Academic dishonesty among students at the Hashemite University in Jordan

Dr. Aieman A. AL-Omari **Dr. Ahmad M. Qablan**

Dr. Khalil A. Qaraeen
Faculty of Educational Sciences,
The Hashemite University,
Zarqa, JORDAN

ABSTRACT

A questionnaire on academic dishonesty was administered to 435 students (231 Female and 204 Male) at the Hashemite University. Students were asked on the extent of their participation in 16 dishonest academic practices; their ratings to the ethical levels of practices; their rating to the reasons for participation in these practices. The effects of three variables (sex, GPA, and discipline) on the participants' academic dishonesty were also investigated. The rating of ethical levels and rates of participation in practices related to academic dishonesty scaled mid to high. Males were found more likely than females to engage in dishonest academic practices. Males were more unethical than females in dishonest academic practices. About 60% of Students with 3 and over GPA were more unethical than students with under 3 GPA. Also, humanities students' were more unethical than scientific students'.

Introduction

The academic dishonesty, or cheating behavior, of college and university students has been the concern of faculty and administrators for several decades (Brown, & Choong, 2003). Surveys conducted on college and university students indicate alarmingly high rates of academic dishonesty, and there is some evidence that rates have generally increased over time. Baird (1980) found that 75.5% of undergraduates from various majors cheated while in college. Singhal (1982) and Sisson and Todd-McMancillas (1984) both reported a dishonesty rate of 56% for the undergraduate with an engineering major. Tom and Borin (1988) found that 49% of students in marketing classes cheated

in college. Greene and Saxe (1992) reported a cheating rate of 81% among undergraduates, while Meade (1992) reported a rate of 87% among undergraduates in various majors at 31 top schools. Brown and Abramson (1999) found that 100% of a sample of marketing majors had cheated, and Brown and McInerney (2001) reported a rate of 96.7% for students with management majors at the same school.

Academic dishonesty or academic misconduct is a form of cheating that occurs in an educational setting, usually committed by students. Academic dishonesty has been documented in most every type of educational setting, from elementary school to graduate school, and has been met with varying degrees of approbation throughout history. Today, most instructors consider academic dishonesty to be highly injurious to the cause of learning, and usually take great pains to ensure honesty among students.

Theoretical Framework

Trying to provide a succinct definition of academic dishonesty is a challenge, given its many facets. Some educators rely on legal or dictionary definitions; others fall back on metaphors and analogies. When dishonesty in the classroom is discussed, most teachers and students think first of cheating; a fraud committed by deception; a trick, imposition, or imposture (The New Webster, 1971). A second form of academic dishonesty is plagiarism; an act of literary fraud in which one writer sets forth the words or ideas of another writer as his or her own in order to get gain (Hatch, 1992). Submitting another's work as one's own is a third form of academic misconduct (Brown & Choong, 2003). Another form of academic misrepresentation is the act of fabricating or falsifying results, i.e., fudging numbers on laboratory reports for a chemistry class (Deal, 1984).

Academic dishonesty has taken on new forms due to revolutionary changes in technology and information transfer (Simon, Carr, McCullough, Morgan, Oleson, and Ressel, 2004). The Internet provides an abundance of information easily available to students (Campbell, Swift, & Denton, 2000; Gilgoff, 2001; Parisey, 2001; Roach, 2001). Additionally, existing students' populations have witnessed dramatic changes in social norms. Political and social elites from both sides of the political and social spectra have been the subject of media scrutiny with regards

to private and public acts of dishonesty and unethical behavior; yet oftentimes the stormy clouds of scandals pass without any lasting consequence for the individuals involved. Changing social and political norms, therefore, might have an impact on the decisions of college students confronted with the choice between academic dishonesty and low performance (McCabe & Trevino, 1996).

Researchers have investigated numerous variables correlating to academic dishonesty. These variables include characteristics related to students, such as age, sex, major, and grade point average (GPA), as well as characteristics associated with schools, such as size, and whether schools are public or private, religious or secular (Sierles, Hendrickx, and Circle, 1980; Moffatt, 1990; Brown and Abramson, 1999; & Tibbetts, 1999).

Investigations on class rank have produced mixed results. Sierles et al. (1980) and Moffatt (1990) found that juniors and seniors tend more likely to cheat than younger students, but Stern and Havlicek (1986) found no difference across class ranks. Whitley's (1998) review of 107 studies concludes that class rank is essentially unrelated to the level of cheating.

Studies on students' sex have produced more consistent results. Males are generally found more likely to engage in academic dishonesty at a higher rate than females (Baird, 1980; Sierles et al., 1980; Tang & Zuo, 1997). Brown and Abramson (1999) found that participation in dishonest academic activities relates to sex for four out of 16 practices. Whitley (1998) found that, overall; males are more likely to cheat. Tibbetts (1999) found that women were more likely to be guided by moral decision-making than male counterparts. However, Stern and Havlicek (1986) found few differences between sexes.

The demographics have changed slightly; more women are now engaging in academic dishonesty than had been the case, previously. Additionally, the increasing numbers of students living in off-campus housing appears to be related to the unethical student collaboration in take-home assignments and examinations. On a positive note, however, college students who have more confidence in the institution and instructors appear to be less likely to engage in academic dishonesty (McCabe & Trevino, 1996).

Students' GPA is another variable that has been studied. Several

researchers have found that students with lower GPAs cheat more than those with higher GPAs (Bunn, Caudill, & Gropper, 1992; Moffatt, 1990; Tang & Zuo, 1997). However, Whitley (1998) concluded that, overall, GPA is not related to cheating.

The research findings of Whitley, Nelson, & Jones (1999) address family interconnectedness that often plays an important role in the development of ethical decision-making in young adults. It also discusses that students look to more responsible or respected individuals or peer-groups for guidance given that many students at school are away from their families. This supposition is partially supported by the evidence that students who are older and are possibly more religious are less likely to have engaged in academic dishonesty.

Honor codes are one possible solution for establishing a sense of institutional commitment to ethical academic behavior, as well as; establishing a set of deontologically- grounded ethical principles that can help guide students towards socially-conscious decisions. Honor codes are likely to be one example of a more proactive model to limiting academic dishonesty, a method that is more adaptable to the situation-specific circumstances often confronting students, faculty and administrators (Karlesky & Stephenson, 1971). In a recent study on the impact of student honor codes, McCabe, Trevino, & Butterfield (2001) found that the presence of an honor code does not in itself explain lower frequencies of academic dishonesty. Colleges and universities with honor codes and lower levels of academic dishonesty often have peer-group pressure to eschew academic dishonesty, as well as; a greater commitment to reporting peers who are caught engaging in dishonest behavior. In other words, students must have a sense of ownership in the educational process, if policy innovations, such as honor codes, are to be effective.

