

Ethics, responsibility and sustainability orientation among economics and management masters' students

Ethics,
responsibility
and
sustainability

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Abstract

Purpose – This study aims to address the topic of ethics, responsibility and sustainability (ERS) orientation of students enrolled in schools of economics and management master's degrees. It examines the effect of educational background and gender on Portuguese students' orientation towards ERS, as well as the extent to which there is a relation between the scientific area of the master degree in which the student is enrolled and his/her ERS orientation.

Design/methodology/approach – The authors used a sample of 201 students from several master degrees offered by the School of Economics and Management of a large public Portuguese university and analysed their ERS orientation using a survey by questionnaire.

Findings – Findings suggest that there are differences in orientation across gender, with female students valuing ERS more than their male counterparts. Educational background has minimal effects on the responses. It was also found some sort of selection effect in terms of the scientific area of the master degree and ERS orientation.

Originality/value – This study contributes to the literature by analysing the issue of whether students with an educational background in economics and management present different ERS orientation than their counterparts, as well as by examining whether there is some sort of self-selection into the study of disciplines

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in which ERS orientation is likely to be a week. As far as the authors are aware, this is the first study analysing this type of issue regarding ERS.

Keywords Ethics, Portugal, Gender, Economics and management education, Responsibility and sustainability

Paper type Research paper

1. Introduction

Education and research on business ethics, corporate social responsibility and corporate sustainability [ethics, responsibility and sustainability (ERS)] in schools of economics and management have developed enormously over the past few decades. The most important accreditations that a school of economics and management can obtain, such as the European Foundation for Management Development (EFMD) and Quality Improvement System (EQUIS) accreditation or the Association to Advance Collegiate Schools of Business (AACSB) accreditation, attribute great importance to ERS (Cho *et al.*, 2014; Nicholls *et al.*, 2013; Rundle-Thiele and Wymer, 2010). The EQUIS accreditation standards include specific criteria for the integration of ERS into schools of economics and management. According to the most recent EQUIS standards and criteria, “responsible and ethical behaviour should be an integral part of the school’s values and strategy and should be reflected in its regular activities” (EFMD, 2018, p. 70). Moreover, it “should be actively engaged in promoting business ideas and solutions to sustainability challenges” (EFMD, 2018, p. 70).

Many see such developments as reactions to the array of corporate scandals that occurred all over the world (Enron, WorldCom, Siemens, etc.). Given that a generous number of those holding responsibilities for these detrimental events were educated in the aforementioned schools, the idea of holding these latter accountable for such events has prospered (Swanson and Frederick, 2003; Ghoshal, 2005).

There are even those who view educators in such schools as having the responsibility of teaching ERS (Gioia, 2003) or claim that this responsibility is one of the pivotal missions that these schools hold (Mitroff, 2011). Recent studies have emphasised the importance of education for sustainability or sustainable development in schools of economics and management (Gitsham and Clark, 2014; Jabbour, 2010; Landrum and Ohsowski, 2017; Novo-Corti *et al.*, 2018). Recent studies have emphasised the importance of education for sustainability or sustainable development in schools of economics and management (Gitsham and Clark, 2014; Jabbour, 2010; Landrum and Ohsowski, 2017; Novo-Corti *et al.*, 2018). More recently, sustainability education has made inroads into top leadership and prominence by the emergence of positions in top management that is devoted to corporate sustainability, often called “chief sustainability officers”, noted in recent studies (Strand, 2014). Given the infancy of these jobs, these individuals tend to be recruited from within the company itself (Osagie *et al.*, 2018).

Besides the cruciality of the CEO’s support (Huang, 2013), the successful implementation of corporate sustainability initiatives is dependent upon these sustainability leaders’ abilities. These leaders must have “extraordinary abilities” as they must be able to “read and predict through complexity”, “think through complex problems, engage groups in dynamic adaptive organisational change”, and be able to “manage emotion appropriately” (Metcalfe and Benn, 2013, p. 381). Formal education is likely to have a role on the development of CEO’s sensitivity to sustainability issues (Huang, 2013). Referring to this role, Huang (2013, p. 242) go as far as asserting that “universities may prove to be an important and constructive link between business and society”. It is also likely to play a crucial role in the

development of the abilities that sustainability leaders need to possess to successfully implement corporate sustainability initiatives.

Notwithstanding the evidence of “strong demand for recruits who are better trained in matters of sustainability” (Gitsham and Clark, 2014, p. 292), some authors suggest that “inconsistencies in the teaching of sustainability in business schools are leading to a deficit in the way these schools are training future business leaders” (Barber *et al.*, 2014, p. 475).

