



## Research Article

# Understanding Student Perceptions of the Value of Ethics Training

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**Abstract:** In this paper, we attempt to replicate and expand a set of studies conducted by Tormo-Carbó, Seguí-Mas, and Oltra and published in *Journal of Business Ethics* and *Procedia* (with Klimkiewicz) in 2016 by conducting an experiment focused on directly addressing similar but refined research questions and contradictory results from their set of studies using improved methodology and question construction. Tormo Carbó and co-authors engaged business school students in a survey of their orientation towards ethics learning and discussion and generally found that those who had taken a business ethics class were more likely to express interest in and an appreciation for ethics training, this result was not robust in across locations more time when further studies were conducted using similar methodology in new settings and with different students. Using a student sample of 653 respondents enrolled in two introductory business and economics courses, we explore the influence that short ethics learning exercises have on students' interest in and appreciation for ethics training. We find that students' interest in ethics training does not increase after exposure to short training opportunities. We further find these students do not indicate an increased willingness to engage in that training or express an increase in the belief that ethics training should be required in degree programs.

**Keywords:** ethics, business ethics training, pedagogy

## 1. Introduction

Business ethics and how to teach it has increasingly become a subject of public, academic, and curricular focus (Fawson et al, 2015; Albrecht, 2017). Demand for improved ethical behavior by future managers and businesspeople has increased, especially in light of the ongoing questions about the behavior of corporations and those who run them.

### 1.1 Background on business ethics

We use the commonly accepted general definition of ethics as being a set of moral principles that are used to guide an individual's behavior. This definition is consistent across the wider Business Ethics literature. (Sparks & Pan, 2010). We look at ethics as a set of values to which individuals adhere, and business ethics seek to apply these values to business settings. While the study of business ethics is not a recent innovation and the the importance of the literature highlighting is substantial, discussion regarding how to better engage and teach students has expanded and grown in urgency (Bampton & Cowton, 2013).

Central to the study of business ethics are examinations of what factors influence decisions to engage in unethical behavior. One approach to identifying these factors focuses on the systems and incentives that are associated with unethical behavior. Albrecht (2017) looked at the conditions that give rise to the opportunity to engage in unethical behavior. This has been referred to as the Ethics Compromise Triangle, which includes perceived pressure, perceived opportunity, and rationalization. Albrecht (2017) finds that to become more ethical and make better decisions, we need to reduce three aspects of this compromise triangle. Brass et al. (1998) studied how social networks influence the ethical decision-making of an individual, and how social interactions impact those decisions. Social relationships provide both constraints against unethical behavior and opportunities to engage in unethical behavior. An individual may not care about how they behave towards a stranger, since they probably won't interact with them again, thus the risk of acting unethically is comparatively small. Within organizations, however, where individuals expect future interactions the reputational impact of unethical behavior is substantial, and the cost of losing these relationships may restrain some unethical actions. Despite this general reality close relationships where high levels of trust exist may create opportunities for unethical behavior as well as possible payoffs for that behavior. The nature and structure of the social network impact the incentives for ethical and unethical behavior.

Other theories focus on the individual in questions of ethics pressures. The individual is the primary actor, and their unethical decisions can be thought of as "bad apple" issues where the individual acts unethically and influences others to behave similarly. Ferrell and Gresham (1985) examined how these factors might lead to unethical behavior and found evidence for this hypothesis. Other research in this same area has suggested that dishonesty is perverting the results of market actions and (Hodock, 1984), and some researchers have found evidence that an absence of a clear consensus about what ethical conduct is may lead to harmful outcomes (Ferrell & Gresham, 1985). More recent examinations across fields have suggested similar explanations for the spread of unethical behavior in business situations (Gino et al., 2009; Chui et al., 2021).

Hunt and Vitell (1986) created a model that appears to validate the theories that focus on the individual and this model has been cited extensively in explanations of ethical decision-making. They designed an approach that demonstrated in scenarios testing ethical decision-making that respondents who perceive ethical content and recognize it as important can identify multiple possible alternatives to resolve the ethical obstacle. As a result, respondents were better able to evaluate whether the presented alternatives are ethical. While the results of this approach do not always produce singularly ethical behavior, the evidence suggests that ethics must both be valued and used as part of a cognitively intensive process to result in ethical decision-making.

