College Cheating: A Twenty-Year Follow-Up and the Addition of an Honor Code

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This study examines university students' behaviors, attitudes, and beliefs related to academic dishonesty using data collected in 1984, 1994, and 2004. We are unaware of any other research program that has used the same instrument to monitor academic dishonesty at the same institution over such a long period of time. Several authors have critiqued the academic dishonesty literature, questioning the validity of comparing historical and recent studies (Brown & Emmett, 2001; Graham, Monday, O'Brien, & Steffen, 1994; Whitley, 1998; Whitley, Nelson, & Jones, 1999) since different studies have measured academic dishonesty in many different ways (Vowell and Chen, 2004). Whitley et al. (1999) stated, "Some of this variance [in reported cheating incidence rates], perhaps a substantial degree, could be due to the wide range of measures used to assess both cheating behavior and attitudes…In the case of both attitudes and behavior the studies used too many different operational definitions to allow assessment of the relationship between operational definition and effect size" (pg. 667). Brown and Emmett (2001) have also questioned studies that report high levels of college cheating, suggesting that these studies might simply be defining cheating in broader terms. In the current study, students were defined as "cheaters" if they reported cheating at some time in their college career on quizzes, exams, or assignments, however they defined those terms. All others were defined as "noncheaters." This same rule was also followed in 1984 and 1994.

In 1984, we found that 54% of students admitted to cheating and we characterized these cheaters as immature, lacking educational commitment, and likely to use neutralizing attitudes to lessen guilt associated with cheating (Haines, Diekhoff, LaBeff, & Clark, 1986). Cheating increased in 1994 to 61%. This increase was significant and suggested that academic dishonesty was on the rise. Cheaters continued to neutralize more than noncheaters; however, both cheaters and noncheaters evidenced less neutralizing than the 1984 cohort. Even as cheating increased, neutralizing decreased, indicating to us that academic dishonesty had become so normative that it was no longer viewed by students as a deviant behavior that needed to be justified (Diekhoff et al., 1996).

The recent literature has reported similarly high rates of overall academic dishonesty, with reports ranging from 52-90% (Genereux & McLeod, 1995; Graham et al., 1994; Lester & Diekhoff, 2002; McCabe & Bowers, 1994; Vowell and Chen, 2004). Academic dishonesty percentages are lower if one looks at behavior within a specific semester. For example, Jordan (2001) found that only 31% of students cheated on an exam or paper during one semester. In addition, 9% of the students in

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the Jordan study committed 75% of the cheating acts. These studies suggested that most students engage in cheating at some point during their academic career; however, a much smaller percent cheats in any given semester.

External factors (e.g., fear of detection and punishment) appear to be more effective in deterring cheating than internal factors (e.g., guilt) (Diekhoff et al., 1996; Genereux & McLeod, 1995; Graham et al., 1994). In 1994, we found that external factors ranked as the top 4 out of 6 deterrents to cheating. First and foremost was the embarrassment of being caught by a faculty member. Being dropped by the instructor ranked second, followed by fear of the university's response, and receiving an 'F.' Guilt ranked fifth, and fear of disapproval by one's friends showed the least deterrent effect (Diekhoff et al., 1996). Genereux & McLeod, (1995) and Burns, Davis, Hoshino, and Miller (1998) also reported that the threat of punishment, such as fear of expulsion, was a top deterrent to cheating. Additional external deterrents included instructor vigilance and spacing in the exam room (Genereux & McLeod, 1995). Thus, the reduction of academic dishonesty depends primarily on faculty and institutional actions.

