

Internet Plagiarism Among College Students

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Six hundred ninety-eight undergraduates (85.9% between the ages of 17 and 23; 87.5% in the first through fourth year) from nine colleges and universities completed a survey on Internet plagiarism. A substantial minority of students reported they use the Internet to copy and paste text into their papers without citation.

Student cheating has garnered much public attention recently. A perception reflected in media accounts is that acts of academic dishonesty among students in college as well as high school have increased sharply. The cover of the November 22, 1999 issue of *U.S. News & World Report*, for example, announced that “a new epidemic of fraud is sweeping through our schools” (“Cheating, writing, and arithmetic,” 1999). Nearly universal access to the Internet has been cited as a reason for this perceived decline in academic integrity, in particular regarding plagiarism. A July 6, 2001 article in the *Chronicle of Higher Education* reported that “several indicators point to widespread plagiarism on campus,” and that “officials at some colleges say that in recent years they have seen a sharp increase in students cutting and pasting material into papers from Web sites without attribution, or purchasing term papers from online term-paper mills” (Young, 2001, A26). Four years ago a count of term paper mills on the Web—including A-Plus Termpapers, Paperz.com, School Sucks, and Research Assistance by Collegiate Care—set the number at 70 (Basinger & McCollum, 1997).

One further indication of growing concern over Internet plagiarism is the development of plagiarism-detection software, such as that employed by Turnitin.com, a service that scans student papers for text lifted from Websites and marks each suspect passage with a link to its probable online source. The use of plagiarism-detection software by professors “appears to be growing” (Young, 2001, A26).

The Internet may be exacerbating the long-standing problem of student plagiarism on college campuses. Moreover, Internet plagiarism raises important questions of academic integrity as students—as well as faculty—frequently turn to online sources, and it foregrounds issues related to the correct handling and citation of online sources. Therefore, university administrators, faculty, and staff should be concerned about the impact of the Internet in shaping a new generation of students’ conception of what does and does not constitute fair use of the countless texts so readily available at the click of a mouse.

Although student academic honesty has attracted considerable scholarly notice for some time, the probable impact of Internet access on student plagiarism is mostly a matter of conjecture and has not yet been studied sufficiently or systematically. Therefore, a measure of the incidence of student online plagiarism will provide a needed map of the territory and an indication of whether or not matters are as bad as many apparently fear they are. Also helpful will be a better understanding of several contextual factors

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related to Internet plagiarism: students' perceptions of peer behavior, their ethical views, and their awareness of institutional sanctions. These factors have been strongly linked to student academic dishonesty (McCabe, Trevino, & Butterfield, in press). Indeed, a review of the relevant literature reveals that studies have focused on these issues—the incidence of academic dishonesty and the contextual factors that influence student cheating.

Incidence

Although plagiarism has been examined qualitatively, primarily within English studies (Drum, 1986; Howard, 1999; Kolich, 1983; McLeod, 1992; Wilhoit, 1994), most of what we know about the incidence of student plagiarism must be extrapolated from surveys of students and, to a lesser extent, faculty and administrators regarding multiple forms of academic dishonesty (Aaron, 1992; Collison, 1990; Davis, Grover, Becker, & McGregor, 1992; Gehring, Nuss, & Pavela, 1986; Haines, Diekhoff, LaBeff, & Clark, 1986; Maramark & Maline, 1993; McCabe, 1992; McCabe & Bowers, 1994; McCabe & Trevino, 1993, 1996, 1997; Nuss, 1984; Shropshire, 1997). In general, self-reports of cheating are high, although estimates vary widely, with 9% to 95% of those asked admitting to some form of academic dishonesty (summarized in Maramark & Maline). In a survey of 6,096 undergraduates on 31 campuses, McCabe (1992) reported that 67.4% admitted cheating at least once on a test or major assignment. Davis et al. reported similar numbers in another multicampus survey, also of more than 6,000 students: 76% admitted cheating in either high school or college or both.