Student's involvement in policy development, therefore, is central to the implementation of successful honor codes (Crown & Spiller, 1997). The evidence indicates that students often desire stricter penalties for academic dishonesty, as they wish to play an active role in the efforts to create an ethical community at the university (McCabe & Pavela, 2000). In other words, honor codes that are simply imposed on students are insufficient: students must become actively involved in the establishment of rules guiding behavior. Kidwell (2001) reported

remarkable success in engaging students in the development of an honor code for her business classes. Through their involvement in the process, students gained greater confidence in the power and intent of an honor code and developed positive peer-group pressures to avoid academic dishonesty. Through student-teacher collaboration, it is possible to develop 'high road' approaches to creating more ethical college and university campuses (Rezaee, Elmone, & Szend, 2001).

Moreover, some of these studies had contradictory results. For example, Sierles et al. (1980) and Moffatt (1990) reported that juniors and seniors tend more likely to cheat than younger students, while Stern and Havlicek (1986) found no difference across class ranks. Also, Whitley (1998) reported that class rank is essentially unrelated to the level of cheating.

On the basis of the above argument, the following trend manifested itself: Research on the dishonest academic practices remains highly contradictory. Researches on dishonest academic practices among students still deserve further study.

In examining previous research, the researchers found no study related to Jordanian students, specifically among students' at the Hashemite University. Therefore, there is a need for additional research on the dishonest academic practices among students at the Hashemite University.

Purpose of the study

A survey of the related literature in Jordan indicated paucity of research that addressed the academic dishonest practices among university students in Jordan, and specifically at the Hashemite University. Therefore, this study was designed for the sake of understanding the nature of dishonest academic practices among Hashemite University students.

The primary purpose of this study was to assess the levels of participation in dishonest academic practices among students enrolled in the Hashemite University in Jordan, ethical levels, and reasons for participation in dishonest academic practices. This study addressed the following specific questions:

Question one : What is the percentage of students who admitted indulgence in each of the 16 dishonest academic practices while being a student at the university?

Question two : What are the levels of participation in the 16 dishonest academic practices?

- Hypothesis One: There are no differences in the levels of participation in the 16 dishonest academic practices related to students' gender.
- Hypothesis Two: There are no differences in the levels of participation in the 16 dishonest academic practices related to students' GPA (based on a scale of 4).
- Hypothesis Three: There are no differences in the levels of participation in the 16 dishonest academic practices related to students' discipline.

Question three : What are the ethical levels in each of the 16 dishonest academic practices?

- Hypothesis Four: There are no differences in the ethical levels of the 16 dishonest academic practices regarding students' gender.
- Hypothesis Five: There are no differences in the ethical levels in the 16 dishonest academic practices related to students' GPA (based on a scale of 4).
- Hypothesis Six: There are no differences in the ethical levels in the 16 dishonest academic practices related to students' discipline.

Question four : What are the reasons for participation in the 16 dishonest academic practices?

- Hypothesis Seven: There are no differences in the reasons for participation in the 16 dishonest academic practices related to students' gender.
- Hypothesis Eight: There are no differences in the reasons for participation in the 16 dishonest academic practices related to students' GPA (based on a scale of 4).
- Hypothesis Nine: There are no differences in the reasons for participation in the 16 dishonest academic practices related to students' discipline.

Procedures

Population and Sample

The target population for the study included all undergraduate students, aged 18 to 23, enrolled in one of the university elective courses, as part of their degree program in the Hashemite University during the second semester of academic year 2005/2006. A sample of 570 students was chosen randomly, but only 435 students were satisfactorily completed the survey and used in this study, with response rate of 76%. The final sample, therefore, included 231 female, 204 male. With regards to GPA, The Hashemite University has adopted the figure system since the academic year 1997/1998 instead of the score system. (Based on a scale of 4, the average scores for each semester are shown as in the following: 3.7 - 4 (Excellent), 3 - 3.69 (Very Good), 2.5 - 2.99 (Good), 2- 2.99 (Pass), and Below 2 (fail), there were 287 students with less than 3, and 148 students with 3 and more GPA. As for discipline, there were 209 scientific and 226 humanities disciplines. Students were told that participation was voluntary, and were assured that their responses anonymous.

Instrumentation

Sixteen practices extracted from literature on academic dishonesty were included in the questionnaire (Brown, 1995; Brown, & Choong, 2003). Respondents were asked to rate how often they participated in each practice while being university students. The scale was a 6-point scale, where 5 was "frequently" and 1 was "infrequently." The sixth point was "never." The scale allowed the measurement of the proportion of students who had engaged in each practice as well as the frequency of participation for those who had engaged in each behavior. Students were also asked to rate the ethical level for each of the practices on a scale ranging from 5, very unethical, to 1, not at all unethical.

The questionnaire also included 11 reasons taken from the literature addressing why students might engage in unethical academic behavior. Respondents were asked to think of the typical university student who engages in such behavior and rate the likelihood that each

item could be a reason for the behavior. The scale ranged from 1, very likely, to 5, not at all likely. Respondents were also asked to provide information about their sex, discipline, and GPA.

Instrument Translation Process

To ensure equivalence of meaning of the items and constructs between the Arabic and English versions of the Academic Dishonesty Practices Questionnaire, a rigorous translation process was used that included forward and backward translation, subjective evaluations of the translated items, and pilot testing. The goal of the translation process was to produce an Arabic version of the Academic Dishonesty Practices Questionnaire with items that were equivalent in meaning to the original English version. The Arabic version of the Academic Dishonesty Practices Questionnaire was then pilot tested with a group of 60 students to collect feedback about instrument content and usage. The feedback from students emphasized that the instrument has both face and content validity.

Instrument Standardization

The Arabic version of the Academic Dishonesty Practices Questionnaire was tested with a sample of 60 students different than that of the study but withdrawn from the same population (the Hashemite University students). Reliability coefficients for the Academic Dishonesty Practices Questionnaire established for the three dimensions were as follows: dishonest academic practices (.91), ethical levels for participation in dishonest academic practices (.85), and reasons for participation in dishonest academic practices (.83). Based on the translation process and the reliability estimates, the Arabic-translated version of the Academic Dishonesty Practices Questionnaire seemed to be a valid and reliable measure for use with a Jordanian population.

Data Collection

With the permission of the instructor, the questionnaire was administered to students during regular class periods during the second semester of academic year 2005/2006. The students received written instructions that specified the purpose of the study and explained the procedures to be followed in responding to the items. They were told that there was no right or wrong responses. Students were asked to

return the questionnaire to the class instructor who in turn returned it to the researchers. The questionnaire included a brief demographic sheet that asked students to provide basic demographic information (e.g., sex, discipline, and their GPA). The questionnaire took approximately 20 minutes to complete.

