

The Academic Ethics Of Graduate Business Students: 1993 To 1998

Bob S. Brown, (E-mail: brownbs@marshall.edu), Marshall University

Abstract

Students enrolled in a graduate business school were surveyed in 1993 and 1998 about the extent of their participation in 15 unethical academic practices, their rating of the ethical level of the practices, and the reasons why they would participate in them. The level of participation in the practices showed a moderate increase over the five-year period, while ratings of their ethical level and reasons for participating in them stayed about the same. Possible explanations of the results and their implications for graduate faculty are discussed.

Introduction

Numerous articles have appeared in the popular press claiming that the incidence of cheating on college campuses has been increasing for several decades (for examples, see: Donahue & Heard, 1997; Young, 1998; "Your cheatin' heart," 1992). Academic studies have not always supported these claims.

Baird (1980) cited five studies conducted between 1941 and 1970 that found the cheating rate among college students had increased from 23% to 55%. His investigation found a continuation of the upward trend, with about 75% of undergraduate business, liberal arts, and education majors admitting to cheating in college.

McCabe and Bowers (1994) did a broad-based survey of college students in 1990. They extracted a sub-sample from the data base that matched the sample used by Bowers in a 1962 study and compared the rates of participation in nine unethical academic behaviors included in both studies. The

samples consisted of junior and senior males in small to medium sized residential schools that had selective admissions policies. In non-honor-code schools, collaboration on individual work increased, while cheating on tests, plagiarism, and turning in work done by others decreased. In schools with honor codes, cheating on tests and collaboration increased, while other forms of cheating decreased. The authors pointed out that they did not find the high rates of increase in cheating heralded by the media.

In 1993 McCabe and Bowers (McCabe & Trevino, 1996) surveyed students enrolled at nine medium to large state universities that were in Bower's 1962 sample. In the Bowers study, 63% of respondents admitted cheating in college. The rate in 1993 was 70%. Rates of cheating on exams and collaboration on individual work increased. The rate of copying from another student's exam went from 26% to 52%, while collaboration increased from 16% to 27%. However, plagiarism and turning in work done by someone else decreased slightly.

Readers with comments or questions are encouraged to contact the author via email.

Spiller and Crown (1995) analyzed the incidence of students changing answers on self-graded tests in 24 studies published between 1927 and 1986. They found no significant correlation between the incidence of cheating and the year the study was conducted, again failing to find the increase in cheating so often claimed. Cole and McCabe (1996) reported that surveys of undergraduate students at Stanford in 1976, 1980, and 1984 found no significant changes in types or levels of student dishonesty. A second study published in 1996 (Diekhoff, LaBeff, Clark, Williams, Francis & Haines) found some increases in student dishonesty from 1984 to 1994 in two first year survey courses. Cheating on exams stayed about the same, but cheating on quizzes increased from 22% to 31%, cheating on assignments increased from 34% to 45%, and the proportion of students cheating overall increased from 54% to 61%.

Several authors have offered possible explanations for the inconsistency of results of the studies. Crown and Spiller (1998) state that "... too often statements assessing chronological changes are proffered without adequate analysis." Baird (1980) and Cole and McCabe (1996) point out the difficulty of making meaningful comparisons from different studies conducted over time. Problems include the measurement of different cheating behaviors, taking measurements over different periods of time, using different sample and class sizes, conducting studies in different types of institutions, and an increased willingness of students to report cheating behavior as it becomes more acceptable.

Subjects in the studies reviewed above were all undergraduate students. A literature search produced no studies of changes over time in the academic ethics of graduate students. This paper addresses that gap in the literature and provides a level of comparability between samples that is higher than in most of the previous studies.

Method

I selected 15 unethical academic practices from the literature and asked respondents to rate on 5-point scales the ethical level of each practice,

ranging from one, *very unethical*, to five, *not at all unethical*, and the extent of their participation in each practice while in graduate school, ranging from one, *frequently*, to five, *infrequently*. The questions rating the ethical level and level of participation in the practices were alternated between the first and second pages of the questionnaire to control for the possibility that the rating of one of the measures would influence the rating of the other.

I also selected 11 reasons why students might engage in the practices. Respondents were asked to rate on a 5-point scale, ranging from one, *not at all likely*, to five, *very likely*, the likelihood that each of the reasons would account for a student's participation in the practices. I also asked respondents to rate on a 5-point scale from one, *much less ethical*, to five, *much more ethical*, how they believed the ethical level of the academic behavior of graduate students compared overall with that of undergraduate students. Several questions about respondent characteristics were also asked.

