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COLLEGE CHEATING: Ten Years Later

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In this 10-year follow-up study of student cheating, we surveyed 474 university students to (1) evaluate the extent of cheating; (2) assess attitudes toward cheating; (3) identify variables that discriminate between cheaters and noncheaters; (4) assess the relative effectiveness of various deterrents to cheating; and (5) examine changes in cheating attitudes and behaviors from 1984 to 1994. Most students (61.2%) reported cheating in 1994, up significantly from 54.1% in 1984 (Haines et al., 1986). Despite this increased cheating, students in 1994 were significantly less likely than in 1984 to neutralize (rationalize) their cheating. Ten variables that discriminated between cheaters and noncheaters in 1984 did so again in 1994, and 12 additional discriminating variables were identified. A principal components analysis of these 22 variables indicated that, compared to noncheaters, cheaters are (1) less mature; (2) less reactive to observed cheating; (3) less deterred by social stigma and guilt and more likely to neutralize cheating; (4) less personally invested in their education; and (5) more likely to be receiving scholarships, but doing less well in school. Both cheaters and noncheaters rated embarrassment and fear of punishment as the strongest deterrents to cheating; disapproval of one's friends was ranked as the least effective deterrent by both groups.

Ten years ago we reported that cheating was widespread and epidemic (Haines et al., 1986). The present report represents the first of a series of anticipated 10-year follow-up studies. We are unaware of any other effort like this one aimed at tracking academic dishonesty within a single institution over a long period of time. It is anticipated that these data will enable us to assess changes in the magnitude of cheating, student attitudes toward cheating, institutional responses to cheating, and to better understand the dynamics of cheating behavior.

Our previous study analyzed data on personal and demographic variables

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gathered in 1984 from 380 students at a midsized liberal arts university in the Southwest. Our analysis identified three factors that discriminated between cheaters and noncheaters: immaturity, lack of educational commitment, and a neutralizing (rationalizing) attitude toward cheating. In this follow-up study we have measured the same variables, including the degree and type of cheating and the use of neutralization techniques. We have sought again to identify some of the factors that underlie cheating, and have identified some important changes, as well as constants, in cheating attitudes and behaviors.

As Welsh (1993) pointed out, research on college student cheating appeared as early as the 1930s, "but a more intense and focused research effort has mounted during the past 20 years" (p. 1). In the years since our original research, numerous reports have been published on college student cheating. Most research reports have used regional or local samples, but McCabe (1992) used a national sample. One study made use of our original survey instrument (May and Loyd, 1993), and at least four have focused on the role of neutralization in cheating (Forsyth, Pope, and McMillan, 1985; McCabe, 1992; Michaels, 1989; Ward and Beck, 1990). Almost all researchers agree that academic dishonesty is widespread, with the majority of college students having engaged in cheating at least once.

In our 1984 data, 54.1% of students admitted cheating during their tenure at the university. Subsequent studies revealed even higher levels of cheating. Gardner, Roper, Gonzalez, and Simpson (1988) studied 245 college students at a regional state university and found that the typical student cheated on about half of the required study guide assignments for an introductory psychology course. Davis, Grover, Becker, and McGregor (1992) found that 64% of the men at a small regional university reported cheating in college. McCabe (1992) reported that 67.4% of 6,096 students at 31 highly selective and prestigious universities reported cheating at least once as undergraduates. Jendrek's (1992) study of 776 students at a public midwestern campus found that 74% of the respondents had witnessed cheating during an exam while at the university. Almost half reported witnessing cheating between two and five times.

Most research indicates that, despite high rates of academic dishonesty, very little is done by universities or individual professors to deter cheating. Some, but not all, studies have found lower levels of cheating in colleges with honor codes. In a study of 177 students at a prestigious university with a strong honor code, May and Loyd (1993) found that only 23.7% of the students reported cheating. In addition, McCabe and Trevino (1993) found that schools with effective honor codes or with strong commitments to academic honor had lower rates of cheating. However, Gardner et al. (1988) found that neither an honor pledge nor values counseling deterred cheating on study guide assignments. Similarly, Jendrek (1989, 1992) found no evidence that honor codes are effective.

