

ACCOUNTING ETHICS IN UNFRIENDLY ENVIRONMENTS: THE EDUCATIONAL CHALLENGE

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ABSTRACT

In recent years, and in close connection with a number of well-known financial malpractice cases, public debate on business ethics has intensified worldwide, and particularly in ethics-unfriendly environments, such as Spain, with many recent fraud and corruption scandals. In the context of growing consensus on the need of balancing social prosperity and business profits, concern is increasing for introducing business (and particularly accounting) ethics in higher education curricula. The purpose is to improve ethical behaviour of future business people, and of accounting professionals in particular. In this study, from a sample of 551 students of the Bachelor in Business Administration (BBA) at a Spanish university, the importance of accounting ethics is investigated. The aim of this paper is twofold. First, we attempt to examine students' overall perceptions of business ethics in unfriendly environments and, specifically, their

views on the importance and goals of accounting ethics education. Second, we intend to investigate whether potential differences in such perceptions depend on previous business ethics courses taken, gender, and age of students. Our results show that those students who have previously taken an ethics course are especially prone to considering that accounting education should include ethical considerations, and show greater interest in further introducing this subject in their curricula. These facts should encourage universities offering BBA degrees in ethics-unfriendly environments to extend the implementation of ethics courses in their curricula. Besides, significant differences in students' perceptions on the importance of accounting ethics are found depending on their gender and age. In line with previous research findings, female and older students show more ethical inclinations than, respectively, male and younger students. Thus, ethics-unfriendly environments can be treated as contexts where general trends on students' ethical attitudes are also clearly visible. This fact, together with the evidenced impact of ethics courses on students' ethical inclinations, places ethics-unfriendly environments as crucial research settings for further inquiring into the nuances that help explain students' attitudes towards accounting ethics and the role of ethics courses in BBA curricula.

KEYWORDS: Accounting ethics, business ethics, higher education, ethics-unfriendly environments.

ABBREVIATIONS:

BBA: Bachelor in Business Administration.

CPI: Corruption Perception Index

EHEA: European Higher Education Area.

OECD: Organization for Economic Co-operation and Development.

1. INTRODUCTION

Despite the growing relevance that accounting ethics education is receiving (Dellaportas, 2006; Gaa and Thorne, 2004; Mayhew and Murphy, 2009), academic literature on this topic is small (Bampton and Cowton, 2013), so this is an emergent research field (Uysal, 2010). Interestingly, the inclusion of ethical awareness among employability skills can bring huge long-term benefits to country economies, provided it reduces the likelihood of financial malpractice (Graham, 2012), especially in a business context where ethical reporting is increasingly relevant (Gallego-Alvarez, 2008).

During the past decade, several financial scandals have evidenced cases of malpractice in the Spanish banking sector (The New York Times, 2013; El País, 2014). According to Transparency International (2014a), Spain has been ranking between 20th (in 2000 and 2002) and 40th (in 2013) in the Corruption Perception Index (CPI) – which included 177 countries in the latest (2013) edition. The country in the first position is the least corrupted (tie between Denmark and New Zealand in 2013), and the one in the last position (tie among Afghanistan, North Korea and Somalia in 2013). It is worthwhile emphasizing that the 40th position (i.e. the worst position of Spain in the whole CPI history since its first edition in 1995) has been just achieved in the latest CPI ranking corresponding to 2013 (Transparency International, 2014b). This position pushes Spain into the poor-performing tier among advanced democracies in terms of corruption. Indeed, in addition to financial sector malpractice cases, other political corruption and tax fraud scandals were discovered, often related to the (former) boom of the Spanish real-estate sector, involving numerous cases of urban development corruption, principally in coastal towns (Cardona, 2014).

The kind of context described above can be, therefore, regarded as an *ethics-unfriendly environment*. Focusing on the implications for accounting ethics as a particular facet of business ethics, our understanding of the concept and meaning of ethics-unfriendly

environments combines social and political (general) aspects of unethical behaviour (Coicaud and Warner, 2001) with (more specific) aspects of failure to meet decent standards of workplace ethics (Lafer, 2005). An ethical work climate can be identified by a prevailing perception that the typical organizational practices and procedures observe ethical behaviour in the workplace (Victor and Cullen, 1998). Accordingly, an ethics-unfriendly environment can be defined as the widespread perception in a particular society that ethics is not relevant as a social value, given the impunity that often follows fraud, corruption and malpractice observed in the behaviours of managers and public officials, especially when occurring at the top business or government levels. Hence, a key underlying social assumption in ethics-unfriendly environments is that ethical behaviour is not worthwhile, since it does not help achieve success, and its inobservance is not likely to be fairly punished.

Assessing Spain as an ethics-unfriendly environment should contribute to reinforcing the relevance of business ethics contents in university curricula. In particular, degrees related to business administration should be especially affected, given the widespread perception that training in professional ethical values is insufficient (Baetz and Sharp, 2004). In Spain, the Bachelor's degree in Business Administration (BBA) is among the most preferred by companies when recruiting job candidates, representing a substantial amount of the total job offer in this country (Infoempleo, 2011). Importantly, many of the Spanish universities' former BBA students will become members of management teams who will often face ethical dilemmas, so BBA degrees may crucially influence future accounting professionals' ethical behaviour. These ideas are consistent with the emphasis being recently made on the relevance of ethics education (Lau, 2010). In this sense, future business leaders (i.e. current students) can help strengthen an ethical context by acting as good ethical models and articulating highly ethical corporate values (Hannah et al., 2011; Mayer et al., 2012). Accordingly, co-workers influence each other and constantly (re)shape standards for ethical behaviour through their

action or inaction (Moore and Gino, 2013; Trevino et al., 2014). However, business students tend to cheat more than non-business students (Carauna and Ewing, 2000; Simkin and McLeod, 2010), and links between unethical workplace behaviour and prior college cheating have been also evidenced (Lawson, 2004). Hence, Spanish business students seem to be particularly interesting targets for our study.

The aim of this paper is twofold. First, we attempt to examine business students' overall perceptions of business ethics in unfriendly environments and, specifically, their views on the importance and goals of accounting ethics education. Second, we intend to investigate whether differences in such perceptions depend on previous business ethics courses taken, gender, and age of students. Accordingly, we formulate the following research questions: What are BBA students' overall perceptions of business ethics in unfriendly environments? What are BBA students' views on the importance and goals of accounting ethics education? Are there significant differences in BBA students' perceptions of business ethics, and also in their views on the importance and goals of accounting ethics education, depending on students' previous enrolment in business ethics courses, gender and age?