In the fall 1993 semester I mailed the questionnaire to the 313 business school students enrolled in courses at an eastern masters-degree-only college. Almost two thirds (64%) were MBA students. About one quarter (24%) were enrolled in the Master of Science in Management (MSM) program. The remainder were in the Master of Science in Industrial Relations (MSIR) program (8%) or were non-degree students (4%). Respondents were assured anonymity. After one reminder, 207 questionnaires were returned for a response rate of 66.1%.

In the spring 1998 semester I mailed the questionnaire to the 275 graduate business school students enrolled at the same institution. The composition of the student body in the spring of 1998 was as follows: MBA, 43%; health care, 23%; industrial relations, 16%; public administration, 7%; and non-degree, 11%. Differences in the composition of the student body were not as great as they appear. Most of the students in the MSM program in 1993 were in the health care option. By 1998, the non-health care options had been dropped and

the MSM degree had been changed to a health care degree. Most of the students listed as non-degree in 1998 would eventually enroll in the MBA program. After one reminder, 127 questionnaires were returned for a response rate of 46.2%.

Results

The results were used to test three hypotheses. The first hypothesis was derived from the position taken by the popular press that academic dishonesty is on the rise.

H1: The level of participation in the practices will be higher in 1998 than in 1993.

The data to test the first hypothesis are shown in Table 1. The table shows the mean on the 5-point, *frequently to infrequently*, rating scale for each practice for 1993 and 1998, and the difference between the means. Also shown are the percent of respondents reporting participation in each practice more than infrequently for 1993 and 1998, and the difference between the percents.

A higher level of participation in the practices in 1998 is indicated by both measures. The mean rating decreased from 1993 to 1998 for 14 of the 15 practices, moving closer to the *frequently* end of the scale. The mean increased for only one practice, "Visiting a professor to influence a grade."

Table 1
Participation in Academic Practices

Practice	Means ¹			Percents ²		
	93	98	98-93	93	98	98-93
Having someone check over a paper before turning it in	3.31	3.11	-.20	67.0	74.0	7.0
Asking about the content of an exam from someone who has taken it	4.11	3.91	-.20	45.9	54.3	8.4
Giving information about the content of an exam to someone who has not yet taken it	4.21	4.13	-.08	39.6	44.1	4.5
Working with others on an individual project	4.47	4.17	-.30**	32.2	45.7	13.5**
Padding a bibliography	4.67	4.64	-.03	23.3	26.0	2.7
Plagiarism	4.76	4.68	-.08	19.3	23.6	4.3
Taking credit for full participation in a group project without doing a fair share of the work	4.81	4.68	-.13*	16.4	27.6	11.2**
Visiting a professor to influence a grade	4.83	4.85	.02	12.6	12.6	0.0
Using exam crib notes	4.86	4.64	-.22**	7.2	19.2	12.0**
Having information programmed into a calculator during an exam	4.90	4.89	-.01	5.3	8.7	3.4
Using a false excuse to delay an exam or paper	4.91	4.79	-.12**	6.8	15.7	8.9**
Allowing another to see exam answers	4.93	4.89	-.04	4.8	8.7	3.9
Turning in work done by someone else as one's own	4.94	4.91	-.03	4.8	6.3	1.5
Copying off another's exam	4.95	4.90	-.05	3.4	4.7	1.3
Passing answers during an exam	4.97	4.91	-.06	1.5	3.1	1.6
Total participating in at least one practice more than infrequently				81.2	87.4	6.2

¹ Scale: 1 = frequently, 5 = infrequently

² Percent participating in practice more than infrequently

*p < .05, one-tailed test; **p < .01, one-tailed test

The percent of respondents reporting participation in the practices more than infrequently increased for the same 14 practices. The percent for “Visiting a professor to influence a grade” did not change.

One-tailed statistical tests were performed to determine if the changes in the means and percents were significant. Significance on both measures was found for four of the practices, at the .01 level for seven of the eight tests. The mean of “Working with others on an individual project” decreased from 4.47 to 4.17, while the percent participating in the practice more than infrequently increased 13.5% from 32.2% to 45.7%. The mean of “Taking credit for full participation in a group project without doing a fair share of the work” decreased from 4.81 to 4.68, while the percent participating in the practice more than infrequently increased 11.2% from 16.4% to 27.6%. The mean of “Using exam crib notes” decreased from 4.86 to 4.64, while the percent participating in the practice more

than infrequently increased 12% from 7.2% to 19.2%. The mean of “Using a false excuse to delay an exam or paper” decreased from 4.91 to 4.79, while the percent participating in the practice more than infrequently increased 8.9% from 6.8% to 15.7%.

