The Impact of an Honor Code on Cheating in Online Courses

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Abstract
Three studies were conducted to assess the effect of an honor code on self-reported cheating during online quizzes in an Introductory Psychology course. In Study 1 (N = 40), the authors found that 72.5% of students reported cheating on at least one of the 14 quizzes (M = 4.15), typically by consulting the textbook or the online course materials. In Study 2 (N = 84), students were randomly assigned to a fully asynchronous online section in which students were required to digitally sign an honor code or to a section without such a requirement. Contrary to expectations, no significant difference in self-reported cheating emerged between students who signed the honor code (61.5%) and students who did not sign the code (50%). In Study 3 (N = 165), the authors tested students in blended sections and found that students who signed an honor code were about 30% less likely to report cheating (57.6%) than those who did not sign (81.8%). The authors discuss the implications for online instruction and suggest that the immediacy (i.e., perceived social distance) of the instructor is one key factor that influences compliance with honor codes in online courses.

Keywords: cheating, codes of ethics, distance education, higher education, web-based instruction

Introduction
One unfortunate fact of academic life is that many students cheat (e.g., McCabe, Butterfield, & Treviño, 2004; McCabe & Treviño, 1993, 1996; McCabe, Treviño, & Butterfield, 2001). Whether plagiarizing or copying from another student’s exam, academic dishonesty rates are high (Bowers, 1964; McCabe & Treviño, 1993) and rising (McCabe & Treviño, 1996; Trenholm, 2006). For example, in 1964 Bowers reported that 26% of students across nine college campuses reported copying from another student’s exam. McCabe and Treviño surveyed the same campuses in 1993 and found the rate had increased to 52% (McCabe & Treviño, 2002). As more students perceive college as an inconvenient requirement for employment (Jordan, 2003; Nadelson, 2006), cheating appears to have become a more accepted method of attaining educational goals (Murdock, Miller, & Kohlhardt, 2004).

Online instruction is on the rise as well. According to a recent Sloan-C survey (Allen & Seaman, 2010), the growth rate for online enrollment (17%) continues to outpace the overall growth rate for enrollments in higher education (1.2%). This trend presents new challenges for protecting academic integrity, particularly in online courses where instructors cover large quantities of fact-based information and typically rely on multiple-choice assessments for measuring academic performance (Jordan, 2003; Trenholm, 2006).
Honor codes can reduce cheating on exams (e.g., Konheim-Kalkstein, Stellmack, & Shilkey, 2008; McCabe, Treviño, & Butterfield, 2002), but they are less effective on larger campuses, where the social and instructional environment is typically less personal and students are less likely to collectively support a norm of academic integrity (Arnold, Martin, Jinks, & Bigby, 2007). These results suggest that honor codes might be less effective for online instruction as well because of the physical and psychological distance between online instructors and students. If online students feel socially isolated and are unable to personally connect with their instructor or their peers, then the temptation to cheat may be overwhelming (Gibbons, Mize, & Rogers, 2002). Mastin, Peszka, and Lilly (2009) provided initial evidence that honor codes may be relatively ineffective online. However, they focused on the cheating behaviors of traditional students engaged in an online extra-credit task and did not examine academic integrity among online students completing required assessments.

Three studies were conducted to determine the impact of an honor code on self-reported academic integrity during several online quizzes. The studies were designed to determine the rate of online cheating, the impact of signing an honor code, and the influence of course delivery method (fully asynchronous online vs. blended) on cheating.

**STUDY 1**

**Method**

*Participants.* Forty undergraduates (33 women, 7 men) in two sections of an online Introductory Psychology course participated for 5 points of extra credit (less than 1% of the final course grade). The course had no face-to-face instructional component, and all course content resided online. Both sections were fully asynchronous in that students were free to access the course content at their leisure, independent of other students or the instructor. Students participating in this study and the subsequent studies came from the general student population and represented a variety of majors. The attrition rate for students in this study and the subsequent studies was negligible (i.e., less than 10% in all sections) and evenly distributed among the sections.

