

Undergraduate Academic Cheating as a Risk Factor for Future Professional Misconduct

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“T’is education forms the common mind:
Just as the twig is bent the tree’s inclined.”
Alexander Pope (1688-1744)

Scientific misconduct may be more acceptable in the minds of those professionals who grew accustomed to lower academic standards during their formative undergraduate years. The hypothesis proposed in this paper is that the recent increase in cheating at the undergraduate level is likely to result in an increase in the number of future professionals involved in scientific misconduct.

Twenty years ago, academic misconduct at the undergraduate level was considered by the great majority of both students and faculty as unacceptable and dishonest behavior. Currently, not only are most undergraduate students aware that misconduct is very common but most of them by their Junior year have participated or witnessed more than one event. Even those students who do not engage in academic misconduct have become more skeptical of the need to be personally responsible for their own academic work and accept this lowering of standards as a fact of life.

Because of these changes in the environment of higher education, the incidence and prevalence of cheating by college students has been an area of intense concern for educators and researchers since the 1970s. A vast number of articles in the literature indicate that cheating or academic dishonesty is at epidemic proportions within academia (1-7). A representative sampling of articles documenting this

Eric # or Journal	Year	Sample size	Institutions	Reported cheating
ED427355	1998	203	four years two years	78 % 57%
EJ351071	1986	380		> 50%
ED334921	1990	232	Rutgers	88%
ED347931	1992	87		81%
EJ449186	1992	6000	31 top-ranked	business: 87% engineering: 74% science: 67% humanities: 63%
EJ489082	1994	480	2 colleges	89%
EJ518822	1995	300		83%
Res. High Ed.	1984	380	mid size	54.1%
37:487-502, 1996	1994	474	liberal arts	61.2%

Table 1. Studies showing increased cheating by undergraduate students.

recent increase in cheating by students is shown in Table 1. Estimates in the literature reveal that 75% to 98% of college students cheat at least once during their college career (8, 9). Students, also reported that they are deterred from cheating only by a fear of getting caught and public embarrassment (2, 10). High achievers and students who have too little time to study for tests are particularly vulnerable to cheating (11, 12).

Students also report that their perception of faculty reactions to cheating is one of apathy. Faculty members often do not report a case of student cheating to the institutional justice system, either for fear of legal repercussions or to prevent hurting the reputation of the student. Instead, many faculty members prefer to handle each case on an individual basis, sending a signal to students that the repercussions for cheating are minimal (6, 13). This signal is tantamount to acceptance of academic dishonesty as a fact in higher education by both faculty and students.

An added problem is that faculty and students often do not agree on what actions constitute cheating in and out of the classroom (14-17). The literature recommends that college teachers should be very specific in their definition of academic dishonesty, giving concrete examples, and then following through on consistent discipline when cheating occurs (18, 19). In an effort to determine the level of

potential disagreement and/or confusion as to what constitutes cheating behaviors in and out of the classroom, the students and faculty of the University of Montevallo were presented with a variety of examples of academic misconduct, and then asked to rank their perceived severity on a scale from 1 to 5 (1 = Not Severe to 5 = Very Severe) (14). The results of this study are shown in Table 2. In several cases (see questions 22-24) there was almost a full point difference between the student and faculty perception indicating a lack of communication between faculty and students. Some of the most problematic areas of disagreement (see questions 3, 5, 12, 14, and 15) indicate a educational moral laxity on the part of the students.

One may interpret these results in two different ways. One possibility is that the results reflect stricter standards developed by faculty members as they moved in their careers. In other words, their perception reflects a more mature evaluation of the scenario being considered. If this interpretation is correct, one also would expect students to improve their moral standards as they mature. In other words, the students' perception of what constitutes misconduct, should not have any influence in their future professional conduct. This hypothesis, however, does not take into consideration that the faculty members polled in this study already had a different perception of what constituted cheating

	Question	Faculty	Student	P
1	Looking directly at another persons paper to copy an answer during a test	4.88 ± 0.67	4.38 ± 1.29	0.0017
2	Using "crib notes" or a "cheat sheet" during a test or class assignment	4.83 ± 0.70	4.32 ± 1.31	0.0016
3	Getting a copy of the test prior to taking it	4.80 ± 0.76	3.94 ± 1.23	0.0001
4	Having/paying someone to do homework or at-home projects for you	4.76 ± 0.81	4.06 ± 1.20	0.0001
5	Copying someone's homework	4.63 ± 0.87	3.77 ± 1.19	0.0001
6	Using answer book or keys to get homework answers	3.95 ± 1.24	3.10 ± 1.34	0.0001
7	Leaving the test to go to the restroom/or another place to get answers	4.77 ± 0.84	4.24 ± 1.33	0.0022
8	Answering "here" or signing someone's name when he/she is absent	4.71 ± 0.79	3.55 ± 1.32	0.0001
9	Copying someone's paper to work and putting your name on it	4.82 ± 0.73	4.17 ± 1.30	0.0001
10	Trying to influence a teacher to give you a better grade	3.46 ± 1.31	2.83 ± 1.30	0.0011
11	Using sorority/fraternity test files	3.56 ± 1.46	3.05 ± 1.47	0.0178
12	Finding someone's idea and using it as your own	4.36 ± 1.00	3.77 ± 1.32	0.0009
13	Asking for answers with gestures or sign language during an in-class assignment	4.54 ± 1.01	3.93 ± 1.39	0.0010
14	Plagiarism of resource materials or documented work	4.76 ± 0.75	4.06 ± 1.39	0.0010
15	Using another's research for your own benefit	4.31 ± 1.13	3.67 ± 1.40	0.0008
16	Watching someone cheat without reporting it	3.51 ± 1.23	2.88 ± 1.26	0.0007
17	Not carrying your weight in a group project for which everyone gets the same grade	3.93 ± 1.17	3.62 ± 1.36	0.0991
18	Using sources on homework which the professor told you not to use	4.15 ± 1.16	3.59 ± 1.26	0.0526
19	Getting a teacher's copy of a test to sell	4.62 ± 1.03	4.22 ± 1.31	0.0072
20	Conducting group sessions to swap or check the accuracy of answers	2.71 ± 1.35	2.15 ± 1.34	0.0166
21	Giving answers with gestures or sign language during an in-class assignment	4.50 ± 1.18	3.83 ± 1.30	0.0017
22	Lying to a teacher about why you are not prepared in class	4.22 ± 1.98	3.27 ± 1.31	0.0000
23	Taking money for doing someone's work	4.58 ± 1.01	3.62 ± 1.33	0.0001
24	Glancing at another paper and seeing something to jar your memory	4.40 ± 1.15	3.49 ± 1.24	0.0000
25	Working with someone else on a take-home exam	3.92 ± 1.37	3.06 ± 1.37	0.0004