## ***1.2 Business ethics training and study***

Ethics in business schools receive substantial attention because of the perceived negative consequences that would happen if unethical student behaviors, such as cheating, were allowed to spill over into the business practice (McCabe et al., 2004). Teaching business ethics has been used to prevent future business corruption and improve general ethical decision-making in business practice (Cummins, 1999). Business schools have focused intensely on this area partly in response to research that has suggested that business students were more likely to cheat than any other academic discipline (McCabe et al., 2004). Others disagree, stating that business students don't cheat any more than any other students, but that ethical breaches in the form of cheating are relatively common in the academic environment (Klein et al., 2017).

Despite the seeming agreement on the importance of ethics in business, a relatively small number of business schools have chosen to target ethics as a core part of their mission. Even in the schools that have focused on it, it tends to be viewed as a desirable characteristic rather than a core principle that should be taught throughout the curriculum. Fawson et al. (2015) argue that ethics should be taught by an active, learning by doing mindset, and included across the business curriculum. This view contrasts with the reality of how most ethics classes are taught today which is lecture-based and often a solitary sidestep in a four-year degree.

Bampton and Cowton (2002) suggested that schools should adopt business ethics in the required curriculum, but they note that the structure of these courses and their content remains an area of open debate and disagreement. Maclagan and Campbell (2011) argue that when designing business ethics courses, there is a need to center the curriculum on an individual's moral deliberation. Earlier work by De George (1987) reinforces this idea and argues that ethics needs to be thoroughly engaged with. Dellaportas (2006) found that purposefully designed ethics interventions

can have a positive effect on the evolution of moral judgment during college. The findings of his paper suggest that the development of moral judgment can be impacted by certain types of ethics intervention.

While there have been some attempts to explore how the curriculum might be designed, there have been few coordinated attempts to create curricular innovations that improve both the ethical retention necessary, and students' perceptions of the value of that training. Yonk et al. (2017), explore some of those challenges and argue that without support during and after the implementation of the new curriculum design, change is unlikely and any change that does occur is unlikely to persist.

## 2. Exploring previous studies

This project seeks to explore the results of the study conducted by Tormo-Carbó, Seguí-Mas, and Oltra, *Accounting Ethics in Unfriendly Environments: the Educational Challenge*, published in the Journal of Business Ethics in November of 2016, and a study *How Effective are Business Ethics/CSR Courses in Higher Education?* by the same authors (with Klimiewicz). These studies, and others like them, have been widely used to argue for both the efficacy of business ethics training and their placement in the wider business school curriculum despite the lack of consistent results regarding the value students place on that training. We began this project with an interest both in replication, and in validating ongoing discussions about increased business ethics training that we experienced internally to our college. This focus was driven at least in part by a focus by The Association to Advance Collegiate Schools of Business (AACSB) and at least the discussion of the Business Ethics requirements during reaccreditation processes (Franks & Spalding, 2013; AACSB, 2013; AACSB, 2020). These accreditation requirements have focused on exposure within the curriculum rather than measured ethical outcomes. Our study attempts to conduct similar research to Tormo-Carbó that better isolates the direct impact of exposure to ethics training, and as a result better evaluates the efficacy of such training on the value students perceive of ethics in the curriculum, and the value of such requirements in accreditation.

We structure our study as an attempt to replicate the findings of Tormo-Carbó et al.'s Journal of Business Ethics Study (2016) largely because their findings confirm the accepted curricular norms that have dominated business education. However, because there have been some discrepancies in empirical results on this subject, using an experimental design with treatment and control and better isolates the impact of the training itself. Better establishing the causal link is an important step to understand how students value ethics training.

### 2.1 Replication and expansion

The primary study we seek to replicate using a different methodology, Tormo-Carbó et al. (2016) surveyed 500 European business school students on their perception of ethics education in business schools and analyzed the results and differences in opinions. These results along with others in the literature (Adkins & Radtke, 2004) explore the overall perceptions business students have regarding business ethics and arrive at similar conclusions.

Tormo-Carbó et al. (2016) tested three hypotheses regarding how students view ethics training, and how well they retain the information from that training. They first explored the role of gender, age, and work experience and whether they influence ethical understanding and the perceived value of ethics and ethics training. They theorized that older, female, and students with more work experience would show a greater understanding of the significance of many general ethics issues and the overall goal of business ethics education. Of the 10 sub-variables that characterize students' ethical understanding and their perception of them, only the need for ethical behavior for dealing with business tasks was higher in the case of older students and females. Considering these outcomes, their first hypothesis was only partly confirmed, and the perceptions of the value of ethics training were only moderately influenced by these demographic realities.