Hypothesis one was generally supported. Though the level of increased participation was significant for only four practices, the increases reported for 14 of the 15 practices suggest a general upward trend in participation in unethical academic practices of the graduate business students involved in the studies. The percent participating in at least one practice more than infrequently also increased, from 81.2% in 1993 to 87.4% in 1998, but the increase was not significant.

Several studies found that students rated as less unethical practices they engaged in more frequently (Greene & Saxe, 1992; Newstrom & Ruch, 1976; Nuss, 1984; Stevens, 1984; Toim &

Table 2
Ratings of the Ethical Level of Academic Practices

<u>Practice</u>	<u>Means¹</u>		
	<u>93</u>	<u>98</u>	<u>98-93</u>
Having someone check over a paper before turning it in	4.12	4.03	-.09
Asking about the content of an exam from someone who has taken it	2.64	2.54	-.10
Giving information about the content of an exam to someone who has not yet taken it	2.54	2.46	-.08
Working with others on an individual project	2.60	2.73	.13
Padding a bibliography	1.89	1.87	-.02
Plagiarism	1.71	1.63	-.08
Taking credit for full participation in a group project without doing a fair share of the work	1.97	1.92	-.05
Visiting a professor to influence a grade	2.11	2.11	.00
Using exam crib notes	1.42	1.79	.37**
Having information programmed into a calculator during an exam	1.75	1.58	-.17
Using a false excuse to delay an exam or paper	1.55	1.52	-.03
Allowing another to see exam answers	1.27	1.16	-.11
Turning in work done by someone else as one's own	1.21	1.13	-.08
Copying off another's exam	1.14	1.08	-.06
Passing answers during an exam	1.15	1.10	-.05

¹ Scale: 1 = very unethical, 5 = not at all unethical.

* p < .05, one-tailed test; ** p < .01, one-tailed test

Borin, 1988). Consequently, the second hypothesis was:

H₂: The practices will be rated less unethical in 1998 than in 1993.

The data used to test the second hypothesis are shown in Table 2. The table shows the mean on the 5-point, *very unethical to not at all unethical*, rating scale for each practice for 1993 and 1998, and the difference between the means. Twelve of the practices were rated more unethical in 1998 than in 1993, as indicated by the lower means. "Working with others on an individual project" and "Using exam crib notes," two of the four practices showing significant increased rates of participation, were rated less unethical, indicated by higher means. One-tailed tests found only the change in the mean for "Using exam crib notes," from 1.42 to 1.79, to be significant. The second hypothesis was not generally supported. The results suggested that the original hypothesis might have been in the wrong direction. One-tailed tests in the opposite direction found none of the decreases in means significant.

Nothing was found in the literature to suggest that specific reasons for participation in unethical academic activities are becoming more or less

prevalent. Therefore, the third hypothesis was:

H₃: The ratings of the likelihood of the reasons for participation in unethical academic activities will be different in 1998 than in 1993.

The data used to test the third hypothesis are shown in Table 3. The table shows the mean on the 5-point, *not at all likely to very likely*, rating scale for 1993 and 1998 for each reason a graduate student might engage in unethical academic behavior and the differences between the means. Respondents rated as less likely 8 of the 11 reasons, indicated by the negative differences in means. A lack of study time, seeing the activity as a challenge or thrill, and peer pressure were rated more likely to be reasons. None of the differences in ratings were statistically significant by a two-tailed test. The third hypothesis was not supported.

Graduate business students in 1998 rated the ethical level of their behavior relative to undergraduates about the same as did students in 1993. The mean rating in 1998 was 4.34, compared to 4.45 in 1993. The difference was not statistically significant. Both ratings were between the *some-what more ethical* and *much more ethical* categories.

Table 3
Reasons for Unethical Behavior

<u>Reason</u>	<u>Means¹</u>		
	<u>93</u>	<u>98</u>	<u>98-93</u>
To get a high grade	4.02	3.99	-.03
Has the time but does not study	3.85	3.69	-.16
Does not have time to study	3.68	3.73	.05
Feels no one is hurt by behavior	3.67	3.60	-.07
Difficulty of material	3.58	3.55	-.03
Low risk of getting caught	3.39	3.34	-.05
Feels work is irrelevant	2.89	2.84	-.05
Instructor is poor or indifferent	2.88	2.82	-.06
Everyone does it	2.48	2.38	-.10
Was a challenge or thrill	1.95	2.05	.10
Peer pressure to do it	1.73	1.79	.06

¹ Scale: 1 = not at all likely, 5 = very likely.