Hawley (1984), based on a single-campus survey of 425 undergraduates,

reported that 12% admitted asking someone to write a paper for them, 14.6% said they had turned in a paper written by another student, and 5.6% indicated “they had handed in a paper obtained from a research service” (p. 36). In addition, approximately 25% of these students “agree with one or more arguments that plagiarism is acceptable behavior” (p. 38).

We know of only one large-scale study including self-reports of student plagiarism. In a comparison of two multicampus surveys of cheating behavior conducted 30 years apart, McCabe and Trevino (1996) reported that 30% of students in a 1963 study admitted plagiarizing, and 26% did so in a survey carried out at the same schools in 1993.

Contextual Influences on Cheating and Plagiarism

A strong relationship has been demonstrated between several contextual variables and student cheating (Bowers, 1964; McCabe & Trevino, 1993, 1997; McCabe et al., in press). According to McCabe et al., “these variables include perception of peers' behavior, student perceptions of the understanding and acceptance of academic integrity policies, the perceived certainty of being reported for cheating, and the perceived severity of campus penalties for cheating.”

Perception of peer behavior is an important factor in academic integrity. Multicampus studies by McCabe and Trevino (1993, 1996, 1997) showed that perceptions of others strongly influenced student academic dishonesty. Indeed, McCabe and Trevino (1997) concluded, “The most powerful influential factors [regarding cheating] were peer-related contextual factors,” including perceptions of peer behavior (p. 391). Elsewhere, McCabe and Trevino (1993) emphasized that “Academic

TABLE 1.
Demographics of Survey Respondents
(*N* = Valid Cases)

| | <i>n</i> | % <i>N</i> |
|-------------------------------|----------|------------|
| Sex <i>N</i> = 644 | | |
| Male | 282 | 43.8 |
| Female | 326 | 56.2 |
| Age <i>N</i> = 673 | | |
| < 17 | 3 | 0.4 |
| 17-19 | 164 | 24.4 |
| 20-21 | 268 | 39.8 |
| 22-23 | 146 | 21.7 |
| 24-25 | 33 | 4.9 |
| Over 25 | 59 | 5.2 |
| Year in school <i>N</i> = 655 | | |
| < 1 | 11 | 1.6 |
| 1 | 108 | 16.5 |
| 2 | 108 | 16.5 |
| 3 | 173 | 26.4 |
| 4 | 184 | 28.1 |
| 5 | 44 | 6.7 |
| > 5 | 27 | 4.4 |
| Major <i>N</i> = 664 | | |
| Business | 133 | 20 |
| Computer Technology | 107 | 16.1 |
| Education | 104 | 15.7 |
| Behavioral and Soc. Sci. | 33 | 5 |
| Humanities | 33 | 5 |
| Fine and Applied Arts | 32 | 4.8 |
| Engineering | 17 | 2.6 |
| Math and Science | 9 | 1.4 |
| Other | 189 | 28.5 |

dishonesty is most strongly associated with the perceptions of peers' behavior" (p. 536). Conversely, strong disincentives for academic dishonesty are the likelihood of being caught and the perceived severity of penalties (McCabe & Trevino, 1993).

Concerning students' ethical views regarding academic honesty, Davis et al. (1992) concluded, "Most students say that it is wrong to cheat," noting that "the percentage of students answering yes to the question, 'Is it wrong to cheat?' has never been below 90%" at the schools they surveyed (p. 17). However, measures of the incidence of cheating suggest a contradiction between what students say and do. In addition, some have argued that colleges and universities are not doing nearly enough to foster a commitment among students to academic honesty. Aaron (1992), based on a survey of 257 chief academic officers, found that few faculty discussed cheating in class, few institutions provided student development programs focused on academic integrity, and almost none made an effort to assess the extent of cheating on their campus. Nuss (1984) faulted the academic community for lack of success "in communicating the value of independent scholarship to its students" (p. 140).

In sum, much is known about academic honesty and plagiarism among college students; however, to date little has been done to measure the effect on plagiarism of the Internet, which presumably makes plagiarism easier. We conducted the current study to answer the following questions. What is the incidence of Internet plagiarism among college students? What are students' perceptions of Internet plagiarism by their peers? What are students' perceptions of the ethics of Internet plagiarism? What are students' perceptions of institutional sanctions re-

garding plagiarism using the Internet?

