

It's Wrong, But Everybody Does It: Academic Dishonesty among High School and College Students

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Academic cheating has become a widespread problem among high school and college students. In this study, 490 students (ages 14 to 23) evaluated the acceptability of an act of academic dishonesty under 19 different circumstances where a person's motive for transgressing differed. Students' evaluations were related to self-reports of cheating behavior, sex, school grade, and psychological variables. Results indicated that high school and college students took motives into account when evaluating the acceptability of academic cheating. Cheating behavior was more common among those who evaluated cheating leniently, among male students, and among high schoolers. Also, acceptance of cheating and cheating behavior were negatively related to self-restraint, but positively related to tolerance of deviance. The results are discussed with reference to biological, cultural, and developmental factors. © 2001 Elsevier Science (USA)

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I am a high school honors student, and I think there are different degrees of cheating. I'm a dedicated student, but when my history teacher bombards me with 50 questions due tomorrow or when a teacher gives me a fill-in-the-blanks worksheet on a night when I have swim practice, church, aerobics—and other homework—I'm going to copy from a friend! . . . Since I only do this when I need to, it isn't a habit. Every kid does this when they're in a pinch.

Erica Brown, a high school honors student

Academic dishonesty among high school and college students is highly common—so common, in fact, that some observers describe it as “epidemic” (Haines, Diekhoff, LaBeff, & Clark, 1982, p. 775). In 1979, a Carnegie Council Report warned of “ethical deterioration” in academic life, and more recently the U.S. Department of Education issued a report describing cheating among college students as a “chronic problem” (Maramark & Maline, 1993, p. 4).

Frequencies and Types of Cheating Behavior

Academic dishonesty may be defined as students' attempt to present others' academic work as their own. Academic dishonesty includes behaviors such as cheating on exams, copying other students' homework and assignments, and plagiarism. Estimates of the number of students who engage in academic dishonesty vary. This variation is partly due to the fact that researchers have focused on different types of academic cheating and have used different methods for assessing the frequency of it. However, findings strongly suggest that cheating has increased over the course of the past several decades. In 1941, Drake found that 23% of college students reported cheating. Goldsen (1960) reported rates of 38% in 1952 and 49% in 1960. By the 1980s, Jendrek (1989) estimated the typical rate between 40 and 60%. By 1992, she found that 74% of college students engaged in cheating (Jendrek, 1992). Even more recently, researchers have reported rates as high as 90% (Graham, Monday, O'Brien, & Steffen, 1994). These rates pertain to college students. Cheating, however, appears to be even more common among high school students (Davis, Grover, Becker, & McGregor, 1992; Davis & Ludvigson, 1995)—suggesting that the high school honors student quoted above may hardly be exaggerating when she claims that “every kid does this.”

The types of cheating that students engage in are varied. Among the more common types are cheating on tests and homework and plagiarism from books and articles (Baird, 1980; Graham et al., 1994). On the basis of his review of 107 studies of academic cheating among college students, Whitley (1998) reported a mean of 43.1% for the prevalence of cheating on exams, a mean of 40.9% for cheating on homework, and a mean of 47.0% for plagiarism.

Correlates of Cheating Behavior

Researchers have examined the relations between cheating behavior and diverse demographic, situational, and psychological factors and have related cheating to a host of factors (for helpful reviews, see Cizek, 1999; Whitley, 1998). Findings have shown that students who report comparatively high levels of cheating have lower grade point averages (GPAs) (Baird, 1980; Graham et al., 1994) and IQ scores (Hetherington & Feldman, 1964; Johnson & Gormly, 1971; Kelly & Worrell, 1978). They are more likely to live in rural areas (Cochran, Wood, Sellers, Wilkerson, & Chamlin, 1998) and to be members of fraternities or sororities (Baird, 1980). These students are also more likely to show a higher need for social approval (Crowne & Marlowe, 1964) as well as higher levels of alienation (Newhouse, 1982). One study also indicated that students who cheat are less likely to work and more likely to have parents who pay for their college education (Haines et al., 1986).

With respect to comparisons of male and female students, some researchers have found no sex differences (e.g., Karabenick & Snull, 1978). Others have found that female students engage in more academic dishonesty than male students (e.g., Graham et al., 1994; Jacobson, Berger, & Millham, 1970). Most studies, however, find that male students engage in more cheating than female students (e.g., Baird, 1980; Cochran et al., 1998; Davis et al., 1992; Hetherington & Feldman, 1964; Kelly & Worrell, 1978; Roth & McCabe, 1995). Whitley (1998) has pointed out that sex differences are particularly strong in survey studies where participants provide self-reports of cheating. Male students report that they cheat more than do female students.

Age and school grade are also related to academic dishonesty. Among college undergraduates, younger students cheat more than older students, and freshmen and sophomores cheat more than juniors and seniors (Baird, 1980; Cochran et al., 1998; Graham et al., 1994; Haines et al., 1986). High school students also appear to engage in more cheating than college students (Davis et al., 1992; Davis & Ludvigson, 1995; Evans & Craig, 1990).

Finally, a few studies have shown an interesting relation between academic dishonesty and the psychological quality of self-control. Testing Gottfredson and Hirshi's (1990) theory that crime and deviance in part result from an uncontrolled and self-centered pursuit of immediate gratification, Cochran et al. (1998) found that college students who cheat are more likely to have low levels of self-control. In a similar vein, Eve and Bromley (1981) reported that low levels of internalized social control are related to more frequent cheating among college undergraduates.

Evaluations of Cheating Behavior and Motives for Cheating

The majority of studies on academic dishonesty focus on frequencies, types, and correlates of cheating behavior. We know much less about how

students themselves conceive of cheating. To what extent do students regard cheating as acceptable? To what extent do students' acceptance of cheating depend on the underlying motives for cheating?

