

## **Exploration of the ethical maturity of an undergraduate student cohort**

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### **ABSTRACT**

To determine whether the ethical perceptions of a cohort of students significantly changed while in college, survey data was collected. For validity control, the data was collected using the same methodology and the same cohorts. A total of 144 useable surveys were collected: 62 from Fall 2010 Freshman/Fall 2011 Sophomores were compared to 82 Spring 2014 Seniors. The acceptability of non-graded dishonest acts are not significantly different between Freshman/Sophomores and Seniors, but the acceptability of graded dishonest acts by males significantly decreased from Freshman/Sophomore to Senior year.

Keywords: academic dishonesty, student attitudes, changing perceptions, ethical maturity

## INTRODUCTION

The Association to Advance Collegiate Schools of Business (AACSB) has called for the strengthening of ethics curriculum in order to combat the crisis in business ethics (2004). The AACSB considers ethics to be a key component of business curricula since “A society where those holding power are neither moral nor accountable creates a state where the strong do what they will and the weak what they must” (2004, p. 10). Perhaps if colleges and universities can help increase the ethical awareness of business students, some future financial implosions can be stopped before they reach the magnitude of past discretions.

This study investigated whether the ethical perceptions of a cohort of students significantly changed while in college. The ethical tendencies of participants were measured by asking about the acceptability of various dishonest acts. A number of the survey questions reference dishonest acts related to coursework submitted for a grade (exams, projects, homework, etc.) and other questions refer to dishonest acts which are not course requirements but are commonly encountered by college students (illegally downloading or photocopying copyrighted material). This study refers to these categories of questions as graded and non-graded dishonest acts.

## LITERATURE REVIEW

From a historical perspective, there has been disagreement on whether ethical perceptions have been changing over time. Several longitudinal studies have focused on changes in academic dishonesty. Some have found an increase in academic dishonesty (Ogilby, 1995; Diekhoff et al., 1996; Brown and McInerney, 2008) while others have found no change (Spiller and Crown, 1995; Vandehey, Diekhoff and LaBeff, 2007) or even a decrease in academic dishonesty over time (Emerson and Conroy, 2004; Molnar, 2014). Several authors have questioned the validity of comparing historical and recent data in academic dishonesty research (Brown and Emmett, 2001; Graham, et al., 1994, and Whitley, 1998) since different studies have measured academic dishonesty in many different ways (Karlins, et al., 1988).

This study focused on not just the change in ethical perceptions over time, but specifically a possible change in ethical perceptions of students during their time in college. Results have been mixed on whether ethical perceptions improve or digress during college. Some previous research studies on students' attitudes towards dishonest acts have showed upper-class students to be more ethical. For example, Davis and Welton (1991) and Lawson (2004) have proposed that students' ethical perceptions of non-academic situations mature while in college. This is supported by the research of Smyth, Davis and Kroncke (2009) who found upper-class students to be more ethical in both academic and non-academic situations.

However, when the dishonest act is an academic situation such as cheating the results about whether younger or older students are more ethical have varied. Some studies have found that upper-class students are more likely to cheat (Rakovski and Levy, 2007; Kerkvliet and Sigmund (1999). While other research found that seniors cheat less (Atmeh and Al-Khadash, 2008) or did not find a significant difference between lower and upper-class students in their attitudes towards cheating (Lau and Haug, 2011).

Perhaps the inconsistent results on which year in college is more ethical are caused by students viewing academic and non-academic ethical situations differently. Therefore, this current study expands the previous research on the year in college variable by incorporating the

work of Molnar and Kletke (2012) who found differences in student attitudes between two categories of questions. The two categories found were labeled as graded and non-graded dishonest acts.

Thus the initial hypotheses, presented in the null form, are:

- 1a: The acceptability of non-graded dishonest acts will not be significantly different between Freshman/Sophomores and Seniors.
- 1b: The acceptability of graded dishonest acts will not be significantly different between Freshman/Sophomores and Seniors.