In order to test our hypotheses, survey data were collected from 551 BBA students at the Technical University of Valencia (Spain). A number of descriptive statistics, multivariate analyses based on linear regressions, and other quantitative analyses were developed.

This article is organized as follows. The next section provides an overview of prior research on accounting ethics in higher education. The third section deepens into our target variables and presents the research model and hypotheses. Subsequently, the fourth section describes the empirical study sample and methods, and the fifth section explains the study results. A discussion section follows and closes the paper.

2. ETHICS AND ACCOUNTING IN HIGHER EDUCATION

Accounting ethics education (Gaa and Thorne, 2004) is gaining relevance, and significant inquiry has been conducted on ethics teaching methodologies and their impact on business degree curricula (Adkins and Radtke, 2004). Scholars, accounting professionals, and students, are the three key groups involved whose points of view need to be considered in accounting ethics learning (Bampton and MacLagan, 2005). Importantly, in contrast with the emphasis put on educators' perceptions of ethics pedagogy and its effectiveness, it is important to investigate students' perspectives, so far under-researched (Duff, 2004).

Ethics can be construed as the system of beliefs that supports a particular form of morality (Stedham et al, 2007). One of the most used frameworks, proposed by Rest (1986), includes a multi-stage model composed by four main elements: moral awareness, moral judgment, moral intention, and behaviour. Later on, Thorne (1999) integrated these four elements into two: the first two components (moral awareness and judgment), are of a cognitive nature, whereas the latter two (moral intention and behaviour) are a function of individual personality and morality, thus implying actions instead of cognition.

Accordingly, Hunt and Vitell (1986) argued that, subject to the influence of situational factors, moral judgment will lead to intention, which will in turn trigger behaviour. These authors also suggest that the actual consequences of behaviour will influence future ethical decision making, and their theory takes into account both individual and situational factors. Similarly, influenced by Kohlberg's (1969) work, Trevino (1986) pinpointed that an ethical dilemma will engender ethical decision making under the influence of one's stage of cognitive moral development. Interestingly, Jones (1991) outlined the basic stage-model seen in all of the aforementioned theories: moral awareness leads to moral judgement, which leads to intent, in turn leading to behaviour.

Regarding the role of education in professional ethical behaviour, students' future ethical behaviour can be enhanced through formal courses by increasing their awareness of the consequences of their decisions and actions. Formal courses provide the necessary skills and abilities (Ajzen and Madden, 1986) that may enhance future accountants' intentions to engage in ethically-driven behaviour (Madden, et al., 1992). Ethics education provides language and conceptual tools appropriate to define ethical actions, evaluate alternatives and enhance reflection (Hooker, 2004). Consistent with these ideas, Clarkeburn (2002) found that short discussion groups on ethics increased the recognition of moral issues, Cohen et al. (2001) found that professional accountants viewed some actions as less ethical than graduate students did, and Swenson-Lepper (2005) observed that ethical sensitivity was higher among those with greater general education.

Research evidence shows that accounting and business students regard ethics teaching as important (Adkins and Radtke 2004; Crane, 2004; Graham, 2012). In particular, Crane (2004) found that students seem to be receptive to information and learning on business ethics. Besides, Adkins and Radtke (2004) uncovered that students valued the teaching of ethics, and discussed the presence of an 'expectation gap' between students and academics, arising from the perceived differences in importance, values and goals of accounting ethics. In this sense, Graham (2012) considers students' opinions to assess the goals and effectiveness of ethics teaching in undergraduate accounting programmes. Indeed, we believe that Graham's (2012) focus on students who already attended ethics courses is very interesting: such students' views, influenced by how ethics had been previously taught, can provide a realistic opinion based on their own experience, and an accurate assessment of the effectiveness of ethics courses in terms of their goals and methodologies.

Within the context of the changes wrought by the European Higher Education Area (EHEA), the Spanish higher education accreditation authority considered ethics as a relevant

subject in BBA degree curricula (ANECA, 2005). Ethics courses help develop cross-curricular competences of a personal nature, and most Spanish universities have introduced them as elective modules. Indeed, ethics courses have steadily increased their presence in EHEA-accredited Spanish BBA degrees: the 27% rate of degrees that included business ethics courses in the 2008/09 year increased to 35% in 2010/11 (Fernández Fernández and Bajo Sanjuán, 2011). Beyond the Spanish context, the above trends can be also found in other countries, reinforcing the growing importance of business (and particularly accounting) ethics education in university curricula (e.g. MacFarlane and Ottewill, 2004; Ghaffari et al., 2008).

3. STUDENTS' PERCEPTIONS ON ACCOUNTING ETHICS: INFLUENCE OF GROUP, GENDER AND AGE

Actual ethical behaviour is more complex to study than ethical reasoning or intentions (Dalton and Ortegren, 2011). This is a reason why previous studies have focused on intentions instead of behaviours (O'Fallon and Butterfield, 2005). These studies have tended to accept the theoretical assumption that an individual's intention (e.g. student's willingness to enrol into an ethics course) will directly determine their actual behaviour (e.g. taking the course). This assumption has been widely criticised as an oversimplification of the complex transition from intentions into action (Gollwitzer and Sheeran, 2006). As Ajzen et al. (2004, p. 1119) have said, 'investigations that rely on an intention as a proxy for actual behaviour must be interpreted with caution'. Besides, these models ignore the influences from the external environment and surrounding situations. During the transition between intention (willingness to enrol) and actual behaviour (following the course), the individual interacts with a physical and social environment (Phillips and Bradshaw, 1993), such as a student's interplay with fellow students or professors. Such interactions with environment factors influence students' decision making processes.

Importantly, the scarcity of ethics studies that measure and observe actual behaviour, as opposed to stated intentions, is a significant methodological limitation that leaves research open to the influence of social desirability bias (Auger and Devinney, 2007; Chung and Monroe, 2003). When investigating ethical issues in general, and attitudes and intentions in particular, people tend to respond with answers they believe to be socially acceptable, overstating the importance of ethical considerations in their behaviour (Carrigan and Attalla, 2001). In order to overcome this limitation to a reasonable extent, and given the low number of studies that focus on behaviours instead of intentions, our investigation centres an important part of the analysis on those students who have already taken an ethics course (i.e. those students who not only had the intention of taking the course but actually took it).

Consistent with the above considerations, Adkins and Radtke's (2004) investigation has been especially influential in the way in which we have built our study and refined aspects of our hypotheses. Adkins and Radtke (2004) studied students' and lecturers' perceptions on the importance of ethics in business education in general and accounting education in particular. Having in mind the already validated contents of their questionnaire, the variables *general aspects of ethics* (GE) and *objectives of accounting ethics education* (OE) are, respectively, the dependent variables in sub-hypotheses 'a' and 'b' of each of the main hypotheses. Besides, *group* (*ethics course vs. non-ethics course* students), *gender* and *age* are, respectively, the independent variables of our three hypotheses.

