

Ethics2Go and Pharisee Effect

The ethical discrepancies of economists – from Fabian Schleithoff and Michael Sendker

Abstract:

This empirical survey at hand analyzes whether there is a systematic two-fold Ethical Discrepancy among German students of business administration and of economics ($n = 916$). The first is between students' ethical awareness and their intended behaviour and the second between their own behaviour and the expected behaviour of fellow students. In the survey, students are presented with four ethically relevant scenarios. The results show that the students are likely to commit an unethically rated action (Ethical Discrepancy 1). Moreover, they assume that fellow students are even more prone to commit the respective action (Ethical Discrepancy 2). Interestingly, the first Ethical Discrepancy is stronger among students of business administration than of economics, whereas, for Ethical Discrepancy 2, the results are the converse.

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Zusammenfassung:

Die vorliegende Studie untersucht ethische Verzerrungen von 916 Studenten der Wirtschaftswissenschaften in zweifacher Hinsicht. Die Studenten wurden mit vier ethisch relevanten Szenarien konfrontiert. Es zeigt sich erstens, dass Studenten die in den Szenarien dargestellten Handlungen zwar als unethisch bewerten, diese aber selbst eher vollziehen würden (Ethical Discrepancy 1). Diese Verzerrung ist stärker unter Studenten der Betriebs- als unter Studenten der Volkswirtschaftslehre ausgeprägt. Zweitens glauben die meisten Studenten, dass ihre Kommilitonen noch eher bereit wären, eine als unethisch eingestufte Handlung durchzuführen (Ethical Discrepancy 2). Hier halten sich insbesondere VWL-Studenten ihren Kommilitonen gegenüber für moralisch überlegen.

I. Introduction

“It is reasonable that everyone, who asks justice, should do justice”
(Thomas Jefferson 1904, p. 51)

Whenever a famous person is publicly convicted of tax evasion, generally an uproar in the press is the consequence. Many commentators express how shocked and concerned they are about such unethical behavior. However, although pointing the moral finger at tax-evaders, many people feel all the more tempted not to declare everything accurately when they do their taxes. In Germany alone, more than 35.000 tax evaders hoping for impunity voluntarily denounced themselves to the authorities in 2014 (Handelsblatt 2014), and the real number of tax evaders is likely to be much higher. Obviously, a discrepancy exists between ethical awareness and personal behavior, because not everyone who asks justice, does justice.

Since students of business administration and of economics (short: economists) deal with rational choice models as an integral part of their study programs, they are often exposed to criticism. Allegedly, they behave too rationally and too profit-oriented. Thus, economists at first glance seem to be especially prone to such behavior. Critics claim that the current financial crisis is partly rooted in the academic education of business leaders (Ghoshal 2005). Accordingly, our study focuses on the Ethical Discrepancies of economists and differentiates between business administration students on the one hand and economics students on the other.

This study observes Ethical Discrepancies among 916 German students, concentrating on the gap between ethical ratings and intended behavior, as well as between self-perceptions and anticipated actions of fellow students. Hence, an evaluation of student ethics per se is not an objective of this study. After a brief review of the literature, the focal point of the analysis is to find whether there are Ethical Discrepancies among economists. This study further explores factors influencing the results, with the aid of ordinal logistic regressions. Based on the results, policy recommendations for academic education are derived.

II. Literature Review

A wide range of studies on ethical behavior has been published in recent years, dealing for example, with the question of whether economists have different ethical attitudes to those of their fellow students from other disciplines. These studies mostly have come to the conclusion that there are indeed differences between the academic disciplines, with economics students generally displaying less ethical behavior than students from other disciplines (Carter and Irons 1991; Frey and Meier 2003; Selten and Ockenfels 1998).

Additionally, many studies focus on further variables that may have an influence aside from academic background. With respect to gender, women are sup-

posed to behave more ethically (Conroy and Emerson 2004; Zopiatis and Krambia-Kapardis 2008). The same holds for age; increasing age correlates with better ethics (Borkowski and Ugras 1998; McCabe et al. 1991), as Kohlberg's (1984) model of moral development suggests. It is therefore not surprising that increasing work experience tends to lead to more ethical behavior (Cohen et al. 2001; Arlow 1991). Iyer and Eastman (2006) conducted a survey in which they found, *inter alia*, that students with low self-esteem are more likely to engage in academic dishonesty. As to Graf (1971, p. 214), such behavior might be "utilized to correct a negative self-image".

Another field of research takes into account the effects of bias, which might occur in scenarios of ethical decision-making. This is of importance in our study, because economists receive an academic education at university that is supposed to prepare them for future careers that at times ask for ethical decision-making. Armitage's and Conner's (2001) findings suggest that there is a disjunction between moral judgment and intended behavior, which is called "blind spot" in the ethical context of Bazerman and Tenbrunsel (2011a, 2011b). Additionally, Frank et al. (1993) and Yezer et al. (1996) discover differences between students' intended behavior and the assessed likelihood of others committing unethical acts.