This paper addresses the topic of ERS orientation of students enrolled in schools of economics and management. Matten and Moon (2004) used the term CSR as an umbrella term for a set of concepts that are used to reflect the relations between business and society (such as, CSR, corporate citizenship and corporate sustainability) and business ethics. The author’s use the term ERS as such an umbrella term. The author’s view the former concepts as depicting inextricable realities. Hence, in the wake of Christensen *et al.* (2007, p. 348), the author’s consider that CSR and sustainability concern what they refer to as the two “dimensions of ethics”: the “corporations’ ethical role in society” (its CSR); and its role in the safeguard of resources for generations to come (its “sustainable management”).

There is a plethora of studies analysing students’ ethical values and moral behaviour (Desplaces *et al.*, 2007; McManus and Subramaniam, 2009; Eweje and Brunton, 2010). There is also a wealth of empirical literature on students’ attitudes towards ERS (Lämsä *et al.*, 2008; Kolodinsky *et al.*, 2010; Ng and Burke, 2010; Wong *et al.*, 2010; López-Navarro and Ciprés, 2015; Alonso-Almeida *et al.*, 2015; Haski-Leventhal *et al.*, 2017; Larrán *et al.*, 2018). The purpose of this study is to contribute to this latter strand of literature by analysing the ERS orientation of Portuguese students enrolled in master’s degrees in economics and management. More specifically, this study examines the effect of educational background and gender on Portuguese students’ orientation towards ERS.

There is also a number of studies comparing the values and behaviours of economics and management students with those of students of other fields (Allgood *et al.*, 2012; Graça *et al.*, 2016; Haucap and Just, 2010). According to Graça *et al.* (2016, p. 519), “it appears to be reasonably well documented” that students exposed to economics’ teaching, such as the students of economics and management, “tend to show an above average self-interested behaviour”. There is also a discussion on how to explain such differences, whether they arise “by nature” or “by nurture” (Haucap and Muller, 2014).

Based on this literature, this study also analyses to what degree there is a relation between the scientific area of the master degree in which the student is enrolled and its ERS orientation. As far as the authors are aware, this is the first study analysing this latter relation. The author’s used a sample of 201 master degree students from the School of Economics and Management of a large public Portuguese university.

The rest of this paper is organised as follows. In Sections 2 and 3, a review of relevant studies is offered and the hypotheses are developed. In Section 4, the research methods used are presented. The results are presented in Section 5. The paper is concluded in Section 6, in which a discussion of the results and some concluding comments are offered.

2. Selection or indoctrination

At least since the study of Marwell and Ames (1981), suggesting that economics graduate students tend to free ride and to have little notion of fairness, a plethora of studies investigating differences between students of economics and management and students of other fields have been published[1]. Most of these studies compare students exposed to economics teaching with students not exposed to such teaching. Most of them focus on the influence of economics’ teaching, and use the word “economist” in the “broad sense of the word” (Frey and Meier, 2003, p. 461) to refer to economics and management students

(Meier and Frey, 2004; Graça *et al.*, 2016; Haucap and Just, 2010; Hummel *et al.*, 2018). As Wang *et al.* (2011, p. 655) contend, “economics education is clearly an essential element in a business professional’s toolkit”.

When compared to the studies presenting evidence of differences in terms of opinions, values and views of the world (Allgood *et al.*, 2012; Haucap and Just, 2010; Jacob *et al.*, 2011), and of prosocial behaviour and trustworthiness (Graça *et al.*, 2016; Haucap and Muller, 2014), the number of studies reporting evidence of the contrary is rather small (Hummel *et al.*, 2018).

An important debate occurring within the literature devoted to the differences between students of economics and management and students of other fields concerns whether they are different by nature or by nurture. According to Segal *et al.* (2011) these are the main mechanisms used to explain differences between students in different fields. While nature “explains individual differences as resulting from an *a priori* distribution of heterogeneous factors that prompt those who possess certain factors to express certain preferences”, nurture explains such differences “as resulting from factors beyond the individual’s control” (Segal *et al.*, 2011, p. 1022).

Applied to this study, in the first case there is some sort of self-selection into the study of economics and management (Frey and Meier, 2003; Segal *et al.*, 2011). In the latter case, there is a sort of indoctrination occurring over the course of management and economics’ studies that promotes changes in terms of values, views of the world and behaviours (Haucap and Just, 2010). Some authors use different terms to refer more or less to what is called “indoctrination” in this study, such as “treatment” (Hummel *et al.*, 2018) or “socialisation” (Arieli *et al.*, 2016; Segal *et al.*, 2011).