Research on students' *evaluations* of cheating behavior (i.e., is it acceptable or unacceptable) is quite limited. In one study of 200 college students, Baird (1980) found that 57% disapproved of cheating, whereas 40% did not. Jendrek (1992), however, found higher rates of disapproval. In her study of 776 undergraduates, 84% disagreed with the statement that "under some circumstances academic dishonesty is justified" (p. 268) and 92% disagreed that "academic dishonesty is justified when a person needs to pass a course" (p. 268). Jendrek (1992) also found that among students who had witnessed cheating 31% reported feeling disgust and 25% felt angry. Furthermore, Jendrek (1992) noted a gender difference where women were more likely than men to report feeling angry upon having witnessed cheating, whereas men were more likely than women to report feeling indifferent. Whereas rates of disapproval of cheating behavior appear to be quite high, both Baird (1980) and Jendrek (1992) found that only about 1% of college students would tell an instructor that they had witnessed another student engaging in academic dishonesty.

Students' evaluation of cheating behavior may also be related to the frequency with which they engage in cheating behavior. In one study, Graham and her colleagues (1994) noted that students with lenient attitudes toward academic dishonesty reported more cheating compared to students with stricter attitudes.

Research examining how students assess and rank order different *motives* that may underlie cheating behavior is rare. Some researchers have mentioned motives that students use to explain their cheating. These motives include the need for a particular grade, lack of time to study, the view that everybody else cheats, desire to help a friend, an unplanned opportunity, and the assessment that the instructor is unfair (Baird, 1980; Davis et al., 1992; Davis & Ludvigson, 1995; Graham et al., 1994). With respect to how students rank order motives, Davis et al. (1992) rank ordered the popularity of two motives. College students indicated that a popular reason for allowing a fellow student access to their answers during an exam was because the person was a friend. In contrast, a monetary incentive was not a popular motive for cheating.

Research on other moral behaviors suggests that adolescents and young adults do take motives into account when evaluating behaviors. In a study of 11-, 14-, and 17-year-olds, Keltikangas-Jarvinen and Lindeman (1997) found that lying and theft were evaluated as less acceptable when a person's motive was "negative" (e.g., self-gain) as opposed to "positive" (e.g., pro-social) and when a person transgressed intentionally as opposed to unintentionally. With respect to physical altercations among peers, Cauffman, Feldman, Jensen, and Arnett (2000) reported that high school and college students

regarded such violence as more acceptable when a person was responding to provocation or was seeking to protect self or others. Violence was less acceptable when a person's motives involved being able to avoid detection or seeking approval from fellow gang members. With respect to betrayal of a friend's secret and sexually betraying a romantic partner, Feldman, Cauffman, Jensen, and Arnett (2000) found that students regarded these behaviors as more acceptable when the motive for the betrayal was a cultural guideline (i.e., the person was from a culture where people routinely share information about others or the person was from a culture where people are expected to have many sexual partners before marriage). Students regarded betrayal of a friend or romantic partner as less acceptable when the motive involved being able to avoid detection.

The Present Study

In the present study, we aimed to address the paucity of research on students' assessment of different motives that underlie cheating behavior and the relation between students' evaluations of cheating in the context of different motives and their own engagement in cheating behavior. Additionally, we related both students' evaluations of cheating behavior and their own engagement in this behavior to factors that previous research have found to be important for students' engagement in cheating.

Thus the present study assessed how students evaluate academic cheating in the context of a variety of different motives. Also, we related students' evaluations of an academically dishonest act to self-reports of cheating behavior. Furthermore, we examined students' evaluations of cheating and their own cheating behavior in relation to level of education (high school versus college), sex (female versus male), and the psychological variables of self-restraint and tolerance of deviance.

Based on the research described above, we hypothesized the following: (a) Students' evaluations of cheating will vary depending on a transgressor's motive for cheating. (b) Students' who give more lenient evaluations of cheating will report having engaged in more cheating compared to students who give more strict evaluations. (c) High school students will evaluate cheating more leniently and will report that they cheat more than college students. (d) Male students will evaluate cheating more leniently and will report that they engage in more cheating behavior than female students. (e) Self-restraint will be negatively related to acceptance of cheating and cheating behavior. (f) Tolerance of deviance will be positively related to acceptance of cheating and cheating behavior.

METHOD

Participants

Participants were 229 high school students ($M = 15.6$ years, $SD = 1.08$) and 261 college students ($M = 20.4$ years, $SD = 1.23$). The high school students attended a public high school

on the West coast. Fifty-eight percent were female students. With respect to ethnicity, 76% were European American, 8% were African American, and 8% were Asian American. Twenty-five percent of the fathers of the high school students had obtained less than a college degree, whereas the comparable figure was 34% for the mothers. Seventy-one percent of the high school students indicated that they had a GPA consisting mostly of As or half As and half Bs. Fifty-seven percent of the students indicated that they did not work.

The college students attended a state university located in the Midwest. The sample consisted of 65% female students. With respect to ethnicity, 83% were European American, 7% were African American, and 8% were Asian American. Fifty-two percent of the fathers of the college students had obtained less than a college degree, whereas the comparable figure was 57% for the mothers. With respect to GPA and work, 40% had a GPA consisting mostly of As or half As and half Bs and 36% did not work.

Significant differences between the high school and college samples occurred on comparisons of father's education, mother's education, GPA, and student employment. Subsequent statistical analyses controlled for these differences.

Materials

Participants completed a battery of questionnaires. For the present study, the relevant measures were the following:

Demographic information. Participants provided information about their age, sex, ethnicity, school grade, GPA, work involvement, and parental education.

Evaluation of academic cheating. Participants read a vignette where a protagonist decides to engage in academic cheating. As described in the introduction, most of the literature shows a sex difference, with male students cheating more than female students. In order to take into account a potential significance of the sex of the vignette protagonist, we included protagonists of each sex. We randomly assigned participants to receive the vignette with either a female or male protagonist. The vignette read as follows:

Jennifer [Jim] was taking a math exam which would determine her [his] final grade in the class. She [he] did not know the solution to several of the questions so she [he] looked at a classmate's answers. Rate how acceptable this behavior is if . . .