In their study, Lowhorn et al. (2013) take into account both types of discrepancy. The 'blind spot' thus appears in two cases: first, when there are differences between ethical judgments and behavioral intentions, *i.e.*, although a student regards a given scenario as unethical, he would, being faced with the situation himself, not behave ethically. Second, an ethical 'blind spot' can be observed when self-perceptions and perceptions of fellow students differ, *i.e.*, when a student thinks that his fellow students are more likely to commit an unethical act than himself. In an empirical study, these authors interpreted 123 questionnaires completed by undergraduate students of business administration. The students were presented with three different situations. In the first, they had to assess the ethicality of the respective activities (*e.g.*, accepting an obviously privately made music CD) on a 5-point scale (from "totally unethical" to "totally ethical"). They then had to indicate, how likely they themselves would be to accept the item and how inclined their average fellow student would be to do so. The latter questions had both to be answered on a 5-point scale, too (from "surely" to "surely not"). With regard to the results, the authors confirmed both variations of the ethical 'blind spot' in their study.

Our own study is closely related to Lowhorn et al. (2013). We also aim to examine whether these two discrepancies still exist in a larger group of German students. Additionally, our survey allows for conclusions on both business administration and economics students. Frey and Meier (2003) found that especially students of business administration are significantly less willing to donate money to a good cause, which leads us to assume that at least the first Ethical Discrepancy is greater among business administration students than in the group of economics students.



III. Sample and Procedure

The data were collected from a sample of 916 students attending various courses at a German university. The courses in question reflect a broad spectrum of economic subjects, covering a wide range of sociodemographic aspects, although the students were not randomly selected. Since almost all students returned the questionnaires, a sample selection bias can be ruled out (Heckman 1979). Table 1 gives an overview of the different courses:

Table 1 Course overview[1]

Economics	n
Business ethics (lecture)	143
Business ethics (seminar)	15
Entrepreneurship	24
Macroeconomics I	153
Macroeconomics II	99
sum econ.	434
Business administration	
Financial Accounting and Taxation	156
Foundations of Accounting	326
sum bus. admin.	482
sum total	916

The students were asked to complete a questionnaire containing four scenarios developed to measure the level of Ethical Discrepancies. All scenarios were designed as typical situations to which the participating students are exposed in their everyday lives, so that they could easily relate to the respective situations.

In scenario 1, a student is exposed to the temptation of accepting an illegal copy of an e-book which is required reading for a university course. Scenario 2 presents a student who is poorly prepared for an exam at university and is worried about failing. A friend of his knows the exam questions and offers to help him out. In the third scenario, an old woman who cannot walk properly tries to cross a road. A student rushes up and helps her. In the fourth scenario, a student finds a purse in front of a library with nothing in it but 50 EUR. He can keep the money or give the purse with the money inside to the information desk.

In order to measure both discrepancies, the students had to answer three questions on a 5-point scale, starting with an ethical evaluation of the given scenario (from “very ethical” to “very unethical”, Q1). The second question (probability

[1] Although the course “Entrepreneurship” and both “Business Ethics” classes at first glance seem more likely to be frequented by students of business administration, here, the majority of students surveyed in these courses were students of economics.



of committing the act oneself from “in no case” to “in any case”, Q2) completes the necessary information on the first Ethical Discrepancy, i.e., the difference between ethical rating and intended behavior.[2] The final question (Q3) examines the estimated likelihood of fellow students committing the respective act and therefore obtains all necessary information for measuring the second Ethical Discrepancy, i.e., the difference between self-perceptions and those of fellow students.[3]

This study adds to existing literature as follows. First, the sample is relatively large, with 916 observations. Second, this survey observes whether there is a difference between business administration and economics students. Third, socio-demographic data are collected; besides general aspects such as age, gender, semester, degree enrolled for, and years of work-experience, the students are asked to assess the likelihood of their being self-employed as opposed to working for a company or the government. Additionally, the students estimate their future income and give information on their intended professional future, e.g., whether they plan to become teachers or not. Finally, they are asked to state how happy, religious and self-confident they are. Fourth, scenario 3 is deliberately chosen as a positive example, in order to discover systematic response behavior and to receive more robust data. Unlike the other three scenarios, this one includes a more ethical act. Thus, students should be more likely to mark the right end of the scale, compared to the other less ethical scenarios (see scales in Appendix A).

Our research design involves a two-step-procedure:

In the first step, the two Ethical Discrepancies are measured for the entire sample as well as for business administration and economics students separately. For this purpose, both gaps are formulated mathematically by subtracting the average results – measured by arithmetic means[4] – of Q2 and Q1 (i.e., Ethical Discrepancy 1) as well as the results of Q3 and Q2 (i.e., Ethical Discrepancy 2)

$$\begin{aligned} \text{(1) Ethical Discrepancy 1} & \quad \bar{d}_1 = \frac{1}{n} \sum_{i=1}^n (x_{Q2,i} - x_{Q1,i}); 0 < \bar{d}_1 \leq 4 \\ \text{(2) Ethical Discrepancy 2} & \quad \bar{d}_2 = \frac{1}{n} \sum_{i=1}^n (x_{Q3,i} - x_{Q2,i}); 0 < \bar{d}_2 \leq 4 \end{aligned}$$

[2] However, the expressed probability of committing an act may not be the same as the behavior that a student actually displays (Kirchgässner 2005, p. 7).

[3] The results can be influenced by a social desirability response bias (Nederhof 1985), meaning “a systematic error in self-report measures resulting from the desire of respondents to avoid embarrassment and project a favorable image to others” (Fisher 1993, p. 303). Therefore, it is possible that this bias has influenced the answers regarding one’s own behavior. If answers to the peers’ behavior (Q3) are not influenced like that, this might explain a part of the second discrepancy.