Unfortunately, the literature is quite clear on how disengaged faculty and university administrators are from student cheating. Diekhoff, LaBeff, Shinohara, and Yasukawa (1999) reported that only 3% of cheaters reported having ever been caught, and Jendrek (1989) and McCabe (1993) found that most faculty members are reluctant to follow official university policies and procedures in handling student cheating. Seventy-one percent of the faculty surveyed in a national sample stated that confronting a student about cheating is one of the most negative aspects of being a college professor (Keith-Spiegel, Tabachnick, Whitley, & Washburn, 1998). McCabe stated that students perceive faculty reactions to cheating as relatively mild, and Graham et al.'s (1994) research confirmed McCabe's report with the finding that only 9% of faculty who caught students cheating had penalized them. Reasons for failing to respond adequately to academic dishonesty included: (a) emotional consequences of dealing with the student and university, including stress, fear (tenure-tracked faculty worrying about career), and a lack of courage (faculty worrying about teaching evaluations after leveling a complaint) (Keith-Spiegel et al., 1998); (b) excessive time and effort needed to gather evidence and pursue a charge of cheating (Alschuler & Blimling, 1995; Groark, Oblinger, & Choa, 2001; Keith-Spiegel et al., 1998; McCabe, 1993); (c) denial – "I know a lot of cheating goes on, but not in my classes" (Keith-Spiegel et al., 1998, pp. 224); (d) perceived lack of administrative support and the belief that any punishment would be light (Groark et al., 2001; Lester & Diekhoff, 2002; McCabe, 1993); and (e) fear of getting involved in potentially expensive litigation (Alschuler & Blimling, 1995; Lester & Diekhoff, 2002).

One approach to curbing academic dishonesty is to establish an honor code that receives broad student and faculty support (McCabe & Trevino, 2002). Student honor codes establish clear definitions of cheating as well as the university's response (Burns et al., 1998; Graham et al., 1994; Jordan, 2001). This in turn has been found to increase the faculty's willingness to report student cheating (McCabe, 1993). Furthermore, well-established student support for an honor code creates an environment in which peers clearly demonstrate a distaste for cheaters (McCabe & Trevino, 2002; McCabe, Trevino, & Butterfield, 1999; McCabe, Trevino, & Butterfield, 2001). For a model on how to build an honor code, see McCabe and Pavela (2000).

The goals of the current study were to evaluate the extent of academic dishonesty over

20 years, to assess changes in student attitudes toward cheating, to identify variables that discriminate between cheaters and noncheaters, and to assess the relative effectiveness of various deterrents to cheating. Data for our original study were collected in 1984 atdi: a small, open-enrollment state-supported university of 4,900 students in the southwestern United States. A 49-item survey was designed in 1984 for use in our first campus-wide study of academic dishonesty (Haines, et al. 1986) It was distributed in introductory sociology and psychology classes, the two options available to students in meeting the university's core curriculum requirement in the social and behavioral sciences. Surveys were completed anonymously in class and were returned by 380 students. Ten years later, in 1994, data were collected in the same manner from 474 students in the same classes at the same university, then grown to 5,700 students. In the present study, another ten years later, data were collected once again in the same manner from 401 students (of 6,100 enrolled in the university). The survey has remained essentially unchanged over the 20 years in which we have collected data. Two open-ended questions were added in 1994, and in 2004 we added the category of "Internet cheating" to the menu of cheating methods, and six items assessing students' knowledge of and beliefs about the university's new Student Honor Code (appendix 1), established in academic year 2002-2003.

METHOD

Participants

The current survey was administered in spring 2004 in introductory sociology and psychology classes. Students completed the survey voluntarily and anonymously in class. Of 558 students enrolled in the surveyed classes, usable surveys were returned by 401 students. All participants were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 2002). Since all students at our institution must complete one of these courses, surveys conducted in the courses are guaranteed to access the full diversity of the student body.

Representativeness of the sample to the student body of 6,100 students was evaluated by comparing sample age, gender, and student classification statistics to known university parameters on these variables. In comparison to the student body as a whole, our sample was younger (sample $M = 21.09$, $SD = 4.92$ vs. population mean = 26.97), $t(400) = 23.52$, $p < .01$. In addition, the sample was overrepresented by freshmen and sophomores (84.1% of the sample vs. 38.4% of the student body), $\chi^2(1, N = 401) = 7.14$, $p < .05$. There was no significant difference between the sexual composition of the sample and population (44% males and 54% females in the sample vs. 42% males and 58% females in the student body, $\chi^2(1, N = 401) = .36$) That the sample was younger than the student body and overrepresented by underclassmen is consistent with our having sampled from introductory courses that are heavily enrolled by beginning students. This was also evident in our 1984 and 1994 samples and suggests that our findings are better generalized to younger underclassmen.