METHOD

To gain a better understanding of how and how often students use the Internet to plagiarize—cutting and pasting, soliciting papers from others, purchasing papers from online term paper mills—we surveyed students on nine campuses to gauge undergraduate attitudes and practices related to online plagiarism.

Participants

Six hundred ninety-eight students completed the survey (valid cases differed from item to item due to varying numbers of missing responses). As shown in Table 1, survey respondents were mostly between the ages of 17 and 23 (85.9%), came from a range of majors, and represented all four undergraduate years in comparable numbers.

Many of these students indicated they

were frequent users of e-mail and the Internet. (When we analyzed these data, we defined *frequent* as at least three or four times per week.)

A weakness of many studies of this kind is that they survey a small number of students on a single campus. To cast a wide net over a varied population of undergraduates, our survey was administered to a convenience sample of students in a variety of courses in communication, technical communication, and English on multiple campuses.

Instrument

The instrument, a machine-scored pencil-and-paper survey, was first piloted with a small number of students on our own campus, revised, and then distributed to participating faculty at nine colleges and universities. The current study was part of a dual investigation: of 60 items on the survey, 28 concerned plagiarism and the Internet, and 32 related

TABLE 2.
Frequency of Computer Use by Respondents

| Frequency of use | E-mail N = 682 | | Other Internet N = 681 | |
|-------------------------|----------------|------|------------------------|------|
| | n | % N | n | % N |
| Several times per day | 254 | 37.2 | 191 | 28.0 |
| Once per day | 170 | 24.9 | 103 | 15.1 |
| 3 or 4 times per week | 122 | 17.9 | 170 | 25.0 |
| Once per week | 56 | 8.2 | 97 | 14.2 |
| Once every 2 weeks | 22 | 3.2 | 49 | 7.2 |
| Once per month | 17 | 2.5 | 35 | 5.1 |
| Once every few months | 14 | 2.1 | 13 | 1.9 |
| < Once every few months | 14 | 2.1 | 14 | 2.1 |
| Never | 13 | 1.9 | 9 | 1.3 |

to student attitudes toward computer and online communication. Only the plagiarism data are reported here.

In the plagiarism portion of the survey, students were asked to indicate, using a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*very frequently*) how often they engaged in each of eight acts of plagiarism: (a) copying text and inserting it in a paper without citation, (b) copying an entire paper without citation, (c) asking someone to provide them with a paper, (d) using the Internet to copy text and insert it in a paper without citation, (e) using the Internet to copy an entire paper without citation, (f) using the Internet to ask someone to provide them with a paper, (g) purchasing a paper from a term paper mill advertised in a print publication, (h) purchasing a paper from an online term paper mill. Because plagiarism in its more abstract sense often is misunderstood by students and is difficult for them to define (Ashworth, Bannister, & Thorne, 1997), in this survey students were asked about specific acts. In fact, the word *plagiarism* appeared in none of the items on the survey.

Using the same scale, respondents also estimated how often they believed other students committed each of the acts of plagiarism. Specifically, we wanted to know if any marked disparity exists between self-reports of plagiarism and students' perception of what is taking place around them.

Next, students were asked to assess the ethics and institutional sanctions regarding: (a) handing in someone else's writing as one's own, (b) using the Internet to copy text and handing it in as one's own, (c) purchasing papers from term paper mills, (d) purchasing papers from online term paper mills. Using a 5-point Likert-type scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*), students responded to three statements about

each of the categories: that the act described is wrong, that their professors clearly feel it is wrong, and that their college has strict punishments for the behavior.

PROCEDURE

The survey was conducted during Winter and Spring of the 1999-2000 academic year, at nine institutions (enrollment in parentheses):

- four state universities in Indiana (18,000), Pennsylvania (7,100), Vermont (8,900), and Wisconsin (12,000)
- two institutes of technology in New York State, one public (2,600) and one private (14,000)
- an American University in the Middle East (5,000)
- a small private university in Washington, D.C. (2,000)
- a community college in Pennsylvania (11,000)

Students participated voluntarily in the survey, which was administered by faculty during regularly scheduled classes.