Participants were then presented with 19 different circumstances where the protagonist's motive for transgressing differed. Participants evaluated the vignette for each of the 19 different motives on a 4-point scale (1 = *totally unacceptable*, 2 = *somewhat unacceptable*, 3 = *somewhat acceptable*, 4 = *totally acceptable*).

To generate the motives, we reviewed the literature on academic dishonesty and moral psychology (e.g., Baird, 1980; Davis et al., 1992; Davis & Ludwigson, 1995; Graham et al., 1994; Jensen, 1995, 1996; Keltikangas-Jarvinen & Lindeman, 1997; Kohlberg, 1981, 1984). We also conducted three focus groups with four to six college students where they discussed the types of cheating they were familiar with and motives they thought commonly were involved in cheating. Finally, we administered our measure to 45 college students in a pilot study in order to obtain data on variability and ceiling and floor effects and to make final editorial corrections to the wording of justifications. (Students involved in the process of selecting motives did not participate in the study).

The 19 final motives pertained to many of the issues discussed in the literatures on academic dishonesty and moral psychology. We selected motives that pertained to a diverse range of moral issues such as self-interest, conformity, prosocial intentions, and redressing perceived inequity. The motives and our classification of the motives based on the literature are presented in Table 1. On the questionnaire, the order of the motives was randomized.

A principal components analysis (PCA) with varimax rotation on the 19 motives did not

TABLE 1
Motives for Academic Dishonesty

Motive type	Academic cheating motive
Self-gain	Would be put on academic probation if she didn't pass Needed a good grade to maintain athletic eligibility Wanted to maintain her class ranking
Conformity	Knew everyone else was cheating
Redressing perceived inequity	Thought the instructor had treated her unfairly Felt the instructor deliberately made the exam too hard
Psychological/Personality	Was very competitive by nature Was depressed and didn't have the energy to prepare for the exam "Froze" and couldn't recall the answers
Autonomy	Didn't think it was a big deal
Prosocial	Needed to pass the class in order to get a job that would let her help her family
No harm to self	Knew the instructor wouldn't do much if she were caught
No harm to others	Knew no one else would suffer since the exam was not on a curve
Avoid detection	Knew she wouldn't get caught
Challenge	Wanted to see if she could get away with it
Prior history	Had cheated in other classes and gotten away with it
Relationship preservation	Didn't want to disappoint her parents with a poor grade
Other	Didn't have enough time to study because of her job Knew the class was very competitive and it was tough to get a good grade

Note. We present here items for female transgressors. There were comparable items for male transgressors.

yield coherent factors. Attempts to create a priori clusters resulted in highly intercorrelated composite scores (e.g., correlation coefficients between .65 and .77). Thus, we elected not to use the factor or a priori composite scores. Instead we examined separately the 19 items scores in most analyses. In some analyses, we also used the overall acceptance score in which we averaged the ratings across the 19 motives. The total acceptance of cheating score had good reliability ($\alpha = .93$, 19 items).

Cheating behavior. On a 5-point scale, participants rated the frequency with which they had engaged in six different forms of cheating within the past year (1 = *never* to 5 = *ten or more times*). The behaviors, listed in Table 4, pertained to cheating on homework, exams, and term papers. (A seventh behavior pertaining to downloading and using a paper from the internet was dropped from analyses as nearly no students reported engaging in this behavior). To create a composite measure of cheating behavior, frequencies across the six behaviors were averaged. The overall frequency of cheating behavior score had reasonable internal reliability ($\alpha = .77$, 6 items).

Self-restraint. The measure was a subscale from the Weinberger Adjustment Inventory (WAI, Weinberger, 1997). The self-restraint scale assesses four dimensions: impulse control, suppression of aggression, consideration of others, and responsibility. Examples of items are "Before I do something, I think about how it will affect people around me" and "I say the first thing that comes into my mind without thinking about it." Participants rated 30 items on a 5-point scale (1 = *false* to 5 = *true*). The scale had good internal reliability ($\alpha = .87$,

30 items). The self-restraint scale has been found to have good psychometric properties and to display convergent, discriminant, and predictive validity (Feldman & Weinberger, 1994; Weinberger, 1997).

Tolerance of deviance. Participants rated the acceptability of three transgressions involving physical violence toward a peer, lying to parents, and betraying a secret told in confidence by a friend. They rated the acceptability of these behaviors under 18 or 19 different circumstances on a 4-point scale (1 = *totally unacceptable* to 4 = *totally acceptable*). The internal reliability scores for each of the three different transgressions were satisfactory: physical violence ($\alpha = .91$, 19 items), lying to parents ($\alpha = .93$, 19 items), and betraying a friend's confidence ($\alpha = .86$, 18 items). Also, the measures of each of the three types of transgressions have shown criterion validity (Cauffman et al., 2000; Feldman et al., 2000; Jensen et al., 2000). The tolerance of deviance score consisted of the mean of the scores of the acceptability of the three transgressions.

Procedure

Students completed questionnaires during one class period (about 45 min). Both college and high school students provided active informed consent, and parents of high school students also provided informed consent. Among college students, approximately 1% of those invited to participate in the study elected not to do so. Among high school students, 8% were withheld from the study by their parents and approximately 5% of students themselves elected not to participate. For college students, taking part in the study was one of several ways to satisfy a class requirement. High school students were given credit for returning parental consent forms (regardless of whether parents agreed to or declined participation on behalf of their child).

To encourage truthful responses, we instructed students not to write their names on the questionnaire in order to make the study completely anonymous and confidential. We told students that the questionnaire was about their feelings and behaviors and to answer as honestly and openly as they could. We added that if some questions made them uncomfortable, they could leave these questions unanswered. We also made it clear that students could end their participation in the study at any time without penalty.

RESULTS

Analysis Guidelines

The acceptance of academic cheating variable was not normally distributed because most students regarded cheating as unacceptable. Nonparametric statistical analyses are the most appropriate for such situations. We conducted both nonparametric and parametric analyses and obtained similar results. We report the results of the parametric analyses here because these analyses allow for assessment of interactions and the use of control variables and are more easily interpreted. However, for correlational analyses we report results from analyses using Kendall's τ -*b* and Spearman correlations (nonparametric tests).