The 2004 sample was also compared directly to previous samples to evaluate the appropriateness of cohort comparisons. Mean age has declined steadily and significantly over the years, $F(2, 1252) = 8.95$, $p < .01$. For 1984, $M = 22.73$, $SD = 5.80$; for 1994, $M = 21.93$, $SD = 5.51$; and for 2004, $M = 21.09$, $SD = 4.90$. Academic classification has been skewed consistently in favor of underclassmen,

though less so in 1994 than other years, $\chi^2(2, N = 1255) = 7.14$, $p < .05$. Our samples were 84% freshmen and sophomores in 1984, 78% freshmen and sophomores in 1994, and 84% freshmen and sophomores in 2004. There has been a steady, but statistically nonsignificant, $\chi^2(2, N = 1255) = 5.99$, increase in males in our samples over time, but females remain in the majority. Our samples included 38% males in 1984, 41% in 1994, and 44% in 2004.

RESULTS

Extent of Cheating

Students were asked to indicate if, during their tenure at the university, they had cheated on exams, quizzes, or class assignments. Percentages who reported cheating in one or more of these ways are summarized in Table 1. Overall, 57.4% of students in 2004 admitted to cheating during their time at the university. This compares to 54.1% in 1984 and 61.2% in 1994. With samples of the size we have used, the margin of error for a 95% confidence interval is +/– 5.0%. The majority of students in our samples reported cheating.

Table 1 also summarizes the results of *z*-tests used to evaluate the statistical significance of changes in the proportions of students who reported cheating from 1984 to 1994, from 1994 to 2004, and from 1984 to 2004 (Bruning & Kintz, 1977). From 1984 to 1994, cheating increased significantly on all measures except cheating on exams. In contrast, cheating levels slightly declined from 1994 to 2004 on all measures. Though these declines were not statistically significant, they brought 2004 cheating incidence rates back toward 1984 levels on all measures. Cheating on quizzes and assignments remained significantly higher than in 1984.

Cheating and Neutralization

Sykes and Matza (1957) first conceptualized neutralization as a means to sidestep the rules and deflect blame or guilt, but the concept stretches much further back to Freud's defense mechanism of rationalization. One of the most consistent findings of our research has been the greater tendency of cheaters to more strongly endorse 11 statements that neutralize cheating behavior. These data are summarized in Table 2 (Note that lower scores indicate higher cheating neutralization and higher

TABLE 1.

Cheating Incidence Levels in 1984, 1994, and 2004

Type of Cheating	1984 (*N* = 380)	Significance of Change from 1984-1994 *z*, significance	1994 (*N* = 474)	Significance of Change from 1994-2004 *z*, significance	2004 (*N* = 401)	Significance of Change from 1984-2004 *z*, significance
Cheated on Exams	23.7%	0.21, n.s.	23.1%	0.78, n.s.	20.9%	0.99, n.s.
Cheated on Quizzes	22.1%	–3.00, $p < .01$	31.3%	0.10, n.s.	31.0%	–2.98, $p < .01$
Cheated on Assignments	34.2%	–3.23, $p < .001$	45.1%	1.04, n.s.	41.6%	–2.25, $p < .05$
Overall Cheating (on Exams, Quizzes, or Assignments)	54.1%	–2.09, $p < .05$	61.2%	1.14, n.s.	57.4%	–0.98, n.s.

scores reflect less neutralization). In both 1984 and 1994, cheaters displayed significantly higher levels of neutralization than did noncheaters. This finding was replicated in 2004, with cheaters expressing a significantly stronger neutralizing attitude (M = 41.39, SD = 9.50) than noncheaters (M = 47.44, SD = 7.67), $t(395) = -6.817$, $p < .001$.

Cheating and the Student Honor Code

A student honor code addressing issues of academic dishonesty was written and adopted by the university's Student Senate during the 2002-2003 academic year (appendix 1). The honor code is published in the student handbook and the university catalog, and is engraved on a plaque that hangs in the student center. Honor codes like this one are often cited as contributing to lower levels of cheating.