Graça *et al.* (2016, p. 519) consider that the existing empirical literature “appears to support the prevalence of the so-called ‘self-selection’ hypothesis”. Frey and Meier (2003) and Meier and Frey (2004) present evidence of a selection effect but not of an indoctrination one. On the contrary, Hummel *et al.*’s (2018) findings suggest that there is neither a self-selection nor a treatment effect in terms of students’ moral judgement competence.

Comparing a business school to a social work school, Arieli *et al.* (2016, p. 504) examined not only value profiles among their students but also such profiles as reflected in their websites. Their findings revealed the “central and prominent role of power and achievement values in business schools”, both in terms of their websites and the “value emphases of their students”. They also present evidence of a “value-based self-selection process” and limited support for the effect of indoctrination.

Segal *et al.* (2011) examined the tolerance of unethical behaviour of management students when compared to criminal justice students. They draw on self-selection theory and Carroll’s (1987) model of management morality to offer an explanation of why certain students might choose management as their field of study. These researchers argue that the choice of fields of study and different ethical attitudes are largely explained by the personalities and values of individuals. According to their perspective, the students’ choice of fields of study is determined by beliefs concerning how well the fields’ “values and personality traits mirror their own dispositions” (Segal *et al.*, 2011, p. 1023). Hence, individuals who choose law as their field of study “tend to value equality, wisdom, and salvation – values associated with the practice of law” (Segal *et al.*, 2011, p. 1023). On the other hand, individuals who decide to study management tend to value excitement, happiness, and pleasure, as well as wealth, all “values associated with business” (Segal *et al.*, 2011, p. 1023). Therefore, whilst individuals who choose criminal justice “are gratified by honor, duty, and a commitment to safeguard society, which resonate with the” profession and “are linked to higher ethical levels”, individuals who pick management “are gratified by

profit, competition and success, which resonate with business and are associated with lower ethical levels” (Segal *et al.*, 2011, p. 1023).

Based on an “an understanding of business as primarily amoral, rather than immoral”, Segal *et al.* (2011, p. 1027) submit that:

[. . .] while self-selection can explain business students’ relative tolerance for unethical behavior, the better explanation for why they choose business is that they perceive it to be amoral and resonate with that.

This view is also coherent with consistent with existing evidence that management students are “susceptible to moral inculcation through ethics interventions” (Segal *et al.*, 2011, p. 1027).

Segal *et al.* (2011) found a lower willingness to condemn unethical conduct on the part of management students. However, these students also revealed higher levels of receptiveness to corporate charity than their criminal justice counterparts, and a moderate receptiveness to the inculcation of ethical principles. Segal *et al.* (2011, p. 1038) interpret their findings as follows: management students’ “relative tolerance for unethical acts may reflect their understanding of business as amoral”; and “their willingness to give corporate charity may reflect their occupation’s managerialist, ‘can-do’ orientation”. Regarding criminal justice students’ “skittishness about corporate charity”, Segal *et al.* (2011, p. 1038) suggest that it “may reflect their understanding that their profession’s mission is to safeguard society’s institutions, not redistribute wealth”.

In his 2015 American Finance Association Presidential Address, Luigi Zingales (2015, p. 1358) acknowledged that there is some evidence of the higher level of selfishness of business economics students when compared to the average student. According to him, although evidence also suggests that this seems to be a result of self-selection rather than indoctrination, “indoctrination seems to be playing a role”.

Providing some information on a sustainability unit within an MBA programme, Stubbs and Cocklin (2008) mention the widespread acceptance of the neoclassical paradigm’s assumptions by students, adding that until the sustainability unit they have not even questioned such assumptions. Harring *et al.* (2017, p. 11) conducted one of the few studies examining the influence of studying economics on the attitudes towards the roles of markets and governments towards an ERS-related issue, climate change mitigation. Based on a sample of Swedish students of economics, political sciences and law, these researchers found that students who enrolled in a module in introductory microeconomics became “became slightly more supportive of market-based government environmental policies and slightly less supportive of non-market policies”.

3. Hypothesis development

Studies on students’ ERS orientation abound (Arlow, 1991; Kraft and Singhapakdi, 1995; Mintz, 1996; Prasad *et al.*, 1998; Burton and Hegarty, 1999; Elias, 2004; Luthar and Karri, 2005; Lämsä *et al.*, 2008; Wong *et al.*, 2010; Ng and Burke, 2010; Kolodinsky *et al.*, 2010; Brijlal, 2011; Alonso-Almeida *et al.*, 2015; López-Navarro and Ciprés, 2015; Haski-Leventhal *et al.*, 2017; Larrán *et al.*, 2018).