3.1. Group: Prior courses taken on business ethics

This study is based on behaviours, assuming that those students who have freely chosen to take a course on ethics (since our target university offers it as an elective module), have done it because in this way they show their explicit interest in that subject. Besides, it is easier for people to say that they would engage into desirable behaviours than actually fulfilling them (Mayhew and Murphy, 2009). Hence, and with the purpose of avoiding biases linked to

potential social desirability, in this study we focus on investigating the differences in perceptions between the students who have already taken an ethics course and those who have not. Accordingly, our first hypothesis is:

- H1. Students who have previously taken an ethics course consider accounting ethics more important than students who have not taken such a course. Specifically:
 - H1a. Students who have previously taken an ethics course consider general aspects of ethics more important than students who have not taken such a course.
 - H1b. Students who have previously taken an ethics course consider objectives of accounting ethics education more important than students who have not taken such a course.

3.2. Gender of students

One of the variables most frequently studied in the business ethics literature is students' gender (O'Fallon and Butterfield, 2005). Eagly's (1987) social role theory of sex differences and similarities in social behaviour supports the idea that men and women behave according to socially expected stereotypes, and reflect current occupational and societal trends. Social role theory reveals that the existence of gender differences in occupational roles generates gender stereotyping of attributes. Thus, gender role stereotypes are more rigid for males than for females. Nonetheless, gender role stereotypes are dynamic and malleable because they emerge from role-bound activities and characteristics. Furthermore, gender socialization theory holds that women are socialized in more communitarian principles (altruism) so they are generally more concerned about others' well-being. In this sense, the distribution of homemaker vs. provider roles to, respectively, women vs. men, might account for the stereotypic belief that women are more community-minded than men. Men are expected to be highly socialized in

principles associated to competitive success and personal growth, thus being more prone to unethical behaviour than women (Loo, 2003). Thus, Eagly and Steffen (1984) argued that, as most people's activities are determined by their different social roles, society's attitudes and beliefs regarding groups of people should reflect the social roles attributed to these groups.

Previous studies that have analyzed the influence of gender in ethical decisions have sometimes reached inconclusive results (Loe et al., 2000). Nevertheless, when significant differences have been found, the usual outcome has been to get more ethical answers from women compared to men (Cohen et al., 2001; O'Fallon and Butterfield, 2005). Indeed, relevant studies indicate that women have more ethical intentions (Stedham et al, 2007) and behaviours (Dalton and Ortegren, 2011; Ross and Robertson, 2003) than men . Interestingly, empirical evidence in research based on business students shows that women behave more ethically than men (Adkins and Radtke, 2004). Therefore, due to the fact that most prior studies found evidence that women are more ethical than men, our second hypothesis is:

- H2. Among university students, women consider accounting ethics more important than men. Specifically:
 - H2a. Among university students, women consider general aspects of ethics more important than men do.
 - H2b. Among university students, women consider objectives of accounting ethics education more important than men do.

3.3. Age of students

Another variable of interest for business ethics researchers has traditionally been the age of individuals. Kohlberg (1969) pinpointed that, as people get older, they increase their awareness of ethical issues. Likewise, Bernardi and Bean (2010) or Trevino (1992) found that ethical reasoning increased with age. Regarding research on business students, previous studies

found that older students make more ethical decisions than younger ones (Adkins and Radtke, 2004; Borkowski and Ugras, 1992; Ruegger and King, 1992). Thus, our third hypothesis is:

- H3. Older students consider accounting ethics more important than younger students.

Specifically:

- H3a. Older students consider general aspects of ethics more important than younger students do.
- H3b. Older students consider objectives of accounting ethics education more important than younger students do.

4. SAMPLE AND MEASURES

The study population included all 1,825 undergraduate students officially registered in the BBA (five-year degree) of the Technical University of Valencia during the 2010/11 academic year. Students were targeted for questionnaire completion during regular class time. Classes at different courses were visited, so as to collect as many questionnaires as possible. Survey respondents included students who had taken the (elective) business ethics course of the BBA curriculum, and also students who had not taken that course. 551 questionnaires were returned properly completed, resulting in a response rate of 30.2%. The sample complies with similar features as the target population: sampling error of 4.81% with a confidence interval of 95% and $p/q=50/50$. Table 1 shows the sample characteristics.

Insert Table 1 about here

The questionnaire was administered to students during regular class time and took around fifteen minutes to complete. Participation was voluntary and anonymous. The questionnaire consisted of three sections (see appendix).

In the first section, students answered questions related to *ethics courses* (EC) at their university. This section was especially influenced by Adkins and Radtke's (2004) questionnaire, in turn adapted from Cohen and Pant (1989). Responses to questions in this first section were dichotomic, i.e. either 'yes' or 'no', also including a 'not sure' option. Within this first section of the questionnaire, question EC1 ('Have you had an ethics course in college?') provides information on the *group* variable, which is dichotomic (1=students who have previously taken an ethics course; 2=students who do not have previously taken an ethics course). The *group* variable is the independent variable in hypothesis 1.

The second section of the questionnaire included two parts. In the first part, students assessed their perceived importance of ethics in a number of *general ethics* (GE) areas: business community, business courses, personal decisions, and workplace decisions. In the second part of the second section, students were asked to rate the importance of seven possible objectives of accounting ethics education (*objectives of education*, OE). The whole second section of the questionnaire was adapted from Adkins and Radtke's (2004) questionnaire. A seven-point Likert-type scale was used in the second part of the questionnaire, whereby a rating of 1 meant 'important' and a rating of 7 meant 'unimportant'. Following Adkins and Radtke's (2004) approach and aims, these questions regarding the perceived importance of ethics were intended to be quite general in order to be easily understood by the student sample. Besides, although participants' interpretations could differ on some questions, respondents were expected to provide their general and accurate impressions on the different issues. It is also important to point out that, given the potential social desirability bias, the responses are relative measures

to each other, mostly appropriate for comparison purposes (they are not absolute measures that can be generalized).

Finally, the third section of the questionnaire measured students' demographic data. Among these data, gender and age stand out as key variables for hypotheses testing, being the independent variables in, respectively, hypotheses 2 and 3. *Gender* is a dichotomic variable (1=male; 2=female), and *age* is a continuous variable.

5. RESULTS

In this section, a number of descriptive analyses are first carried out. Then, the three hypotheses are tested.