We evaluated the potential influence of the student honor code on cheating by examining differences in perceptions of the honor code among cheaters and noncheaters. The first question in our survey pertinent to the student honor code simply asked students if they were aware of its existence. There was virtually no difference on this measure between cheaters (68% were aware) and noncheaters (69% were aware). Thus, awareness of the honor code is not associated with the decision whether or not to cheat. On the next page of the survey we provided a copy of the honor code for students to read (appendix 1), followed by a series of rating scale questions about the code and cheating. When asked to rate the degree to which the honor code influences their own behavior as it relates to cheating (1 = "no effect" to 5 = "extremely strong effect") there was again no significant difference between cheaters (M = 2.65, SD = 1.18) and noncheaters (M = 2.73, SD = 1.52). Further, when asked to rate the degree to which they think the honor code influences the cheating behavior of others, there was no significant difference between cheaters (M = 2.57, SD = .87) and noncheaters (M = 2.67, SD = .85).

Although there is no evidence to suggest that the honor code affects cheating behavior, it is interesting to note that cheaters and noncheaters did differ significantly in their endorsement of the code. When asked to rate the degree to which they endorse the honor code (1 = "strongly disagree" to 5 = "strongly agree"), noncheaters (M = 4.18, SD = .97) were significantly stronger in their endorsement than were cheaters (M = 3.84, SD = .93), $t(396) = 3.53$, $p < .001$. Thus, the honor code appears to capture a favorable sentiment toward honesty among noncheaters that is lacking among cheaters (this is consistent with the lower levels of cheating neutralization among noncheaters discussed previously). Perhaps honest students say that the honor code doesn't strongly affect their behavior because they believe in the sentiments expressed by the code and would follow those beliefs with or without an honor code. Dishonest students say the honor code doesn't strongly affect their behavior because they don't subscribe to the sentiments it expresses.

Cheating Deterrents

A fundamental question in the cheating research literature is, "What will deter cheating?" Our participants were asked to rate the effectiveness (0 = *no influence*, 1 = *some influence*, 2 = *major influence*) of several possible deterrents to cheating. Three deterrents focused on fear of punishment (e.g., fear of receiving an F on the exam, fear of being dropped from class by the instructor, and fear of university disciplinary action); three deterrents focused on social considerations (e.g., disappointment/anger of one's family, friends' disapproval, and embarrassment); and, alone in its category, we asked students to rate

TABLE 2.

Means and Standard Deviations on Cheating Neutralization Scales in 1984, 1994, and 2004

Neutralizing Statements	1984		1994		2004	
	Cheaters (*N* = 205)	Noncheaters (*N* = 174)	Cheaters (*N* = 283)	Noncheaters (*N* = 181)	Cheaters (*N* = 230)	Noncheaters (*N* = 171)
"Jack should not be blamed for cheating if . . ."	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
1. the course material is too hard.	3.08 (0.62)	3.44 (0.67)	3.98 (0.94)	4.38 (0.85)	3.91 (1.03)	4.35 (0.88)
2. he is in danger of losing his scholarship.	3.09 (0.67)	3.42 (0.68)	3.88 (1.02)	4.30 (1.00)	3.74 (1.13)	4.23 (1.00)
3. he doesn't have time to study.	3.04 (0.66)	3.36 (0.67)	3.84 (0.99)	4.30 (0.90)	3.73 (1.09)	4.28 (0.84)
4. the instructor doesn't seem to care.	2.74 (0.79)	3.17 (0.76)	3.50 (1.22)	4.10 (1.06)	3.35 (1.26)	4.09 (1.03)
5. the instructor acts like his/her course is the only one.	2.68 (0.75)	3.16 (0.74)	3.60 (1.14)	4.14 (1.02)	3.42 (1.28)	4.09 (1.02)
6. his cheating isn't hurting anyone.	3.23 (0.65)	3.47 (0.61)	4.03 (0.96)	4.45 (0.87)	4.01 (1.00)	4.47 (0.72)
7. everyone else in the room seems to be cheating.	2.96 (0.77)	3.32 (0.75)	3.74 (1.10)	4.31 (0.94)	3.67 (1.14)	4.27 (0.93)
8. the people sitting around him made no attempt to cover their papers.	3.13 (0.64)	3.39 (0.66)	4.07 (0.96)	4.47 (0.82)	4.06 (1.02)	4.51 (0.79)
9. his friend asked him to help him/her cheat.	3.01 (0.70)	3.45 (0.66)	3.93 (0.91)	4.45 (0.82)	4.00 (0.96)	4.39 (0.92)
10. the instructor left the room.	2.97 (0.74)	3.41 (0.69)	3.71 (1.08)	4.34 (0.94)	3.66 (1.22)	4.32 (0.95)
11. the course is required.	2.98 (0.72)	3.37 (0.69)	3.99 (0.98)	4.44 (0.84)	3.82 (1.10)	4.42 (0.95)
Total Neutralization Score	32.90 (5.41)	36.95 (6.01)	42.36 (9.01)	47.69 (8.24)	41.39 (9.50)	47.44 (7.67)

Note. Lower cheating neutralization scores indicate higher cheating neutralization; higher scores indicate lower neutralization.

the deterrent effectiveness of guilt.