Situational variables like large classes, multiple-choice tests, and the use of old exams may actually foster cheating (Maramark and Maline, 1993). Very few students are caught cheating, and even fewer are officially punished. As Jendrek (1992) noted, "fully 99% of the students chose not to 'rat' on a classmate" (p. 263) they had seen cheating. Only 5% expressed any disapproval to the cheating student, and more than half simply ignored incidents of cheating they saw. Maramark and Maline (1993) wrote, "Research indicates that some students view cheating as a legitimate means for getting ahead and coping with stress, and this perception may be reinforced by minor or nonexistent sanctions for cheating" (p. 5).

Students cheat in small colleges, prestigious universities, private and public schools, and medical schools. Common threads in the literature on student dishonesty now exist. Students who cheat tend to be younger, less mature, less committed to the goals and values of higher education, and feel pressured to succeed by maintaining GPAs. Neutralization and excuse-making are common strategies students use to justify their cheating. The literature also indicates that mechanisms for the control of cheating are largely ineffective. It is also widely accepted that student cheating is part of a broader societal problem where people sidestep ethics in favor of the bottom line.

The bottom line in the cheating research is this: Although researchers and university officials are aware of the high rates of cheating that exist, the problem seems to be growing, not diminishing.

METHOD

Data for our original study were collected in 1984 at a small (4,900 students) state university in the southwestern United States using a 49-item survey distributed in the university's core curriculum courses. Surveys were completed anonymously in class and were returned by 380 students. In the present study, data were collected at the same institution (now grown to 5,700 students) in the same manner using a survey identical to our original instrument, except for the addition of two open-ended questions.

Participants

The questionnaire was administered to students in two first-year survey courses—introductory sociology and introductory psychology—required in the university's academic core. Surveys were completed anonymously and returned by 474 undergraduate students. Surveys were completed voluntarily in class and returned as students left the classroom. Virtually all students completed and returned questionnaires.

Representativeness of the sample to the student body population of 5,700

students was evaluated by comparing sample age, gender, and student classification statistics to known university parameters on these variables. In comparison to the university student body as a whole, the sample examined in this study was overrepresented by females (59.5% of the sample vs. 53.3% of the population), $\chi^2(1, N = 474) = 7.31$, $p < .01$, freshmen and sophomores (78.0% of the sample vs. 44.0% of the population), $\chi^2(1, N = 474) = 175.84$, $p < .01$, and younger students (sample $M = 21.90$, $SD = 5.51$ vs. population $\mu = 26.0$), $t(473) = -16.09$, $p < .001$. These same discrepancies between sample and population characterized the sample in our 1984 cheating study and are consistent with our having sampled from lower-level, core-curriculum courses. The characteristics of our sample make it inappropriate to generalize our findings to the entire university population. It may be best to consider this research a study of cheating behavior among students enrolled in lower-division, core curriculum classes, bearing in mind that this description characterizes all students early in their college career.

The 1984 and 1994 samples were also compared directly to evaluate the appropriateness of subsequent cohort comparisons. There was no significant change in gender distribution from 1984 (38.0% male, 62.0% female) to 1994 (41.0% male, 59.0% female). The 1994 sample was younger ($M = 21.93$, $SD = 5.51$) than the 1984 sample ($M = 22.73$, $SD = 5.80$) by 0.8 years, $t(852) = 2.11$, $p < .05$. At the same time, however, the 1994 sample was further along in school: There were 6% fewer freshmen and sophomores in 1994 (78.0%) than in 1984 (84.0%), and 6% more juniors and seniors in 1994 (22.0%) than in 1984 (16.0%), $\chi^2(1, N = 854) = 4.77$, $p < .05$. These differences, though statistically significant, are quite small. Still, subsequent comparisons of the 1984 and 1994 samples should be interpreted with caution, keeping in mind that differences between the samples may account partially for some of their other differences, especially since variables associated with maturity, like age and year in school, are correlated with cheating attitudes and behavior. In one sense (age) the 1994 sample is less mature than the 1984 sample. In another sense (year in school), though, the 1994 sample is more mature than the 1984 sample.