5.1. Descriptive analyses

In this subsection, a number of descriptive analyses are conducted, having a two-fold purpose in mind. More broadly, we inquire into business students' overall perception of business ethics and, particularly, their views on the importance and goals of accounting ethics. More specifically, we investigate whether differences exist between the perceptions from students who have previously taken business ethics courses and those from students who have not taken these courses. In the two subsections that follow, we respectively deepen into the above issues with a focus on, first, the importance of ethics courses (first section of the questionnaire) and, second, the importance of general ethics issues and the objectives of accounting ethics education (second section of the questionnaire).

5.1.1. Importance of ethics courses

Descriptive statistics and χ^2 tests were used to analyze data derived from the first section of the questionnaire, where students answered questions on ethics courses at their university (see table 2).

Insert Table 2 about here

As shown on table 2, among the total of 551 students who responded the survey, 116 have *taken an ethics course*, which is slightly over a fifth of the sample (21.1%). Among them, 78.1% think that the course was *well designed and effective*, a result that shows a reasonable degree of success in the achievement of the course's goals, at least in terms of students' assessment of it. Among the whole sample of 551 students, 223 of them said that had the *willingness to enrol* in an ethics course (40.9%), a figure which is higher than the 116 students who had actually taken the course (21.1%). This fact can be interpreted as that, in addition to those students who have proven through action their interest in business ethics (i.e. taking the ethics course), there are also students who have not taken the course but show favourable intentions towards business ethics (i.e. they would like to take the course).

A contingency analysis of the combined results of questions EC1 and EC5 ($\chi^2(2)=50.30$, $p<.01$, $\Phi=.314$) is helpful to reveal the fine details of the above findings. On the one hand, intention became action in 36.3% of the cases: among the 223 students who showed intention to enrol into a business ethics course, 81 of them eventually did it. On the other hand, among the 116 students who had actually taken the ethics course, 81 (69.8%) did that consistent with their willingness to take the course, whereas 11 (9.5% of 116) said that they did not want to take it, and 24 (20.7% of 116) were unsure about taking the course but finally did it. In view of these figures, we can state that, in a substantial majority of cases (81 out of 116, i.e. 69.8%), students who took the ethics course did it as the result of transforming ethical intentions (willingness to take the course) into actions (actually taking it). Conversely, a minority of those students who did take the course (11 out of 116, i.e. 9.5%) showed an apparently inconsistent

behaviour of taking the course while at the same time not wanting to take it. This result may be explained by the fact that some students might not have been really motivated towards business ethics (e.g. took the course because of class schedules or randomly to complete credits).

In this sense, actual individual behaviour and choice are generally determined by individual ethical values (Bardi and Schwartz, 2003; Crossan et al., 2013; Fritzsche and Oz, 2007). However, the prioritization of ethical values above other considerations, which in turn triggers ethical intent (Cohen and Martinov-Bennie, 2006; Martinov-Bennie and Mladenovic, 2013) (i.e. in our study the ethical motivation to take the course), appears not to be the underlying cause for taking the ethics course in a minority of our sample. These paradoxical situations of (apparently) ethical behaviours not being motivated by ethical values (but instead by personal gain motives) stimulate researchers' reflection and may grant (beyond the scope of our study) further inquiry.

Moreover, the majority of students (64.7%) report *knowing that ethics courses are offered at their university*. A combined students' unawareness and uncertainty figure of 35.3% regarding the existence of the ethics course is indeed noteworthy. However, the business ethics course is an elective module, among many others offered. Students' awareness of the available elective course offer depends on their personal interests and curricular preferences. Given the ethics-unfriendly character of the environment in which we have framed our study, and the fact that this course is more recent than most other elective courses, the 64.7% awareness figure can be considered relatively positive.

In any case, further χ^2 tests had to be used to evaluate if there were significant differences between responses from students who had taken ethics courses (*ethics course students*) and responses from students who had not (*non-ethics course students*). Table 3 shows the results of such χ^2 tests.

Insert Table 3 about here

Regarding the *willingness to enrol in an ethics course*, our data show a 69.8% for this claim among *ethics course* students (81 out of 116) vs. a 32.8% support from *non-ethics course* students (131 out of 399), and these differences are statistically significant (EC5, $\chi^2(4)=51.77$, $p=.000$, $\Phi=.314$). Consistent with prior studies (Hurt and Thomas, 2008), accounting students regard as positive having specific ethics courses, and in general they even consider that just one course is not enough. Consistent with our results, this fact would help explain the willingness of students who have already taken ethics courses of taking further courses on ethics. Besides, the *belief that an ethics course is necessary for the degree curriculum* also shows significant differences (EC4, $\chi^2(4)=24.016$, $p=.000$, $\Phi=.239$): 44.2% of *ethics course* students support such a belief, vs. 22.9% who do so among *non-ethics course* students. Finally, the *belief on the convenience that ethics courses are offered in the business school* also shows significant differences (EC6, $\chi^2(4)=48.8$, $p=.000$, $\Phi=.308$): 89.7% of *ethics course* students vs. 58.8% of *non-ethics course* students support that belief. These results may indicate that the business ethics course in the target university is quite effective. First, a majority of students consider that offering an ethics course is convenient (65% of all students surveyed, EC6, see table 2) regardless of the fact that they have taken the course or not. Second, according to our results, the significance in the differences according to the *group* variable mean that the students who have taken the course are more aware of the importance of the ethics course, compared to the students who have not taken the course (i.e. the course has had a significant impact on the ethical values and attitudes of the students who have taken it).

Nevertheless, there are no statistically significant differences regarding question EC7, ‘Do you think that having an ethics course in college would help you solve moral and ethics issues facing the accounting profession and the business community in general?’ ($\chi^2(2)=5.758$, $p>.05$, $\Phi=.106$). Indeed, just slightly more than half of the students surveyed (53.5%) believe that university ethics education will be effective for facing future business ethics challenges (see table 2). This result can be, to some extent, attributed to students’ sceptical views on how the harsh (Spanish) reality of business can actually meet ethical demands.

In any case, as shown in table 2, almost two thirds of all students considered that ethics courses are convenient in the business school (65.1% for EC6), and nearly four fifths of students who had taken such courses thought they were effective (78.1% for EC2). These rather encouraging findings support the results of those researchers who found that students regard ethics teaching as an important part of business education (Graham, 2012; Adkins and Radtke, 2004; Crane, 2004).