[4] Strictly speaking, due to the ordinal scales it is statistically problematical to formulate arithmetic means. However, these averages have the advantage of yielding precise results and, thus, allow for a detailed comparison. This procedure was applied as well by Lowhorn et al. (2013).



A positive result of the first difference (Ethical Discrepancy 1) indicates that the ethicality is evaluated lower, in comparison to the likelihood of committing the act. A positive result in the case of the latter gap (Ethical Discrepancy 2) means that fellow students are estimated as more likely to commit the respective act. In both cases, the results of scenario 3 have to be interpreted the other way round.

In order to examine the statistical significance of these two Ethical Discrepancies, we apply two techniques. Since the data structure is non-parametric and two paired groups are involved, the Wilcoxon signed-rank test is used to analyze the discrepancies, using the medians. In addition, the two-sample paired t-test (using the arithmetic means) serves to detect significant differences for parametric samples. This hypothesis test is very robust, even though one assumption (here: parametric data) is violated. Therefore, the t-test serves as a further verification of the results. The Mann-Whitney U-test is used to observe differences between students of business administration and of economics.

In the second step, the survey deals with independent variables that may have an impact on the Ethical Discrepancies. Since the dependent variables (discrepancy-values) are ordinally scaled, ordered logistic regression is a suitable statistical procedure.[5] The regressions are performed for the entire group and for both single student groups, as well. The independent variables are not scaled uniformly, including metric (age, income), ordinal (religiosity, self-confidence, happiness [each measured on 7-point scale]) or dichotomous variables (gender, teacher [yes/no]). In order to use the above mentioned regression technique, some of the explanatory variables have to be transformed. This applies to ordinal variables that need to be dichotomized. The absence of multicollinearity is another necessary precondition for using this kind of regression. The variance inflation factor (VIF) is used to prove the severity of this potential problem. As a rule of thumb, a VIF value of less than 10 precludes multicollinearity. Since the VIF in each of our regressions is always below 2, multicollinearity between the independent variables can be ruled out.

IV. Results

Ethical Discrepancies

Regarding Ethical Discrepancy 1, the results clearly demonstrate that there are differences between moral assessment and intended behavior (see Table 2, \bar{d}_1). The students' likelihood of committing the respective act is greater than their ethical rating. The third scenario (old woman), however, has to be interpreted in the opposite

[5] As an alternative method, ordered probit regression can also be applied to the data. Since both regression methods yield comparable results, the data analysis in this study relies on the ordered logit regression.



direction, since helping an old woman cross the street is generally regarded as very ethical. In this case, as in the other three scenarios, the students would behave less ethically, compared to their ethical evaluation. The relatively high value of Q_1 results (3.26) in the 'e-book'-scenario is remarkable; the students consider the situation of copying an e-book as relatively ethical, even though this is undoubtedly pure digital piracy. A possible explanation could be that the description of this scenario as illegal was not clear enough in the questionnaire. Moreover, the illegal copying of software often seems to be regarded as trivial. It is likely to be a socially accepted action, which might also explain the fairly ethical assessment. Notwithstanding this high valuation, there is a difference between the results of Q_2 and Q_1 . Finally, the first Ethical Discrepancy cannot be refuted in all four scenarios and expresses an 'Ethics-2Go'[6] attitude, analogously to typical 'to go' products, such as coffee, that make eating more flexible. In ethical terms, this flexibility means a moderately lax dealing with ethical situations, one easily takes the high moral ground, but one's own behavior does not necessarily correspond to this.

The second Ethical Discrepancy describes the difference between self-perceptions and those of fellow-students, expressed mathematically by the difference between Q_3 and Q_2 . The positive results of this subtraction in the first two scenarios and in the last one reveal a quite pessimistic view of fellow students (see Table 2, \bar{d}_2). Students assume that their colleagues are even more inclined to behave unethically. The positive result of scenario 3 has to be interpreted again the other way round; this time, the fellow students are reputedly less likely to behave ethically (helping an old woman). Thus, the second Ethical Discrepancy applies here too.

In addition, considerably more than 50% of all students – in two of four scenarios – think of themselves as morally above average. This is, however, logically impossible, because no more than half of the population can actually behave morally above average. According to Kahneman, people “tend to be overly optimistic about their relative standing on any activity in which they do moderately well” (Kahneman 2012, p. 260). For example, 90% of drivers attribute themselves above average driving skills (Kahneman 2012, p. 259). As with this more general above-average effect, the results of the present study indicate an above-moral-average effect.

We call this phenomenon the 'Pharisee effect', referring to the biblical Pharisees who believed themselves to be more ethical than others and who were quick to judge others as morally inferior. A relevant example is given in the biblical parable of the Pharisee and the Publican (Luke 18:9-14). A Pharisee and a tax-collector go to the temple in order to pray. While the latter humbly admits his unworthiness and asks God for mercy, the Pharisee, on the contrary, thanks God for not being “like other people: thieves, rogues adulterers, or even this tax-collector.” He is seemingly proud of leading a righteous life in accordance with the Mosaic Law and regards himself as more ethical than, for example, the tax-collector. Applied to our context, the students have a quite negative perception of others, too. Most of them – like the Pharisee – estimate their own behavior as more ethical than that of their peers.

[6] Critics also question such attitudes (“moral to go”) in the current debate on the refugee crisis (Mohr 2014).