Table 2. Perception by Faculty and Students of Cheating Behavior in College. 140 students and 108 faculty members were asked to assign a value to the perceived severity of the behavior on a scale of 1 to 5, with 5 being most severe. The results are presented as average ± SD. The study was carried out at the University of Montevallo during the Fall of 1997.

when they were in college. They grew up with a different set of standards, in an environment in which cheating was not as prevalent. Thus, accepting this hypothesis would imply that regardless of the predominant moral values among college students at any given point in

history, they will always develop the correct moral values as they become professionals.

An alternative hypothesis is that, although the moral standards of most individuals increase through life, some of these individuals do not see any need to change their values. For them the

concept of “misconduct” disappears. The concern of those interested in maintaining high post-secondary educational standards is that the habits established by some college students will continue to be their habits in graduate school, employment and research in the future. Therefore, an increase in the proportion of an undergraduate students involved in academic misconduct is likely lead into an increased incidence of professional misconduct in the future.

The current situation is likely to deteriorate even more. The development of the Internet at the end of the 20th century has also increased the number of cheating episodes by providing tools that were not available even 10 years ago. Students may now download an enormous amount of information in seconds, which may be incorporated into a paper with a couple of keystrokes. Moreover, several virtual companies have proliferated offering term papers in all disciplines on a per page cost (see for example, www.schoolsucks.com, www.ezwrite.com, www.academictermpapers.com, etc.). In the last two years there has been a increase in number of cases of plagiarism by students who simply download text from the internet, not just at the University of South Alabama and the University of Montevallo but also at many other institutions. When confronted by the faculty, these students are dismayed at getting caught, but many will repeat similar behaviors in the future. The only tools available to faculty to identify these cases is to search the web for a specific (unique) paragraph in the paper or to contract the services of commercial search engines (for example, www.plagiarism.org) that can look for the papers sold to students by Internet companies. The first procedure is time-consuming and limited. Hiring the services of a company to track these papers down still requires someone to enter the text in the Internet and also the becomes too expensive.

Since the formative years of college are important in setting many of our standards, as the students’ academic standards decrease future professionals may find it easier to engage in scientific misconduct as they will perceive it to be less immoral and more expedient. For example, a study done with 2,459 sophomore medical students showed that 4.7% admitted to cheating while 66.5% admitted to having heard of cheating among their peers (20). About 70% of the students that admitted having cheated in medical school also admitted to cheating in high

school and college. Thus we see a moral laxity beginning at the high school level (or before) and progressing, probably with more cheating occurring rather than less, as the level of the academic workload increases.

One of the established patterns of human development is the relative stability of personality traits and behavioral habits over the life span. Thus, traits of dishonesty in the face of hard or demanding intellectual work in college, will, in all likelihood, remain stable characteristics as these college students grow older. One cognitive/moral development theorist, Kohlberg, proposed a universal set of discrete stages of moral development based on Piaget’s theory of cognitive development (21, 22). As a child develops more complex and different modes of thinking and reasoning, the child should also be able to make more complex and adaptive moral judgments. Kohlberg proposed a six-level moral developmental sequence. At Levels 1 and 2, there is a basic desire to escape punishment and to win some level of approval from significant others. At Levels 3, 4, 5, and 6, the individual may progress from living up to others’ expectations, to following rules to maintain the social order and avoid chaos, to adhering to a social contract only when it appears to be valid to the individual, and, finally, to upholding moral judgments and principles despite potential harm or threat to oneself because of their intrinsic worthiness.

Kohlberg proposes that rarely do most individuals progress in moral development past Level 3 or perhaps 4 (21, 22). We do the “right” thing in any given situation to garner favor and approval from others who expect a substantial effort from us. And, if we perceive the rules that are in place for us to follow to be unfair or nonsensical, we may make a judgment to avoid complying with those rules on what we call moral grounds.

With Kohlberg’s postulations in mind, it is then easy to hypothesize that an individual who learned to cheat in academic situations without active reprisal from faculty or a school administration, would tend to repeat those cheating behaviors in future learning/academic/research situations as a way to gain approval for completion of the assignment or project. In addition, if the adult who participated in academic dishonesty all the way through graduate school may view the demands of a thesis or dissertation committee as non-valid, that

individual may engage in academic dishonesty with an almost-clear conscience. The requirements of “publish or perish,” then, in the post-academic world may become “non-valid” in the professional’s mind, and the individual may continue to participate in dishonesty in research.

In summary, the correlation between cheating in high school, college and in medical school supports our hypothesis that future professional misconduct will also show a positive correlation with previous history. Thus, we propose that part of the efforts to promote integrity among future professionals should be devoted to curbing cheating at the undergraduate level since an increase in one is likely to increase the other.

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