5.1.2. Importance of general ethics issues and the objectives of accounting ethics education

In the second section of the questionnaire, students assessed their perceived importance of ethics in four general areas (business community, business courses, personal decisions, workplace decisions), and also regarding seven objectives of accounting ethics education (moral issues, ethical implications, moral obligation, tackling dilemmas, tackling uncertainties, behaviour change, understanding aspects). The exploratory data analysis of the second section of questionnaire identified the presence of severe non-normality in the distribution of all variables. Thus, we decided to use non-parametric statistical techniques for testing group differences. To test the differences between *ethics course* students’ perceptions vs. those of *non-ethics course* students, we used *Mann-Whitney U tests*.

The responses (*Mean and Standard Error*) for the questions related to the importance of *general aspects of ethics* (GE) and for the *objectives of accounting ethics education* (OE) are reported in table 4. Generally speaking, students in our sample believe that general aspects of ethics are important, and also agree on the importance of the seven accounting ethics education goals proposed by Adkins and Radtke (2004). Besides, means are, in the vast majority of aspects, lower (i.e. ethics is regarded as more important) for *ethics course* students compared with *non-ethics course* students.

Insert Table 4 about here

Table 5 shows the results of *Mann-Whitney U tests* applied for assessing the significance of differences in the responses between *ethics course* students and *non-ethics course* students regarding *general aspects of ethics* (GE). On a relative basis, the most important aspect for both groups of students is *ethics in personal decisions* (see table 4, GE3, mean=2.08) and differences in responses are not significant (see table 5, p=.43). Nonetheless, there are significant differences regarding *ethics in the business community* (GE1, p=.047), *ethics in business courses* (GE2, p=.049), and *ethics in workplace decisions* (GE4, p=.006) (see table 5), so *ethics course* students regard these issues as more important than *non-ethics course* students.

Insert Table 5 about here

Furthermore, the results of the *Mann-Whitney U tests* regarding the *objectives of accounting ethics education* (OE) are illustrated in table 6. There are two goals for which

differences between both groups of students are statistically significant: *relating accounting education to moral issues* (OE1, $p=.035$) and *fostering change in ethical behaviour* (OE6, $p=.008$). *Ethics course* students regard these issues as more important than *non-ethics course* students.

Insert Table 6 about here

5.2. Hypotheses testing

Table 7 presents correlations between all the variables included in our hypotheses. Multivariate analysis has been applied to test hypotheses. Specifically, linear regressions have been conducted for each of the 11 questions regarding the importance of accounting ethics (see tables 8 and 9). The explanatory variables included have been *group* (students who have taken a previous business ethics course vs. those who have not), *gender*, and *age* (see figures 1 and 2).

Insert Table 7 about here

5.2.1. General aspects of ethics

The sub-model related to the general aspects of ethics is shown in figure 1. Each of the independent variables (group, gender, and age) is related to the dependent variable *importance of general aspects of ethics* (GE), thus building the ‘a’ sub-hypothesis of each of the three hypotheses.

Insert Figure 1 about here

The regression results on general aspects of ethics are shown in table 8.

Insert Table 8 about here

As for the *group* independent variable, significant differences can only be found regarding the importance of ethics in business courses (GE2). In other words, students who have previously taken a business ethics course hold a stronger belief in the importance of ethics business courses, compared to the opinion of students who have not taken any ethics course. This means that hypothesis H1a can only be accepted for one of the four general aspects of ethics.

Conversely, hypothesis H2a (influence of *gender*) is fulfilled in all four cases: highly significant ($p < .01$) differences can be seen between men and women, with all general ethical issues being more important for women.

In turn, hypothesis H3, dealing with the role of *age*, is partially supported. Two out of the four relationships building hypothesis H3a are significant, implying that the older the students, the higher the perception of the importance of ethics in business courses (GE2) and in the workplace (GE4).

5.2.2. Objectives of accounting ethics education

The sub-model on the objectives of accounting ethics education is shown in figure 2. Each of the independent variables (group, gender, and age) is related to the dependent variable

importance of the objectives of accounting ethics education (OE), thus building the ‘b’ sub-hypothesis of each of the three hypotheses.

Insert Figure 2 about here

The regression results on the objectives of accounting ethics education are shown in table 9.

Insert Table 9 about here

First, it can be stated that hypothesis H1b, which includes the *group* as an independent variable, can only be accepted regarding the goal of fostering change in ethical behaviour (OE6). In other words, students who have already taken an ethics course hold a stronger belief in the importance that the objectives of accounting ethics education are oriented towards behaviour change, compared to the opinion of students who have not taken any ethics course.

Second, hypothesis H2b (role of *gender*) is fully accepted, since there are significant relationships regarding all seven objectives of accounting ethics education (and six out of seven are highly significant, i.e. $p < .01$). In this sense, women hold a stronger belief in the importance of the objectives of accounting ethics education, compared to the opinion of men.

Finally, hypothesis H3b (influence of *age*) is almost fully supported. Six out of the seven relationships are significant, implying that, the older the students, the higher the perception of importance of the objectives of accounting ethics education.

6. DISCUSSION

According to our results, students in our sample seem to be highly receptive to ethics teaching. These results support previous studies' findings (Graham, 2012; Adkins and Radtke, 2004; Crane, 2004), which include different types of students (schools, degrees and levels) and countries (mainly USA and UK). Besides, students in our sample also indicated the importance of learning about ethics in their degrees, with the aim of preparing themselves professionally to be able to effectively tackle ethical decision-making in the workplace. Hence, pedagogy and learning methodologies regarding accounting ethics education should be adapted accordingly.

Broadly speaking, students in our sample generally consider that teaching accounting ethics is important for their university education, having in mind the high value that students give to business ethics as a subject. Students share this belief, regardless of whether they have previously taken an ethics course or not. Moreover, students who have previously taken an ethics course consider that such a course was well designed and that it was useful for them. Therefore, universities should offer ethics courses and include them officially in their degree curricula. Furthermore, the fact that, at the target university, the ethics course is an elective, probably enhances students' interest, motivation and commitment towards the module.

Besides, interesting outcomes emerge from our study regarding the differences between students' perceptions, depending on whether they have actually taken business ethics courses or not. Particularly, there are significant differences regarding *ethics in the business community*, *ethics in business courses*, and *ethics in workplace decisions*, so *ethics course* students regard these issues as more important than *non-ethics course* students. These results may be indicative that students who have taken ethics courses, and precisely as a consequence of having gained some knowledge and awareness on business ethics, feel that they need to deepen further into these issues, so that ethical considerations can effectively influence their future decisions in the workplace and their overall professional responsibilities. Revisiting the literature introduced earlier in this article, these findings support ideas put forward by previous contributions. We

refer here to the reinforcement of an ongoing (virtuous) cycle of cause-effect relations between ethical values, moral judgements, intentions and behaviours, eventually impacting again on ethical values and re-initiating the cycle (Hunt and Vitell, 1986; Jones, 1991; Trevino, 1986).