RESULTS

Extent of Cheating

Students were asked to indicate if, during their tenure at the university, they had cheated on major exams, quizzes, or class assignments. Percentages who reported cheating in one or more of these ways are summarized in Table 1. Table 1 also summarizes *t*-test comparisons between the 1984 and 1994 samples. Significant increases occurred from 1984 to 1994 in the percentages of students who reported cheating on quizzes and classroom assignments. These

TABLE 1. Cheating Levels in 1984 and 1994

Type of Cheating	*1984* (N = 380)	*1994* (N = 474)	*Significance Tests* t	df	p
Cheated on exams	23.7%	23.1%	.20	843	n.s.
Cheated on quizzes	22.1%	31.3%	−3.04	843	.01
Cheated on assignments	34.2%	45.1%	−3.42	843	.01
Overall cheating (on exams, quizzes, or assignments)	54.1%	61.2%	−2.08	843	.05

increases produced a significant increase in the overall index of cheating as well, with a clear majority of students (61.2%) engaged in some form of cheating in 1994.

Students reported cheating in a variety of ways and situations: "cheat sheets," 13.5%; copying from someone else's exam, 25.5%; studying a stolen exam, 4.6%; letting someone else write research and term papers, 3.8%; letting someone else copy an exam, 16.5%; and plagiarism, 8.4%.

In all subsequent analyses, "cheaters" are defined as students who indicated having engaged in one or more types of cheating; "noncheaters" are defined as students who did not report engaging in any of these activities.

Cheating and Neutralization

Our 1984 data established that cheaters were significantly more likely than noncheaters to endorse statements that justify or "neutralize" cheating. Sykes and Matza (1957) first conceptualized neutralization as a means to sidestep the rules and deflect blame or guilt. This neutralizing attitude was measured both in 1984 and 1994 using a series of 11 statements typifying the neutralizing attitude (e.g., "Jack should not be blamed for cheating if the course material is too hard"). Students responded to each statement on a 1–5 scale (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree). Mean responses of cheaters and noncheaters to the 11-item neutralization scale are summarized in Table 2 for 1984 and 1994. Note that *lower scores* indicate *greater neutralization.* Standard deviations are given in parentheses.

In 1994 as in 1984, cheaters expressed a significantly stronger neutralizing attitude (M = 42.36, SD = 9.01) than did noncheaters (M = 47.69, SD = 8.24), $t(462)$ = 6.37, $p < .001$. It is interesting to note, though, that both cheaters and noncheaters showed such a strong decrease in neutralization (increase in scores) from 1984 to 1994 that 1994's cheaters actually engaged in significantly less neutralization (M = 42.36, SD = 9.01) than 1984's noncheaters (M = 36.95, SD = 6.01), t = −7.06, df = 455, $p < .001$. It is rather paradoxical that there was significantly more cheating in 1994 than in 1984, but

TABLE 2. Cheating Neutralization in 1984 and 1994

Neutralizing Statements	1984		1994	
"Jack should not be blamed for cheating if . . ."	Cheaters (N = 205)	Noncheaters (N = 174)	Cheaters (N = 283)	Noncheaters (N = 181)
1. the course material is too hard	3.08 (.62)	3.44 (.67)	3.98 (.94)	4.38 (.85)
2. he is in danger of losing his scholarship	3.09 (.67)	3.42 (.68)	3.88 (1.02)	4.30 (1.00)
3. he doesn't have time to study	3.04 (.66)	3.36 (.67)	3.84 (.99)	4.30 (.90)
4. the instructor doesn't seem to care	2.74 (.79)	3.17 (.76)	3.50 (1.22)	4.10 (1.06)
5. the instructor acts like his/her course is the only one	2.68 (.75)	3.16 (.74)	3.60 (1.14)	4.14 (1.02)
6. his cheating isn't hurting anyone	3.23 (.65)	3.47 (.61)	4.03 (.96)	4.45 (.87)
7. everyone else in the room seems to be cheating	2.96 (.77)	3.32 (.75)	3.74 (1.10)	4.31 (.94)
8. the people sitting around him made no attempt to cover their papers	3.13 (.64)	3.39 (.66)	4.07 (.96)	4.47 (.82)
9. his friend asked him to help him/her cheat	3.01 (.70)	3.45 (.66)	3.93 (.91)	4.45 (.82)
10. the instructor left the room	2.97 (.74)	3.41 (.69)	3.71 (1.08)	4.34 (.94)
11. the course is required	2.98 (.72)	3.37 (.69)	3.99 (.98)	4.44 (.84)
Total Neutralization Score	32.90 (5.41)	36.95 (6.01)	42.36 (9.01)	47.69 (8.24)