Self-reporting of any behavior is problematic; self-reporting of dishonest behavior is even more challenging. To increase the likelihood that survey respondents will answer questions candidly, they must be confident that their responses cannot be traced to them. Those administering this survey, as well as the text of the survey itself, emphasized that responses would remain anonymous, and nowhere on the survey were students asked to provide personal information that could identify them individually.

Data Analysis

After collecting the data, we performed a

TABLE 3.
Acts of Conventional Plagiarism: Self-Reports and Perception of Others
by Percentage Frequency and Mean Response

| Plagiarism Act | Never/Rarely | | Sometimes | | Often/Very Frequently | | Mean: 1-5 | |
|-----------------------------|--------------|--------|-----------|--------|-----------------------|--------|-----------|--------|
| | Self | Others | Self | Others | Self | Others | Self | Others |
| Copy text without citation | 71.4 | 8.9 | 19.0 | 39.2 | 9.6 | 52.0 | 2.04 | 3.57 |
| Copy paper without citation | 91.4 | 35.4 | 5.4 | 40.4 | 3.2 | 24.2 | 1.31 | 2.90 |
| Request a paper to hand in | 89.7 | 25.5 | 8.3 | 41.5 | 2.1 | 33.0 | 1.39 | 3.15 |
| Purchase a paper to hand in | 90.9 | 36.7 | 6.3 | 42.2 | 2.8 | 21.1 | 1.30 | 2.85 |

principal component analysis with varimax rotation to identify the underlying factors. This analysis resulted in four factors with eigenvalues over 1.0 (see Appendix). These four factors, which accounted for 62.2% of the variance, are Others (students' perception of others' plagiarism), Self-report (self-reports of plagiarism), Ethics (students' ethical views, and perception of their professors' views, on plagiarism), and Sanctions (students' perception of strict punishments for plagiarism at their colleges). These factors were used to test correlations between self-reported plagiarism and stu-

dents' ethical views, and between self-reported plagiarism and students' perceptions of the severity of sanctions.

RESULTS

Incidence of Student Plagiarism: Self-Reports

A substantial minority of students reported copying some text and using it without citation: 19.0% sometimes and 9.6% often or very frequently (see Table 3). These percentages were lower for more egregious forms of plagiarism: copying an entire paper

TABLE 4.
Acts of Internet Plagiarism: Self-Reports and Perception of Others
by Percentage Frequency and Mean Response

| Plagiarism Act | Never/Rarely | | Sometimes | | Often/Very Frequently | | Mean: 1-5 | |
|-----------------------------|--------------|--------|-----------|--------|-----------------------|--------|-----------|--------|
| | Self | Others | Self | Others | Self | Others | Self | Others |
| Copy text without citation | 75.5 | 12.3 | 16.5 | 37.3 | 8.0 | 50.4 | 1.88 | 3.49 |
| Copy paper without citation | 88.8 | 32.0 | 8.1 | 39.9 | 3.1 | 28.0 | 1.35 | 3.00 |
| Request a paper to hand in | 89.7 | 43.0 | 5.4 | 39.8 | 4.9 | 17.1 | 1.33 | 2.73 |
| Purchase a paper to hand in | 91.7 | 37.8 | 6.0 | 41.1 | 2.3 | 21.1 | 1.25 | 2.82 |

TABLE 5.
Students' Ethical Views on Acts of Plagiarism
by Percentage Frequency and Mean Response

| It is wrong to: | Strongly Agree or Somewhat Agree | Neither Agree nor Disagree | Somewhat Disagree or Strongly Disagree | Mean Response: 1-5 |
|--|--|-------------------------------|--|-----------------------|
| hand in someone else's writing as one's own | 89.1 | 7.0 | 3.9 | 1.46 |
| use the internet to copy text to hand in as one's own | 89.3 | 7.7 | 3.1 | 1.44 |
| purchase papers from print term paper mills | 89.1 | 6.8 | 4.1 | 1.44 |
| purchase papers from online term paper mills | 89.8 | 6.1 | 4.1 | 1.43 |

(5.4% sometimes, 3.2% often or very frequently), requesting a paper to hand in (8.3% sometimes, 2.1% often or very frequently), and purchasing a paper from a print term paper mill (6.3% sometimes, 2.8% often or very frequently).