Moreover, students generally believe that all goals of accounting ethics education are important, sharing strong and positive expectations about these goals. Nevertheless, those students who have previously attended an ethics course give a special importance to the goals of *relating accounting education to moral issues* and *fostering change in ethical behaviour*. That is, *ethics course* students regard these issues as more important than *non-ethics course* students. It seems that these two goals are relatively close to the specific contents and explicit aims of the business ethics courses received by the students at the target university of our study, so these courses do make a difference in students' perceptions. However, the other goals of accounting education (for which no statistically significant differences were found according to group of students) seem to refer to issues which are more abstract and/or more distant from the specific contents and explicit aims of the business ethics courses. Such accounting education goals, for which significant differences were not found according to group of students, are *recognizing issues in accounting that have ethical implications, developing 'a sense of moral obligation' or responsibility, developing the abilities needed to deal with ethical conflicts or dilemmas, learning to deal with the uncertainties of the accounting profession, and appreciating and understand the history and composition of all aspects of accounting ethics and their relationship to the general field of ethics*.

Regarding our hypotheses, the *group* variable (i.e. students who took an ethics course vs. those who did not) shows relatively weak results, since only one aspect of each of the sets of general aspects of ethics (H1a) and the objectives of accounting education (H1b) offered significant relationships (respectively, *ethics in business courses*, and *fostering change in ethical behaviour*). In any case, the (few) significant relationships found offer, if anything,

partial support for hypothesis 1, and are consistent with the results of our descriptive analyses, according to which *ethics-course* students show more ethical inclinations than *non-ethics course* students.

In turn, *gender* is an independent variable that fulfils all our predictions, implying full acceptance of hypothesis H2. Significant differences were found between male and female students regarding their perceived importance of the whole sets of general aspects of ethics (H2a) and the objectives of accounting ethics education (H2b). Consistent with the literature (Cohen et al., 2001; Dalton and Ortegren, 2011; O’Fallon and Butterfield, 2005; Stedham et al, 2007), in our study women showed stronger ethical inclinations than men. These results are in line with previous empirical research on business students’ ethical attitudes and behaviours (Adkins and Radtke, 2004).

As for the *age* variable, our results show significant relationships in most cases, leading to a high degree of the acceptance of hypothesis H3, implying that older students show more ethical inclinations than younger ones. Specifically, significant differences were found, depending on age, about two of the four general aspects of ethics (H3a), and about six out of the seven objectives of accounting ethics education (H3b). These findings are also consistent with previous literature frameworks (Bernardi and Bean, 2010; Kohlberg, 1969; Trevino, 1992), and they particularly support earlier studies on business students’ ethical decision-making (Adkins and Radtke, 2004; Borkowski and Ugras, 1992; Ruegger and King, 1992).

All in all, our study helps extend prior research and add value to the literature regarding inquiry on students’ perceptions of accounting ethics education. Interestingly, previously validated data collection methods have been applied to ethics-unfriendly environments, and particularly to the relatively underexplored Spanish context, also opening up interesting further inquiry opportunities. In line with previous research findings, female and older students show more ethical inclinations than, respectively, male and younger students. Thus, ethics-unfriendly

environments can be treated as contexts where general trends on students' ethical attitudes are also clearly visible. This fact, together with the evidenced impact of ethics courses on students' ethical inclinations, places ethics-unfriendly environments as crucial research settings for further inquiring into the nuances that help explain students' attitudes towards accounting ethics and the role of ethics courses in BBA curricula.

In this context of ethics-unfriendly environments, emphasis must be put on the fact that courses on ethics have only recently started to be introduced at Spanish universities. Therefore, thanks to having taken ethics courses, future accounting professionals should be more encouraged and determined to fulfil their individual ethical inclinations, instead of giving up and accepting the unethical business dynamics dictated by Spanish (unethical) 'tradition'. Accordingly, offering ethics courses at Spanish universities now should contribute to, in the long run, change this ethics-unfriendly environment, through the transformative action triggered by future (senior) accounting professionals (i.e. current students).

This study is not free of limitations, such as the nature of the students' sample, drawn from undergraduate business students of a single Spanish university in Valencia. These conditions limit the generalization of results to other institutions. Besides, social desirability bias (Chung and Monroe, 2003), inherent to research methods that employ self-reported behaviour, and especially pronounced in studies with ethical considerations (Podsakoff and Organ, 1986), might be another limitation (i.e. students' answers could be biased towards 'expected' ethical intentions). We have adopted a two-fold strategy to reduce this bias as much as possible. On the one hand, we have focused key aspects of our study on actual behaviour (having actually taken an ethics course) rather than just on intentions (willingness to take an ethics course). On the other hand, we have emphasized differences – rather than plain results – between different types of students (regarding group, gender and age), substantially downplaying potential bias related to social desirability since the absolute figures are not as

important as the differences found according to students' characteristics. The fact that the ethics course at the target university is elective may be another limitation. However, we have at least confirmed that ethics courses are reasonably effective in fulfilling students' expectations (it might well be the opposite if courses were poorly designed so students might become disappointed and sceptical, and eventually changed their views on business ethics).

Further research opportunities can also be derived from our investigation. For instance, the relative effectiveness of different types of interventions on accounting ethics education (i.e. stand-alone courses, integrated in other courses, or a mix of both approaches) could be more thoroughly investigated, focusing on the impact of those interventions on students' ethical behaviour (Hurt and Thomas, 2008). In this sense, longitudinal studies aimed at future accounting professionals (current students) would help assess the extent to which different goals have been (or not) achieved and in what way.

APPENDIX: QUESTIONNAIRE ITEMS

Section 1. Ethics education courses.

EC1. Have you had an ethics course in college?

EC2. If yes, do you think this course was well designed and effective?

EC3. Does your university offer ethics courses?

EC4. Do you think such a course is necessary for your degree curriculum?

EC5. If a business ethics course were offered as an elective course, would you enrol in it?

EC6. Do you think that it is convenient that ethics courses are offered at the business school?

EC7. Do you think that having an ethics course in college would help you solve moral and ethics issues facing the accounting profession and the business community in general?

Section 2.a. General aspects of ethics.

GE1. How important is ethics in the business community?

GE2. How important is ethics in business courses?

GE3. How important is ethics in your personal decisions?

GE4. How important is ethics in your decisions in the workplace?

Section 2.b. Objectives of accounting ethics education.

OE1. Relating accounting education to moral issues.

OE2. Recognizing issues in accounting that have ethical implications.

OE3. Developing 'a sense of moral obligation' or responsibility.