Their second hypothesis proposed that exposure to business ethics courses would positively influence perceptions of the importance of business ethics. They found significant impacts on perceptions of ethics training. Three of the objectives were found to be substantially correlated with having taken previous ethics courses. Further, they found that having previously taken ethics courses improved perceptions of ethics training.

The third hypothesis from Tormo-Carbó et al. (2016) was that the intensity of exposure to business ethics courses and the recency of completing an ethics course positively influence business students' ethical knowledge and the

perceived importance of business ethics education. Overall, they largely found that exposure to ethics training did significantly increase a student’s perceived value of ethics training issues.

We set out to further explore, and partially replicate Tormo-Carbó et al. (2016) in this regard. Our core interest is in better understanding the link between having participated in ethics training, and the perceived value of that training. Thus, while replicating in part Tormo-Carbó et al. (2016), we make important changes to both the research design and the general goals of the study to more directly test this question. Further, the contradictory evidence between studies conducted by them, warrants an alternative research design focused on this area. Using an experimental design, we explore the perceived value students place on ethics training and focus primarily on how an ethics training exercise might influence perceptions, rather than focus on either the demographic or recency hypotheses.

### 3. Methods and approaches: experimental design

Our experiment engaged 653 students enrolled in two introductory business courses, across four different course sections. We tested the influence of a short ethics learning exercise on the interest in and appreciation for ethics training. We divided the sections into treatment and control groups with sections from each course number designated treatment and control. These courses were taught by two professors, with one of each professor’s sections assigned to the treatment and control groups, to better control for professor-level effects in the perception of ethics by students.

All surveys were anonymous and requested no individually identifying information, and course instructors had no access to the survey results. This experiment was conducted under the supervision of Utah State University’s Institutional Review Board.

Consistent with the approaches outlined above, which suggest that exposure to classroom activities focused on ethics is likely to spark ethical thinking and increased appreciation for ethics we use exposure and test experimental design to test for this proposed effect. Students in the treatment group were asked to complete the activity *Ring of Gyges*, which explores ethics through a hypothetical question focused on ethics in business and then discuss and report to the class on their discussion and then complete the anonymous survey instrument. The control group did not complete the activity or discussion and only completed the survey instrument in the course of a regular class meeting. We include the activity guidelines in Appendix A.

#### 3.1 Hypotheses

Table 1 includes the hypotheses of this study, which are all largely based on the exposure leading to effect approach that dominates the literature as described above. We do not modify the survey instruments to test the treatment group.

Table 1. Hypotheses

Hypotheses	
H1	Subjects that are exposed to an ethics learning activity or a previous ethics class will be more likely to report that ethics training is important
H2	Subjects that are exposed to an ethics learning activity or a previous ethics class will be more likely to report that ethics should be part of the curriculum in their degree program
H3	Subjects that are exposed to an ethics learning activity or a previous ethics class will be more likely to report that they are willing to enroll in an ethics course in the future
Null Hypothesis	
H0	Subjects that are exposed to an ethics learning activity or a previous ethics class activity will exhibit no difference in their propensity to value ethics training or their willingness to enroll in that training

To analyze the results of the experimental survey, we use Logit Regression, in an attempt to tease out potential

relationships. Our regression analyses focused on the answers to four key questions that probed the perceived value of ethics training, as well as willingness to enroll in future ethics training opportunities.

### 3.2 Dependent variables

The questions from our survey instrument that were used to generate our dependent variables were:

1. Would having an ethics course in college be helpful to those in business professions in solving the moral and ethical issues they face?

2. Do you think that having an ethics course in college would aid you in solving the moral and ethical issues you will face in your chosen profession?

3. Do you think that it is important that ethics course be offered in the Business School?

4. If an ethics course were offered as an elective course in your selected major, would you enroll in it?

We base these questions on the Tormo-Carbó study with modifications that better refine the different potential situations in which students might value ethics training. Our interest in these modifications was primarily to attempt to tease out if the perceived value of ethics varied by the type of situation students considered. We then include a question that asks students about willingness to engage in a specific activity, taking a future class to better ground the questions in concrete action rather than just perceived value.

For each of these questions, the respondents were asked to respond yes or no, coded as 1 for yes and 0 for no. The response frequency to each of these questions is included in Table 2 below.