Table 2 Ethical Discrepancies and average results (arithmetic means)

	Q1		Q2		Q3
	ethical rating	\bar{d}_1	likelihood to commit action	\bar{d}_2	likelihood to commit action (fellow students)
e-book	3.24	1.09	4.33	0.11	4.44
bus. admin.	3.18	1.15	4.33	0.10	4.43
econ.	3.31	1.01	4.32	0.12	4.44
exam	2.53	1.43	3.96	0.29	4.25
bus. admin.	2.55	1.56	4.11	0.23	4.34
econ.	2.52	1.27	3.79	0.35	4.14
old woman	4.78	-0.31	4.47	-0.86	3.61
bus. admin.	4.78	-0.31	4.47	-0.91	3.56
econ.	4.78	-0.31	4.47	-0.79	3.68
purse	1.56	0.33	1.89	1.02	2.91
bus. admin.	1.55	0.43	1.98	1.01	2.99
econ.	1.57	0.23	1.80	1.02	2.82

\bar{d}_1 : first Ethical Discrepancy (difference between likelihood of committing the act and ethical rating)

\bar{d}_2 : second Ethical Discrepancy (difference between likelihood of fellow students and own likelihood of committing the act)

Having found that both Ethical Discrepancies are evident in this survey, the question of significance arises. First, the null hypothesis is formulated on the assumption that there are no differences between the results of the first two questions (Ethical Discrepancy 1) and the last two questions (Ethical Discrepancy 2), stating that there are no such discrepancies. By using the Wilcoxon signed-rank test, both null hypotheses have to be rejected, since the p-values are significant at the 0.01 level. Additionally, the two-sample t-test yields the same significance level, and therefore rejects the null hypothesis as well (see Appendix B).

As a second step, an alternative hypothesis is stated in order to determine the direction of the difference (see Appendix C). This means that the data were tested as to whether the results of Q2 are significantly higher than those of Q1, and whether the data of Q3 are significantly higher than those of Q2. Regarding scenarios 1, 2 and 4, the two-sample t-tests reveal that the p-values for both Ethical Discrepancies are highly significant (at 0.01 level). Since scenario 3 serves as a control scenario, the results had to be exactly the opposite, which is indeed the case.

In short, both Ethical Discrepancies are highly significant. From the statistics, it follows that – in simple terms – the students are likely to commit an as rather unethical rated act. Furthermore, the statistically significant results show that the students deem themselves as acting more ethically than their fellow students. Insofar, the results match Lowhorn et al. (2013), as well as Yezer et al. (1996, p. 183). However, since the students in this sample can be grouped into students of business administration and of economics, the question arises, whether a differentiated analysis brings up other results.



Do the discrepancies differ between students of business administration and of economics?

Regarding Ethical Discrepancy 1, both student groups differ significantly according to the Mann-Whitney test. This holds for all scenarios (at least at the 0.05 level), except the third one, meaning that this Ethical Discrepancy is stronger among students of business administration. These results are confirmed by an unpaired t-test. A possible explanation might lie in the students' academic curricula, because students of business administration deal mainly with rational-choice-based lectures and seminars. This may influence business administration students towards more rational and potentially unethical behavior (Blais and Young 1999; Frank et al. 1993; Haucap and Just 2010; Stigler 1959).[7] Participating economics students, however, are mostly enrolled in a second subject of equal weighting in their degrees, with less contact to rational-choice models. Our results also fit those of Frey and Meier (2003).

With regard to Ethical Discrepancy 2, only scenarios 2 and 3 reveal significant differences between both groups. Interestingly, in contrast to Ethical Discrepancy 1, the discrepancies are stronger in the group of economics students. This means that students of economics have worse perceptions of their fellow students than business administration students. One reason might again be the rational choice argumentation, since, due to the underlying assumptions of that concept, business administration students might think that their fellow students would act similarly, which is analogous to the assumption that potential business partners act rationally (Frank et al. 1993, p. 167).

Influencing Factors

Using sociodemographic and participating student personal data, the ordinal logistic regression reveals how the individual factors influence both Ethical Discrepancies. Since the two discrepancies refer to different questions, these explanatory variables might have an unequal influence on both gaps. Therefore, the data regression observes each Ethical Discrepancy separately, referring to the total group (see Table 3).

[7] There is a debate about the effects of rational-choice models on student behavior. The listed studies reflect the so-called indoctrination thesis, indicating that these models have an impact on behavior. However, other studies conclude a self-selection thesis, stating that rational individuals decide to study economics or business administration (Carter and Irons 1991; Ruske and Suttner 2012; Frey et al. 1993; Frank and Schulze 2000). In our study, the rational-choice argument serves as a possible explanation for the different Ethical Discrepancy results. Therefore, it is of less importance whether these students are born rational (self-selection) or made so (indoctrination).



Gender

As to the first Ethical Discrepancy, the gender variable reveals a negatively significant effect (at 0.01 level) in three scenarios. In mathematical terms, for a one unit increase in gender (male serves as a reference group, RG) a decrease in the log odds of being on a higher discrepancy level can be expected, indicating that the likelihood of women having a strong Ethical Discrepancy is quite low, in comparison to their male counterparts. These findings confirm the results of several other studies claiming that women behave more ethically than men (Arlow 1991, p. 66f.; Beltramini et al. 1984, p. 197; Conroy and Emerson 2004, p. 389; Iyer and Eastman 2006, p. 106; McCabe et al. 1991, p. 957; Ruegger and King 1992, p. 184). A reason for this gender gap may be that women are supposed to take into account – more so than men – emotional and interpersonal aspects in ethical decision making processes (Gilligan 1982; Dawson 1995).