OE4. Developing the abilities needed to deal with ethical conflicts or dilemmas.

OE5. Learning to deal with the uncertainties of the accounting profession.

OE6. Fostering change in ethical behaviour.

OE7. Appreciating and understand the history and composition of all aspects of accounting ethics and their relationship to the general field of ethics.

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Figure 1. Hypotheses on general aspects of ethics

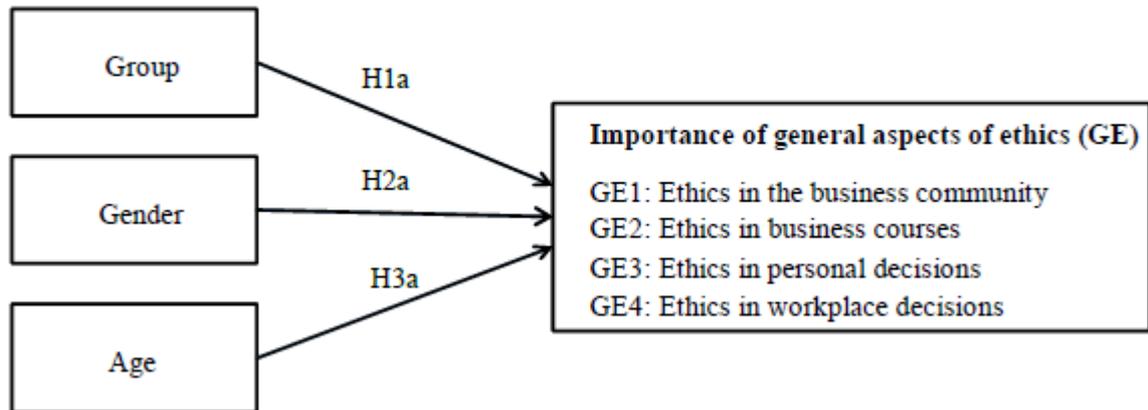


Figure 2. Hypotheses on the objectives of accounting ethics education

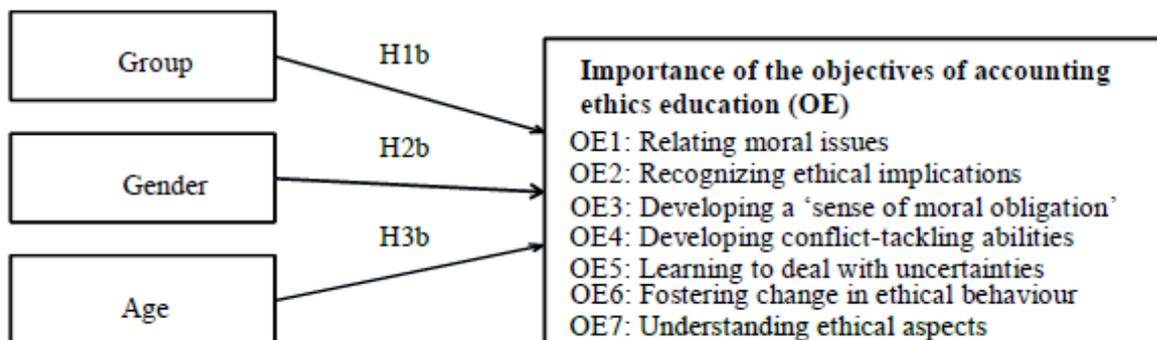


Table 1. Sample characteristics

	n=551
Gender	
Female	339
Male	209
No response	3
Nationality	
Spanish	479
Other	72
Year	
First year	143
Second year	119
Third year	88
Fourth year	106
Fifth year	80
No response	15

Table 2. Responses to questions on ethics courses

<i>Questions</i>	<i>Responses</i>		
	<i>Yes</i>	<i>No</i>	<i>Not sure</i>
EC1. Previous ethics course	116	399	36
(n=551)	(21.1%)	(72.4%)	(6.5%)
EC2. Course well designed and effective	89	25	0
(n=114)	(78.1%)	(21.9%)	(0%)
EC3. Ethics courses offered	337	83	101
(n=521)	(64.7%)	(15.9%)	(19.4%)
EC4. Need of ethics course in curriculum	126	235	81
(n=442)	(28.5%)	(53.2%)	(18.3%)
EC5. Willingness to enrol in ethics course	223	141	181
(n=545)	(40.9%)	(25.9%)	(33.2%)
EC6. Convenience of offering ethics courses	356	89	102
(n=547)	(65.1%)	(16.3%)	(18.6%)
EC7. Utility for solving business ethical issues	293	105	150
(n=548)	(53.5%)	(19.2%)	(27.3%)

Table 3. χ^2 tests for the questions on ethics courses

<i>Questions</i>	<i>χ^2 (df)</i>	<i>p-value</i>	<i>Phi</i>
EC4. Need of ethics course in curriculum n=442	24.02 (2)	.000*	.239
EC5. Willingness to enrol in ethics course (n=545)	51.77 (2)	.000*	.314
EC6. Convenience of offering ethics courses (n=547)	48.80 (2)	.000*	.308
EC7. Utility for solving business ethical issues (n=548)	5.76 (2)	.117	.106

*p<.01

**Table 4. Results for general aspects of ethics (GE)
and for objectives of accounting ethics education (OE)**

	<i>Ethics course (n=116)</i>		<i>Non-ethics course (n=399)</i>			
	<i>Mean</i>	<i>SE</i>	<i>Mean</i>	<i>SE</i>		
GE1. Ethics in the business community	2.57	1.40	2.41	1.43	2.61	1.39
GE2. Ethics in business courses	2.50	1.30	2.27	1.35	2.56	1.28
GE3. Ethics in personal decisions	2.08	1.20	1.94	0.99	2.11	1.25
GE4. Ethics in workplace decisions	2.37	1.27	2.07	1.07	2.44	1.31
OE1. Relating moral issues	3.33	1.44	3.10	1.33	2.40	1.46
OE2. Recognizing ethical implications	3.05	1.33	2.87	1.91	3.09	1.36
OE3. Developing moral obligation	2.59	1.31	2.47	1.25	2.62	1.32
OE4. Developing conflict-tackling abilities	2.52	1.30	2.36	1.33	2.57	1.30
OE5. Learning to deal with uncertainties	2.52	1.23	2.53	1.20	2.52	1.24
OE6. Fostering change in ethical behaviour	2.99	1.28	2.68	1.17	3.07	1.30
OE7. Understanding ethical aspects	3.37	1.40	3.36	1.41	3.37	1.40

Table 5. Mann-Whitney U test for general aspects of ethics (GE)