**Table 2.** Percent answering yes (Categories are the dichotomous responses to the question. As a result, the Min for Each Variable is 0, Max is 1, and the Percentage is the Mean of response category)

Variable	Obs	St Dev	% Answering Yes
Would having an ethics course in college be helpful to those in business professions in solving the moral and ethical issues they face?	653	0.488	60.95%
Do you think that having an ethics course in college would aid you in solving the moral and ethical issues you will face in your chosen profession?	653	0.388	18.38%
Do you think that it is important that ethics courses be offered in the Business School?	653	0.453	28.79%
If an ethics course were offered as an elective course in your selected major, would you enroll in it?	639	0.484	62.63%

The raw pooled responses from students to these questions are interesting in their own right and reveal substantial differences in the perceived value of ethics training. When students are generically asked if they think having a course in ethics would be useful in solving moral and ethical issues nearly 61% respond affirmatively, likewise over 62% of students' response is that they were willing to enroll in an ethics course if it were offered. When asked about the importance of ethics courses to their professional work or the importance of having a course offered in the business school, students' responses indicate much less support with only 29% of students agreeing that it is important for ethics courses to be offered in the Business School, and just over 18% agreeing that ethics courses will help solve ethical issues in their professional life. This divergence indicates that while students view ethics as important generally they may not necessarily believe they are relevant or important in the business-specific context. We further explore this divergence in our regression analysis below.

### 3.3 Control variables

We asked for information about many control variables, including socioeconomic indicators of age, marital status, number of children, parents' education, and race. We also ask about religious affiliation as the location of the university is in an area that has a high percentage of adherence to the Latter-Day Saint faith tradition and may have an effect on ethical consideration. In each of these cases, responses were structured so that only one answer could be selected and

the response to the question was used to create dichotomous variables. These variables have been shown to potentially affect how individuals perceive ethical questions and training, and those perceptions are at the core of this study.

We also include information about the profile of each student academically. These variables including class standing, GPA, Major (represented as Business Major or Not), and the primary source of tuition payment. Like our demographic variables, we believe controlling for student profile is an important part of identifying the impact of the ethics exercise independently. Again, the responses were structured to result into dichotomous variables.

We also asked students about their political ideologies as an ideology has been hypothesized in some of the literature to be relevant to the valuation of ethics and ethics training. We measure ideology by asking each respondent where on the political spectrum they identify. We then code these data so that responses provide dichotomous variables for Liberal, Conservative, and Moderate Ideology. We include ideological measures in our analysis because of the potential for impact on perceptions about ethics and the importance of ethics training.

The frequency of response for each of the variables we included in our Logit Regressions is included in Table 3.

**Table 3.** Percent in each category (Categories are the dichotomous responses to the underlying variable for each variable. As a result, the Min for Each Variable is 0, Max is 1, and the Percentage is the Mean of response category)

Variable	Obs	St Dev	% Answering Yes
Business Major	653	0.500	50.38%
Female	653	0.464	31.24%
Age over 25	653	0.038	38.28%
Have Children	653	0.020	19.90%
Married	653	0.119	11.94%
White	653	0.905	90.50%
Junior or Senior	653	0.193	19.29%
Grade Point above 2.5	653	0.715	71.51%
Parents Paying Tuition	650	0.277	27.69%
Own Funds Paying Tuition	650	0.272	27.23%
Parents Advanced Degree	653	0.337	33.69%
Latter Day Saint Religious Adherent	653	0.761	76.11%
Conservative Ideology	653	0.447	44.71%
Liberal Ideology	644	0.114	11.49%
Moderate Ideology	644	0.385	38.50%
Have you had an ethics course in college?	653	0.136	13.60%

### 3.4 Sample

This study used a non-random sample of students enrolled in four courses in the business school, but section assignment to treatment and control was done to minimize instructor level effects. Because it is designed primarily as an experiment, this sample selection is appropriate. This experiment seeks to evaluate the propensity of individuals to value ethics training in their degree programs. This sample of students allows the impact of the treatment to be compared with a subgroup of the population of interest that is similar across other axes.

## 4. Results

Our first test explores the perceptions that students have on the value of an ethics course for those in business professions in solving the ethical issues they face. This question probed the generic value that students placed on those ethics courses in assisting those in business, and not necessarily their future position or expected career path. Table 4 provides the results of this analysis.