Respondents were asked to rate how often they participated in each practice while being university students. The scale was a 6-point scale, where 5 was "frequently" and 1 was "infrequently." The sixth point was "never." Students were also asked to rate the ethical level for each of the practices on a scale ranging from 5, very unethical, to 1, not at all unethical. Respondents were asked to think of the typical university student who engages in such behavior and rate the likelihood that each item could be a reason for the behavior, the scale ranged from 1, very likely, to 5, not at all likely.

Results

Question one : What is the percentage of students who admitted indulgence in each of the 16 dishonest academic practices while being a student at the university?

Table 1: Percent and mean of frequency of students participating in dishonest academic practices

	Practice	Percentage	Mean
1	Asking about the content of exam from someone who has taken it	84.5	3.95
2	Having someone check over a paper before turning it in	86.1	3.81
3	Giving information about the content of an exam to someone who has not yet taken it	81.0	3.87
4	Working with others on an individual project	82.5	4.48
5	Padding a bibliography	66.3	4.08
6	Plagiarism	60.4	3.21
7	Before taking an exam, looking at a copy that was not supposed to be available to students	54.2	3.07
8	Allowing another to see exam answers	50.7	3.63
9	Visiting a professor to influence grade	47.2	2.47
10	Using a false excuse to delay an exam or paper	47.3	2.53

Cont. Table 1: Percent and mean of frequency of students participating in dishonest academic practices

Practice		Percentage	Mean
11	Copying of another's exam	39.5	2.14
12	Taking credit for full participation in a group project without doing a fair share of the work	43.5	3.60
13	Having information programmed into a calculator during an exam	35.1	4.04
14	Using exam crib notes	35.8	1.55
15	Turning in work done by someone else as one's own	27.3	2.02
16	Passing answers during an exam	24.3	2.60
	Overall percent admitting participation	96.3	51.03

Table 1 shows the percentage of students in the Hashemite University who admitted having engaged in each of the 16 practices while being students at the university. Students at the Hashemite University were more likely to have someone check over a paper before turning it in, at a rate of 86.1%. Students were also more likely to ask about the content of the exam from someone who has taken it, at a rate of 84.5%. Students were also more likely to work with others on an individual project, at a rate of 82.5%. The overall level of academic dishonesty, defined as the percentage of students who had engaged in at least one of the practices, was 96.3%.

Question two : What are the levels of participation in the 16 dishonest academic practices?

Table 1 shows the means of students in the Hashemite University who admitted to having engaged in each of the 16 practices while being a student at the university, as measured by the 5-point frequency on the participation scale. Only students who said they had participated in an academic misconduct were included in the calculations. The Hashemite University students reported a higher frequency in participating with others in working on an individual project (M = 4.48), padding a bibliography (M = 4.08), and having information programmed into a calculator during an exam (M = 4.04). The means ranged from 1.55 to 4.48 on the 5-point scale.

Hypothesis One : There are no differences in the levels of participation in the 16 dishonest academic practices related to students' gender.

Table 2: t-Test for Equality of Means of students participating in dishonest academic practices by gender

Practice			Mean	SD	t value	Sig. Level
1	Asking about the content of exam from someone who has taken it	Male	3.97	.46	-1.105	.270
		Female	3.93	.35		
2	Having someone check over a paper before turning it in	Male	3.83	.54	-.539	.590
		Female	3.81	.45		
3	Giving information about the content of an exam to someone who has not yet taken it	Male	3.94	.73	-2.563	.011
		Female	3.81	.69		
4	Working with others on an individual project	Male	4.48	.83	-1.545	.123
		Female	4.43	.83		
5	Padding a bibliography	Male	4.08	.81	-3.349	.001*
		Female	3.98	.85		
6	Plagiarism	Male	3.23	.66	-1.140	.255
		Female	3.18	.51		
7	Before taking an exam, looking at a copy that was not supposed to be available to students	Male	3.24	1.42	-2.997	.003*
		Female	2.93	1.38		
8	Allowing another to see exam answers	Male	3.77	.67	-5.629	.000*
		Female	3.51	.59		
9	Visiting a professor to influence grade	Male	2.59	1.36	-2.421	.016
		Female	2.36	1.22		
10	Using a false excuse to delay an exam or paper	Male	2.65	1.13	-3.125	.002*
		Female	2.42	.82		
11	Copying off another's exam	Male	2.33	1.31	-4.054	.000*
		Female	1.97	1.03		
12	Taking credit for full participation in a group project without doing a fair share of the work	Male	3.69	.62	-4.017	.000*
		Female	3.51	.56		
13	Having information programmed into a calculator during an exam	Male	4.17	.76	-4.107	.000*
		Female	3.91	.92		
14	Using exam crib notes	Male	1.63	.72	-3.592	.000*
		Female	1.47	.51		
15	Turning in work done by someone else as one's own	Male	1.98	.60	1.671	.095
		Female	2.05	.57		
16	Passing answers during an exam	Male	2.58	1.26	.327	.744
		Female	2.61	1.15		
	Overall percent admitting participation	Male	52.31	5.91	-6.023	.000*
		Female	49.88	4.92		

* t-test significant at $p < .003$

The nature of the practices shows significant differences in the participation levels of gender related to males. Males were found to be more likely to participate in dishonest academic practices. For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.003 level (0.05 divided by the number of items on this scale which is 16).Table 2 shows that eight of the practices showing differences related to males, were forms of cheating in exams: padding a bibliography, before taking an exam looking at a copy that was not supposed to be available to students, allowing another to see exam answers, using a false excuse to delay an exam or paper, copying off another's exam, taking credit for full participation in a group project without doing a fair share of the work paper, using exam crib notes, and overall percent admitting participation.

Hypothesis Two : There are no differences in the levels of participation in the 16 dishonest academic practices related to students' GPA.