significantly less neutralizing. It appears that 1994's students are more cognizant of the immorality of cheating, but care less!

Discriminators of Cheaters and Noncheaters

Ten variables were identified in 1984 that significantly discriminated between cheaters and noncheaters: age, marital status, grade-point average, dependence on parents for financial support, involvement in varsity sports, involvement in intramural sports, membership in a fraternity or sorority, employment status, total score on the neutralization scale, and awareness of cheating by

others. Perhaps in part because of the increased statistical power afforded by the larger 1994 sample size, these 10 variables and 12 additional variables were identified in the 1994 data that provided significant separation of cheaters and noncheaters. These variables are listed in Table 3 along with sample descriptive statistics and significance tests comparing 1994 cheaters and noncheaters. Most of these variables are self-explanatory, but one requires comment. The effectiveness of social deterrents to cheating was computed as the mean response to ratings on two items: the deterrent effectiveness of disapproval of one's friends, and the deterrent effectiveness of embarrassment if caught cheating. More will be said about deterrents to cheating in a later section.

All variables that discriminated between cheaters and noncheaters in 1984 did so again in 1994. The directions of these differences were replicated for all but one variable—how often students notice others cheating. In 1984, cheaters noticed others cheating more often than noncheaters. In 1994, the direction of this difference was reversed. We have no explanation for this reversal, particularly in light of the stability of the other differences.

Variables that did not discriminate significantly between cheaters and noncheaters in 1994 included gender, employment status (unemployed, part-time, or full-time), membership in academic honor societies, attendance in night vs. day classes, first semester vs. subsequent semester enrollment, and awareness of the university policy on cheating.

To list 22 variables on which cheaters and noncheaters differ significantly hardly provides a parsimonious description of these two groups. To get a clearer picture of the fundamental differences between cheaters and noncheaters, we factor analyzed the 22 discriminating variables. A similar factor analysis of discriminating variables in 1984 yielded three strong groups of variables (factors) on which cheaters and noncheaters differed. Factor I was interpreted as representing level of maturity: Cheaters were generally less mature than noncheaters. Factor II was interpreted as representing involvement in nonacademic activities, excluding employment: Cheaters were generally more involved in nonacademic activities than were noncheaters. Factor III was interpreted as representing the neutralizing attitude and related perceptions: Cheaters were generally more likely than noncheaters to neutralize their cheating and to justify cheating as necessary.

Because the 1994 data identified more discriminating variables, one cannot expect the factor structures of the two analyses to be identical. Still, there are some similarities. Table 4 summarizes the results of a varimax rotated principal components analysis of the 22 variables identified in 1994 as discriminating between cheaters and noncheaters. Five factors provided the simplest, most interpretable factor structure and explained 43.5% of the variance in the 22 discriminating variables. All variables loaded strongly on only one factor, and only one variable, involvement in varsity sports, failed to load on any factor.