The regression results for the second difference indicate that female students have a significantly higher Ethical Discrepancy. The probability of being at a higher discrepancy level rises for females, in comparison to the reference group, i.e., male students. In simple terms, female students are more likely to assume that their fellow students act less ethically than themselves.

Age and Work-Experience

As to student age, the regression coefficients generally reveal a negative sign for both Ethical Discrepancies, except for scenario 3 (see Table 3). Increasing age is associated with a decrease in the log odds, meaning that older students less likely have great Ethical Discrepancies. The likelihood that older students would behave in line with their ethical judgements is higher than it is for younger students. As to Ethical Discrepancy 2, older students are less likely to assess their fellow students as unethical, in comparison to themselves. In half of the cases, these findings are significant. McCabe et al. (1991, p. 958) come to a similar conclusion: “maturity enhances ethical decision making” (see also Conroy and Emerson 2004, p. 389). This line of reasoning finds support in Kohlberg’s model of moralization, involving three sequential moral levels (each entailing two stages), whereas the highest level generally presupposes a certain age, and is only reached by few adults. Thus “to act in a morally high way requires a high stage of moral reasoning” (Kohlberg 1984 p. 172).[8]

Moreover, particularly for Ethical Discrepancy 1, the regression indicates that work-experience and the probability of having a higher discrepancy are positively cor-

[8] Interestingly, the explanatory variable ‘semester’ shows no such significant results, although the ‘age’-results would suggest similar findings; older students are generally supposed to be in a higher semester. Nevertheless, the non-influence of that variable might refute the indoctrination thesis (see footnote 7), since a more advanced semester does not lead to higher Ethical Discrepancies. Therefore, our findings tend to support the self-selection thesis in the debate on whether economists are born or made although this study’s dependent variable does not express rational behavior and thus, such a statement has to be interpreted with caution.



related, in simple terms this means that students who have gained more experience are more inclined to act in a manner which is likely to be rated as unethical. A reason for this phenomenon might be that students could have experienced harsh corporate reality and thus have less concern about committing a relatively unethical action. According to Arlow (1991, p. 68), longer work experience is associated with “lower concern for selfish interest” and with a ‘survival of the fittest’ attitude. This result, however, is insofar counter-intuitive as work-experience usually increases with age (e.g., McCabe et al. 1991, p. 958).

Table 3: Influencing factors on Ethical Discrepancy 1 & 2[9]

	Ethical Discrepancy 1				Ethical Discrepancy 2			
	S1 e-book	S2 exam	S3 old woman	S4 purse	S1 e-book	S2 exam	S3 old woman	S4 purse
gender	RG	RG	RG	RG	RG	RG	RG	RG
male	-0.17 (0.13)	-0.40 (0.13) ***	0.37 (0.14) ***	-0.44 (0.14) ***	0.57 (0.14) ***	0.61 (0.14) ***	-0.31 (0.13) **	0.70 (0.13) ***
female								
age	-0.09 (0.03) ***	-0.03 (0.03)	0.08 (0.03) **	-0.03 (0.03)	0.02 (0.04)	-0.11 (0.04) ***	0.05 (0.03) *	-0.01 (0.03)
semester	0.02 (0.04)	0.00 (0.04)	0.03 (0.05)	-0.03 (0.04)	-0.02 (0.05)	0.10 (0.05) **	0.06 (0.04)	-0.07 (0.04) *
degree	RG	RG	RG	RG	RG	RG	RG	RG
bachelor	-0.05 (0.51)	-0.29 (0.46)	0.36 (0.57)	-0.30 (0.53)	0.54 (0.53)	0.58 (0.53)	0.10 (0.56)	-0.60 (0.46)
master								
other	1.62 (0.64) **	0.39 (0.71)	1.11 (0.73)	-0.29 (0.77)	-0.45 (0.72)	0.63 (0.70)	-0.65 (0.66)	0.90 (0.67)
non-teacher	-0.42 (0.45)	-0.43 (0.43)	-0.50 (0.49)	-0.26 (0.46)	0.91 (0.48) *	0.71 (0.51)	-0.38 (0.45)	-0.61 (0.44)
experience	0.06 (0.04) *	0.07 (0.04) *	-0.02 (0.04)	0.09 (0.04) ***	-0.02 (0.04)	0.00 (0.04)	-0.10 (0.04) ***	0.03 (0.04)
income	-0.14 (0.06) **	-0.01 (0.06)	0.05 (0.07)	0.00 (0.07)	0.02 (0.07)	0.04 (0.07)	-0.04 (0.07)	0.09 (0.06)
self-confidence	RG	RG	RG	RG	RG	RG	RG	RG
fairly unconfident	0.18 (0.27)	-0.38 (0.26) *	0.09 (0.28)	0.48 (0.29) *	-0.28 (0.29)	0.01 (0.28)	0.08 (0.27)	-0.38 (0.27)
neutral								
fairly confident	0.10 (0.22)	-0.22 (0.21)	0.33 (0.23)	0.40 (0.24) *	-0.38 (0.24)	-0.28 (0.23)	-0.32 (0.22)	-0.28 (0.22)
religiosity	RG	RG	RG	RG	RG	RG	RG	RG
fairly non-religious	-0.16 (0.19)	-0.43 (0.18) **	-0.08 (0.21)	-0.62 (0.20) ***	0.22 (0.21)	0.17 (0.20)	-0.09 (0.20)	0.31 (0.19) *
neutral								
fairly religious	-0.39 (0.16) **	-0.51 (0.16) ***	-0.07 (0.17)	-0.54 (0.17) ***	0.69 (0.17) ***	0.49 (0.18) ***	-0.05 (0.17)	0.51 (0.16) ***
happiness	RG	RG	RG	RG	RG	RG	RG	RG
fairly unhappy	-0.21 (0.31)	-0.14 (0.31)	-0.23 (0.34)	-0.04 (0.35)	0.32 (0.36)	-0.67 (0.34) *	0.26 (0.33)	0.07 (0.33)
neutral								
fairly happy	-0.21 (0.26)	-0.21 (0.26)	-0.07 (0.30)	-0.33 (0.29)	0.61 (0.31) **	-0.69 (0.28) **	0.49 (0.28)	0.15 (0.27)
self-employment	RG	RG	RG	RG	RG	RG	RG	RG
unlikely	0.31 (0.15) **	0.10 (0.15)	0.35 (0.16) **	0.29 (0.16) *	-0.12 (0.17)	-0.29 (0.16) *	0.14 (0.16)	-0.03 (0.15)
neutral								
likely	-0.01 (0.20)	0.18 (0.20)	0.46 (0.22) **	0.04 (0.22)	-0.21 (0.22)	-0.50 (0.22) *	-0.20 (0.21)	-0.05 (0.20)
employment	RG	RG	RG	RG	RG	RG	RG	RG
employed	-0.76 (0.30) ***	-0.66 (0.29) **	0.55 (0.33) *	-0.29 (0.31)	0.41 (0.33)	0.14 (0.33)	-0.29 (0.29)	-0.32 (0.29)
civil servants								
self-employed	0.47 (0.21) **	-0.08 (0.22)	0.19 (0.23)	0.02 (0.23)	-0.18 (0.23)	-0.44 (0.24) *	0.12 (0.23)	-0.16 (0.22)
other	-0.27 (0.39)	-0.05 (0.42)	0.64 (0.46)	-0.13 (0.46)	-0.25 (0.44)	0.10 (0.47)	0.35 (0.44)	0.00 (0.42)
unsure	-0.02 (0.23)	-0.36 (0.24)	0.10 (0.25)	0.25 (0.25)	-0.26 (0.26)	0.35 (0.26)	0.29 (0.25)	-0.17 (0.24)