The responses for online plagiarism were similar (see Table 4). Cutting and pasting some text without citation was reported sometimes by 16.5% of students and often or very frequently by 8.0%.

Also, 6.0% of participants indicated that they bought papers online sometimes, whereas only 2.3% specified they did so often or very frequently (see Table 4). Their mean response was 1.3. Notably, responses for online term paper mills were nearly identical to those for print publication businesses.

Incidence of Plagiarism: Perceptions of Others

Students consistently judged plagiarism by others to be more prevalent than their own self-reports would suggest. Note, for example, that although 8.0% of students self-reported cutting and pasting text from the Internet often or very frequently, 50.4%

indicated their peers do so (see Table 4). And while only 8.3% reported purchasing papers from online term paper mills sometimes to very frequently, 62.2% of students estimated that their peers patronize those sites at that rate. A comparison of means of responses for acts of conventional and Internet plagiarism (see Tables 3 and 4) also pointed up the disparity between self-reports and perceptions of other students' behavior. In all but two cases, mean responses for perceptions of others' behavior were at least double that of self-reports. As with self-reports, student perceptions of conventional and online plagiarism by peers were comparable.

Student Ethics, Perception of Faculty Ethics, and Awareness of Punishments Regarding Plagiarism

Most students in this study agreed that plagiarism of any kind is wrong. Approximately 89% strongly or somewhat agreed that handing in someone else's writing as one's own or purchasing a paper to turn in as one's own is wrong, whether done conventionally or online (see Table 5). An even larger

percentage indicated that their professors clearly feel plagiarism is wrong (see Table 6).

A drop-off in student agreement occurred, however, with statements about the severity of punishments for acts of plagiarism at their colleges (see Table 7). Notably larger percentages of students either were uncertain (neither agree nor disagree) about the existence on their campuses of strict punishments for acts of plagiarism, or disagreed that such punishments were in place, at all.

Not surprisingly, self-reports of plagiarism were linked to ethical views, with a negative correlation between agreement with statements that acts of plagiarism are wrong (see Appendix, factor Ethics) and self-reports. A *t* test comparing those who strongly agreed plagiarism is wrong with a group comprised of those who neither agreed nor disagreed, disagreed, or strongly disagreed revealed that those who believed plagiarism is wrong were significantly less likely to plagiarize ($t = -12.05, p < 0.01$). This same group also was significantly less likely to report plagiarism by others ($t = -3.64, p < 0.01$).

Plagiarism self-reports, as well as reports of plagiarism by others, also were negatively correlated with perceptions of the severity of sanctions (see Appendix, factor Sanctions). A comparison of those who strongly agreed that strict punishments were in place with those who neither agreed nor disagreed, disagreed, or strongly disagreed showed that those who believed strict punishments exist were significantly less likely to plagiarize ($t = -7.09, p < 0.01$) or report plagiarism in others ($t = -4.15, p < 0.01$). These findings are in keeping with those of McCabe and Trevino (1993), who concluded that students' perceptions of the severity of punishments for academic dishonesty strongly influenced their decisions to cheat.