**Table 4.** Logit regression. Would having an ethics course in college be helpful to those in business professions in solving the moral and ethical issues they face? N = 639, Pseudo R2 0.056 (We include the full table here to highlight the results and provide detailed information that can be compared with the other tests reported in this paper)

	Coefficient	P Value	Robust Std. Error
Treatment	0.185402	0.293	0.176268
Business Major	0.3034478	0.085*	0.1759138
Female	0.9628432	0.000***	0.1999137
Age over 25	0.4535789	0.363	0.4991127
Have Children	0.2857306	0.660	0.6694162
Married	0.2756908	0.333	0.2847099
Moderate Ideology	0.3886312	0.300	0.3750088
White	0.5001027	0.093*	0.298074
Junior Senior	0.0045837	0.984	0.2320483
Grade Point above 2.5	0.2556616	0.208	0.2028618
Parents Paying Tuition	0.0032728	0.987	0.2071268
Own Funds Paying Tuition	0.16102	0.418	0.1989156
Parents Advanced Degree	0.1003979	0.585	0.1837492
The Church of Jesus Christ of Latter-day Saints (LDS) Religion	0.1779031	0.431	0.2261452
Conservative Ideology	0.1363809	0.719	0.3783556
Liberal Ideology	0.1761006	0.680	0.4267904
Previous Ethics Class	0.2787728	0.291	0.2640969
_cons	0.76932	0.095*	0.461278

\*Significant at the 0.10 Level, \*\*Significant at the 0.05 Level, \*\*\*Significant at the 0.01 Level

In contrast to Tormo-Carbó et al. (2016), the results of our analysis of this question found no effect of either past ethics courses or the ethics exercise in our experiment on their perception of how ethics courses might be useful to those in business professions. Only Females returned a coefficient that was significant at the 0.05 level. However, we did see business majors appeared to have a slightly higher perceived value of this training, although that effect did not reach the 0.05 level of statistical significance. Given these results, we cannot reject our null hypothesis.

Our second test addressed students' own future career plans and the perceived value of ethics training on solving ethical and moral issues in that more personally relevant circumstance. These results are presented in Table 5.

Again, our results do not confirm the Tormo-Carbó et al. (2016) conclusions. We find no statistically significant effect from the treatment. However, in line with their Procedia findings, we find some, albeit relatively weak, evidence that a previous ethics class may be associated with students being more likely to perceive that ethics training might have value in their professional endeavors. Having previously taken an ethics class returns a positive, but only marginally significant coefficient. Thus, we cannot conclusively reject our null hypothesis of no effect.

**Table 5.** Logit regression. Do you think that having an ethics course in college would aid you in solving the moral and ethical issues you will face in your chosen profession? N = 639, Pseudo R2 0.049

	Coefficient	P Value	Robust Std. Error
Treatment	0.1461247	0.497	0.2150586
Business Major	0.3198897	0.153	0.2238946
Female	0.8241202	0.000***	0.2174596
Age over 25	-0.6945716	0.401	0.8266323
Have Children	1.25805	0.145	0.8625323
Married	-0.3355414	0.390	0.390685
Moderate Ideology	0.0667595	0.878	0.4364321
White	-0.0043191	0.991	0.3737876
Junior Senior	-0.3471811	0.225	0.2863246
Grade Point above 2.5	0.0962604	0.702	0.2516221
Parents Paying Tuition	-0.1034853	0.680	0.2507241
Own Funds Paying Tuition	0.3168362	0.189	0.2410835
Parents Advanced Degree	-0.1250335	0.594	0.2348496
LDS Religion	0.0604617	0.825	0.2739306
Conservative Ideology	-0.1533778	0.723	0.4328336
Liberal Ideology	0.235219	0.634	0.49426
Previous Ethics Class	0.5465028	0.056*	0.2856937
_cons	-2.172367	0.000***	0.5379802

\*Significant at the 0.10 Level, \*\*Significant at the 0.05 Level, \*\*\*Significant at the 0.01 Level

**Table 6.** Logit regression. Do you think that it is important that ethics courses be offered in the Business School? N = 639, Pseudo R2 0.032

Dependent Variable	Coefficient	P Value	Robust Std. Error
Treatment	0.237397	0.206	0.187757
Business Major	0.134521	0.468	0.185481
Female	0.429392	0.028**	0.194956
Age over 25	0.29114	0.587	0.536242
Have Children	-0.53206	0.495	0.779643
Married	0.629037	0.031**	0.291261
Moderate Ideology	-0.032	0.935	0.391614
White	0.184691	0.576	0.330024
Junior Senior	-0.01444	0.950	0.230302
Grade Point above 2.5	0.159161	0.467	0.218891
Parents Paying Tuition	-0.14432	0.505	0.216712
Own Funds Paying Tuition	0.01915	0.928	0.211648
Parents Advanced Degree	0.253979	0.188	0.192943
LDS Religion	-0.0247	0.917	0.237941
Conservative Ideology	0.096602	0.808	0.396618
Liberal Ideology	0.395314	0.374	0.444942
Previous Ethics Class	0.609502	0.015**	0.251557
_cons	-1.84112	0.000***	0.520936

