Questions marked with a * are required

* A firm has been hard hit by recessionary times and the partners realize that they must scale back. An analysis of productivity suggests that the person most likely to be terminated is a long-time employee with a history of absenteeism due to illness in the family.
 Action: Instead, the partner-in-charge lays off a younger, but very competent, recent hire.

	1. Strongly disagree	2. Disagree	3. Partly disagree	4. Neutral	5. Partly agree	6. Agree	7. Strongly agree
The manager should have dismissed the frequently absent employee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were the manager, I would have fired the frequently absent employee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall harm caused by the manager's decision will be small.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people would agree that the decision made by the manager is the wrong decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a low probability that the manager's decision will actually cause harm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the immediate future, the manager's decision will not have negative consequences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Very few (if any) people will be harmed by the manager's decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The manager's decision is likely to harm the people close to him.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Next

Ethics in audit



Questions marked with a * are required

* A company has just introduced a highly successful new kitchen appliance. The sales manager, who is paid partly on a commission basis, discovers that there has been insufficient product testing to meet government guidelines. The tests so far indicate no likelihood of any safety problem. Action: The sales manager continues to promote and sell the product.*

Table with 7 columns (1 Strongly disagree to 7 Strongly agree) and 8 rows of statements for the sales manager scenario.

Navigation buttons: back arrow and Next

Questions marked with a * are required

* A Canadian manager of a company eager to do more business abroad has been requested to make an undisclosed cash payment to a local distributor in a foreign country. The payment is requested as a "good will gesture" that will allow the Canadian company to introduce its products in that foreign country. This practice is considered normal business procedure in that country, and no laws prohibit such a payment there. Action: The Canadian manager verbally authorises the payment.

Table with 7 columns (1 Strongly disagree to 7 Strongly agree) and 8 rows of statements for the Canadian manager scenario.

Navigation buttons: back arrow and Done

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