Table I presents a synthesis of the characteristics of students’ ERS perception examined in these studies. Gender, age/educational level and work experience are the three main characteristics studied in previous literature. As the research is on examining the ERS orientation of students enrolled in master’s degrees, the authors will analyse only gender. In our study, the educational level is similar.

Sex differences exist, not only at home but also at work (Ryan, 2017). Although such differences are usually attributed to learned psychologies and differences that exist in terms

Table I.
Main characteristics
of students' ERS
perception in
previous research

	Gender	Age/educational level	Work experience	ERS course	Race/ nationality	Major	Spirituality
Arlow (1991)	x	x	x		x	x	
Kraft and Singhapakdi (1995)	x	x	x		x	x	
Burton and Hegarty (1999)	x	x		x			
Elias (2004)	x	x	x			x	
Luthar and Karri (2005)	x	x	x	x			
Lämsä <i>et al.</i> (2008)	x	x					
Wong <i>et al.</i> (2010)	x	x	x		x		
Ng and Burke (2010)	x	x	x			x	x
Kolodinsky <i>et al.</i> (2010)	x	x	x		x		
Brijlal (2011)	x				x	x	
Alonso-Almeida <i>et al.</i> (2015)	x	x	x				
López-Navarro and Segarra Ciprés (2015)	x						
Haski-Leventhal <i>et al.</i> (2017)	x	x					
Larrán <i>et al.</i> (2018)	x	x	x				

Source: Adapted from Alonso-Almeida *et al.* (2015, p. 4)

of experiences men and women undergo, contemporary advances occurred in neurosciences revealed crucial neurological differences (ibid.). In the beginning of the century, [Dollar et al. \(2001\)](#) referred to the wealth of literature in the social sciences suggesting that women may have higher standards of ethical behaviour and be more concerned with the common good. Such literature has increased substantially.

More recently, there is a wealth of literature reporting evidence of the greater concern for the environment revealed by women when compared to men, as well as their higher preoccupation with responding to the needs of others ([Post et al., 2015](#)). For example, regarding their role on corporate boards, [Galbreath \(2018\)](#) contends that because women possess a more communal character than men (because they are, among other things, more affectionate, sympathetic and concerned for the welfare of others), they are more likely to consider a larger set of stakeholders in their decision-making process ([Galbreath, 2018](#)). Moreover, in view of their more relational orientation, women are more likely to be inclined to the establishment of relationships with a more inclusive set of stakeholders (ibid.).

Evidence reported in prior literature suggests that gender is among the most important factors that influence or at least, are related, to differences in ERS orientation, with women demonstrating more positive attitudes towards ERS ([Mintz, 1996](#); [Prasad et al., 1998](#); [Burton and Hegarty, 1999](#); [Elias, 2004](#); [Hudson and Miller, 2005](#); [Luthar and Karri, 2005](#); [Malone, 2006](#); [Bloodgood et al., 2008](#); [Ng and Burke, 2010](#); [Alonso-Almeida et al., 2015](#); [López-Navarro and Ciprés, 2015](#); [Haski-Leventhal et al., 2017](#)). This gives rise to the first hypothesis:

H1. Female students present higher levels of ERS orientation than their male counterparts.

The type of economic theory that has dominated economics and management schools' thinking and teaching since the mid-1970s – neoclassical economics – promotes a corporate culture that “ignores the personal rewards and social responsibilities associated with managing a modern enterprise, and encourages an ethic of greedy materialism” ([Gintis and Khurana, 2008](#), p. 300). Moreover, in this type of vision “human character virtues such as honesty and decency are deployed only contingently in the interests of personal material reward” ([Gintis and Khurana, 2008](#), p. 300). [Hühn \(2014, p. 534\)](#) goes as far as asserting that “the ideology of economism” has “penetrated all subjects taught in business schools”.

[Fourcade et al. \(2015\)](#) document a shift towards business schools of the economics academic field. These researchers refer to a movement of absorption of sizeable numbers of economics PhDs by business schools having turned them into fundamental players within the economic science itself. They offer as some sort of attestation of this phenomenon the number of economists based in business schools that have been awarded the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel in the past 25 years (these include Eugene Fama, Robert Fogel, John Harsanyi, Robert Merton, Merton Miller, Michael Spence, Myron Scholes and Oliver Williamson).