Further, gender differences towards the acceptability of dishonest acts have been noted. Numerous studies report that females cheat less often than males (Atmeh and Al-Khadash, 2008; McCabe and Trevino, 1997; Rakovski and Levy, 2007; Niiya, Ballantyne, North and Crocker, 2008) and Smyth, Davis and Kroncke (2009) found females are more ethical in both academic and non-academic situations. To control for any gender affect, the data will be further separated by gender.

Therefore, the following null hypotheses are proposed.

- 2a: The acceptability of non-graded dishonest acts will not be significantly different between female Freshman/Sophomores and female Seniors.
- 2b: The acceptability of graded dishonest acts will not be significantly different between female Freshman/Sophomores and female Seniors.
- 2c: The acceptability of non-graded dishonest acts will not be significantly different between male Freshman/Sophomores and male Seniors.
- 2d: The acceptability of graded dishonest acts will not be significantly different between male Freshman/Sophomores and male Seniors.

## METHODOLOGY

The survey instrument is similar to that used in previous research studies (Molnar, et al., 2008). For validity control, the same data was collected using the same pencil-and-paper data collection techniques, the same questionnaires, the same methodology and the same cohorts. Participants were asked to respond to questions regarding their attitudes towards the listed activities rather than their actual engagement in these activities. This makes the survey less threatening and hopefully elicits more honest responses (Kisamore, Stone and Jawahar, 2007).

The surveys were voluntarily completed by students during class time at a small, Catholic liberal arts college in the Midwest. Only demographic information was collected in order to protect the students' anonymity and to encourage honest responses.

In order to capture responses from a particular cohort, students' responses from Fall 2010 Freshman and Fall 2011 Sophomores were compared to Spring 2014 Seniors. The Freshman/Sophomore responses were obtained in an introductory computer applications course required of all business majors; the Senior responses were obtained in a capstone course required of all business majors.

The attitude of survey participants toward eleven dishonest acts was collected by using a 5-point Likert scale. "Strongly Disagree" was coded as 1 while "Strongly Agree" was coded as 5. Therefore, a lower score indicated that the participant found the dishonest act less acceptable.

A factor analysis was conducted to separate the questions into categories. Consistent with previous studies, two factors were detected using an eigenvalue greater than one criterion and retaining factors  $> 0.5$  as suggested by Hair, et al. (1995, p. 374). Factor loadings of .518 to .690 were found for factor 1 and from .598 to .841 for factor 2. Three questions (1, 3, 11) comprised factor 1 and were labeled non-graded dishonest acts. Factor 2 consisted of eight questions (2, 4, 5, 6, 7, 8, 9, 10) and were labeled graded dishonest acts.

## RESULTS

A total of 144 useable surveys were collected. Demographic information for the responses is listed in Table 1 (Appendix).

Table 2 (Appendix) shows the results after categorizing the questions based on the factor analysis. A significant difference was found between Freshman/Sophomores and Seniors for graded dishonest acts but not for non-graded dishonest acts. The larger mean value indicates that during their Freshman/Sophomore year the cohort viewed committing dishonest acts on graded assignments as more acceptable. Therefore we are not able to reject hypothesis 1a, but we can reject hypothesis 1b. The ethical perceptions of the cohort did decrease in acceptance in terms of graded dishonesty over their time in college. Surprisingly, although not statistically significant, acceptance of non-graded dishonesty appears to be increasing over their time in college.

The results were then analyzed separately for each gender. Table 3 (Appendix) shows the results of female participants. No significant difference was found for either non-graded or graded dishonest acts. The results of the male subjects in Table 4 (Appendix) show there is a significant difference for graded but not for non-graded dishonest acts. Therefore, support was only found to reject hypothesis 2d. For graded dishonest acts, the mean scores for both males and females appear to be decreasing in acceptance over their time in college although the change was only significant for males.

Although not significant, it is interesting to note that the mean scores for both females and males in relation to non-graded dishonest acts increased indicating that Seniors appear to be more accepting of these behaviors.