Table 3: t-Test for Equality of Means of students participating in dishonest academic practices by GPA

	Practice	GPA	Mean	SD	t	Sig. Level
1	Asking about the content of exam from someone who has taken it	Under 3	3.97	.44	1.545	.123
		3 and over	3.92	.33		
2	Having someone check over a paper before turning it in	Under 3	3.80	.53	-1.339	.181
		3 and over	3.85	.42		
3	Giving information about the content of an exam to someone who has not yet taken it	Under 3	3.84	.84	-1.365	.173
		3 and over	3.92	.53		
4	Working with others on an individual project	Under 3	4.39	.86	-4.303	.000*
		3 and over	4.66	.73		
5	Padding a bibliography	Under 3	4.25	.86	8.194	.000*
		3 and over	3.74	.55		
6	Plagiarism	Under 3	3.25	.64	2.993	.003*
		3 and over	3.12	.45		
7	Before taking an exam, looking at a copy that was not supposed to be available to students	Under 3	2.69	1.56	-11.124	.000*
		3 and over	3.83	.50		
8	Allowing another to see exam answers	Under 3	3.53	.70	-6.497	.000*
		3 and over	3.85	.44		
9	Visiting a professor to influence grade	Under 3	2.56	1.50	2.622	.009
		3 and over	2.30	.71		

Cont. Table 3: t-Test for Equality of Means of students participating in dishonest academic practices by GPA

Practice		GPA	Mean	SD	t	Sig. Level
10	Using a false excuse to delay an exam or paper	Under 3	2.65	1.07	4.756	.000*
		3 and over	2.29	.74		
11	Copying off another's exam	Under 3	2.06	1.32	-2.744	.006
		3 and over	2.31	.81		
12	Taking credit for full participation in a group project without doing a fair share of the work	Under 3	3.47	.61	-8.587	.000*
		3 and over	3.85	.47		
13	Having information programmed into a calculator during an exam	Under 3	4.18	.90	6.607	.000*
		3 and over	3.75	.69		
14	Using exam crib notes	Under 3	1.40	.67	-9.488	.000*
		3 and over	1.84	.37		
15	Turning in work done by someone else as one's own	Under 3	2.14	.61	8.051	.000*
		3 and over	1.78	.47		
16	Passing answers during an exam	Under 3	2.66	1.28	2.277	.023
		3 and over	2.45	1.02		
	Overall admitting participation	Under 3	50.83	6.34	-1.416	.157
		3 and over	51.44	3.40		

* t-test significant at $p < .003$

The nature of the practices shows significant differences in the participation levels of the GPA. For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.003 level (0.05 divided by the number of items on this scale which is 16). Table 3 shows that students with under 3 GPA were found to be more likely to participate in five dishonest academic practices: Padding a bibliography, plagiarism, using a false excuse to delay an exam or paper, having information programmed into a calculator during an exam, and turning in work done by someone else as one's own. While students with 3 and over GPA were found to be more likely to participate in six dishonest academic practices: Working with others on an individual project, before taking an exam looking at a copy that was not supposed to be available to students, allowing another to see exam answers, copying off another's exam, taking credit for full participation in a group project without doing a fair share of the work, and using exam crib notes.

Hypothesis Three : There are no differences in the levels of participation in the 16 dishonest academic practices related to students' discipline.

Table 4: t-test for Equality of Means of students participating in dishonest academic practices by discipline

	Practice	Discipline	Mean	SD	t	Sig. Level
1	Asking about the content of exam from someone who has taken it	Scientific	3.91	.48	-2.352	.019
		Humanities	3.98	.33		
2	Having someone check over a paper before turning it in	Scientific	3.81	.53	-.611	.541
		Humanities	3.83	.46		
3	Giving information about the content of an exam to someone who has not yet taken it	Scientific	3.96	.79	3.224	.001*
		Humanities	3.79	.63		
4	Working with others on an individual project	Scientific	4.39	1.00	-2.887	.004
		Humanities	4.56	.61		
5	Padding a bibliography	Scientific	4.26	1.03	5.512	.000*
		Humanities	3.92	.51		
6	Plagiarism	Scientific	3.17	.64	-1.590	.112
		Humanities	3.24	.53		
7	Before taking an exam, looking at a copy that was not supposed to be available to students	Scientific	2.23	1.60	-18.546	.000*
		Humanities	3.84	.51		
8	Allowing another to see exam answers	Scientific	3.31	.70	-14.611	.000*
		Humanities	3.93	.41		
9	Visiting a professor to influence grade	Scientific	2.23	1.53	-4.785	.000*
		Humanities	2.69	.99		
10	Using a false excuse to delay an exam or paper	Scientific	2.58	1.07	1.286	.199
		Humanities	2.48	.90		
11	Copying off another's exam	Scientific	1.77	1.20	-8.487	.000*
		Humanities	2.48	1.06		
12	Taking credit for full participation in a group project without doing a fair share of the work	Scientific	3.24	.58	-18.166	.000*
		Humanities	3.91	.41		
13	Having information programmed into a calculator during an exam	Scientific	4.50	.61	16.210	.000*
		Humanities	3.61	.83		
14	Using exam crib notes	Scientific	1.42	.74	-5.382	.000*
		Humanities	1.66	.47		
15	Turning in work done by someone else as one's own	Scientific	2.16	.47	6.324	.000*
		Humanities	1.89	.66		
16	Passing answers during an exam	Scientific	2.66	1.23	1.526	.127
		Humanities	2.53	1.17		
	Overall admitting participation	Scientific	49.59	6.79	-6.882	.000*
		Humanities	52.34	3.62		

* t-test significant at $p < .003$

The nature of the practices shows significant differences in the participation levels of discipline. For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.003 level (0.05 divided by the number of items on this scale which is 16).Table 4 shows that students with humanities discipline were found to be more likely to participate in six dishonest academic practices: Before taking an exam looking at a copy that was not supposed to be available to students, allowing another to see exam answers, visiting a professor to influence the grade, copying off another's exam, taking credit for full participation in a group project without doing a fair share of the work, and using exam crib notes. While students with scientific discipline were found to be more likely to participate in four dishonest academic practices: Giving information about the content of an exam to someone who has not yet taken it, Padding a bibliography, having information programmed into a calculator during an exam, and turning in work done by someone else as one's own.

Question three : What are the ethical levels in each of the 16 dishonest academic practices?

Table 5: Mean frequency of the ethical levels of dishonest academic practices

	Practice	Mean
1	Asking about the content of exam from someone who has taken it	1.90
2	Having someone check over a paper before turning it in	1.71
3	Giving information about the content of an exam to someone who has not yet taken it	3.87
4	Working with others on an individual project	4.55
5	Padding a bibliography	4.25
6	Plagiarism	3.22
7	Before taking an exam, looking at a copy that was not supposed to be available to students	3.11
8	Allowing another to see exam answers	3.71
9	Visiting a professor to influence grade	2.45
10	Using a false excuse to delay an exam or paper	2.49
11	Copying off another's exam	2.11
12	Taking credit for full participation in a group project without doing a fair share of the work	3.66

Cont. Table 5: Mean frequency of the ethical levels of dishonest academic practices

	Practice	Mean
13	Having information programmed into a calculator during an exam	4.14
14	Using exam crib notes	1.51
15	Turning in work done by someone else as one's own	3.30
16	Passing answers during an exam	4.53

Table 5 shows the mean ratings of students at the Hashemite University on the 5-point ethical level scale. The Hashemite University students' rated working with others on an individual project, passing answers during an exam, padding a bibliography, having information programmed into a calculator during an exam, as very unethical practices of academic dishonesty. While they rated using exam crib notes, having someone check over a paper before turning it in, less unethical in dishonest academic practices.