\*Significant at the 0.10 Level, \*\*Significant at the 0.05 Level, \*\*\*Significant at the 0.01 Level

Our third test explores the importance that respondents place on an ethics course being offered in Business School. Sixty percent of our pooled respondents indicated that they viewed it as important. The results of this test are provided in Table 6.

The results for this question provide the strongest evidence for the impact of previous ethics training on the increased perceived value of ethics training. While we cannot identify a statistically significant effect of our treatment, we do find a statistically significant effect of a previous ethics course on the perception that ethics offerings are important. Those who had previously taken an ethics course were somewhat more likely to express that such classes should be available. This result suggests previous ethics training has the potential to improve students' perceptions that ethics training should be available as part of the curriculum.

Our final test explores the willingness of respondents to enroll in an elective ethics course within their own major. Our results are provided in Table 7.

**Table 7.** Logit regression. If an ethics course were offered as an elective course in your selected major, would you enroll in it? N = 639, Pseudo R2 0.031

Dependent Variable	Coefficient	P Value	Robust Std. Error
Treatment	-0.2845698	0.105	0.1753298
Business Major	-0.3344378	0.054*	0.1732354
Female	-0.0468272	0.801	0.1855386
Age over 25	-0.1105695	0.819	0.4828515
Have Children	-0.4739353	0.459	0.6405137
Married	0.2797463	0.330	0.2869458
Moderate Ideology	0.247088	0.494	0.3614861
White	0.2216249	0.459	0.2216249
Junior Senior	0.406551	0.079*	0.406551
Grade Point above 2.5	-0.1043152	0.601	0.199627
Parents Paying Tuition	0.3036921	0.124	0.1975858
Own Funds Paying Tuition	0.243411	0.222	0.1994481
Parents Advanced Degree	0.3036921	0.211	0.1811168
LDS Religion	0.0076663	0.973	0.2261947
Conservative Ideology	0.2443104	0.505	0.3667005
Liberal Ideology	-0.054602	0.894	0.4103441
Previous Ethics Class	-0.5659977	0.021**	0.251557
_cons	-0.2640619	0.560	0.4535912

\*Significant at the 0.10 Level, \*\*Significant at the 0.05 Level, \*\*\*Significant at the 0.01 Level

The results of this regression provide a divergent finding from Tormo-Carbó et al. (2016). Most clearly, those who had previously taken an ethics course were less likely to indicate they would willingly take a future ethics class. This result was significant at the 0.05 level. Likewise, it was in this analysis that our treatment came closest to even marginal statistical significance (0.105) but like having previously taken a course in ethics the coefficient was negative.

These results do little to confirm our general hypothesis and do not provide conclusive evidence suggesting that previous ethics training experience has substantially improved students' perceptions of the value of ethics training.

## 5. Discussion

Taken together the results of our experiment find some statistically significant effects of previous ethics courses, although those effects are directionally divergent and thus do not provide evidence for our general hypothesis. We further find no statistically significant effect from our treatment that exposed participants to an ethics learning activity on their perceptions of the value of ethics training in their degree program. These results are not particularly encouraging for those interested in engaging students in ethics course as a means to improve or explore questions about ethical decision-making are surprising as they deviate substantially from the results of Tormo-Carbó et al. (2016). They are however more closely consistent with Procedia results by Tormo-Carbó et al. (2016). We view the replication of the finding and the more granular responses where students are asked about a variety of circumstances in which ethics course might be used as an advancement of the larger literature, albeit one that largely suggests that exposure to an ethics course or ethics activity is not likely to be sufficient. A larger-scale study which longitudinally follows students both across collegiate experience and into professional practice might better reveal whether course has a longer-term effect.

Our approach and the experiment we conducted probed both general perceptions of the value of ethics training overall the perceived the value of ethics training within their professional ambitions. Our results leave open the question of how to move the needle on student perceptions. We find that at best no conventionally statistically significant effect can be identified of previous ethics training, and in the case of wiliness to enroll in future ethics courses that effect might be negative.