Finally, to investigate the responses at the individual question level, t-tests were run on each question. The ethical perceptions of the cohort were reviewed for each question to detect any changes during their time at college. As can be seen in Table 5 (Appendix), there is a significant difference in student responses for six (questions 2, 4, 5, 6, 7, 8) out of the eight questions which make up the majority of factor 2 (graded). In all cases where a significant difference was detected, Seniors found the dishonest act to be less acceptable. For all questions (questions 1, 3 and 11) making up factor 1 (non-graded), none were found to be significantly different and further they all had means well above 2 (disagree). It is interesting to note that two questions (questions 9 and 10) which were part of factor 2 (graded) were not found to be individually statistically significant. These questions deal with copying material from a book and purchasing a paper from the Internet.

## DISCUSSION

The results of this study do not support the belief that the maturity process during college significantly changes the ethical perceptions of students. Overall, the only significant difference between Freshman/Sophomore and Senior responses was based on graded dishonest acts. When gender was taken into consideration, the only significant change detected was for male students for graded work. Perhaps the ethics that students are learning are that “cheating in school is bad” versus ethics are important in their everyday lives and careers.

Although not significant across genders, it appears students’ perceptions changed for grade-related topics but not for non-graded issues. This may be due to the fact that students are focused on academic ethics while in school. Over the past several years, there has been a revision of the honor code policy at this institution which has brought forth many discussions about graded dishonest acts. The graded questions all either mention the phrase “quiz or exam” or “for a grade.” These phrases may have “clued” the student to the type of expected or “best” response. The non-graded questions focus on copyright and downloading from the Internet. Either students are not focused on these issues or simply may not understand copyright and downloading issues as dishonest acts.

This is a bit disheartening especially considering the fact that 96.3% of the Seniors in the study reported that ethical discussions were included in at least one of their courses. Further, it is worrisome that both male and female Seniors appear to find non-graded dishonest acts to be more acceptable; although this was not statistically significant it does suggest a negative trend.

Two other disturbing issues found when looking at the individual non-graded questions are not only did these questions have no significant differences between Freshman/Sophomores and Seniors, but all had means above 2 with some of the means closer to 3 (the higher the mean the more acceptable it is to the student). This suggests that many of these students do not recognize these as dishonest acts. Is this merely an educational issue? Perhaps, institutions need to do a better job of making sure students focus not only on the ethics important to them in the moment (graded issues), but also ethical issues outside the academic sphere (non-graded).

In addressing why questions 9 and 10 were not found to be individually significant, each question needs to be looked at separately. Question 9 pertains to copying from a book without proper citations. Selwyn (2008) found that there was “...a near identical proportion...” of students engaged in some form of offline plagiarism as reported engaging in online plagiarism. And yet, there was a significant difference found for question 7 which was copying from the Internet without proper citation. Why did student perceptions of copying from the Internet significantly decline and not their responses in terms of copying from a book? In the Selwyn study, just over 15% of respondents argued that they were less likely to commit online plagiarism than offline plagiarism. For many of these students, ‘fear of being caught/detected’ was a significant deterrent and at the time of the research the university was promoting online plagiarism detection services. One recent major revision of this institution’s honor code features the inclusion of online plagiarism. This may have affected student responses to these two questions over the student’s college career.

Question 10 deals with purchasing a paper from the Internet. In a study by Sisti (2007), high school students indicated that purchasing a term paper was much worse than copy-paste plagiarism due to the actual amount of intellectual property being “stolen.” If high school students are well aware that this is cheating and are not as accepting of this type of dishonesty as they are of copy-paste plagiarism, it would explain why the acceptance of this type of dishonesty did not change over time in college. In addition, studies seem to indicate that the purchase of

papers over the Internet is not as common as other dishonest behaviors. The percentage of students acknowledging that they purchased term papers over the Internet does not seem to change. A 1995 study by Genereux and McLeod found that only 2% of students acknowledged that they purchased a term paper from the Internet which is the same percentage found by Sisti in 2007. This infrequency in occurrences, may also account for the lack of significant change in this response over time.