Hypothesis Four: There are no differences in the ethical levels of the 16 dishonest academic practices related to students' gender.

Table 6: t-Test for Equality of Means of the ethical levels of dishonest academic practices by gender

	Practice		Mean	SD	t value	Sig. Level
1	Asking about the content of exam from someone who has taken it	Male	1.98	1.05	-1.970	.049
		Female	1.83	.99		
2	Having someone check over a paper before turning it in	Male	1.74	.88	-.861	.389
		Female	1.69	.86		
3	Giving information about the content of an exam to someone who has not yet taken it	Male	3.88	.77	-.259	.795
		Female	3.86	.68		
4	Working with others on an individual project	Male	4.54	.82	.375	.708
		Female	4.56	.77		
5	Padding a bibliography	Male	4.19	.76	1.804	.072
		Female	4.29	.75		
6	Plagiarism	Male	3.19	.67	1.329	.184
		Female	3.25	.47		
7	Before taking an exam, looking at a copy that was not supposed to be available to students	Male	3.20	1.43	-1.616	.107
		Female	3.02	1.42		
8	Allowing another to see exam answers	Male	3.80	.70	-3.739	.000*
		Female	3.63	.49		

Cont. Table 6: t-Test for Equality of Means of the ethical levels of dishonest academic practices by gender

Practice			Mean	SD	t value	Sig. Level
9	Visiting a professor to influence grade	Male	2.52	1.37	-1.457	.146
		Female	2.38	1.24		
10	Using a false excuse to delay an exam or paper	Male	2.56	1.09	-1.868	.062
		Female	2.42	.84		
11	Copying off another's exam	Male	2.26	1.29	-3.251	.001*
		Female	1.98	1.05		
12	Taking credit for full participation in a group project without doing a fair share of the work	Male	3.67	.63	-.651	.515
		Female	3.64	.51		
13	Having information programmed into a calculator during an exam	Male	4.18	.75	-1.435	.152
		Female	4.09	.86		
14	Using exam crib notes	Male	1.55	.49	-2.415	.016
		Female	1.47	.50		
15	Turning in work done by someone else as one's own	Male	3.25	1.44	.779	.436
		Female	3.33	1.41		
16	Passing answers during an exam	Male	4.54	.62	-.360	.719
		Female	4.52	.64		

* t-test significant at $p < .003$

Table 6 shows significant differences in the ethical levels of gender related to males. Males were found to be more unethical than female in participating in dishonest academic practices. For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.003 level (0.05 divided by the number of items on this scale which is 16). Table 6 shows that four of the dishonest academic practices show significant differences related to gender: allowing another to see exam answers, and copying off another's exam.

Hypothesis Five: There are no differences in the ethical levels of the 16 dishonest academic practices related to students' GPA.

Table 7: t-Test for Equality of Means of the ethical levels of dishonest academic practices by GPA

Practice			Mean	SD	t value	Sig. Level
1	Asking about the content of exam from someone who has taken it	Under 3	1.91	1.02	.331	.741
		3 and over	1.88	1.03		
2	Having someone check over a paper before turning it in	Under 3	1.73	.89	.717	.474
		3 and over	1.68	.02		
3	Giving information about the content of an exam to someone who has not yet taken it	Under 3	3.83	.86	-2.112	.035
		3 and over	3.95	.31		
4	Working with others on an individual project	Under 3	4.44	.85	-5.350	.000*
		3 and over	4.77	.61		
5	Padding a bibliography	Under 3	4.39	.85	7.970	.000*
		3 and over	3.94	.39		
6	Plagiarism	Under 3	3.25	.63	1.749	.081
		3 and over	3.17	.45		
7	Before taking an exam, looking at a copy that was not supposed to be available to students	Under 3	2.68	1.56	-12.201	.000*
		3 and over	3.94	.42		
8	Allowing another to see exam answers	Under 3	3.57	.67	-9.074	.000*
		3 and over	3.98	.26		
9	Visiting a professor to influence grade	Under 3	2.51	1.50	1.969	.049
		3 and over	2.31	.74		
10	Using a false excuse to delay an exam or paper	Under 3	2.58	1.04	3.986	.000*
		3 and over	2.28	.75		
11	Copying off another's exam	Under 3	2.01	1.31	-3.321	.001*
		3 and over	2.31	.82		
12	Taking credit for full participation in a group project without doing a fair share of the work	Under 3	3.48	.59	-12.833	.000*
		3 and over	4.00	.25		
13	Having information programmed into a calculator during an exam	Under 3	4.27	.87	6.530	.000*
		3 and over	3.86	.58		
14	Using exam crib notes	Under 3	1.33	.47	-14.868	.000*
		3 and over	1.85	.35		
15	Turning in work done by someone else as one's own	Under 3	3.25	1.44	-.937	.349
		3 and over	3.36	1.37		
16	Passing answers during an exam	Under 3	4.56	.60	1.941	.053
		3 and over	4.46	.67		

* t-test significant at $p < .003$

Table 7 shows significant differences in the ethical levels related to GPA. For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.003 level (0.05 divided by the number of items on this scale which is 16). Table 7 shows that 9 of the dishonest academic practices have significant differences in the ethical levels. Six over of 9 (67%) dishonest academic practices have significant differences related to students with GPA 3 and over, which means students with GPA 3 and over are found to be more unethical than students with under 3 GPA in these practices: Working with others on an individual project, before taking an exam looking at a copy that was not supposed to be available to students, allowing another to see exam answers, copying off another's exam, taking credit for full participation in a group project without doing a fair share of the work, and using exam crib notes. While 3 over of 9 (33%) dishonest academic practices have significant differences related to students' GPA fewer than 3, which means students with under 3 GPA are found to be more unethical than students with 3 and over GPA, in these practices: Padding a bibliography, using a false excuse to delay an exam or paper, and having information programmed into a calculator during an exam.

Hypothesis Six: There are no differences in the ethical levels of the 16 dishonest academic practices related to students' discipline.