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$; standard errors in parentheses

[9] Note that the third scenario is designed as a rather ethical scenario.

Therefore the results of this control scenario have to be interpreted in the opposite way, compared to those of the other three scenarios.



Religiosity

In comparison to students who state that they are fairly non-religious, the other (esp. 'fairly religious') students yield clearly different results regarding both types of discrepancy (see Table 3). The more students consider themselves as religious, the less they can be grouped into a higher Ethical Discrepancy 1 category. In simple terms, the gap between ethical rating and intended action is probably low in the group of fairly religious students, compared to their fairly non-religious fellow students (significant at least at the 0.05 level in three of four scenarios).

These results correspond to Conroy and Emerson (2004) who found that ethical attitudes are positively affected by religiosity (see also Lam and Hung 2005, p. 210; Senger 1970, p. 186; Longenecker et al. 2004, p. 384). Nevertheless, the ethical rating (Q1) of the single scenarios reveals only marginal differences between religious and non-religious students. The discrepancies, however, are higher for non-religious students, since Ethical Discrepancy 1 also considers Q2-answers. A reason might be the impact of religion and its guidelines for moral conduct (e.g., Ten Commandments) on the latter ones (Baumeister and Exline 1999, p. 1166f.). Less religious students seem to be more flexible in their ethical decision making and therefore are more likely to reveal an 'Ethics2Go' attitude.

Looking at Ethical Discrepancy 2, there are again significant differences between religious and non-religious students (all scenarios except no. 3 reveal significant differences at a 0.01 level). Here, however, the likelihood of having a higher discrepancy increases with expressed religiosity. Thus, fairly religious students have a quite negative perception of their fellow students. They believe them to be more likely to commit a relatively unethical action than they themselves. A possible cause for this difference could be the high moral ground of religious students making them feel morally elevated and thus deeming other students as less ethical, a phenomenon that corresponds with the above mentioned 'Pharisee effect'.

(Self-)Employment

This survey also observes possible future forms of employment, including the options of being an employee, a civil servant or self-employed. The students were asked to indicate which of these forms of employment they are aiming for. In comparison to potential future employees (reference group), the coefficients of the potential civil servants are mostly negatively significant, referring to Ethical Discrepancy 1. The likelihood of having a higher level of discrepancy decreases for the latter, meaning that potential civil servants would less likely commit a relatively unethical action, compared to potential future employees. A possible reason for this result might be provided by an unwritten ethical code associated with the special loyalty that is usually assumed when employed for a lifetime by the government (e.g., Mosher 1982, p. 24; Schiavo-Campo and McFerson 2008, p. 423 ff.).^[10]

[10] According to Dur and Zoutenbier (2015, p. 362) public sector employees are relatively altruistic. Thus, it is realistic to expect that individuals with such



Other independent factors

This study observes other potential influence variables, too. These independent factors, however, do not really yield an important outcome (see Table 3). As for the variable 'self-confidence', our insignificant results contradict existing findings, which conclude that ethical behavior increases with the level of self-esteem (e.g., Aronson and Mettee 1968, p. 126; Graf 1971, p. 214f.; Iyer and Eastman 2006, p. 106). Another relatively personal factor 'happiness' also yields no clear results, whereas empirical studies suggest that happier persons have higher ethical values (e.g., James and Chymis 2004, p. 19; Aknin et al. 2012, p. 352; Thoits and Hewitt 2001, p. 126f.).