This institution is incorporating a required business ethics course for all incoming Freshman. It will be interesting to see if this will have any effect on the non-graded responses. Are student perceptions' something we can change with education? Would this change in attitudes correlate to a change in behavior or are students just learning and reporting what they are supposed to believe (i.e., compliance based ethics)?

## LIMITATIONS

The ability to generalize the results of this study is limited by various factors. The small sample size, particularly the low number of female Freshmen/Sophomores, may have limited the study's ability to detect significant differences. Also, demographic variables such as GPA and race were not controlled which may have affected the results. The majority of participants were business majors. Perhaps a sample of students with diverse majors would have resulted in different results. In addition, self-administered paper-and-pencil surveys have been criticized as a reliable data collection technique and the specific type of institution may limit the generalizability across different student populations.

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**APPENDIX: TABLES**

Table 1 – Demographic Information of Survey Participants

Year	Female	Male	Total
Freshman/Sophomore	19	43	62
Seniors	37	45	82
Total	56	88	144

Table 2 - T-tests by type of dishonest by year

Type of dishonest act	Year	N	Mean	Std. Deviation	<i>t</i>	<i>p</i> -value
Non-graded	Freshman/Sophomore	62	7.79	2.09	.648	.518
	Senior	82	8.04	2.47		
Graded	Freshman/Sophomore	62	13.79	3.73	-3.839	.000*
	Senior	82	11.50	3.29		

\* Significant at  $p < .05$ 

Table 3 -T-tests by type of cheating by year - Females

Type of dishonest act	Year	N	Mean	Std. Deviation	<i>t</i>	<i>p</i> -value
Non-graded	Freshman/Sophomore	19	7.58	1.87	.357	.723
	Senior	37	7.78	2.32		
Graded	Freshman/Sophomore	19	12.42	3.36	-1.560	.128
	Senior	37	10.97	3.16		



Table 4 –T-tests by type of cheating by year – Males

Type of dishonest act	Year	N	Mean	Std. Deviation	<i>t</i>	<i>p</i> -value
Non-graded	Freshman/ Sophomore	43	7.88	2.20	.706	.482
	Senior	45	8.24	2.59		
Graded	Freshman/ Sophomore	43	14.40	3.76	-3.233	.002*
	Senior	45	11.93	3.36		

\* Significant at  $p < .05$



Table 5 - T-tests by survey question

Question (It is okay for me to ...)	Year	N	Mean	Std. Deviation	t	p- value
Q1 – Download copyrighted music	Freshman/ Sophomore	62	2.63	.962	1.299	.196
	Senior	82	2.87	1.225		
Q2 – Copy others' electronic files	Freshman/ Sophomore	62	1.48	.565	-2.136	.035*
	Senior	82	1.29	.484		
Q3 – Violate photocopy copyrights	Freshman/ Sophomore	62	2.90	1.051	-.004	.997
	Senior	82	2.90	1.129		
Q4 – Text message answers to tests	Freshman/ Sophomore	62	1.53	.620	-2.518	.013*
	Senior	82	1.29	.484		
Q5 – Submit others' paper as my own	Freshman/ Sophomore	62	1.47	.564	-3.076	.003*
	Senior	82	1.21	.408		
Q6 – Copy others' written homework	Freshman/ Sophomore	62	2.16	.909	-3.498	.001*
	Senior	82	1.67	.721		
Q7 – Copy from the Internet	Freshman/ Sophomore	62	2.24	.803	-3.581	.000*
	Senior	82	1.76	.810		
Q8 – Look on others' tests	Freshman/ Sophomore	62	1.66	.700	-2.934	.004*
	Senior	82	1.34	.571		
Q9 – Copy material from a book	Freshman/ Sophomore	62	1.87	.778	-1.732	.086
	Senior	82	1.65	.760		
Q10 – Purchase paper from the Internet	Freshman/ Sophomore	62	1.37	.579	-.846	.399
	Senior	82	1.29	.509		
Q11 – Download or copy anything I find on the Internet	Freshman/ Sophomore	62	2.26	.808	.069	.945
	Senior	82	2.27	.956		

\* Significant at  $p < .05$