According to [Khurana \(2007, p. 314\)](#), the ideas from neoclassical economics “came to dominate not only finance but also accounting, international business, production, negotiations and strategy”. Business schools' excessive emphasis on market mechanisms and stock prices has prevented them to impart to students the notion that they belong to a profession responsible for much more than shareholder value ([Khurana, 2007](#)). [Huehn \(2008, pp. 829, 833, 823\)](#) argues that “bad management theories are destroying more than just good management practices”. This author refers to an “ideology of economics; the attempt to declare a sociological discipline as value-free”, which he calls “economism”. He argues further that the prevailing economism in management theories “acts like a corrosive destroying not only the basis of good (ethical and effective) management practice and theory

but also the social context in which management exists". In a subsequent article, Huehn (2016, p. 177) argues that "business theory sets greed as an economic virtue while simultaneously rejecting responsibility for its destructive social consequences".

Many scholars depict as pernicious the hegemony of visions taken from neoclassical economic theory (e.g. the efficient market hypothesis, the transaction costs approach or the agency theory) within management education (Beverungen *et al.*, 2013; Dierksmeier, 2011; Evans and Tourish, 2017; Ferraro *et al.*, 2005; Ghoshal and Moran, 1996, 1995; Ghoshal, 2005; Gioia, 2002, 2003; Hühn, 2014; Huehn, 2016; Khurana, 2007; Lourenço, 2013; MacLagan and Campbell, 2011; Pfeffer, 2005; Shareef, 2007; Tourish *et al.*, 2010). They argue that such approaches offer models of human nature and behaviour and corporate behaviour that are subordinate to the goal of maximizing shareholder value. According to them, the economic views of the world that became dominant in economics and management schools result in diverting attention away from other perspectives that enable conceptualisations of corporate responsibilities (Gioia, 2002).

There is a wealth of studies examining the relation between economic education and unethical or less ethical behaviours (Kirchgässner, 2005). Some studies report evidence that exposure to courses in economics is related to increased free-riding behaviour (Marwell and Ames, 1981), less cooperation (Frey *et al.*, 1993), selfish behaviour (Carter and Irons, 1991), corruption behaviour (Frank and Schulze, 2000), less charitable behaviour (Bauman and Rose, 2011) or increased levels of greed (Wang *et al.*, 2011). Racko (2019, p. 44) found that studying economics is "associated with an increase in the importance of hedonism and power values and a decrease in the importance of self-direction value". Some studies also suggest that business education helps to develop students who present attitudes and behaviour that are less ethical (Smyth and Davis, 2004). Still, others report evidence of the influence of studying economics and management in civic behaviours (Allgood *et al.*, 2012). Hence, the second hypothesis:

H2. Master students with an educational background in economics or management present lower ERS orientation than their counterparts.

Rasche and Gilbert (2015) argue that the likelihood of the faculty members of a school of economics and management viewing responsible management as an important part of its educational framework is lower in the case of departments in which the theoretical underpinnings of scholarship are formed by rational and self-interested behaviour (such as economics and finance) when compared to management and marketing departments. These authors refer to recent empirical evidence suggesting that most responsible management content happens in disciplines such as leadership and strategy, whereas the integration of such content in more technical disciplines such as accounting, finance and economics, is still low. Moreover, they contend that the set of assumptions with which these latter disciplines work is different (e.g. profit maximisation and opportunistic behaviour), and this entails an absence of the conceptual resources to justify the investments required to build responsible corporate behaviour. In addition, education in these disciplines is frequently of a vocational nature and prepares students for specialised jobs characterised by pre-defined profile, whereas education in management aims at developing a broader array of skills and capabilities (Rasche and Gilbert, 2015). Therefore, the following hypothesis is proposed:

H3. Students enrolled in master degrees with theoretical underpinnings of scholarship formed by rational and self-interested behaviour attribute lower importance to ERS.

4. Methodology

4.1 Sample and data collection

The questionnaire used in this study was conceived to be administered to students in all the higher education institutions participating in an international study, which resulted in the publication of [Turker et al. \(2015\)](#). It has been based on well-known existing scales ([Aiman-Smith et al., 2001](#); [Etheredge, 1999](#); [Maignan and Ferrell, 2000](#); [Webb et al., 2008](#)). The questionnaire has been translated into Portuguese and passed on to students from several of the economics and management master degree programmes offered by the School of Economics and Management of a large public university in Portugal between November 2014 and December 2014.

The sample for this study was drawn from all the students enrolled in a master's degree at the School of Economics and Management mentioned above. The purpose was to survey all the students from all the master degrees. Hard copy surveys were administered in core lectures, to increase response rates. Only the students present at the lectures were surveyed. The directors of most of the master degrees agreed to have the questionnaire passed on to the students, and facilitated the contact between the authors and the lecturers. Only five of the master degrees were not included in this study. The students participated willingly. The non-response rate (full survey left blank) was of about two per cent of the total sample. About four per cent of the respondents provided incomplete, unusable questionnaires. The characteristics of our final sample are presented in [Table II](#).