Table 8: t-Test for Equality of Means of the ethical levels of dishonest academic practices by discipline

Practice			Mean	SD	t value	Sig. Level
1	Asking about the content of exam from someone who has taken it	Scientific	1.944	1.03	1.181	.238
		Humanities	1.85	1.01		
2	Having someone check over a paper before turning it in	Scientific	1.75	.94	1.339	.181
		Humanities	1.67	.79		
3	Giving information about the content of an exam to someone who has not yet taken it	Scientific	3.90	.83	1.211	.226
		Humanities	3.83	.60		
4	Working with others on an individual project	Scientific	4.45	.97	-3.317	.001*
		Humanities	4.64	.56		
5	Padding a bibliography	Scientific	4.43	.98	6.596	.000*
		Humanities	4.07	.38		
6	Plagiarism	Scientific	3.17	.63	-2.037	.042
		Humanities	3.26	.51		
7	Before taking an exam, looking at a copy that was not supposed to be available to students	Scientific	2.18	1.58	-20.813	.000*
		Humanities	3.94	.41		
8	Allowing another to see exam answers	Scientific	3.38	.69	-16.013	.000*
		Humanities	4.01	.28		
9	Visiting a professor to influence grade	Scientific	2.16	1.52	-5.564	.000*
		Humanities	2.69	1.00		
10	Using a false excuse to delay an exam or paper	Scientific	2.47	1.04	-.208	.835
		Humanities	2.49	.90		
11	Copying off another's exam	Scientific	1.68	1.15	-9.747	.000*
		Humanities	2.49	1.06		
12	Taking credit for full participation in a group project without doing a fair share of the work	Scientific	3.25	.54	-24.111	.000*
		Humanities	4.01	.26		
13	Having information programmed into a calculator during an exam	Scientific	4.60	.52	17.404	.000*
		Humanities	3.71	.79		
14	Using exam crib notes	Scientific	1.34	.48	-8.918	.000*
		Humanities	1.65	.47		
15	Turning in work done by someone else as one's own	Scientific	3.28	1.40	-.130	.897
		Humanities	3.30	1.44		
16	Passing answers during an exam	Scientific	4.51	.62	-.708	.479
		Humanities	4.54	.63		

* t-test significant at $p < .003$

Table 8 shows significant differences in the ethical levels of student's discipline. For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.003 level (0.05 divided by the number of items on this scale which is 16). Table 8 shows that 9 of the dishonest academic practices showing significant differences on the ethical levels. Seven of 9 dishonest academic practices have significant differences related to humanities discipline: Working with others on an individual project, before taking an exam, looking at a copy that was not supposed to be available to students, allowing another to see exam answers, visiting a professor to influence grade, copying off another's exam, taking credit for full participation in a group project without doing a fair share of the work, and using exam crib notes. While 2 over of 9 dishonest academic practices have significant differences related to scientific discipline: Padding a bibliography, and having information programmed into a calculator during an exam.

Question four: What are the reasons for participation in the 16 dishonest academic practices?

Table 9: Mean rating of reasons for participation in dishonest academic practices

	Practice	Mean
1	To get high grade	3.47
2	Difficulty of material or course	3.03
3	Had time but did not prepare adequately	3.41
4	Feels no one is hurt by behavior	3.00
5	Does not have adequate time	3.44
6	Feels risk of getting caught is low	3.01
7	Instructor is poor or indifferent	2.99
8	Feels the material or assignment is irrelevant	3.00
9	Everyone does it	3.47
10	Peer pressure	3.46
11	Is a challenge or thrill	3.41

Table 9 shows the mean ratings of students on the 5-point scale indicating the likelihood of reasons for participation in academic

dishonesty. University students indicated higher likelihood to get a high grade, everyone does it, and peer pressure. The means were almost identical, at 3.47, 3.47 and 3.46 respectively.

Hypothesis Seven: There are no differences in the reasons for participation in the 16 dishonest academic practices related to students' gender.

Table 10: t-Test for Equality of Means rating of reasons for participation in dishonest academic practices by gender

Practice			Mean	SD	t value	Sig. Level
1	To get high grade	Male	3.76	.94	-9.187	.000*
		Female	3.22	.62		
2	Difficulty of material or course	Male	3.34	1.66	-2.600	.010
		Female	2.75	3.86		
3	Had time but did not prepare adequately	Male	3.70	.99	-8.235	.000*
		Female	3.11	.81		
4	Feels no one is hurt by behavior	Male	3.35	1.65	-2.853	.004*
		Female	2.70	3.85		
5	Does not have adequate time	Male	3.69	.95	-8.018	.000*
		Female	3.21	.62		
6	Feels risk of getting caught is low	Male	3.32	1.66	-2.579	.010
		Female	2.73	3.86		
7	Instructor is poor or indifferent	Male	3.27	1.69	-2.319	.021
		Female	2.74	3.85		
8	Feels the material or assignment is irrelevant	Male	3.29	1.67	-2.439	.015
		Female	2.74	3.86		
9	Everyone does it	Male	3.76	.94	-9.309	.000*
		Female	3.21	.62		
10	Peer pressure	Male	3.74	.92	-8.749	.000*
		Female	3.22	.64		
11	Is a challenge or thrill	Male	3.70	.99	-4.881	.000*
		Female	3.15	.82		

* t-test significant at $p < .004$

For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.004 level (0.05 divided by the number of items on this scale which is 11). Table 10 shows that the nature of the practices has significant differences for reasons to participate in dishonest academic practices related to gender. There

were 7 over of 11 significant differences for reasons for participation in dishonest academic practices. Males were found to have a higher likelihood in participating in dishonest academic practices.

Hypothesis Eight: There are no differences in reasons for participation in the 16 dishonest academic practices related to students' GPA.

Table 11: t-Test for Equality of Means rating of reasons for participation in dishonest academic practices by GPA

Practice			Mean	SD	t value	Sig. Level
1	To get high grade	Under 3	3.70	.83	11.389	.000*
		3 and over	3.01	.62		
2	Difficulty of material or course	Under 3	3.87	3.37	11.403	.000*
		3 and over	1.35	.83		
3	Had time but did not prepare adequately	Under 3	3.65	.91	10.474	.000*
		3 and over	2.92	.81		
4	Feels no one is hurt by behavior	Under 3	3.82	3.39	11.100	.000*
		3 and over	1.36	.79		
5	Does not have adequate time	Under 3	3.65	.84	10.409	.000*
		3 and over	3.01	.62		
6	Feels risk of getting caught is low	Under 3	3.85	3.37	11.411	.000*
		3 and over	1.33	.78		
7	Instructor is poor or indifferent	Under 3	3.82	3.39	11.219	.000*
		3 and over	1.34	.79		
8	Feels the material or assignment is irrelevant	Under 3	3.84	3.38	11.317	.000*
		3 and over	1.33	.79		
9	Everyone does it	Under 3	3.70	.83	11.336	.000*
		3 and over	3.02	.63		
10	Peer pressure	Under 3	3.69	.81	10.802	.000*
		3 and over	3.03	.66		
11	Is a challenge or thrill	Under 3	3.65	.91	10.209	.000*
		3 and over	2.94	.84		

* t-test significant at $p < .004$

For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.004 level (0.05 divided by the number of items on this scale which is 11). Table 11 shows that the nature of the practices has significant differences for reasons for participation in dishonest academic practices related to GPA. There

were significant differences for reasons for participation in dishonest academic practices. Students with lower than 3 GPA were found to have a higher likelihood for participating in dishonest academic practices.