DISCUSSION

That 24.5% of these students reported plagiarizing online sometimes to very frequently should be cause for concern, although these numbers do not suggest an epidemic of Internet-facilitated plagiarism. McCabe and Bowers (1994) concluded that

TABLE 6.
Students' Perception of Faculty Ethical Views on Acts of Plagiarism
by Percentage Frequency and Mean Response

| It is clear that professors feel it is wrong to: | Strongly Agree | Somewhat Disagree | | Mean Response: 1-5 |
|---|-------------------|----------------------------|----------------------|--------------------|
| | or Somewhat Agree | Neither Agree nor Disagree | or Strongly Disagree | |
| hand in someone else's writing as one's own | 93.9 | 3.2 | 2.9 | 1.26 |
| use the Internet to copy text to hand in as one's own | 92.2 | 5.5 | 2.3 | 1.33 |
| purchase papers from print term paper mills | 91.4 | 5.7 | 2.9 | 1.36 |
| purchase papers from online term paper mills | 90.4 | 6.7 | 3.0 | 1.39 |

TABLE 7.
Students' Awareness of Their Colleges' Punishments for Acts of Plagiarism
by Percentage Frequency and Mean Response

| There are strict punishments if I: | Strongly Agree or Somewhat Agree | Neither Agree nor Disagree | Somewhat Disagree or Strongly Disagree | Mean Response: 1-5 |
|--|--|-------------------------------|--|-----------------------|
| hand in someone else's writing as one's own | 80.7 | 12.3 | 7.0 | 1.67 |
| use the Internet to copy text to hand in as one's own | 76.9 | 15.6 | 7.5 | 1.76 |
| purchase papers from print term paper mills | 77.7 | 15.8 | 6.5 | 1.73 |
| purchase papers from online term paper mills | 76.9 | 15.2 | 7.9 | 1.75 |

comparative data on all forms of academic dishonesty “clearly argue against the position that student cheating in the 1980’s and the 1990’s has escalated in dramatic fashion” (p. 5). McCabe and Bowers emphasized, however, that although

it appears that cheating at selective institutions has remained relatively unchanged in the last 30 years, comparable data is not available for the less selective, and often larger, institutions that now educate the vast majority of the nation’s college students. (p. 9)

The results of the current study, which includes data from “less selective, and . . . larger institutions,” appear to support their conclusions.

Overall, frequency of plagiarism using the Internet followed the same pattern as did conventional forms and was self-reported at similar levels. This congruence could indicate that many survey respondents simply did not make a distinction between conventional and online plagiarism when asked about acts of plagiarism in general—that is, when asked

how often they copy text and use it without citation, they may have included acts of online plagiarism in their responses. (This blurring of distinctions is far less likely to have occurred in response to those questions regarding term paper mills, because the survey drew a sharp distinction between print publications and online mills.) On the other hand, students who self-report plagiarism are probably likely to employ both conventional and online methods.

These self-reports of online plagiarism, although not pointing to an epidemic of cheating, suggest that many students do go online to cut and paste text for use in their assignments. A relatively small number patronize online term paper mills. The results of the current survey do not, however, tell us the extent to which students who otherwise would not have plagiarized did so due to Internet access, a subject that deserves further study.

The contrast between self-reports and perceptions of others was striking, both for Internet and conventional forms of plagiarism. However, we did not design the current

study either to assess with statistical confidence the effect of student perceptions on their behavior, or to account for any third-person effect, the tendency of subjects to overestimate objectionable behavior in others. For the time being, we can only note the gap separating students' self-reports of Internet as well as conventional plagiarism and their assumption that plagiarism of both types is widespread. Clearly this is an area that deserves further study.

Strengths and Limitations

As noted above, many studies of this kind survey only a small number of students on a single campus. In the current study, we gathered data on Internet plagiarism from a large sample of students from a variety of colleges and universities, nine total. Those who completed the survey, however, do constitute a convenience sample.

The machine-scored survey was designed and administered in such a way to assure students that their responses would remain anonymous in order to encourage candor. However, the problematical nature of self-reported dishonest behavior is a limitation of this study—as it is of any survey of students regarding cheating. Some students will be unwilling or unable to admit cheating, anonymity notwithstanding; others will offer socially desirable responses.