TABLE 3. Variables Discriminating Cheaters and Noncheaters in 1984 and 1994

Discriminating Variables	1984		1994		Significance Tests (for 1994 Noncheaters vs. Cheaters)
	Cheaters (N = 205)	Noncheaters (N = 174)	Cheaters (N = 283)	Noncheaters (N = 181)	
Age	M = 20.30 SD = 3.40	M = 25.60 SD = 5.23	M = 20.10 SD = 2.40	M = 24.80 SD = 7.51	t = 9.89 df = 464 p<.001
Marital status (% married)	11.2%	29.1%	7.4%	32.0%	t = 7.29 df = 464 p<.001
Grade-point average	M = 2.54 SD = .62	M = 2.84 SD = .68	M = 2.74 SD = .57	M = 2.91 SD = .66	t = 2.76 df = 411 p<.01
Dependent on parents for financial support	37.6%	22.2%	57.2%	27.1%	t = −6.65 df = 464 p<.001
Receiving a scholarship	N/A	N/A	21.4%	11.6%	t = −2.72 df = 464 p<.01
Using personal earnings to pay for college	N/A	N/A	34.0%	45.3%	t = 2.45 df = 464 p<.02
Receiving a grant	N/A	N/A	29.8%	42.0%	t = 2.71 df = 464 p<.01
Involved in varsity sports	6.3%	1.1%	8.8%	2.2%	t = −2.88 df = 464 p<.01

Involved in intramural sports	26.8%	5.7%	28.1%	11.6%	$t = -4.28$ $df = 464$ $p<.001$
Member of a fraternity or sorority	19.5%	7.5%	15.8%	8.3%	$t = -2.37$ $df = 464$ $p<.02$
Working full-time	18.0%	37.9%	27.9%	43.3%	$t = 2.96$ $df = 464$ $p<.001$
Attending school full-time	N/A	N/A	88.7%	81.2%	$t = -2.27$ $df = 463$ $p<.05$
Total score on neutralization scale	M = 32.90 SD = 5.41	M = 36.95 SD = 6.01	M = 42.36 SD = 9.11	M = 47.69 SD = 8.24	$t = 6.37$ $df = 462$ $p<.001$
Notice other students cheating (1 = often, 2 = sometimes, 3 = rarely, 4 = never)	M = 2.71 SD = .88	M = 2.14 SD = .75	M = 2.15 SD = .73	M = 2.68 SD = .81	$t = 7.35$ $df = 462$ $p<.001$
Feel that majority of students approve of cheating	N/A	N/A	49.4%	28.3%	$t = -3.56$ $df = 282*$ $p<.001$
Think that cheating is necessary for some students to compete	N/A	N/A	57.5%	48.3%	$t = -1.91$ $df = 456$ $p<.05$
Effectiveness of social deterrents to cheating (0 = no influence, 1 = some influence, 2 = major influence)	N/A	N/A	M = 1.20 SD = .50	M = 1.30 SD = .57	$t = 1.92$ $df = 451$ $p<.05$
Effectivensss of guilt as a deterrent to cheating (0 = no influence, 1 = some influence, 2 = major influence)	N/A	N/A	M = 1.43 SD = .74	M = 1.62 SD = .66	$t = 2.75$ $df = 453$ $p<.01$

TABLE 3. *Continued*

Discriminating Variables	1984 Cheaters (N = 205)	1984 Noncheaters (N = 174)	1994 Cheaters (N = 283)	1994 Noncheaters (N = 181)	Significance Tests (for 1994 Noncheaters vs. Cheaters)
Reactions to seeing others cheating:					
Resent cheating	N/A	N/A	26.7%	40.98%	t = 3.23 df = 464 p<.01
Report to teacher	N/A	N/A	3.9%	1.5%	t = 4.50 df = 464 p<.001
Tell the cheater	N/A	N/A	4.2%	14.9%	t = 4.13 df = 464 p<.001
Ignore it	N/A	N/A	80.0%	57.5%	t = 4.50 df = 464 p<.001

*Responses to this item included "yes," "no," and "don't know." Only "yes" and "no" responses were included in the analysis, accounting for the apparently high nonresponse rate on this item.