* p < .05, two-tailed test; ** p < .01, two-tailed test

Conclusion

This study found moderately strong evidence that the level of participation in unethical academic practices by graduate business students increased over the period from 1993 to 1998. Students' evaluation of the ethical level of the practices and the reasons for participation in them remained about the same. Even though increases in rates of participation were statistically significant for only four practices, there is evidence of a broader-based trend. While studies of undergraduates have found increasing rates of participation in some practices and decreasing rates in others (McCabe & Bowers, 1994; McCabe & Trevino, 1996), this study found increasing rates of participation in 14 of the 15 practices and a near constant rate of participation in the 15th. In addition, the time period covered by this study was a relatively short five years. Other studies reporting comparable or greater rates of increase covered longer time periods. Diekhoff et al. (1996) found increases ranging from 7% to 11% over a ten year period. McCabe (McCabe & Bowers, 1994; McCabe & Trevino, 1996) found increases ranging from 11% to 27% over 28 and 31 year time spans.

Several factors could account for the changes found in the rates of participation between 1993 and 1998. The response rate in 1998 was 46%, compared to 66% in 1993, raising the possibility that the differences could reflect non-response bias. However, since cheating is not generally a socially acceptable form of behavior, it seems likely that non-respondents would be in the less ethical segment of the population. This would bias the 1998 results in the direction of more ethical behavior.

Only seven 1998 respondents indicated they had participated in the 1993 survey, suggesting the possibility that the composition of the student body changed over the five year time interval. Statistically significant differences were found between the 1993 and 1998 respondents on two variables. The 1998 respondents were younger. Fifty-two percent were between 20 and 34, compared to 35% in the 1993 survey. Studies of undergraduates have found higher rates of academic dishonesty

among younger students (Haines, Diekhoff, LaBeff, & Clark, 1986; McCabe & Trevino, 1997). Whitley (1998), in a review of eight studies, reported a negative correlation between cheating and age. The 1998 respondents were also farther along in their programs of study. Sixty-nine percent had completed at least 25 hours of course work, compared to 38% in 1993. Moffatt (1990) and Sierles, Hendrickx, & Circle (1980) found increased rates of cheating among students farther along in undergraduate and medical programs. However, Whitley (1998), reported no correlation between cheating and year in college.

The findings of this study have implications for faculty and managers. Articles in a special edition of *Management Accounting* in 1990, as reported in Horngren, Sundem, and Stratton (1996), emphasized the importance of business schools making students aware of the ethical dimensions of the decisions they will make on the job. Research suggests that ethical behavior at work is more likely if the worker's academic behavior has been ethical. The results of this study suggest that less ethical behavior on the job might be forthcoming. Educators need to emphasize ethical conduct both in the academy and on the job. The emphasis on ethical conduct on the job needs to be continued by the organizations that employ business school graduates. Outspoken support of ethical conduct by top management is one of the greatest motivators of such conduct in an organization (Horngren et al.).

Faculty must not let their guard down in their graduate courses. The level of participation in unethical activities by graduate business students was found to be not only high, but increasing. The study design did not permit the determination of causality, but the results suggest that increased vigilance by graduate faculty might be warranted if the characteristics of their students change in the direction of higher levels of attributes known to be correlated with dishonesty.

"Using exam crib notes" was the only one of the four practices showing a statistically significant increase in participation that takes place in the

classroom. "Working with others on an individual project," "Taking credit for full participation in a group project without doing a fair share of the work," and "Using a false excuse to delay an exam or paper" are behaviors that are not always observable by faculty and are, therefore, difficult to detect and prevent. Compounding the problem, instructors often assign more out-of-class individual and group projects in graduate classes than in undergraduate classes. In his discussion of strategies for reducing academic dishonesty, Whitley (1998) emphasizes the importance of communication in reducing participation in these types of activities. Not only is better communication of acceptable standards of behavior about the only alternative available to faculty, it can be effective simply because students are often unaware of what is considered acceptable. Whitley advocates clear statements of standards and policies on academic dishonesty in all catalogs, handbooks, course syllabi, and written instructions, as well as an oral statement by the instructor the first class meeting.