The likelihood of becoming a teacher does not affect both types of Ethical Discrepancy, contradicting the assumption that the education of teacher candidates conveys a special ethical code, since their future job involves "a moral and ethical responsibility to teach all their pupils fairly and equitably" (Villegas 2007, p. 371). Furthermore, estimated future income also has no influence on the results (contradicting the findings of Turcotte 2011, p. 22), meaning that potential high earners are not more likely to have higher discrepancies.

Are students of business administration and those of economics influenced differently?

Generally, the influence factors are similar in both groups. There are only a few differences, such as gender. Here, the effect of being female in terms of Ethical Discrepancy 1 seems to be more distinct among students of business administration. Moreover, religiosity merely plays a significant role in the group of economics students (Ethical Discrepancy 1). Thus, while the likelihood of having a higher discrepancy decreases with religiosity among students of business administration, there are hardly any differences between non-religious and religious economics students. With regard to self-employment, students of economics reveal more significant values for Ethical Discrepancy 1, meaning that the likelihood of being self-employed has an influence on students of economics, whereas this does not hold for students of business administration.

V. Conclusion and Educational Implications

The approach of this study was to examine whether or not Ethical Discrepancies occur among both economists groups. Descriptive statistics reveal the students' different answering patterns in the questionnaire; Ethical Discrepancy 1 shows the gap between ethical rating and own intended action. Students basically assess the given scenarios as relatively unethical, if put in the respecti-

characteristics act more in line with ethical standards, compared to relatively selfish employees working in private institutions.



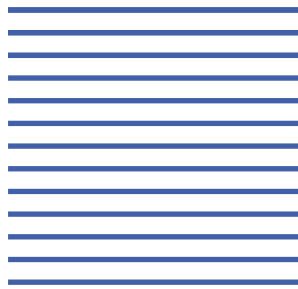
ve situation, however, they are more prone to commit that action ('Ethics2Go' attitude). As to the second Ethical Discrepancy, the students have a quite negative view of their fellow students, meaning that they believe them to be more likely to behave unethically, in comparison to themselves ('Pharisee effect'). The Wilcoxon's signed-rank test and the paired t-test confirmed a high level of significance of both differences. Among students of business administration, Ethical Discrepancy 1 is stronger and this holds for economics students regarding Ethical Discrepancy 2. These results may be due to the more pronounced focus on rational choice in business administration courses.

Ordered logistic regression was used to measure the impact of different influence factors on both discrepancies. Results show that female, older and more religious students are more inclined to behave in line with their evaluations. But these groups – except for older students – assess their fellow students' behavior as more unethical, what we call the 'Pharisee Effect'.

There are many reasons why business ethics education should be of great importance in academic curricula (e.g., Walton 1998; Adkins and Radtke 2004; Sen 1993). Reducing the above mentioned Ethical Discrepancies gives another reason for teaching business ethics. Of course, it is utopian to believe that both discrepancies can be eradicated completely. Typically, an ethical education conveys various different ethical concepts (e.g., Kantian deontological ethics, virtue ethics or consequentialism) and thus enhances student skills in making differentiated judgments in ethically relevant situations. According to Kohlberg (1984), "a high stage of moral reasoning" is required for acting ethically. "One can, however, reason in terms of such principles and not live up to them" (Kohlberg 1984, p. 172). Applied to our scenarios, this means that the ethical rating (Q1) might change through ethical education, whereas its impact on the intended actions is questionable. Students could give, for example, ethical ratings based on deontological or virtue ethics. Applied to the e-book scenario, it would not be just and therefore unethical not to remunerate the author's efforts in creating content (according to virtue ethics). If their own behavioral intention remained the same, the Ethical Discrepancy would even increase in this case. Thus, the mere acquisition of ethical knowledge will not necessarily reduce the first Ethical Discrepancy.

Therefore, in order to diminish the first Ethical Discrepancy, business ethics education might focus more on the second question (own intended behavior). Obviously, many students are guided by consequentialist motives, leading them to emphasize individual benefits. Since in game-theory (esp. in the prisoners' dilemma) such general behavior leads to a Pareto inferior Nash equilibrium, business ethics classes may inter alia demonstrate that ethical behavior can also even yield clear economic benefits. This is the case, e.g., when a company takes its corporate social responsibilities seriously. For example, a manufacturing company increases its social reputation by no longer releasing CFC; an investment bank might contribute to its employees' well-being by not allowing work at night and thus even increase productivity. The mere knowledge of such measures might lead to a decrease of Ethical Discrepancy 1, at least as far as moral corporate issues are taken into account.