Cheaters and noncheaters showed no significant differences on the rated effectiveness of any of the three punitive deterrents, nor on a combination of these deterrents formed by averaging the three components (for cheaters: $M = 1.64$, $SD = .52$; for noncheaters: $M = 1.61$, $SD = .64$). Punitive deterrents were rated as more effective than either social deterrents or guilt by both cheaters and noncheaters, even though only 8% of cheaters reported that they had ever been caught cheating. It is surprising that punitive deterrents are rated as effective as they are, given the low probability that cheating will be detected.

Cheaters and noncheaters did differ significantly on the rated effectiveness of one of the social deterrents, i.e., friends' disapproval (for cheaters: $M = .47$, $SD = .62$; for noncheaters, $M = .82$, $SD = .76$; $t(399) = -5.15$, $p < .001$). Cheaters and noncheaters also differed significantly on a combination of the social deterrents formed by averaging the three components: for cheaters, $M = 1.15$, $SD = .46$; for noncheaters, $M = 1.30$, $SD = .56$; $t(398) = -2.96$, $p < .01$. It is worth pointing out that, although cheaters and noncheaters differed significantly in their views of the deterrent effectiveness of their friends' disapproval of cheating, both groups gave this deterrent very low effectiveness ratings, noticeably lower than any other type of deterrent. Apparently neither the friends of cheaters nor the friends of noncheaters particularly care if someone cheats, consistent with the finding that cheating is behavior in which most students engage.

Finally, cheaters and noncheaters differed significantly in their ratings of the deterrent effectiveness of guilt: for cheaters, $M = 1.25$, $SD = .76$; for noncheaters, $M = 1.59$, $SD = .72$; $t(398) = -4.54$, $p < .001$, with noncheaters more strongly affected by guilt than cheaters. Noncheaters' reluctance to justify cheating, their stronger endorsement of the honor code, and their higher ratings of the deterrent effectiveness of guilt all point to a higher level of moral reasoning in comparison to cheaters.

Additional Discriminating Variables

In 1984, we identified 10 variables that provided significant discrimination of cheaters and noncheaters. In 1994, 22 variables were identified that discriminated between the groups, including all 10 identified in 1984. Once again we looked for variables that discriminate between cheaters and noncheaters in 2004. The list includes many variables that were identified before, some new variables, and some variables dropped off our previous lists. The list for 2004 appears in Table 3, along with significance tests. Independent-samples *t*-tests were used to assess differences between cheaters and noncheaters on continuous dependent variables; χ^2 tests for independent samples were used to assess differences between the groups on nominal scale dependent variables (Diekhoff, 1996).

Variables that continue to discriminate between cheaters and noncheaters were: age (cheaters are younger), marital status (cheaters are more likely to be single), GPA (cheaters have lower grades), parental assistance (cheaters are more likely to depend on their parents for financial support), Greek (cheaters are more likely to be members of fraternities and sororities), intramural sports (cheaters are more likely to be involved in intramural sports), neutralization (cheaters neutralize cheating to a greater degree), awareness of cheating by others (noncheaters report seeing more cheating around them), thinking the majority of students approve of cheating (cheaters are more likely to believe that the majority of other students approve of cheating), thinking that cheating is necessary for some students (cheaters are more likely to believe that cheating is necessary in order for some students

TABLE 3.