4.2 Dependent variables

The ERS consumer attitude scale, with 13 items and two subscales, was taken from the subscale of [Webb et al. \(2008\)](#), and measured using a five-point Likert scale ranging from 1

	No.	(%)
<i>Gender</i>		
Male	89	44
Female	112	56
Total	201	100
<i>Educational background</i>		
Sciences and Engineering	29	14
Economics	92	46
Management	56	28
Management – others	9	4
Humanities	15	7
Total	201	100
<i>Master degree</i>		
Accounting and Management Control	17	8.46
Environmental Economics and Management	10	4.98
Commercial Management	23	11.44
Health Services Economics and Management	3	1.49
Services Management	17	8.46
Finance	29	14.43
Marketing	21	10.45
Economics	29	14.43
Business Economics and Administration	31	15.42
Management	21	10.45
Total	201	100.00

Table II.
Demographic
characteristics of the
respondents

(never true) to 5 (always true). The other scales (importance of ERS for the respondents and ERS prospective employee attitude) were adapted from the scales proposed by Etheredge (1999), Aiman-Smith *et al.* (2001) and Maignan and Ferrell (2000) and measured using also a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Table III shows, for each of the scales and subscales, the number of items, the mean, the standard deviation and reliability values.

For all the scales and subscales, the reliability values are greater than 0.64. These values are acceptable compared to a minimum recommended value of 0.6 (Hair *et al.*, 2009).

4.3 Independent variables

Our independent variables are the following: gender (a dummy variable); educational background (a nominal variable with five categories as follows: Sciences and Engineering; economics; management; management – others; and humanities); scientific area of the master degree (a nominal variable with nine categories concerning the master degrees as follows: Accounting and Management Control; Environmental Economics and Management; Commercial Management; Health Services Economics and Management and Services Management; Finance; Marketing; Economics; Business Economics and Administration; Management).

5. Main findings

To test the first hypothesis (on the relation between gender and ERS orientation) we used independent *t*-tests, allowing us to verify whether there are statistically significant differences between the means of the women subsample and the men subsample.

As evident from the data presented in Table IV, there are statistically significant differences between male and female students regarding the first four dependent variables. With respect to these aspects, women are more ERS oriented than men. Regarding the variables concerning ERS in the workplace, results do not allow to conclude for a higher ERS orientation.

Table III.
Descriptive statistics and reliability analysis for scales and subscales

Scales and subscales	#items	Mean	SD	Reliability
ERS consumer attitude	13	3.45	0.68	0.905
Consumer support for ERS to internal stakeholders	7	3.38	0.76	0.863
Consumer support for ERS to external stakeholders	6	3.52	0.68	0.810
Importance of ERS for the respondents	5	3.51	0.69	0.792
ERS Prospective employee attitude	9	3.89	0.62	0.895
Organisational attractiveness	4	4.12	0.64	0.844
Job pursuit intentions	5	3.70	0.73	0.876

Table IV.
Results of the independent *t*-tests for gender

Dependent variable	Mean – women	Mean – men	<i>t</i>	Sig. (bilateral)
Importance of ERS	0.258	-0.205	3.347	0.001
ERS Consumer attitude	0.168	-0.134	2.147	0.033
Consumer support for ERS to internal stakeholders	0.153	-0.122	1.947	0.053
Consumer support for ERS to external stakeholders	0.155	-0.123	1.970	0.050
ERS prospective employee attitude	0.032	-0.026	0.407	0.684
Organisational Attractiveness	0.080	-0.063	0.673	0.315
Job Pursuit Intentions	-0.020	0.016	-0.256	0.798

To test the second hypothesis one factor analysis of variance (ANOVA one-way) was used. As shown in Table V, results do not show statistically significant differences between different educational backgrounds. Thus, it is not possible to validate H2.

ANOVA one-way was also used to test H3. Data in Table VI indicates that there are statistically significant differences only in the cases of the variables associated with ERS importance and to ERS in the workplace (the final four variables). In these cases, results show that there are statistically significant differences between at least two different groups of students.

To identify the groups of students between which there are significant differences Tukey's post-hoc tests were used (Table VII). Results in Table VII suggest that only differences between the master degrees in Finance (MiF) and Marketing (MMkt) and the master degrees in Environmental Economics and Management (MEEM), Commercial Management (MCM) and Services Management and Health Services Economics and Management (MSM/MHSEM) are statistically significant. The two former master degrees are those whose students present statistically significant lower levels of ERS orientation when compared with students from the latter three master degrees.