TABLE 4. Varimax Rotated Factor Structure Matrix for Variables Discriminating Cheaters and Noncheaters in 1994

Variables	Factor I (Level of Maturity)	Factor II (Reactivity to Cheating)	Factor III (Deterrent Effectiveness)	Factor IV (Personal Financial Investment)	Factor V (Scholarship)	Communalities
Age	−.56					.50
Marital status	−.47					.36
GPA					.67	.47
Dependent on parents	.53					.56
Receiving a scholarship					.60	.45
Using personal earnings				.61		.51
Receiving a grant				−.49		.43
Involved in varsity sports						.13
Involved in intramurals	.59					.47
Member of fraternity/sorority	.43					.36
Working full-time				.67		.52
Attending school full-time				−.59		.43
Total neutralization score			.55			.46
Notice other students cheating	−.49					.31
Feel students approve cheating	.57					.45
Think cheating necessary	.45					.26
Effectiveness of social deterrents			.69			.51
Effectiveness of guilt as deterrent			.69			.50
Resent cheating		.48				.45
Report cheating		.52				.31
Tell the cheater		.62				.43
Ignore cheating		−.78				.68
Eigenvalues	3.37	1.82	1.66	1.39	1.34	
% Variance	15.30	8.30	7.60	6.30	6.10	

As in 1984, several variables reflecting level of maturity loaded strongly on Factor I. Students who scored high on this factor were younger, single, dependent on their parents for financial support, involved in intramurals, and were members of fraternities and sororities. Several variables involving perceptions of cheating also loaded strongly on Factor I. Students with high scores on Factor I were less likely to notice others cheating and more likely to endorse the views that most students approve of cheating and that cheating is the only way for some students to compete. Cheaters tended to score higher on Factor I than did noncheaters. We can conclude that cheaters are marked by a lower level of maturity and the perception that cheating is acceptable and even necessary.

Factor II was interpreted as representing reactivity to cheating. All four variables with strong loadings on Factor II involved students' reactions to others' cheating. High scores on Factor II came from those who are more reactive to cheating—they say they resent it, report it to the teacher, tell the cheater about it, and are less likely to ignore it. Low Factor II scores were seen in those who are less reactive and more likely to ignore cheating. Cheaters tended to score lower on this factor than noncheaters. We can conclude that cheaters are less reactive to cheating than are noncheaters, consistent with the idea that those who live in glass houses tend not to throw stones.

Factor III was interpreted as representing the effectiveness of deterrents to cheating. High scores on Factor III came from students who were more strongly deterred by the social stigma of cheating and by the guilt that accompanies cheating. These high scorers also tended to show less neutralization of cheating. In short, high Factor III scores came from students who believe that cheating is unconditionally wrong and are deterred from cheating by social stigma and guilt. Cheaters tended to score lower on Factor III than did noncheaters. We can conclude that cheaters are less affected than noncheaters by social deterrents and guilt, perhaps because they engage in more neutralizing cognitions to justify their cheating.

Factor IV was interpreted as representing a personal financial investment in education. High scores on Factor IV came from students who use personal earnings to finance their education, are not receiving any form of financial assistance, are employed full-time, and are part-time students. These students are paying their own way through college, often by working full-time and going to school part-time. Although it might seem that Factor IV is related to Factor I (level of maturity), it should be remembered that the factors extracted in this analysis are completely orthogonal. Cheaters scored lower on Factor IV than did noncheaters. We can conclude that cheaters have less personal financial investment in their education than do noncheaters.

Factor V was interpreted as representing scholarship. Students scoring high on Factor V had higher GPAs and were more likely to be receiving scholarships

than were low scorers. It makes sense that the variables of grades and scholarships would load together on the same factor, but the relationship between Factor V and cheating is complex. Cheaters and noncheaters did not fall at opposite ends of Factor V. Factor V simply identified variables that discriminated between these two groups. On the one hand, cheaters had lower GPAs than noncheaters (the low end of Factor V), perhaps creating more grade pressure to cheat. On the other hand, cheaters were more likely than noncheaters to be receiving scholarships (the high end of Factor V), perhaps further heightening the pressure to keep grades up.

Deterrents to Cheating

Fundamental to any consideration of academic dishonesty is this question: What will stop students from cheating? We asked students to rate the importance of several potential deterrents to cheating on a 0–2 scale (0 = no influence, 1 = some influence, 2 = major influence). Mean ratings of cheaters and noncheaters are summarized in Table 5. Standard deviations are given in parentheses. Deterrent effectiveness has also been rank-ordered for each group for easier comparison.