Variables Discriminating Between Cheaters and Noncheaters in 2004

Discriminating Variables	Cheaters	Noncheaters	Significance Tests	Also seen in 1984?	Also seen in 1994?
Age	*M* = 20.18 *SD* = 3.40	*M* = 22.24 *SD* = 6.20	$t(397) = -4.24$, $p < .001$	yes	yes
Marital Status (% married)	7%	16%	$\chi^2(1, N = 400) = 10.08$, $p = .001$	yes	yes
GPA	*M* = 2.74 *SD* = .64	*M* = 2.99 *SD* = .64	$t(333) = -3.50$, $p = .001$	yes	yes
Parental Assistance (% receiving assistance)	52%	41%	$\chi^2(1, N = 401) = 5.00$, $p = .03$	yes	yes
Greek (% who are fraternity or sorority members)	15%	6%	$\chi^2(1, N = 397) = 6.59$, $p = .01$	yes	yes
Intramural Sports (% who participate)	25%	10%	$\chi^2(1, N = 400) = 14.51$, $p < .001$	yes	yes
Total Neutralization Scores (Note: lower scores indicate high neutralization)	*M* = 41.39 *SD* = 9.50	*M* = 47.44 *SD* = 7.67	$t(395) = -6.82$, $p < .001$	yes	yes
Notice Others Cheating (1 = *often*, 2 = *sometimes*, 3 = *rarely*, 4 = *never*)	*M* = 2.17 *SD* = .79	*M* = 2.78 *SD* = .90	$t(396) = -7.22$, $p < .001$	yes	yes
Think Majority of Students Approve Cheating	62%	33%	$\chi^2(1, N = 216) = 17.15$, $p < .001$	no	yes
Think cheating is necessary for some students	62%	41%	$\chi^2(1, N = 395) = 16.45$, $p < .001$	no	yes
Effectiveness of Social Deterrents to Cheating (1 = *some influence*; 2 = *major influence*)	*M* = 1.15 *SD* = .46	*M* = 1.30 *SD* = .56	$t(398) = -2.96$, $p = .003$	no	yes
Effectiveness of Guilt Deterrent (1 = *some influence*; 2 = *major influence*)	*M* = 1.26 *SD* = .76	*M* = 1.59 *SD* = .72	$t(398) = -4.54$, $p < .001$	no	yes
Reactions to seeing others cheating: Report cheating	3%	15%	$\chi^2(1, N = 401) = 17.90$, $p < .001$	no	yes
Confront the cheater	1%	5%	$\chi^2(1, N = 401) = 5.30$, $p = .02$	no	yes
Ignore cheating	87%	70%	$\chi^2(1, N = 401) = 17.14$, $p < .001$	no	yes
Endorse the honor code (1 = *strongly disagree*; 3 = *mixed feelings*; 5 = *strongly agree*)	*M* = 3.84 *SD* = .93	*M* = 4.18 *SD* = .97	$t(396) = -3.53$, $p < .001$	no	no

to be competitive), effectiveness of social deterrents to cheating (cheaters are less deterred from cheating by their friends' disapproval), effectiveness of guilt deterrent (cheaters are less deterred from cheating by guilt), and reactions to seeing others cheating (noncheaters are more likely to report cheating that they observe, are more likely to confront cheaters that they see, and are less likely to simply ignore cheating). Endorsement of the student honor code was the one new variable identified in the current study that discriminated cheaters from noncheaters. Cheaters showed weaker endorsement of the code than did noncheaters.

Several variables that were found in our previous surveys to discriminate between cheaters and noncheaters did not emerge as significant discriminators in the current study including scholarship status (we found previously that cheaters were more likely to be scholarship recipients), personal financial investment (we found previously that cheaters were less likely to use personal earnings and savings for their education), grant status (we found previously that cheaters were less likely to be grant recipients), varsity sports (we found previously that cheaters were more likely to be involved in varsity sports), employment status (we found previously that cheaters were less likely to be employed on a full-time basis), full-time student status (we found previously that cheaters were more likely to be full-time students), and resentment of cheating (we found previously that cheaters were less resentful of the cheating of others).

DISCUSSION

A major criticism of the academic dishonesty literature is the inconsistency in how cheating is defined from one study to the next (Brown & Emmett, 2001; Graham, et al., 1994; Whitley, et al., 1999). This lack of consistency makes interstudy comparisons difficult and may distort estimates of the incidence of academic dishonesty across time. By using the same instrument over 20 years, we can be more confident that our findings accurately document changes in cheating behaviors, beliefs, and attitudes.