6. Discussion and concluding comments

The findings of this study suggest that in the case of students enrolled in master's degrees in economics and management gender is a factor explaining ERS orientation. Women do present higher levels of ERS orientation. These results are consistent with those of many previous studies mentioned above. The first hypothesis is accepted. On the contrary, the second hypothesis, suggesting that students with an educational background in economics and management would present lower levels of ERS orientation, cannot be accepted on the basis of the findings.

Based on the discussion on whether students of economics and management are different by nature or by nurture, the authors of this study interpret the findings on the absence of significant differences between students with economics and management undergraduate

Table V.
Results of one-way
ANOVA's for
educational
background

Dependent variables	F	Sig.
ERS consumer attitude	0.402	0.807
Consumer support for ERS to internal stakeholders	0.393	0.814
Consumer support for ERS to external stakeholders	0.731	0.572
Importance of ERS	0.735	0.569
ERS prospective employee attitude	0.599	0.664
Organisational attractiveness	1.210	0.308
Job pursuit intentions	0.148	0.964

Table VI.
Results of one-way
ANOVA's for
master's degree

Dependent variables	F	Sig.
ERS consumer attitude	1.072	0.384
Consumer support for ERS to internal stakeholders	0.989	0.446
Consumer support for ERS to external stakeholders	1.000	0.437
Importance of ERS	2.048	0.043
ERS prospective employee attitude	2.740	0.007
Organisational attractiveness	2.829	0.005
Job pursuit intentions	1.803	0.079

Table VII.
Results of tukey's
post-hoc tests

Dependent variable	(I) MestrNum	(J) MestrNum	Mean dif. (I-J)	SD	Sig.
Importance of ERS	MSM/MHSEM	MMkt	0.926	0.306	0.068
MSM/MHSEM > MMkt	MMkt	MSM/MHSEM	-0.926	0.306	0.068
ERS prospective employee attitude	MEEM	MMkt	1.220*	0.372	0.033
MEEM > MMkt		MiF	1.186*	0.355	0.027
MEEM > MiF	MCM	MMkt	0.874	0.2923	0.074
MCM > MMkt		MiF	0.840	0.270	0.054
MCM > MiF	MMkt	MEEM	-1.220*	0.372	0.033
		MCM	-0.874	0.292	0.074
	MiF	MEEM	-1.186*	0.355	0.027
		MCM	-0.840	0.270	0.054
Organisational attractiveness	MEEM	MiF	1.042	0.354	0.085
MEEM > MiF	MCM	MMkt	0.880	0.291	0.069
MCM > MMkt		MiF	0.989*	0.270	0.009
MCM > MiF	MMkt	MCM	-0.880	0.291	0.069
	MiF	MEEM	-1.042	0.354	0.085
		MCM	-0.989*	0.270	0.009
Job pursuit intentions	MEEM	MMkt	1.193*	0.378	0.048
MEEM > MMkt		MiF	1.042	0.361	0.097
MEEM > MiF	MMkt	MEEM	-1.193*	0.378	0.048
	MiF	MEEM	-1.044	0.361	0.097

degrees and students with other types of undergraduate degrees as evidence of some sort of selection effect. After all, all the students in the sample have enrolled in economics and management master degrees. This selection effect mitigates the possible effect of indoctrination of undergraduate degrees.

Findings provide only partial support for the hypothesis that students enrolled in master degrees with theoretical underpinnings of scholarship formed by rational and self-interested behaviour would attribute lower importance to ERS. The results on the differences between students enrolled in different master degrees may also be interpreted as a sign of a selection effect. Students with certain characteristics do seem to prefer certain type of master degrees. This may be the case of the students enrolled in the Master in Environmental Economics and Management who present higher levels of ERS orientation.

As expected, students enrolled in the Master in Finance are those with lower levels of ERS orientation. However, contrary to the authors' expectations, the case is not the same with students enrolled in the Economics master degree and in the Accounting and Management Control master degree. Also, unexpectedly, students from the Master in Marketing are among those with lower levels of ERS orientation.

Fourcade *et al.* (2015, p. 103) underline the "continuous rise of finance as a purveyor of 'interdisciplinary' references for economics" in the past few decades. This shift in the academic field of economics is tantamount to the insistent defence by financial economists of the maximisation of shareholder value as the purpose of corporations, as well as their justifications for the management practices such as leveraged buy-outs, mergers and acquisitions, and corporate executives' compensation through stock options (Fourcade *et al.*, 2015). These researchers refer to evidence presented in Zingales (2013) of economics papers being significantly less likely to be positive and significantly more likely to be negative regarding levels of executive compensation when none of their authors worked in a business school.