Table 5 shows that both cheaters and noncheaters are most deterred from cheating by fear of embarrassment should they be caught. But this embarrassment does not originate in the perception that their friends would disapprove of cheating: Disapproval of one's friends was ranked as the least effective deterrent to cheating by both groups (although it was significantly more important to

TABLE 5. Deterrent Effectiveness for Cheaters and Noncheaters in 1994

	Cheaters (N = 283)		Noncheaters (N = 181)		Significance Tests		
Deterrent	Mean/SD	Rank	Mean/SD	Rank	t	df	p
Embarrassment	1.71 (.56)	1	1.69 (.59)	1	−.37	454	n.s.
Instructor Drop	1.68 (.58)	2	1.65 (.67)	2	−.52	453	n.s.
Fear of University	1.61 (.65)	3	1.55 (.69)	5	−.88	453	n.s.
F for the Exam	1.60 (.64)	4	1.61 (.69)	4	.18	453	n.s.
Guilt	1.43 (.74)	5	1.62 (.66)	3	2.75	453	.006
Friends Disapprove	.69 (.71)	6	.90 (.82)	6	2.96	451	.003

noncheaters than to cheaters). Fear of being dropped from the course was the second most important deterrent in both groups. Receiving an F on the exam was ranked by both groups as the fourth most effective deterrent. The only difference between cheaters and noncheaters was in the relative importance of guilt and fear of university reprisal. Guilt was a significantly stronger deterrent to cheating among noncheaters than cheaters, ranked third most important by noncheaters, but only fifth most important by cheaters. Fear of university reprisal for cheating was ranked fifth by noncheaters and third by cheaters, but the difference in rated effectiveness of this deterrent was nonsignificant.

Although noncheaters are significantly more motivated toward honesty by internalized standards of right and wrong—that is, guilt (Kohlberg, 1964)—than are noncheaters, it remains true that both groups are controlled primarily by fear of the disapproval (i.e., embarrassment) and punishment of authority figures. But these deterrents operate only when students believe that dishonesty is likely to be detected. Is it? In both 1984 and 1994 we asked students if they had ever been caught cheating during their tenure as college students. In 1984, only 1.3% of our sample reported having been caught. In 1994, this figure showed a statistically nonsignificant increase to 2.5%.

DISCUSSION

As we attempt to make sense of these data, our biggest concern is that cheating has become normative for a large number of students. Grade pressures motivate them to cheat and immature moral reasoning enables them to neutralize their cheating. When they cannot justify cheating, they cheat anyway because dishonesty does not need to be justified if it is the norm. The pressure and competition for grades, without a corresponding commitment to the goals and values of higher education, encourage many students to find an easier way to acquire adequate GPAs. For those having little financial stake in their education, cheating seems just that much less a serious matter. What might deter these students from cheating?

Our data indicate that the traditional mechanisms of social control are largely ineffective in deterring academic dishonesty. Internal controls—conscience and guilt—are weak. Informal controls, such as friends' disapproval of cheating, clearly do not exist. Cheaters know that most other students will not condemn them or report them, especially if those others are cheaters, as the majority are. As for external controls, students might respect or fear official sanctions, but they also feel, with justification, that they will escape notice. Large and crowded classrooms, multiple-choice tests, and lack of close monitoring foster cheating and make it more difficult for cheating to be detected.

While faculty members express much concern about cheating, the data indicate that they do very little to actively deter such behavior. We are currently

conducting research into faculty perceptions of student cheating at our institution. Preliminary results of this research indicate that many faculty members have in fact disengaged from actively attempting to deter cheating, feeling that they will not be supported at the administrative level. Others just do not care. Institutions must demonstrate their commitment to the enforcement of policies on academic dishonesty and must provide the resources necessary to deter cheating at the classroom level.