As was true in 1984 and 1994, cheating continues in 2004 to be self-reported by over one-half of our participants. We found a significant increase in academic dishonesty from 54% in 1984 to 61% in 1994 (Diekhoff et al., 1996; Haines et al., 1986). In 2004, there was a nonsignificant decrease in academic dishonesty to 57%. Brown and Emmett (2001) reported that cheating has not really increased over a 33-year period, but that changing definitions of cheating have resulted in the appearance of an increase (they compared 31 studies), our findings largely support their hypothesis: some forms of cheating have increased during the last 20 years, but other forms have declined. Overall, there has been little change.

Unlike McCabe et al. (1999, 2001), who found honor codes to be connected with lower levels of cheating, student awareness of an honor code with broad university support did not reduce student cheating in our study. When asked whether or not an honor code would impact their cheating or that of others, cheaters and noncheaters were similar in reporting a mild effect. Jordan (2001) may offer an explanation for our findings. Specifically, knowing about an honor code is different than knowing the university or other students will follow through on the procedure set forth by the honor code. It is possible that our honor code is still too new and too few students have seen it put to use for the honor code to be much of a deterrent. Though differing in their levels of endorsement, cheaters and noncheaters alike reported some level of agreement with the honor code. The fact that cheaters report that they tend to agree with the code but cheat

anyway may reflect a kind of resignation: "I don't want to cheat, but it is the only way to compete in an environment in which cheating is so widespread."

Consistent with our previous findings, punitive factors continue to be perceived by students as the most effective deterrents to cheating (Diekhoff et al., 1996). This is surprising since only 8% of the cheaters in the current study reported they had ever been caught, up from 3% in 1994. Unlike McCabe and Trevino (1997), who reported that peer disapproval was the strongest deterrent to cheating, social deterrents, like a friend's disapproval, were rated by our participants as only marginally effective. Finally, students in our survey did not view guilt as an effective deterrent.

On the other hand, noncheaters, as compared to cheaters, are less likely to justify cheating, have higher rates of endorsing the honor code, and are more impacted by guilt. We view this as evidence of higher moral reasoning and this variable may be important to future academic dishonesty research. As campuses prepare young adults for the world, the development of moral and ethical reasoning may become an increasingly important goal to be encouraged by various sectors of student life (e.g., student affairs activities, sections in core curriculum courses). However, we also recognize that students come to higher education with 17 or more years of life experience, and the teaching of moral and ethical reasoning is, at minimum, a large, ongoing task. Some professions require a certain number of ethics hours to be a part of yearly continuing education training, and there might be some value in extending this model to our college campuses.

Limitations

One strength of the current study is that the same institution was examined over a 20-year span of time. However, the fact that the three studies examined cheating at only one institution is a weakness of the research design. Even though our student body consists of students from across the nation and many foreign countries, each campus has its own culture. By limiting ourselves to one campus, we may be missing important factors that commonly occur at other universities and colleges.

Since we are an open-enrollment institution, more selective universities and private colleges may not find our results applicable to their specific student bodies. In particular, open-enrollment campuses like ours are more likely to have students needing remedial work. The varying skill levels of our students may aid in the creation of a perspective that cheating is necessary to survive for those struggling students.

Our main focus has been on freshmen and sophomore students. The immaturity and lower skill level of these students may also lead to higher rates of academic dishonesty. The generalization of these results to upper-level undergraduates should be done with caution.

Finally, this study was conducted in the "Bible Belt" of the southwest, where students and faculty are generally more conservative than in other parts of the southwest and nation. This could have lead to either lower reports of cheating (Whitley, 1998), as such behavior is socially undesirable, or an actual decrease in cheating, as our students may find such behavior immoral.

Recommendations

It is important for administrators to understand that a credible threat of punishment appears to be the best deterrent to academic dishonesty (see also Alschuler & Blimling, 1995; Diekhoff et al., 1996; Genereux & McLeod, 1995; Graham et al., 1994). These penalties need to be clearly defined and communicated to students. Different types of

cheating behavior need to lead to different types and levels of punishment, and repeat offenders should be punished more severely than first-time offenders. However, when punishments are too severe, faculty are less likely to follow established institutional procedures (Alschuler & Blimling, 1995); thus, appropriate punishment is the key. It is also important that the threat of punishment be seen as credible, which will result only when students become aware that cheating is being detected and is being punished. Working against this awareness is the traditional university policy of handling academic dishonesty proceedings behind closed doors, out of sight and, unfortunately, out of the minds of other students who might be considered cheating.