Evaluations of Academic Cheating in the Context of Different Motives

In order to test the hypothesis that acceptance of academic cheating would vary by motive among high school and college students as well as among male and female students, we conducted repeated-measures analyses of vari-

ance (ANOVAs) with motive as a within-subject factor. Motive had a highly significant influence on the acceptability of academic cheating for the sample as a whole, $F(18, 450) = 114.6, p < .001$, as well as for high school students, $F(18, 207) = 70.1, p < .001$, college students, $F(18, 243) = 51.8, p < .001$, male students, $F(18, 172) = 40.4, p < .001$, and female students, $F(18, 275) = 78.2, p < .001$.

Next, we calculated Kendall's correlation coefficients in order to assess whether the different groups ranked motives in a similar or different way. High school and college students ranked the motives in a highly similar way, $\tau-b = .79, p < .001$, as did the male and female students, $\tau-b = .81, p < .001$.

Next, we determined which motives were most and least acceptable. We carried out analyses for the sample as a whole because the analyses described immediately above indicated that there were no significant differences between groups (by school and sex) in how the motives were rank ordered. Table 2 lists the most and least acceptable motives. We carried out paired t tests with Bonferoni adjustments on the four most acceptable motives and the four least acceptable motives. Results indicated that each of the four most acceptable motives differed significantly from each of the four least acceptable motives. Among the four most acceptable motives, the top motive ("needed to pass the class in order to get a job that would let her help her family") differed significantly from each of the other three motives, whereas these three did not differ significantly from one another.

TABLE 2
The Most and Least Acceptable Motives for Academic Cheating

	All students	
	<i>M</i>	<i>SD</i>
Most acceptable		
Needed to pass the class in order to get a job that would let her help her family	2.73	.96
Didn't want to disappoint her parents with a poor grade	2.06	.96
Would be put on academic probation if she didn't pass	2.03	.97
Thought the instructor had treated her unfairly	1.96	.93
Least acceptable		
Was very competitive by nature	1.56	.80
Didn't think it was a big deal	1.47	.78
Had cheated in other classes and gotten away with it	1.38	.65
Wanted to see if she could get away with it	1.35	.67

Note. We present here items for the female transgressor. There were comparable items for a male transgressor. Scale is as follows: 1 = *totally unacceptable*, 2 = *somewhat unacceptable*, 3 = *somewhat acceptable*, 4 = *totally acceptable*.

Among the four least acceptable motives, there was also a differentiation. The two motives that were least acceptable (“wanted to see if she could get away with it” and “had cheated in other classes and gotten away with it”) did not differ significantly from one another. However, each of these two motives either differed significantly or showed a significantly different trend from each of the other two motives. These two other motives (“didn’t think it was a big deal” and “was very competitive by nature”) did not differ significantly from each other.

Evaluations of Academic Cheating in Relation to Sex and Age

We hypothesized that academic cheating would be more acceptable to male than female students and more acceptable to high school than college students. To test these hypotheses, we conducted a three-way multivariate analysis of covariance (MANCOVA) on the 19 motives with sex of student, school (high school and college), and sex of vignette protagonist as between-subjects variables. Because high school and college students differed on GPA, father’s education, mother’s education, and student’s work hours, we entered these variables as covariates in order to remove their effects on the dependent variables. Given the large number of motives (19), we decided to be conservative and set the significance level at .01.

As predicted, there were main effects for sex, $F(18, 430) = 2.9, p < .001$, and school, $F(18, 430) = 6.1, p < .001$. As seen in Table 3, female students judged academic cheating as less acceptable than male students on 13 of 19 motives. Also, college students regarded academic dishonesty as less acceptable than high school students on 16 of 19 motives. Sex of the vignette protagonist was not a significant main effect.

There was only one significant interaction effect. This interaction was between sex and school, $F(18, 430) = 2.0, p < .01$. However, an inspection of the significance levels for each of the 19 motives showed a significant result for only one of the motives [“didn’t think it was a big deal,” $F(18, 430) = 6.9, p < .01$]. Figure 1 illustrates that female college students were particularly unaccepting of cheating given this motive. However, because a significant interaction effect occurred for only 1 of the 19 motives, we conclude that interaction effects for sex by school were sporadic.

Academic Cheating Behavior in Relation to Sex and Age

In order to test our hypotheses that academic cheating would be more common among male than female students and more common among high school than college students, we carried out a MANCOVA on cheating behavior comparable to the analysis described above. As predicted, there were main effects for sex, $F(5, 439) = 4.3, p < .001$, and age, $F(5, 439) = 37.0, p < .001$. As seen in Table 4, male students reported that they had engaged in academic cheating more often than female students on four of

TABLE 3
Comparisons by School and Sex of the Acceptability of Academic Cheating

Motive	Mean scores							
	H.S.	Col.	<i>F</i>	<i>p</i>	Male	Female	<i>F</i>	<i>p</i>
Needed to pass the class in order to get a job that would let her help her family	3.11	2.42	48.90***		2.88	2.65	5.93 <i>ns</i>	
Didn't want to disappoint her parents	2.44	1.76	49.22***		2.22	1.97	7.68**	
Would be put on academic probation if she didn't pass	2.41	1.75	44.08***		2.29	1.88	19.41***	
Didn't have enough time to study because of her job	2.25	1.67	43.95***		2.07	1.85	6.93**	
"Froze" and couldn't recall the answers	2.18	1.73	22.78***		2.03	1.89	2.45 <i>ns</i>	
Thought the instructor had treated her unfairly	2.15	1.79	13.58***		2.08	1.86	5.79 <i>ns</i>	
Needed a good grade to maintain athletic eligibility	2.16	1.59	37.19***		2.04	1.71	15.00***	
Knew the class was very competitive and it would be tough to get a good grade	2.15	1.57	40.06***		2.02	1.69	15.05***	
Was depressed and didn't have the energy to prepare for the exam	1.98	1.61	17.00***		1.86	1.73	2.25 <i>ns</i>	
Knew everyone else was cheating	1.96	1.91	0.28 <i>ns</i>		2.10	1.76	11.75***	
Felt the instructor deliberately made the exam too hard	1.96	1.58	16.57***		1.95	1.59	16.97***	
Knew no one else would suffer since the exam was not on a curve	1.92	1.57	14.55***		1.91	1.59	13.77***	
Knew she wouldn't get caught	1.80	1.53	8.41**		1.89	1.45	26.65***	
Wanted to maintain her class ranking	1.75	1.44	13.61***		1.68	1.50	4.82 <i>ns</i>	
Knew the instructor wouldn't do much if she were caught	1.72	1.48	8.07**		1.78	1.42	20.73***	
Was very competitive by nature	1.68	1.52	3.28 <i>ns</i>		1.74	1.46	12.68***	
Didn't think it was a big deal	1.67	1.40	11.11***		1.68	1.39	14.07***	
Had cheated in other classes and gotten away with it	1.49	1.31	7.34**		1.49	1.31	8.29**	
Wanted to see if she could get away with it	1.43	1.26	6.16 <i>ns</i>		1.40	1.28	3.50 <i>ns</i>	