CONCLUSION

The amount of online plagiarism reported here should be a matter of concern, although the current study does not point to an epidemic of Internet plagiarism. However, the disparity between student self-reports of plagiarism and their estimates of how often their peers plagiarize suggests many students view plagiarism as more commonplace than it is—a misperception perhaps shared by

faculty as well as the public at large. The students' perception, regardless of its causes, may have potentially troubling consequences. As McCabe and Trevino (1997) concluded, "The most powerful influential factors [regarding cheating] were peer-related contextual factors," including perceptions of peer behavior (p. 391). Elsewhere, the authors emphasized that "academic dishonesty is most strongly associated with the perceptions of peers' behavior" (1993, p. 536). In other words, if students perceive that a majority of their peers are going online to plagiarize, they may be more apt to plagiarize themselves. As noted earlier, we are not in a position to affirm or refute this conclusion, although the difference between perceptions and self-reports is intriguing. The possible influence of a third-person effect, and the consequences of such misperception of peer behavior on student Internet plagiarism, should be subjects of future research.

It is no longer much of an insight to say that computers and the Internet have changed and are changing the manner in which all of us write. What is not yet as clear is how these technologies are shaping a new generation of students' conception of what does and does not constitute fair use of the countless texts so readily available at their desktops. How students use the Internet to complete research and to write papers, and how we respond to electronic textual appropriation, are and will be critical matters for university faculty and administrators as information technology continues its dramatic growth within higher education.

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APPENDIX.
Rotated Factor Matrix (Varimax Rotation) of
Student Plagiarism Behavior and Perceptions

| Item | 1 | 2 | 3 | 4 |
|--|---------|---------|---------|---------|
| <i>Others</i> | | | | |
| Copy paper from Internet | .85047 | .11094 | .03382 | .08369 |
| Purchase paper from online mills | .79131 | -.01815 | .15849 | -.08486 |
| Purchase paper from print mills | .75000 | -.04366 | .09887 | -.03437 |
| Copy a paper | .74769 | .18690 | -.01832 | .14480 |
| Ask someone for a paper | .74219 | .11376 | -.03381 | .12085 |
| Copy text from Internet | .73351 | .15371 | -.05297 | .09468 |
| Copy text | .66233 | .15958 | -.14660 | .16808 |
| Ask someone on Internet for paper | .65978 | .15017 | .20653 | -.09987 |
| <i>Self-Report</i> | | | | |
| Copy paper from Internet | .09854 | .80515 | .22302 | .11115 |
| Copy a paper | .08050 | .75579 | .19560 | .07864 |
| Copy text from Internet | .15548 | .75156 | .08282 | .12707 |
| Copy text | .16650 | .70220 | -.00128 | .13394 |
| Ask someone for a paper | .15681 | .66082 | .21628 | .00455 |
| Purchase paper from online mills | .02200 | .57304 | .36153 | .05577 |
| Ask someone on Internet for paper | .05563 | .53485 | .25759 | .00535 |
| <i>Ethics</i> | | | | |
| Wrong to purchase paper | .07453 | .29210 | .75286 | .05756 |
| Profs. feel it's wrong to purchase paper | -.01550 | .12285 | .75052 | .35601 |
| Wrong to purchase paper online | .09660 | .28173 | .73961 | .10551 |
| Profs. feel it's wrong purchase paper online | -.01285 | .11256 | .71509 | .41230 |
| Profs. feel it's wrong copy text online | -.01240 | .19094 | .69178 | .35268 |
| Wrong to copy text online | .05916 | .36966 | .59755 | .08531 |
| <i>Sanctions</i> | | | | |
| Purchase paper online | .08842 | .04571 | .23330 | .87442 |
| Purchase paper | .08761 | .06104 | .30223 | .85287 |
| Copy text online | .09243 | .14200 | .23348 | .85061 |
| Hand in someone else's writing | .05769 | .14139 | .10484 | .78218 |

| Factors | Eigenvalue | % of Variance | Cumulative |
|------------------------|------------|---------------|------------|
| Factor 1 (Others) | 7.43760 | 29.8 | 29.8 |
| Factor 2 (Self-Report) | 4.06551 | 16.3 | 46.0 |
| Factor 3 (Ethics) | 2.55484 | 10.2 | 56.2 |
| Factor 4 (Sanctions) | 1.49523 | 6.0 | 62.2 |

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