Despite these findings we do not necessarily believe that ethics training, especially if it is hands-on and directly connected to students' professional practice, should be excluded from or removed from curricula where it currently exists, rather much as Tormo-Carbó and co-authors suggest, we believe that digging deeper in how to better provide ethics training is of particular importance. The value of ethical behavior as we highlighted in earlier sections has been well demonstrated and exploring how best to conduct that training, and how to engage students in ethical learning should be at the front of any discussion of ethics in the business curricula. Our findings suggest that crafting and convincing students of the value of ethics training will require more than simply offering the courses and creating the classes. Rather, more in-depth pedagogical study and research are necessary given both the inconsistent findings from Tormo-Carbó et al.'s two studies and our findings from our independent experiment. It is increasingly clear that simply relying on the inclusion of ethics training in the curriculum is insufficient to achieve the goal of increased ethical behavior and focus among students, and that further research is needed that explores how different approaches to teaching ethics might impact those perceptions and evaluate whether those approaches yield positive results in the curricula.

## References

- AACSB (2013). *Eligibility Procedures and Accreditation Standards for Business Accreditation* (pp. 1-72). Tampa, FL.
- AACSB (2020). *Guiding Principles and Standards for Business Accreditation* (pp. 1-55). Tampa, FL.
- Adkins, N., & Radtke, R. R. (2004). Students' and faculty members' perceptions of the importance of business ethics and accounting ethics education: Is there an expectations gap? *Journal of Business Ethics, 51*(3), 279-300. <https://doi.org/10.1023/b:busi.0000032700.07607.02>
- Albrecht, W. S. (2017, September 12). *The Compromise Triangle*. Wheatley Institution. <https://wheatley.byu.edu/compromise-triangle/>
- Bampton, R., & Cowton, C. J. (2002). The teaching of ethics in management accounting: Progress and prospects. *Business Ethics: A European Review, 11*(1), 52-61. <https://doi.org/10.1111/1467-8608.00258>
- Bampton, R., & Cowton, C. J. (2013). Taking stock of accounting ethics scholarship: A review of the journal literature. *Journal of Business Ethics, 114*(3), 549-563. <https://doi.org/10.1007/s10551-012-1341-3>
- Brass, D. J., Butterfield, K. D., & Skaggs, B. C. (1998). Relationships and unethical behavior: A social network perspective. *Academy of Management Review, 23*(1), 14-31. <https://doi.org/10.5465/amr.1998.192955>
- Cummins, J. (1999). (rep.). *The teaching of business ethics at undergraduate, postgraduate and professional levels in the UK A survey and report*. Institute of Business Ethics.
- De George, R. T. (1987). The status of business ethics: Past and future. *Journal of Business Ethics, 6*(3), 201-211.

<https://doi.org/10.1007/bf00382865>

- Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. *Journal of Business Ethics*, 65(4), 391-404. <https://doi.org/10.1007/s10551-006-0020-7>
- Fawson, C., Simmons, R., & Yonk, R. (2015). Curricular and programmatic innovation at the intersection of business ethics and entrepreneurship. *Advances in the Study of Entrepreneurship, Innovation & Economic Growth*, 109-130. <https://doi.org/10.1108/s1048-473620150000025006>
- Ferrell, O. C., & Gresham, L. G. (1985). A contingency framework for understanding ethical decision making in marketing. *Journal of Marketing*, 49(3), 87. <https://doi.org/10.2307/1251618>
- Franks, R. A., & Spalding, A. D. (2013). Business ethics as an accreditation requirement: A knowledge mapping approach. *Business Education & Accreditation*, 5(1), 17-30.
- Gino, F., Shahar, A., & Ariely, D. (2009). Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. *Psychological Science*, 20(3), 292-398. <https://doi.org/10.1111%2Fj.1467-9280.2009.02306.x>
- Chui, C., Kouchaki, M., & Gino, F. (2021). "Many others are doing it, so why shouldn't I?": How being in larger competitions leads to more cheating. *Organizational Behavior and Human Decision Processes*, 164, 102-115. <https://doi.org/10.1016/j.obhdp.2021.01.004>
- Hodock, C. (1984). Intellectual dishonesty is perverting the results from various market tests. *Marketing News*, 19(2), 1.
- Klein, H. A., Levenburg, N. M., McKendall, M., & Mothersell, W. (2007). Cheating during the college years: How do business school students compare? *Journal of Business Ethics*, 72(2), 197-206. <https://doi.org/10.1007/s10551-006-9165-7>
- McCabe, D. L., & Pavela, G. (2004). Ten (updated) principles of academic integrity: How faculty can foster student honesty. *Change: The Magazine of Higher Learning*, 36(3), 10-15. <https://doi.org/10.1080/00091380409605574>
- Sparks, J. R., & Pan, U. (2010). Ethical judgments in business ethics research: Definition, and research agenda. *Journal of Business Ethics*, 91, 405-418. <https://doi.org/10.1007/s10551-009-0092-2>
- Tormo-Carbó, G., Oltra, V., Seguí-Mas, E., & Klimkiewicz, K. (2016). How effective are business ethics/CSR courses in higher education? *Procedia-Social and Behavioral Sciences*, 228, 567-574. <https://doi.org/10.1016/j.sbspro.2016.07.087>
- Tormo-Carbó, G., Seguí-Mas, E., & Oltra, V. (2016). Accounting ethics in unfriendly environments: The educational challenge. *Journal of Business Ethics*, 135(1), 161-175. <https://doi.org/10.1007/s10551-014-2455-6>
- Hunt, S. D., & Vitell, S. J. (1986). A general theory of marketing ethics: the consumer ethics and intentions issues. *Journal of Macromarketing*, 6(1), 5-37. <https://doi.org/10.1177/027614678600600103>
- Yonk, R. M., Harrigan, J., & Mason, N. (2017). Collaborative contagion: A case study in curriculum development, distribution, and adoption. *Global Voices in Higher Education*, 175-185. <https://doi.org/10.5772/intechopen.68689>