Note. We present here items for the female transgressor. There were comparable items for a male transgressor. Rating scale is as follows: 1 = *totally unacceptable*, 2 = *somewhat unacceptable*, 3 = *somewhat acceptable*, 4 = *totally acceptable*. Abbreviations: H.S. = high school students; Col. = college students. Standard deviations (*SDs*): H.S.: .69–1.01; Col.: .59–.98; Male: .74–1.07; Female: .56–.94. The motives are rank ordered in this table, whereas on the questionnaire they were randomized.

** $p < .01$.

*** $p < .001$.

ns = not significant.

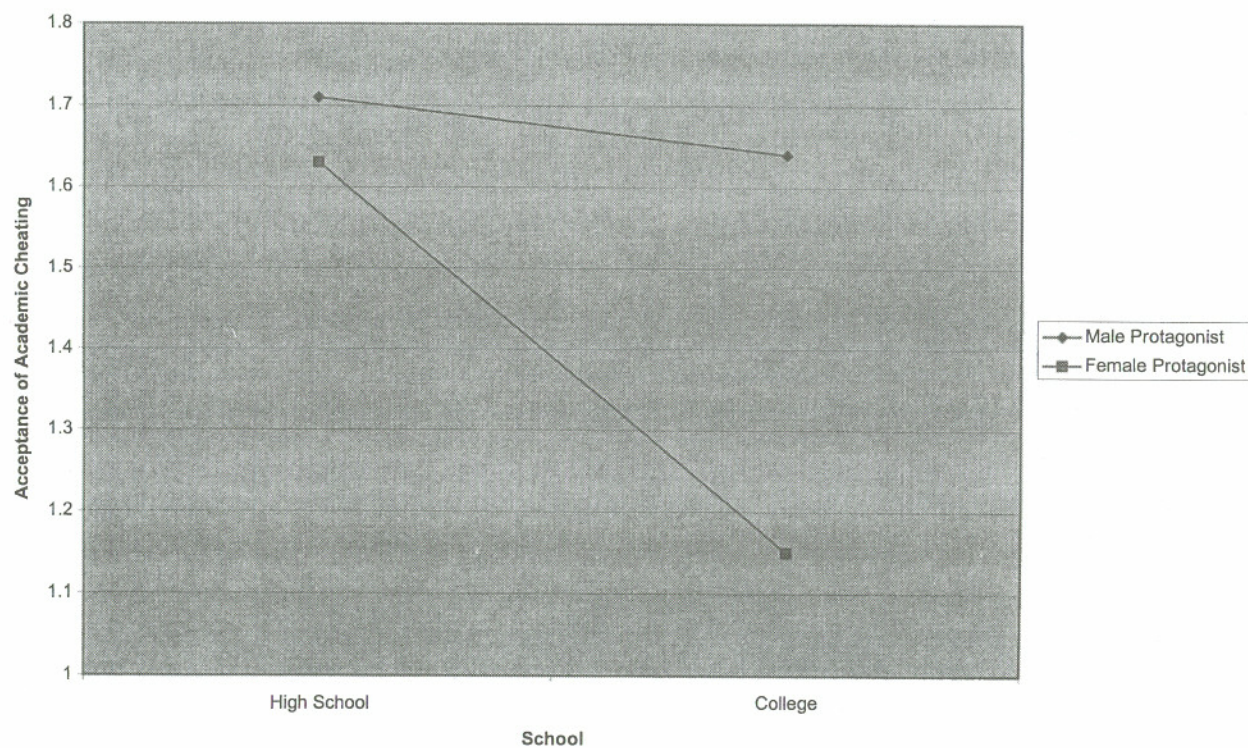


FIG. 1. The interaction of sex and school on acceptance of academic cheating when the motive was “didn’t think it was a big deal.” Rating scale is as follows: 1 = totally unacceptable, 2 = somewhat unacceptable, 3 = somewhat acceptable, 4 = totally acceptable.

TABLE 4
Comparisons by Age and Sex of Frequency of Academic Cheating

Type of behavior	Mean scores					
	H.S.	Col.	<i>F</i>	<i>p</i>	Male	Female
Copied off someone's homework	3.67	2.10	147.46***		3.05	2.71
Copied off someone during an exam	2.27	1.50	50.64***		2.06	1.71
Used someone else's term paper	1.14	1.11	0.59 <i>ns</i>		1.18	1.08
Let someone else copy off your homework	3.78	2.13	191.85***		3.05	2.85
Let someone copy off you during an exam	2.11	1.40	45.45***		1.94	1.58
Let someone else use your term paper	1.14	1.19	0.90 <i>ns</i>		1.25	1.07

Note. Rating scale is as follows: 1 = *never*, 2 = *once*, 3 = *two to five times*, 4 = *six to nine times*, 5 = *ten or more times*. Abbreviations: H.S. = high school students; Col. = college students. Standard deviations (*SDs*): H.S.: .51–1.37; Col.: .40–1.08; Male: .52–1.47; Female: .34–1.39.