Hypothesis Nine: There are no differences in reasons for participation in the 16 dishonest academic practices related to students' discipline.

Table 12: t-Test for Equality of Means rating of reasons for participation in dishonest academic practices by discipline

Practice			Mean	SD	t value	Sig. Level
1	To get high grade	Scientific	3.68	.83	6.469	.000*
		Humanities	3.29	.79		
2	Difficulty of material or course	Scientific	3.91	3.93	7.796	.000*
		Humanities	2.22	1.47		
3	Had time but did not prepare adequately	Scientific	3.61	.87	5.471	.000*
		Humanities	3.23	.97		
4	Feels no one is hurt by behavior	Scientific	3.85	3.94	7.398	.000*
		Humanities	2.24	1.47		
5	Does not have adequate time	Scientific	3.61	.84	5.192	.000*
		Humanities	3.29	.79		
6	Feels risk of getting caught is low	Scientific	3.86	3.94	7.503	.000*
		Humanities	2.23	1.47		
7	Instructor is poor or indifferent	Scientific	3.84	3.96	7.397	.000*
		Humanities	2.22	1.47		
8	Feels the material or assignment is irrelevant	Scientific	3.86	3.94	7.510	.000*
		Humanities	2.22	1.47		
9	Everyone does it	Scientific	3.67	.82	6.382	.000*
		Humanities	3.29	.79		
10	Peer pressure	Scientific	3.66	.81	6.233	.000*
		Humanities	3.29	.80		
11	Is a challenge or thrill	Scientific	3.62	.88	5.657	.000*
		Humanities	3.23	.97		

* t-test significant at $p < .004$

For our study, we chose to control Type I error using a traditional Bonferroni procedure and test each item at the 0.004 level (0.05 divided by the number of items on this scale which is 11). Table 12 shows that the nature of the practices has significant differences for reasons of

participation in dishonest academic practices related to students' discipline. There were significant differences in all reasons for participation in dishonest academic practices. Students of the scientific discipline were found to have a higher likelihood for participating in dishonest academic practices.

Discussion of results

The primary purpose of this study was to investigate the dishonest academic practices and unethical levels of dishonest academic practices, and reasons for participation in dishonest academic practices among students' at the Hashemite University. It is generally assumed that universities are connected in a way to the development of higher moral values, and thus; promote a greater tendency to behave morally (Bruggeman & Hart, 1996). This suggests that the direct impact of ethics in education is on values, followed by changes in behavior. One might expect that students at the university level would rate the 16 dishonest academic practices included in this study as more unethical than students receiving a different level of education, and would, therefore, report lower levels of participation. However, in this study, the rating of ethical levels and rates of participation in practices scaled mid to high.

The results indicated that males were found to be more likely to engage in dishonest academic practices. This result may be explained by the fact that male students seek self-interests to obtain a college degree for individual economic benefits rather than to become learned individuals. This result agrees with those reported by Baird (1980), Sierles et al. (1980), Tang & Zuo (1997), and Whitley (1998).

Results of this study indicated also, that students with under 3 GPA were more likely to participate in dishonest academic practices, through padding a bibliography, plagiarism, visiting professor to influence the grade, or using a false excuse to delay an exam or paper. This means college students with under 3 GPA may feel less confident in themselves and in the institution and instructors, which reflects among those students to be more likely to engage in dishonest academic practices. This result agrees with Bunn, Candill & Gropper (1992),

Moffatt (1990), and Zang & Zuo (1997). At the same time this result is not consistent with Whitley's (1998) results, which concluded that GPA is not related to cheating and dishonest academic practices.

With regards to students' discipline, the results of study indicated that students' belongings to humanities discipline were more likely to participate in dishonest academic practices. This result may be explained by the fact that humanities students feel that university's faculty members are less committed to the teaching and learning process, so, they have ethical levels less than scientific discipline students. This result is consistent with studies of Tom & Borin (1988), Brown & Abramson (1999), and Brown & McInerney (2001).

Regarding to ethical levels, the results of this study indicated that males were more unethical than females in dishonest academic practices. This result may be explained by the fact that male students' ethics rests with external ties, not with the intellectual and social goals of the university; their success is measured by the job and the money they will earn in the future, not by academic recognition. In addition to that, the increasing number of male students who live outside their home, out of control of their families, influences their ethical levels. This result agrees with McCabe & Trevino (1996).

Also, about 60% of Students with GPA 3 and over were more unethical than students with under 3 GPA, and this result may be explained by the fact that students with GPA 3 and over, try to keep their high level of achievement even by cheating or committing dishonest academic acts, so their ethical levels will be in low level. In addition, students with humanities discipline have more unethical levels than students with scientific discipline. This result may be explained by the fact that scientific students feel that university's faculty members are more committed to the teaching and learning process. Building on that, scientific students have higher ethical levels than humanities. This result agrees with McCabe & Trevino (1996).

Conclusion and Implications

One possible conclusion for these study outcomes is that the level of exposure of students to values and ethics is not high enough to have an impact on work. This could be a result of discrepancy between what is described in the student's catalog as ethical, and what actually happens in

the classroom. Another reason discusses the intensity of the classroom coverage on ethical issues as not being high enough to have the desired effect. Perhaps more ethics courses, more emphasis on ethics in other courses, or different teaching methods would eventually bring about a change in university students' evaluation of the academic practices.

Another possible conclusion is that the educational orientation at the university level has an effect on some aspect or aspects of students' values, but not in respect to their academic endeavors. The education ethics might have been either too general or too situation specific for students to link to their academic pursuits.

It must be recognized that success in changing students' values and ethics will not necessarily bring about the desired change in behavior. Bruggeman and Hart (1996) point out that the cognitive process used in reaching moral conclusions, or moral reasoning, can be different from overt actions in situations that call for moral judgment, or moral behavior. In other words, "there is a difference between knowing what is right and doing what is right" (Bruggeman & Hart, 1996, p. 341). Even if a university is successful in instilling a higher level of morality in its students, their academic behavior might still be dominated by other factors associated with academic dishonesty, because academic dishonesty is most likely a complex behavior that includes environmental conditions, as well as a host of personality and motivational factors.

The results of this study urge educators to examine how they are going about teaching moral/ ethical behavior so as to improve its effectiveness. The findings of this study suggest a similar examination of the educational process at the university level, especially with respect to its effect on how students approach their academic pursuits. Also, the finding of this study offers further support for the need to educate students about the importance of academic honesty and ethics, through university and college programming to reinforce academic integrity in the minds of students.

And finally, one of the recommendations of the present study emphasizes on the prevention of academic dishonesty by having faculty and administrators agree on what is considered academically dishonest at their university, and by making sure students are informed about what is expected of them through a student handbook, a course syllabi, and discussions on the issue lead by instructors.