## Appendix A

Ring of Gyges	
Title	Ring of Gyges
Grade	College
Duration	15 minutes
Core concept	Ethics
Learning objectives	
<ul style="list-style-type: none"> <li>• To examine the relationship between ethics and law.</li> <li>• To examine how external constraints (law, social pressure, social judgment) impact willingness to act ethically.</li> <li>• To spark interest in students to do the ethical thing voluntarily, without the mediation of external constraints.</li> </ul>	
Summary of activities	
<ul style="list-style-type: none"> <li>• This task is to be a discussion.</li> <li>• Divide the class into groups of 3.</li> <li>• Each group is to imagine a fictional situation in which each possesses a ring of invisibility, the Ring of Gyges. They have no superpowers but can do whatever they want without being seen.</li> <li>• Each group is then to imagine that they become privy to secret information regarding a market competitor. They may utilize this information to engage in insider trading if they wish, without any fear of other discovering this fact, and without fear of legal repercussions.</li> <li>• The groups are to consider whether they would use this information to their advantage and what factors impact their decision.               <ul style="list-style-type: none"> <li>Is the use of such information ethically wrong? Why?</li> <li>If so, should they refuse to use the information despite their freedom from repercussions?                   <ul style="list-style-type: none"> <li>• Each group should then present its argument to the class.</li> </ul> </li> </ul> </li> </ul>	
Performance metrics	
<ul style="list-style-type: none"> <li>• Level of participation in the conversation.</li> <li>• Recognition that possessing integrity even in this situation is beneficial.</li> </ul>	

### *Notes for instructors*

#### *Ring of gyges-college*

##### *Learning objectives*

The object of this exercise is to consider the significance of how external constraints impact an individual's willingness to act ethically. Utilizing a classic story taken from Plato's *Republic*, the Ring of Gyges, students are asked to imagine themselves as having a ring of invisibility. They have no superpowers-they are as they normally are-but they possess the power of invisibility. Hence, they may do almost anything they want without social repercussions, and in particular without legal repercussions. It is hoped that students will recognize the significance of acting ethically despite the lack of external constraints through their engagement with a case of potential repercussion-free insider trading.

##### *Activities*

Divide the class into groups of 3. Each group is to consider why they ought to remain good people-more precisely, why they should act ethically-despite possessing the power of invisibility and freedom from legal repercussions. It is imperative that the students recognize that there will be no social censure, praise, or legal punishment for their actions-the question is what they will gain or lose by acting ethically/unethically in spite of the lack of external constraints on their actions. The overriding issue is what relation exists between ethics and a good life. It will be apparent to them that there will be many ways in which they could "succeed" in a situation where they have the power of invisibility. The conversation should move through these openly to a consideration of what might be lost through unethical actions and what might be gained through ethical activity. Each group should present their case to the class.

### *Performance metrics*

This exercise takes place as a conversation. Hence, students should be watched for their contribution to and engagement with the conversation. Opinions should be offered and considered openly.