Suggestions for Future Research

Three types of future research are suggested. First, the study reported here was conducted in a small business school at a state college. The study should be replicated at other schools with different characteristics to determine if the findings presented here are applicable to other institutions. Second, the research should be on-going to continue tracking trends in academic ethics over time. Finally, the disciplines included in this study were all business related. Future researchers should consider similar investigations in other academic disciplines. □

References

1. Baird, John S., "Current Trends in College Cheating," *Psychology in the Schools*, Vol. 17, No. 4, pp. 515-522, 1980.
2. Cole, Sally and Donald L. McCabe, "Issues in Academic Integrity," *New Directions for Student Services*, " Vol. 73, pp. 67-77, 1996.
3. Crown, Deborah F. and M. Shane Spiller, "Learning from the Literature on College Cheating: A Review of Empirical Research," *Journal of Business Ethics*, Vol.17, pp. 683-700, 1998.
4. Diekhoff, George M., Emily E. LaBeff, Robert E. Clark, Larry E. Williams, Billy Francis, and Valerie J. Haines, "College Cheating: Ten Years Later," *Research in Higher Education*, Vol. 37. No. 4, pp. 487-502, 1996.
5. Donahue, Billy and Alex Heard, "Cheat Feats," *New York Times Magazine*, Vol. 146, Issue 50789, p. 15, 1997.
6. Greene, Aleza S. and Leonard Saxe, "Everybody (Else) Does It: Academic Cheating," Paper presented at the annual meeting of the Eastern Psychological Association, April 3-5, Boston, MA, Eric Document No. 347931, 1992.
7. Haines, Valerie J., George M. Diekhoff, Emily E. LaBeff, and Robert E. Clark, "College Cheating: Immaturity, Lack of Commitment, and the Neutralizing Attitude," *Research in Higher Education*, Vol. 25, No. 4, pp. 342-354, 1986.
8. Horngren, Charles T., Gary L. Sundem, and William O. Stratton, *Introduction to Management Accounting* (10th ed.), Prentice-Hall, Upper Saddle River, New Jersey, 1996.
9. McCabe, Donald L. and William J. Bowers, "Academic Dishonesty Among Males in College: A Thirty Year Perspective," *Journal of College Student Development*, Vol. 35, No. 1, pp. 5-10, 1994.
10. McCabe, Donald L. and Linda K. Trevino, "What We Know About Cheating in College: Longitudinal Trends and Recent Developments," *Change*, Vol. 28, No. 1, pp. 28-33, 1996.
11. McCabe, Donald L. and Linda K. Trevino, "Individual and Contextual Influences on Academic Dishonesty: A Multicampus Investigation," *Research in Higher Education*, Vol. 38, No. 3, pp. 379-396, 1997.
12. Moffatt, Michael, "Undergraduate Cheating," Eric Document No. 334931, 1990.
13. Newstrom, John W. and William A. Ruch, "The Ethics of Business Students: Preparation for a Career," *AASCB Bulletin*, April, pp. 21-30, 1976.

14. Nuss, Elizabeth M., " Academic Integrity: Comparing Faculty and Student Attitudes," *Improving College and University Teaching*, Vol. 32, No. 3, pp. 140-144, 1984.
15. Sierles, Fredrick, Ingrid Hendrickx, and Sybil Circle, "Cheating in Medical School," *Journal of Medical Education*, Vol. 55, No. 2, pp. 124-125, 1980.
16. Spiller, M. Shane and Deborah F. Crown, "Changes Over Time in Academic Dishonesty at the College Level," *Psychological Reports*, Vol. 76, pp. 763-768, 1995.
17. Stevens, George E., "Ethical Inclinations of Tomorrow's Citizens: Actions Speak Louder?," *Journal of Business Education*, Vol. 59, No. 4, pp. 147-152, 1984.
18. Tom, Gail and Norm Borin, "Cheating in Academe," *Journal of Education for Business*, Vol. 63, pp. 153-157, 1988.
19. Whitley, Bernard E., "Factors Associated with Cheating Among College Students," *Research in Higher Education*, Vol. 39, No. 3, pp. 235-274, 1998.
20. Young, Kristen, "College Cheating on the Rise," *Charleston (WV) Daily Mail*, October 8, pp. 1A, 11A, 1998.
21. "Your Cheatin Heart," *Psychology Today*, Vol. 25, No. 6, p. 9, 1992.

Notes