** $p < .01$.

*** $p < .001$.

ns = not significant.

six behaviors. Also, high school students had cheated more often than college students on four of six behaviors. The sex by school interaction term was not significant.

Correlates of Evaluations of Cheating Behavior and of Cheating Behavior

As predicted, we found that acceptance of academic cheating was positively correlated with cheating behavior, both a specific cheating behavior paralleling the vignette scenario (i.e., cheating on an exam) as well as cheating behavior more generally (i.e., the composite score). Tolerance of deviance was positively correlated with acceptance of cheating as well as self-reported cheating behavior. Self-restraint was negatively correlated with both acceptance of cheating and self-reported cheating behavior. As seen in Table 5, all correlations (Spearman's) were strongly significant.

DISCUSSION

The results confirmed the hypotheses. High school and college students take motives into account when evaluating the acceptability of academic cheating. Cheating behavior is more common among students who evaluate cheating leniently than students who do not, among male than female stu-

TABLE 5
Correlates of Evaluations of Cheating (Total Score) and of Cheating Behavior

	All	H.S.	Col.	Male	Female
Evaluations of cheating					
Cheating behavior: Copied off someone's exam	.51***	.56***	.39***	.48***	.45***
Cheating behavior: Composite measure	.52***	.56***	.39***	.50***	.46***
Tolerance of deviance	.65***	.66***	.61***	.61***	.64***
Restraint	-.44***	-.36***	-.46***	-.40***	-.41***
Cheating behavior					
Tolerance of deviance	.37***	.44***	.20***	.43***	.26***
Restraint	-.35***	-.33***	-.32***	-.20**	-.35***

Note. All = all students; H.S. = high school students; Col. = college students.

** $p < .01$.

*** $p < .001$.

ns = not significant.

dents, and among high school than college students. Also, both evaluations of cheating and cheating behavior are strongly related to the psychological characteristics of self-restraint and tolerance of deviance.

Before discussing these findings in more detail, several caveats are necessary. First, the present sample was one of convenience and hence generalizations must be made with caution. Most students were White, and they came from two regions in the country. However, as is discussed below, the present findings are in accord with findings from a variety of other research which has used different samples. Second, students in the present study evaluated academic cheating only in response to one vignette pertaining to cheating on an exam. Again, this approach limits generalizability. Third, self-report measures pertaining to academic cheating may be influenced by social desirability bias. Still, students in the present study readily admitted to cheating behavior (e.g., 89% of high schoolers and 60% of college students indicated that they had copied off someone's homework within the last year). Finally, by administering the questionnaires only at one time, there may have been a context effect where students adjusted their responses based upon inferences about the relations between the different questionnaires (Council, 1993; Council et al., 1996).

The Influence of Motives on Evaluation

The nature of the motive for academic cheating was an important influence on the acceptability of cheating. However, our attempts to classify motives was unsuccessful. We did not obtain meaningful and distinct groupings either

by using a PCA or by deriving *a priori* clusters based on the empirical and conceptual work of others (e.g., Jensen, 1996; Keltikangas-Jarvinen & Lindeman, 1997; Kohlberg, 1984). In contrast to our difficulties in creating a meaningful classification of motives, our composite score of acceptance of cheating had highly satisfactory psychometric properties. Nevertheless, a useful and generalizable classification of motives for academic cheating is desirable at this time.

The motives that we identified as most and least acceptable for academic cheating were in many ways similar to motives that research on other moral transgressions has identified as popular and unpopular. As in Keltikangas-Jarvinen and Lindeman's (1997) research on theft and lying, students in the present study found a moral violation most acceptable when motivated by prosocial intentions. Students saw the scenario where academic cheating was in the service of helping one's family as particularly acceptable. In fact, it was the only one in response to which a majority of students regarded cheating as acceptable (66%). For all other motives, a minority of students regarded cheating as acceptable (7–33%). Unlike the students in Keltikangas-Jarvinen and Lindeman's (1997) research, however, students in the present study did not regard self-interested motives as least acceptable. In fact, the scenario where a student cheats in order to avoid the risk of academic probation was among the most acceptable. It is possible that motives are evaluated differently depending on the specific type of moral transgression in question (e.g., theft, lying, or academic dishonesty). It is also possible that the magnitude of what is at stake with respect to one's interests makes a difference, with academic probation being a serious threat to a person's self-interest.

Among the motives that students judged to be least acceptable was the ability to avoid detection and transgressing for the sake of a challenge. These two motives may have some generalizability as both also ranked among the least acceptable motives in research by Feldman et al. (2000) on betrayal of friends and sexual partners and in research by Cauffman et al. (2000) on physical altercations between peers and between dating partners. Whereas, students do not judge the avoidance of detection as a compelling motive for academic cheating nor for a variety of other types of moral transgressions, the extent to which students themselves are motivated to cheat by the conviction that detection is unlikely remains unclear.

Interestingly, high school and college students as well as male and female students ranked the motives for academic cheating in similar ways, even though there were differences both by school grade and sex in evaluations of the acceptability of cheating. This finding suggests that the group differences in evaluations of cheating are not due to different groups imputing different motives to a person who cheats. Instead, the different groups seem to start out at different base levels of tolerance of academic cheating (with

high schoolers more tolerant than college students and male students more tolerant than female students), and then the groups calibrate their degree of tolerance in similar ways depending on the motive.

The Relation between Moral Evaluation and Behavior

The students who evaluated academic dishonesty more leniently reported engaging in more cheating compared to students who evaluated cheating less leniently. Graham and her colleagues (1994) also observed a positive correlation between evaluations of cheating and cheating behavior. Of course, the direction of the relation between evaluation and behavior is unclear. The present finding can support the cognitive dissonance perspective that people change their evaluations to fit with their behavior. It can support a rational choice perspective that people behave in accordance with their moral evaluations. Finally, the present finding can support some combination of these two perspectives. What is clear, however, is that once we know how acceptable a student judges academic dishonesty to be, we also know something about how likely the student is to engage in cheating behavior.