The message the students are sending is unequivocal: Faculty members and university officials must do more to deter and punish cheating if anything is to change. It is unlikely that students will become more mature or that peers will become more reactive to cheating without salient university intervention. Our study indicates that students who cheat are poorly controlled by internalized standards of right and wrong. Thus, external controls must be used. Pactor, McKeen, and Morris (1990) list 14 such external deterrents, including the use of proctors, checking picture IDs, using multiple test versions, and collecting all backpacks and notebooks during exams. Where administrations have shown commitment to active enforcement of cheating policies, as for example at honor code schools, there is significantly less cheating (McCabe and Bowers, 1994). As Davis et al. (1992) point out, "before our students will internalize standards and apply them, the institutions and their faculties must openly and uniformly support such ethical behaviors" (p. 19).

Under the present circumstances, some cheating seems inevitable, and even with deterrents in place, a significant amount of cheating is inevitable. Cheating on homework and papers, for instance, will always be a fact of academic life. Indeed, our 1994 data reveal that much cheating takes place not on exams but in situations where external controls are largely absent. From a broader perspective, many scholars see the prevalence of academic dishonesty as symptomatic of a general social and cultural malaise evident in the lack of ethical behavior in educational, political, and business arenas. As Welsh (1993) so aptly stated, "Student academic dishonesty exists in a broader social and educational context which includes accusations of faculty plagiarism, administrative misuse of institutional and government funds, insider trading, and accusations of plagiarism and other forms of dishonesty by national leaders" (p. 6). It is not surprising that dishonesty among students is so prevalent given its many role models on the local, state, and national levels. Academic dishonesty is only a reflection of the normative patterns of the society in which it occurs.

REFERENCES

Davis, S., Grover, C., Becker, A., and McGregor, L. (1992). Academic dishonesty: Prevalence, determinants, techniques, and punishments. *Teaching of Psychology* 19(1): 16–20.

Forsyth, D. R., Pope, W. R., and McMillan, J. H. (1985). Students' reactions after cheating: An attributional analysis. *Contemporary Educational Psychology* 10: 72–82.

Gardner, W. M., Roper, J. T., Gonzalez, C. C., and Simpson, R. G. (1988). Analysis of cheating on academic assignments. *The Psychological Record* 38: 543–555.

Haines, V. J., Diekhoff, G. M., LaBeff, E. E., and Clark, R. E. (1986). College cheating: Immaturity, lack of commitment, and the neutralizing attitude. *Research in Higher Education* 25: 342–354.

Jendrek, M. P. (1989). Faculty reactions to academic dishonesty. *Journal of College Student Development* 30(5): 401–406.

Jendrek, M. P. (1992). Student reactions to academic dishonesty. *Journal of College Student Development* 33(3): 260–273.

Kohlberg, L. (1964). Development of moral character and moral ideology. In M. Hoffman and L. W. Hoffman (eds.), *Review of Child Development Research*, p. 400. New York: Russell Sage Foundation.

Maramark, S., and Maline, M. B. (1993). *Academic Dishonesty Among College Students.* Washington, DC: U.S. Department of Education.

May, K. M., and Loyd, B. (1993). Academic dishonesty: The honor system and students' attitudes. *Journal of College Student Development* 34(2): 125–129.

McCabe, D. L. (1992). The influence of situational ethics on cheating among college students. *Sociological Inquiry* 62(3): 365–374.

McCabe, D. L., and Bowers, W. J. (1994). Academic dishonesty among males in college: A thirty-year perspective. *Journal of College Student Development* 35: 5–10.

McCabe, D. L., and Trevino, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *The Journal of Higher Education* 64(5): 522–538.

Michaels, J. W. (1989). Applying theories of deviance to academic cheating. *Social Science Quarterly* 70(4): 870–885.

Pactor, H. S., McKeen, W., and Morris, J. (1990). Students' ethics require new ways to cope with cheating. *Journalism Educator* 44(4): 57–59.

Sykes, G., and Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review* 22: 664–670.

Ward, D. A., and Beck, W. L. (1990). Gender and dishonesty. *Journal of Social Psychology* 130(3): 333–339.

Welsh, J. F. (1993). Student academic dishonesty in higher education: Social context and institutional response. Unpublished report, Kansas Board of Regents, Topeka, Kansas.

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