Finally, for future research, we recommend extending the population and regional focus of the sample. This study among German students of business ad-

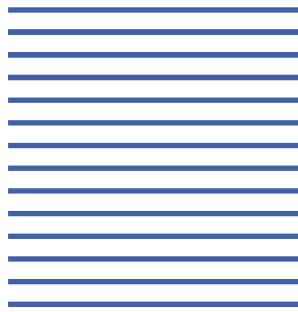


ministration and of economics mainly corresponds to and broadens the results of Lowhorn et al. (2013), who claim that both types of Ethical Discrepancy prevail among their sample of US-American students. It would be interesting to explore whether such questionnaires reveal the same findings in other regions. Furthermore, continued research should focus on whether classes in business ethics can reduce the discrepancy between ethical awareness and intended action.[11]

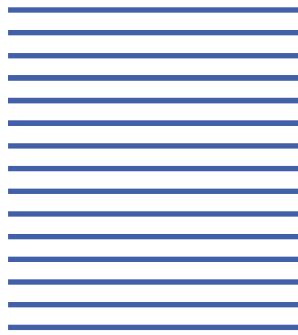
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[11] Table 1 shows that the survey was also conducted in business ethics classes (at the beginning of the semester). At the end of the semester, that same survey was repeated, in order to analyze the impact of ethic education. This is the objective of a forthcoming paper of the authors.



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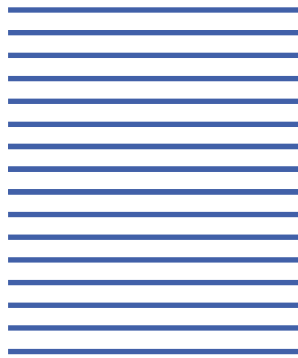
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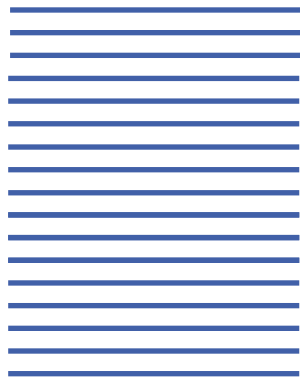
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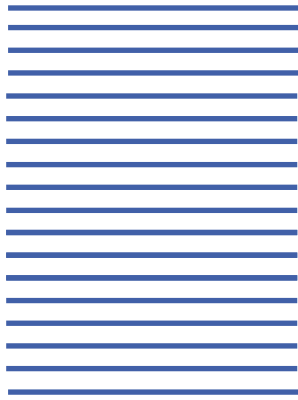
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Appendix

A: Survey questions

Scenario A

Student A and Student B attend the same course. The teacher gives the students an e-book as required reading and they are requested to buy the e-book. Student B has already bought the book and offers student A to copy it to his USB-device.

Is it ethical for Student A to accept the copy?

very unethical (1)
 unethical (2)
 neutral (3)
 ethical (4)
 very ethical (5)

If you were the student, would you accept the copy?

Do you think the average student would accept the copy?

in no case (1)
 probably not (2)
 unsure (3)
 probably (4)
 in any case (5)

Scenario B

Student C prepares for an important exam. However, some of contents relevant for the exam cause him difficulties. Thus, he is fears to fail. A friend of his knows the exam questions.

Is it ethical for student C to use the information of his friend?

very unethical (1)
 unethical (2)
 neutral (3)
 ethical (4)
 very ethical (5)

If you were the student, would you use the information?

Do you think the average student would use the information?

in no case (1)
 probably not (2)
 unsure (3)
 probably (4)
 in any case (5)

Scenario C

An old woman who cannot walk properly tries to cross a road. Student D rushes up and helps her.

Is it ethical for student D to help the old woman?

very unethical (1)
 unethical (2)
 neutral (3)
 ethical (4)
 very ethical (5)

If you were the student, would you help the old woman?

Do you think the average student would help the old woman?

in no case (1)
 probably not (2)
 unsure (3)
 probably (4)
 in any case (5)

Scenario D

Student E finds a purse in front of a library with nothing in it but 50 EUR. He can keep the money or give the purse with the money inside, to the information desk. Student E decides to keep the purse.

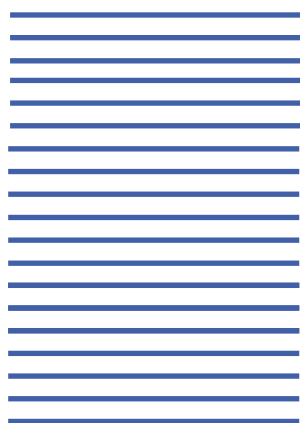
Is it ethical for student E to keep the purse?

very unethical (1)
 unethical (2)
 neutral (3)
 ethical (4)
 very ethical (5)

If you were the student, would you keep the purse?

Do you think the average student would keep the purse?

in no case (1)
 probably not (2)
 unsure (3)
 probably (4)
 in any case (5)



B: Null hypothesis tests (p-values)

	two-sample t-test		Wilcoxon signed-rank test	
	Discrepancy 1	Discrepancy 2	Discrepancy 1	Discrepancy 2
e-book	0.00	0.00	0.00	0.00
exam	0.00	0.00	0.00	0.00
old woman	0.00	0.00	0.00	0.00
purse	0.00	0.00	0.00	0.00

C: Alternative hypothesis tests (p-values)

	two-sample t-test	
	Discrepancy 1	Discrepancy 2
e-book	0.00	0.00
exam	0.00	0.00
old woman	1.00	1.00
purse	0.00	0.00

alternative hypothesis: mean (Q1-Q2) < 0 and mean (Q2-Q3) < 0