Sex Differences

Female students regarded academic cheating as less acceptable than male students, and they also reported engaging in less cheating behavior. A considerable number of studies have shown that male students cheat more than female students and that male students may experience less guilt or regret about cheating (Baird, 1980; Cochran et al., 1998; Davis et al., 1992; Hetherington & Feldman, 1964; Kelly & Worrell, 1978; Roth & McCabe, 1995; Whitley, 1998).

The extent of the influence of biological and cultural factors on this sex difference is unclear. From a biological point of view, the argument can be made that men are more prone to engage in risky, high-sensation behaviors and that academic cheating involves these characteristics (Zuckerman, 1995). Also, research in other countries, such as South Africa, has shown a similar sex difference, with male students cheating more than female students (Burns, Davis, Hoshino, & Miller, 1998). From a cultural point of view, however, it is noteworthy that the results pertaining to sex differences on academic dishonesty have not been consistent in research with American students in that some studies have found that American female students cheat as much as or more so than American male students (Graham et al., 1994; Jacobson et al., 1970; Karabenick & Snull, 1978). Also, cross-cultural research has indicated that Japanese female students report engaging in more cheating than Japanese male students (Burns et al., 1998).

School Grade and Age

High school students judged academic dishonesty more leniently than college students, and they also engaged in more cheating behavior. Other re-

searchers have also noted such a difference between high school and college students (e.g., Evans & Craig, 1990). A variety of explanations can account for this finding. One possibility is that the difference between high school and college students reflects an institutionally related difference where college is academically more serious than high school, and this more serious quality is conveyed to students in a variety of ways—including more of an emphasis on not cheating.

Another possibility is that colleges enroll students who are academically more committed. Even if these students are more academically committed and less inclined to cheat by the time they reach college, these facts do not necessarily mean that they cheated less than other students in high school. Thus, some research has shown that college students indicate that they did in fact cheat more when they were high school students (Davis et al., 1992; Davis & Ludvigson, 1995). Whether the frequency of cheating of college bound students was similar to that of their noncollege bound class mates is unclear.

Still another possible explanation for the difference in academic cheating between high school and college students relates to developmental trends. In a study that included students from grades 7 through 12 as well as college students, Evans and Craig (1990) found that academic cheating peaked at the high school level. This curvilinear finding is in accord with other research that also has shown a midadolescence peak in toleration of some deviant and immoral behaviors, such as theft, lying, and fighting (Hurrelmann & Engel, 1992; Keltikangas-Jarvinen & Lindeman, 1997). However, developmental explanations of academic cheating must take into account cross-cultural variation. In Japan, for example, college students report engaging in more cheating than high school students (Burns et al., 1998). In sum, whereas the difference in academic cheating between American high school and college students is notable, a variety of explanations for this finding are plausible.

Deviance, Self-Restraint, and Academic Dishonesty

Lenient attitudes toward academic cheating and engaging in academic cheating were positively correlated with tolerance of deviance and negatively correlated with self-restraint. These findings fit with the theoretical perspective of Gottfredson and Hirshi (1990), who have proposed a general theory of deviance. Defining deviance broadly as “acts of fraud or force undertaken in pursuit of self-interest” (p. 15), they argue that such acts at least in part are the result of low self-control. In their view transgressors tend to focus on their own immediate needs without much consideration of the long-term consequences of their actions to themselves or others.

The present findings also fit with Cochran et al.’s (1998) empirical finding that low self-control is positively related to academic dishonesty. At a more

general level, the present findings are in accordance with research which has indicated that low self-restraint and tolerance of deviance are associated with a wide variety of transgressions, including betrayal of one's sexual partner, alcohol use, stealing, and physical assault (Dryfoos, 1990; Feldman et al., 2000; Feldman & Weinberger, 1994; Jessor & Jessor, 1977; McCord, 1990). Academic cheating, then, appears to share characteristics with a larger group of risky problem behaviors.

Conclusion

The present study showed that students evaluate academic cheating differently depending on a transgressor's motive. Future research might examine students' own motives for engaging in cheating behavior in order to better understand their internalized conceptions of cheating (see also, Davis & Ludvigson, 1995). In carrying out such research, it would be helpful to include groups of students that we already know differ on evaluations of cheating and frequency of engaging in cheating behavior. As shown in the present study, important factors that distinguish students are sex, school grade, self-restraint, and tolerance of deviance. If we come to understand better both how students evaluate motives for cheating and what motives guide the extent to which they engage in cheating, we might be able to begin to reduce the "epidemic" (Haines et al., 1882, p. 775) and "chronic" problem of academic dishonesty (Maramark & Maline, 1993, p. 4).

REFERENCES

- Baird, J. S. (1980). Current trends in college cheating. *Psychology in the Schools*, **17**, 515–522.
- Brown, E. (1997). Lynn Minton Reports Fresh Voices, Parade Magazine, *Saint Louis Post-Dispatch*, p. 19.
- Burns, S. R., Davis, S. F., Hoshino, J., & Miller, R. L. (1998). Academic dishonesty: A delineation of cross-cultural patterns. *College Student Journal*, **32**, 590–596.
- Carnegie Council on Policy Studies in Higher Education. (1979). *Fair practices in higher education: Rights and responsibilities of students and their colleges in a period of intensified competition for enrollments*. San Francisco: Jossey-Bass.
- Cauffman, E., Feldman, S. S., Jensen, L. A., Arnett, J. J. (2000). The (un)acceptability of violence against peers and dates among adolescents and young adults. *Journal of Adolescent Research*, **15**, 672–693.
- Cizek, G. J. (1999). *Cheating on tests: How to do it, detect it, and prevent it*. Mahwah, NJ: Erlbaum.
- Cochran, J. K., Wood, P. B., Sellers, C. S., Wilkerson, W., & Chamlin, M. B. (1998). Academic dishonesty and low self-control: An empirical test of a general theory of crime. *Deviant Behavior: An Interdisciplinary Journal*, **19**, 227–255.
- Council, J. R. (1993). Context effects in personality research. *Current Directions in Psychological Science*, **2**, 31–33.
- Council, J. R., Grant, D. L., Smith, E. J. H., Solberg, L. R., Mertz, H., Knudson, C., Titus, T. M., Long, C. J., & Kramer, T. (1996). *Preference for consistency and context effect*