The results concerning the master in accounting and management control may be related to the fact that this particular area of study is highly regulated and subject to high ethical

standards. In Portugal, the professions related to accounting and auditing produced behavioural codes aiming at encouraging ethical practices. Both chartered accountants and statutory auditors are subject to rules built upon behavioural codes, namely, the Deontological Code of Chartered Accounts and the code of ethics and professional deontology of statutory auditors. Given that access to these professions requires a profound knowledge of the aforementioned codes, accounting education ends up by emphasising the ethical aspects of the professions. This idea is consistent with the findings of [Valentine and Fleischman \(2008, p. 662\)](#), who provide evidence of an association between ERS and “individual’s beliefs about professional ethics”, as well as of an association between ERS attitudes and “the ideologies that originate in professional associations”. These researchers conclude for the “need for professional codes that institutionalise business ethics and CSR, especially because business people face many ethical conflicts”. It is also consistent with the perspective on self-selection put forward by [Segal et al. \(2011\)](#). It may be the case that the fields of economics and management that are highly regulated and subject to high ethical standard are more likely to attract individuals who “are gratified by honor, duty and a commitment to safeguard society, which resonate with the” profession and “are linked to higher ethical levels”, such as seems to be the case with criminal justice ([Segal et al., 2011, p. 1023](#)).

The authors of this study would like to underline the awareness this study raises regarding the lack of importance of ERS in some degrees offered by schools of economics and management. This study may be of some utility for these schools to think about the education they offer and how they can change it to be more oriented to the stimulation of prosocial behaviour of the future professionals in whose education they play a major role. The “standard defense” to the accusation that schools of economics and management are “training people to be (more) dishonest” is that economics and management scholars “are scientists, not moral philosophers” ([Zingales, 2015, p. 1358](#)). Zingales considers that borrowing from “real” sciences, educators in schools of economics and management have taken an approach to teaching according to which “just like physicists do not teach how atoms should behave but rather how they do behave, so should” them. However, “physicists do not teach to atoms and atoms do not have free will. If they did, physicists would be concerned about how the atoms being instructed could change their behaviour and affect the universe” ([Zingales, 2015, p. 1358](#)). As a consequence of the crucial difference between atoms and social actors, “prescriptive analysis” should not be relegated to “separate, poorly attended ethics courses, validating the implicit assumption that social norms are a matter of interest only for the less bright students” ([Zingales, 2015, p. 1358](#)). There is a number of social norms that “are crucial to the flourishing of a market economy”, and that should be taught in “regular classes, at the very least emphasizing how violating these norms has a negative effect on reputation” ([Zingales, 2015, p. 1359](#)).

If the idea that students in fields that are highly regulated and subject to high ethical standards reveal higher levels of ERS orientation holds true, this study may also be of some utility to professional bodies related to the finance and marketing areas. These bodies may be stimulated to think about how to make the professions more ERS oriented, and how to impart ERS values to the students in these fields.

The authors believe this study also raises awareness concerning the urgency of strong ERS education in schools of economics and management in view of the growing importance of sustainability leaders to the development of corporate sustainability initiatives ([Osagie et al., 2018](#); [Strand, 2014](#)). Formal education in ERS is likely to have a role in the development of the abilities these leaders must have to successfully implement such initiatives.

This study has some practical implications for professional bodies and for educational institutions. Results suggest a positive influence of having professional behavioural codes that encourage socially responsible practices and of the teaching of such codes and issues related to the topics they address on the ERS orientation among students. Hence, professional bodies that do not have such documents would be well advised to develop them, given that they seem to have some influence on how future members of the profession view ERS. Education institutions would be well advised to include the teaching of these documents on the courses they provide for this same reason.

This study presents several limitations that lead to ideas for further research. Not only is our sample small but also sample of students from a single country. Future research could use larger samples and/or samples including students from different schools in different countries. In addition, an interesting avenue for further studies is the examination of whether economics and management fields, which are highly regulated and subject to high ethical standards attract an individual with different values.

Note

1. In view of the purpose of this study, the authors have decided to focus in this section on studies examining students of both economics and management. In addition to the papers reviewed in this section, there is a wealth of literature focusing on economics students and economists (Bauman and Rose, 2011; Cipriani *et al.*, 2009; Carter and Irons, 1991; Frank *et al.*, 1993; Frank and Schulze, 2000; Gandal *et al.*, 2005; Gerlach, 2017; Haferkamp *et al.*, 2009; Jacob *et al.*, 2011; Kirchgässner, 2005; Racko, 2019; Sapienza and Zingales, 2013). Fourcade *et al.* (2015, p. 106) go as far as asserting that economists do seem to have “distinctive opinions, beliefs and tastes compared to academics in other fields”, as well as to the broader public.

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Further reading

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