عدم الأمانة الأكاديمية لدى طلبة الجامعة الهاشمية

د. أيمن أحمد العمري د. أحمد محمد قبلان

د. خليل عزمي قراعين

كلية العلوم التربوية

الجامعة الهاشمية – الزرقاء – الأردن

الملخص

تهدف هذه الدراسة التي تكونت عينتها من ٤٣٥ طالبا (٢٣١ إناث و ٢٠٤ ذكور) في الجامعة الهاشمية إلى التعرف على أكثر الممارسات غير الأكاديمية شيوعا بين الطلبة فيما يتعلق بعدم الأمانة الأكاديمية، بالاضافة الى المستوى الأخلاقي بين الطلبة فيما يتعلق بتلك الممارسات، والأسباب وراء تلك الممارسات. وأشارت نتائج الدراسة الى أن مستوى الممارسات غير الأكاديمية المتعلقة بعدم الأمانة الأكاديمية والمستوى الأخلاقي بين الطلبة تتراوح من الدرجة المتوسطة الى العالية، وأن الطلبة الذكور لديهم عدم أمانة أكاديمية أكثر من الطالبات، وأن المستوى الأخلاقي لدى الطالبات أعلى من مستوى الطلبة الذكور فيما يتعلق بتلك الممارسات. والطلبة ذوي التخصصات الانسانية يمارسون سلوك عدم الأمانة الأكاديمية أكثر من الطلبة بالتخصصات العلمية.

References

1 - Baird, J.S. (1980). Current trends in college cheatings. **Psychology in the Schools, 17**(4), 515-522.

2 - Brown, B.S. (1995). The academic ethics of graduate business students: A survey. **Journal of Education for Business, 70**(3), 151-156.

3 - Brown, B.S.; & Choong, P. (2003). A comparison of academic dishonesty among business students in a public and private catholic university. **Journal of Research on Christian Education, 12**(1), 27-48.

4 - Brown, B.S.; & Abramson, J. (1999). The academic ethics of undergraduate marketing majors. **Academy of Marketing Studies Journal, 3**(1), 62-71.

5 - Brown, B.S.; & McInerney, M. (2001). The academic ethics of business management students: A lesson for professors. **The International Journal of Business Disciplines, 11**(3), 79-88.

6 - Bruggeman, E.L.; & Hart, K. (1996). Cheating, lying, and moral reasoning by religious and secular high school students. **Journal of Educational Research, 89**(6), 340-349.

7 - Bunn, D.N.; Caudill, S.B.; & Gropper, D.M. (1992). Crime in the classroom: An economic analysis of undergraduate cheating behavior. **Journal of Economic Education,** 23 (Summer), 197-207.

8 - Campbell, C.; Swift, C.; & Denton, L. (2000). Cheating goes hi-tech: on-line term paper mills. **Journal of Management Education, 24**(6), 726-740.

9 - Crown, D.; & Spiller, M. (1997). Faculty responsibilities in dealing with collegiate cheating: a student development perspective. **Teaching Business Ethics**, 1, 117-130.

10 - Deal, W. J. (1984, September). Cheating. **Journal of Chemical Education,** 61, 797.

11 - Gligoff, D. (2001). Click on honorable college student: will

computers make honor codes obsolete? **U.S. News and World Report, 130**(20), 51.

12 - Greene, A.S.; & Saxe, L. (1992). Everybody (else) does it: Academic cheating. Paper presented at the annual meeting of the Eastern Psychological Association, April 3-5, Boston, MA. Eric Document No. 347931.

13 - Hatch, G. L. (1992, March). The crime of plagiarism: A critique of literary property law. Paper presented at the 43rd Conference on College Composition and Communication, Cincinnati, OH.

14 - Karlesky, J.; & Stephenson, D. (1971). Student disciplinary proceedings: some preliminary questions. **Journal of Higher Education, 42**(8), 648-656.

15 - Kidwell, L. (2001). Student honor codes as a tool for teaching professional ethics. **Journal of Business Ethics**, 29, 45-49.

16 - Meade, J. (1992). Cheating: Is academic dishonesty par for the course? **Prism, 1**(7), 30-32.

17 - McCabe, D.; & Pavela, G. (2000). Some good news about academic integrity. **Change, 32**(5), 32-38.

18 - McCabe, D.; & Trevino, L. (1996). What we know about cheating in college. **Change, 28**(1), 28-32.

19 - McCabe E, D.; Trevino, L.; & Butterfield, K. (2001). Dishonesty in academic environments. **Journal of Higher Education, 72**(1), 29-45.

20 - Moffatt, M. (1990). **Undergraduate cheating**. Eric Document No. 334931.

21 - Parisey, C. (2001). Turn It On.com. **Library Journal, 126**(8), 138.

22 - Rezaee, Z.; Elmore, R.; & Szendi, J. (2001). Ethical behavior in higher educational institutions: the role of the code of conduct. **Journal of Business Ethics,** 30, 171-183.

23 - Roach, R. (2001). Safeguarding against online cheating. **Black Issues in Higher Education, 18**(8), 92.

24 - Sierles, F.; Hendrick, I.; & Circle, S. (1980). Cheating in medical school. **Medical Education, 55**(2), 124-125.

25 - Simon, C.A.; Carr, J.R.; McCullough, S.M.; Morgan, S.J.; Oleson, T.; and Ressel, M. (2004). Gender, student perceptions, institutional commitments and academic dishonesty: Who reports in academic dishonesty cases? **Assessment and Evaluation in Higher Education, 29**(1), 75-90.

26 - Singhal, A.C. (1982). Factors in student dishonesty. **Psychological Reports,** 51, 775-780.

27 - Sisson, E.; & Todd-McMancillas, W. (1984). Cheating in engineering courses: Short and long-term consequences. Paper presented at the annual meeting of the Midwest Section of the American Society of Engineering Education, March, Wichita, NE. Eric Document No. 242532.

28 - Stern, E.B., & Havlicek, L. (1986). Academic misconduct: Results of faculty and undergraduate student surveys. **Journal of Allied Health, 15**(2), 129-142.

29 - Tang, S.; & Zuo, J. (1997). Profile of college examination cheaters. **College Student Journal, 31**(3), 340-347.

30 - Tibbetts, S. (1999). Differences between women and men regarding decisions to commit test cheating. **Research in Higher Education, 40**(3), 323-342.

31 - Tom, G.; & Borin, N. (1988). Cheating in academic. **Journal of Education for Business**, 63(January), 153-157.

32 - Whitley, B.E. (1998). Factors associated with cheating among college students: A review. **Research in Higher Education, 39**(3), 235-274.

33 - Whitley, B.; Nelson, A.; & Jones, C. (1999). Gender differences in cheating attitudes and classroom cheating behavior: a meta-analysis. **Sex Roles, 41**(9/10), 657-680.