- in personality measurement. Paper presented at the annual meeting of the American Psychological Association, Toronto, Canada.
- Crowne, D. P., & Marlowe, D. (1964). *The approval motive*. New York: Wiley.
- Davis, S. F., Grover, C. A., Becker, A. H., & McGregor, L. N. (1992). Academic dishonesty: Prevalence, determinants, techniques, and punishments. *Teaching of Psychology*, **19**, 16–20.
- Davis, S. F., & Ludvigson, H. W. (1995). Additional data on academic dishonesty and a proposal for remediation. *Teaching of Psychology*, **22**, 119–121.
- Drake, C. A. (1941). Why students cheat. *Journal of Higher Education*, **12**, 418–420.
- Dryfoos, J. (1990). *Adolescents at risk*. New York: Oxford Univ. Press.
- Evans, E. D., & Craig, D. (1990). Adolescent cognitions for academic cheating as a function of grade level and achievement status. *Journal of Adolescent Research*, **5**, 325–345.
- Eve, R. A., & Bromley, D. G. (1981). Scholastic dishonesty among college undergraduates: Parallel tests of two sociological explanations. *Youth & Society*, **13**, 3–22.
- Feldman, S. S., Cauffman, E., Jensen, L. A., & Arnett, J. J. (2000). The (un)acceptability of betrayal: A study of late adolescents' evaluations of sexual betrayal by a romantic partner and betrayal of friend's confidence. *Journal of Youth and Adolescence*, **29**, 499–523.
- Feldman, S. S., & Weinberger, D. A. (1994). Self-restraint as a mediator of family influences on boys' delinquent behavior: A longitudinal study. *Child Development*, **65**, 195–211.
- Goldsen, R. K. (1960). *What college students think*. Princeton, NJ: D. Van Nostrand.
- Gottfredson, M., & Hirshi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford Univ. Press.
- Graham, M. A., Monday, J., O'Brien, K., & Steffen, S. (1994). Cheating at small colleges: An examination of student and faculty attitudes and behaviors. *Journal of College Student Development*, **35**, 255–260.
- Haines, V. J., Diekhoff, G. M., LaBeff, E. E., & Clark, R. E. (1986). College cheating: Immaturity, lack of commitment, and the neutralizing attitude. *Research in Higher Education*, **25**, 342–354.
- Hetherington, E. M., & Feldman, S. E. (1964). College cheating as a function of subject and situational variables. *Journal of Educational Psychology*, **55**, 212–218.
- Hurrelmann, K., & Engel, U. (1992). Delinquency as a symptom of adolescents' orientation toward status and success. *Journal of Youth and Adolescence*, **21**, 119–138.
- Jacobson, L. I., Berger, S. E., & Millham, J. (1970). Individual differences in cheating during a temptation period when confronting failure. *Journal of Personality and Social Psychology*, **15**, 48–56.
- Jendrek, M. P. (1989). Faculty reactions to academic dishonesty. *Journal of College Student Development*, **30**, 401–406.
- Jendrek, M. P. (1992). Students' reactions to academic dishonesty. *Journal of College Student Development*, **33**, 260–273.
- Jensen, L. A. (1995). Habits of the heart revisited: Autonomy, community and divinity in adults' moral language. *Qualitative Sociology*, **18**, 71–96.
- Jensen, L. A. (1996). *Coding Manual: Ethics of Autonomy, Community, and Divinity. Different habits, different hearts: orthodoxy and progressivism in the United States and India*. Unpublished doctoral dissertation, University of Chicago.
- Jensen, L. A., Arnett, J. J., Feldman, S. S., & Cauffman, E. (2000). *The right to do wrong: Lying to parents among adolescents and emerging adults*. Manuscript submitted for publication.

- Jessor, R., & Jessor, S. L. (1977). *Problem behavior and psychosocial development*. New York: Academic Press.
- Johnson, C. D., & Gormly, J. (1971). Achievement, sociability and task importance in relation to academic cheating. *Psychological Reports*, **28**, 302.
- Karabenick, S. A., & Srull, T. K. (1978). Effects of personality and situational variation in locus of control on academic cheating: Determinants of the "congruence effect." *Journal of Personality*, **46**, 72–95.
- Kelly, J. A., & Worrell, L. (1978). Personality characteristics, parent behavior, and sex of the subject in relation to cheating. *Journal of Research in Personality*, **12**, 179–188.
- Keltikangas-Jarvinen, L., & Lindeman, M. (1997). Evaluations of theft, lying, and fighting in adolescence. *Journal of Youth and Adolescence*, **26**, 467–483.
- Kohlberg, L. (1981). *The philosophy of moral development*. San Francisco: Harper & Row.
- Kohlberg, L. (1984). *The psychology of moral development*. San Francisco: Harper & Row.
- Maramark, S., & Maline, M. B. (1993). *Issues in education: Academic dishonesty among college students*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- McCord, J. (1990). Problem behaviors. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent*. Cambridge, MA: Harvard Univ. Press.
- Newhouse, R. C. (1982). Alienation and cheating behavior in the school environment. *Psychology in the Schools*, **19**, 234–237.
- Roth, N. L., & McCabe, D. L. (1995). Communication strategies for addressing academic dishonesty. *Journal of College Student Development*, **36**, 531–541.
- Weinberger, D. A. (1997). Distress and self-restraint as measures of adjustment across the life span: Confirmatory factor analyses in clinical and nonclinical samples. *Psychological Assessment*, **9**, 132–135.
- Whitley, B. E. (1998). Factors associated with cheating among college students: A review. *Research in Higher Education*, **39**, 235–274.
- Zuckerman, M. (1995). *Behavioral expressions and psychobiological bases of sensation seeking*. Cambridge: Cambridge Univ. Press.