There are multiple ways that the Student Affairs division of campus can design and oversee programs aimed at changing campus culture. McCabe & Trevino (2002) recommended the use of rituals or ceremonies to introduce the honor code to new students and to send a clear message that honesty is an institutional priority. Alschuler & Blimling (1995) considered student involvement important to creating a campus culture intolerant of academic dishonesty, and student participation in creating the honor code and educating new students on the campus culture is vital. In addition, students can aid faculty in proctoring exams and sit as members on judicial review boards. Student Affairs can identify and monitor students for said roles.

Another strategy is to publicize faculty development workshops whereby faculty are trained by Student Affairs on anti-cheating strategies. This serves two purposes. First, it sends a clear message to the entire campus that the administration supports faculty in demanding academic honesty. Second, it serves as one more reminder to the campus that cheating will not be tolerated. Some strategies include: (a) widely spaced seating that is controlled by the proctor to reduce cheating during tests (Genereux & McLeod, 1995 ; Whitley, 1998), (b) the use of essay exams rather than multiple choice exams (Genereux & McLeod, 1995), (c) using alternative test forms if multiple choice exams are used (e.g., changing the order of pages or using test programs to scramble questions and answers; Whitley, 1998), (d) requiring students in larger classes to show a student ID prior to receiving an exam (Alschuler & Blimling, 1995), (e) close proctoring (Alschuler & Blimling, 1995; Whitley, 1998), and(f) not allowing students to have personal items that can conceal crib sheets (Alschuler & Blimling, 1995).

For a variety of reasons, only 9% of faculty report academic dishonesty (Graham et al., 1994). If higher education institutions would like to see an increase in reporting, then policies aimed at controlling the time needed to see a complaint through the review process is needed (Alschuler & Blimling, 1995). Institutions need to minimize the bureaucratic complexity of handling cheating cases and should be prepared for lawsuits brought by students. Administrators need to remember that the focus is not on the faculty member who caught the student, but on the student who engaged in some form of unacceptable behavior. The review board's charge is to evaluate the severity of the unacceptable behavior, not evaluate and pass judgment on the faculty. If there is a concern about the faculty member, another review board should be in place to hear a student's complaint.

Future research would be useful that assesses the processes by which a student is brought up on charges of academic dishonesty. Issues that need to be addressed are: (a) how much evidence is required, (b) what is the process if the faculty's only evidence is observational (e.g., witness a student looking at another student's exam), (c) what is the

process if the only evidence is another student providing witness, (d) how long the complaint process should take, (e) how a student can defend against false accusations, (f) how institutions should respond if a student obtains legal advice or legal counsel, (g) what punishments are appropriate to various types of violations, (h) the composition of the judicial review board (i.e., administration, faculty, and students), and, (i) how the campus community can be made aware of incidents of academic dishonesty while still protecting the privacy rights of dishonest students.

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APPENDIX.

Student Honor Creed

"As an MSU Student, I pledge not to lie, cheat, steal, or help anyone else do so."

As students at MSU, we recognize that any great society must be composed of empowered, responsible citizens. We also recognize universities play an important role in helping mold these responsible citizens. We believe students themselves play an important part in developing responsible citizenship by maintaining a community where integrity and honorable character are the norm, not the exception.

Thus, We, the Students of Midwestern State University, resolve to uphold the honor of the University by affirming our commitment to complete academic honesty. We resolve not only to be honest but also to hold our peers accountable for complete honesty in all university matters.

We consider it dishonest to ask for, give, or receive help in examinations or quizzes, to use any unauthorized material in examinations, or to present, as one's own, work or ideas which are not entirely one's own. We recognize that any instructor has the right to expect that all student work is honest, original work. We accept and acknowledge that responsibility for lying, cheating, stealing, plagiarism, and other forms of academic dishonesty fundamentally rests within each individual student.

We expect of ourselves academic integrity, personal professionalism, and ethical character. We appreciate steps taken by University officials to protect the honor of the University against any who would disgrace the MSU student body by violating the spirit of this creed.

Written and adopted by the 2002-2003 MSU Student Senate.

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