<i>Questions</i>	<i>U test</i>	<i>p-value</i>
GE1. Ethics in the business community	20423.5	.047*
GE2. Ethics in business courses	19220.5	.049*
GE3. Ethics in personal decisions	22046.6	.413
GE4. Ethics in workplace decisions	17942.5	.006**

* p<.05 **p<.01

Table 6. Mann-Whitney U test for objectives of accounting ethics education (OE)

<i>Questions</i>	<i>U test</i>	<i>p-value</i>
OE1. Relating moral issues	20076.5	.035*
OE2. Recognizing ethical implications	20542	.063
OE3. Developing moral obligation	21397	.202
OE4. Developing conflict-tackling abilities	20419.5	.051
OE5. Learning to deal with uncertainties	22688.5	.804
OE6. Fostering change in ethical behaviour	19333.5	.008**
OE7. Understanding ethical aspects	22319	.648

* p<.05 **p<.01

Table 7. Pearson's χ^2 correlation matrix

	<i>GE1</i>	<i>GE2</i>	<i>GE3</i>	<i>GE4</i>	<i>OE1</i>	<i>OE2</i>	<i>OE3</i>	<i>OE4</i>	<i>OE5</i>	<i>OE6</i>	<i>OE7</i>	<i>Group</i>	<i>Gender</i>	<i>Age</i>
<i>GE1. Ethics in the business community</i>														
<i>GE2. Ethics in business courses</i>	.762**													
<i>GE3. Ethics in personal decisions</i>	.513**	.535**												
<i>GE4. Ethics in workplace decisions</i>	.517**	.580**	.683**											
<i>OE1. Relating moral issues</i>	.295**	.357**	.257**	.307**										
<i>OE2. Recognizing ethical implications</i>	.333**	.422**	.309**	.360**	.660**									
<i>OE3. Developing a 'sense of moral obligation'</i>	.371**	.443**	.440**	.470**	.503**	.556**								
<i>OE4. Developing conflict-tackling abilities</i>	.401**	.468**	.439**	.436**	.431**	.631**	.631**							
<i>OE5. Learning to deal with uncertainties</i>	.346**	.413**	.422**	.364**	.329**	.507**	.609**	.609**						
<i>OE6. Fostering change in ethical behaviour</i>	.383**	.469**	.367**	.450**	.476**	.538**	.572**	.471**	.471**					
<i>OE7. Understanding ethical aspects</i>	.320**	.367**	.285**	.327**	.471**	.438**	.441**	.440**	.353**	.584**				
<i>Group</i>	.070	.103*	.062	.122**	.096*	.082	.055	.074	-.004	.129**	.014			
<i>Gender</i>	-.162**	-.160**	-.155**	-.203**	-.089*	-.147**	-.139**	-.172**	-.142**	-.237**	-.157**	-.026		
<i>Age</i>	-.065	-.106*	-.090*	-.138**	-.156**	-.165**	-.113*	-.097*	-.056	-.199**	-.104*	-.188**	-.095*	

* $p \leq .05$; ** $p \leq .01$; N=551

Note. Gender: 1=male; 2=female. Group: 1=students who have previously taken a business ethics course; 2=students who do not have previously taken a business ethics course. Age: continuous variable. Dependent sub-variables (GE1-GE4 and OE1-OE7): Likert-type scale (1. Important ... 7. Unimportant).

Table 8. Multiple regression for general aspects of ethics

<i>Questions</i>	<i>Constant</i>	<i>Group</i>	<i>Gender</i>	<i>Age</i>
GE1. Ethics in business community				
n=474 R ² = .032 **p<.01 *p<.05				
B	3.861	.194	-.403	-.032
SBE	.663	.156	.135	.020
β	□	.058	-.139**	-.074
GE2. Ethics in business courses				
n=473 R ² =.053 **p<.01 *p<.05				
B	3.901	.308	-.418	-.047
SBE	.610	.144	.124	.019
β	□	.099*	-.155**	-.116*
GE3. Ethics in personal decisions				
n=474 R ² =.038 ** p<.01 *p<.05				
B	3.558	.108	-.371	-.033
SBE	.571	.138	.116	.018
β	□	.038	-.148**	-.088
GE4. Ethics in workplace decisions				
n=462 R ² =.073 **p<.01 *p<.05				
B	4.309	.209	-.434	-.048
SBE	.575	.137	.117	.018
β	□	.072	-.171**	-.127**

Note. Gender: 1=male; 2=female. Group: 1=students who have previously taken a business ethics course; 2=students who do not have previously taken a business ethics course. Age: continuous variable. Dependent sub-variables (GE1-GE4): Likert-type scale (1. Important ... 7. Unimportant).

Table 9. Multiple regression for the objectives of accounting ethics education

<i>Questions</i>	<i>Constant</i>	<i>Group</i>	<i>Gender</i>	<i>Age</i>
OE1. Relating moral issues				
n=472 R ² = .055 **p<.01 *p<.05				
B	5.331	.250	-.295	-.075
SBE	.656	.155	.134	.020
β	□	.075	-.102*	-.173**
OE2. Recognizing ethical implications				
n=473 R ² = .062 **p<.01 *p<.05				
B	5.381	.105	-.375	-.083
SBE	.599	.141	.122	.018
β	□	.034	-.141**	-.209**
OE3. Developing a 'sense of moral obligation'				
n=474 R ² = .037 **p<.01 *p<.05				
B	4.361	.077	-.341	-.057
SBE	.601	.141	.122	.018
β	□	.025	-.130**	-.144**
OE4. Developing conflict-tacking abilities				
n=473 R ² = .040 **p<.01 *p<.05				
B	3.863	.174	-.417	-.047
SBE	.601	.141	.122	.018
β	□	.057	-.158**	-.120**
OE5. Learning to deal with uncertainties				
n=472 R ² = .021 **p<.01 *p<.05				
B	3.743	-.035	-.344	-.028
SBE	.584	.137	.199	.018
β	□	-.012	-.136**	-.073
OE6. Fostering change in ethical behaviour				
n=463 R ² = .144 **p<.01 *p<.05				
B	5.589	.276	-.632	-.083
SBE	.574	.135	.116	.018
β	□	.092*	-.241**	-.212**
OE7. Understanding ethical aspects				
n=473 R ² = .036 **p<.01 *p<.05				
B	5.564	-.071	-.431	-.049
SBE	.648	.153	.131	.020
β	□	-.022	-.152**	-.115*

Note. Gender: 1=male; 2=female. Group: 1=students who have previously taken a business ethics course; 2=students who do not have previously taken a business ethics course. Age: continuous variable. Dependent sub-variables (OE1-OE7): Likert-type scale (1. Important ... 7. Unimportant).