*Procedure.* Throughout the term, students completed 14 five-item multiple-choice quizzes. Because the quizzes were not proctored, students had numerous opportunities to cheat. During the last week of the term (but prior to completing the final exam), 100% of the enrolled students responded to an anonymous online survey regarding cheating during the unproctored, online quizzes (see Appendix A for general instructions and survey items). The survey operationally defined cheating as “consulting your textbook, notes, friends, family, the Internet, etc.”

**Results and Discussion**

Most students (72.5%) reported cheating on at least one quiz ($M = 4.15$, $SD = 4.56$), typically by consulting the textbook or the online course materials. Given initial research demonstrating that only 3% of students admitted to cheating in an online course for which they were currently enrolled (Grijalva, Nowell, & Kerkvliet, 2006), it was surprising to discover that nearly three-quarters of the students reported cheating. However, cheating rates can vary dramatically from one study to another, as cheating is dependent on a host of factors.

For example, cheating rates depend on the number of opportunities students have to cheat. When compared with students in the current study (who completed 14 unproctored quizzes), most students in Grijalva et al.’s (2006) study had fewer overall opportunities to cheat. Furthermore, over the past several decades, researchers have studied how a variety of factors influence cheating rates, yet those factors have typically accounted for only a small portion of the total variance (see McCabe, Treviño, & Butterfield, 2002, for discussion). This variability is consistent with classic research demonstrating very little cross-situational consistency in cheating behaviors (e.g., Hartshorne & May, 1928). Thus, it is extremely difficult to compare cheating rates between studies, particularly when the data represent students under varying circumstances.
Study 2 tested if an honor code would reduce self-reported cheating. Honor codes have proven effective in traditional classrooms, and although the social dynamics are different online, the authors predicted that students who signed the code would respect their pledge and report less cheating.

STUDY 2

Method

Participants. Eighty-four undergraduates (65 women, 19 men) in four sections of a fully asynchronous online Introductory Psychology course participated for 5 points of extra credit.

Procedure. This study was identical to Study 1 except students were randomly assigned to a section that digitally signed an honor code ($n = 42$) or to a section without a code ($n = 42$). The code was posted online along with the other course materials. It stipulated that any form of cheating was a violation of university policy (see Appendix B). Students digitally signed the code during the first week of the term, prior to completing any graded assignments.

Results and Discussion

The response rate for the anonymous online survey was 92%. Contrary to expectations, no significant difference in self-reported cheating emerged between students who signed the honor code (61.5%) and students who did not sign the code (50%), $\chi^2(1, N = 77) = 1.04, p = .308$. Although honor codes have proven to be effective in traditional academic settings, the necessary social dynamic might be missing from a fully asynchronous online environment.

Study 3 examined if an honor code would influence cheating in a blended course. Because blended courses offer at least some personal interaction between students and their instructor, the authors predicted this social dynamic would lead students to feel more obligated to uphold their pledge not to cheat.

STUDY 3

Method

Participants. One hundred sixty-five undergraduates (125 women, 40 men) in six sections of a blended Introductory Psychology course participated for 5 points of extra credit. Unlike the completely online, fully asynchronous sections in Studies 1 and 2, the six sections in Study 3 were blended in that approximately 20% of the course content was delivered online (asynchronously) and the remaining 80% was delivered face-to-face in a classroom (synchronously).

Procedure. The procedure was nearly identical to Study 2 except the authors were unable to randomly assign students to a section of the blended course. Instead, three of the six sections ($n = 81$) were randomly selected and students were required to physically sign an honor code in those sections. Students in the remaining sections ($n = 84$) did not sign a code. As in the previous studies, students completed 14 unproctored quizzes online.

Results and Discussion

The response rate for the anonymous online survey was 87%. Students who signed the honor code were about 30% less likely to report cheating (57.6%) than those who did not sign (81.8%), and the difference was statistically significant, $\chi^2(1, N = 143) = 10.07, p < .01$. When compared with the pattern of results in Study 2, these findings suggest that social and contextual factors influence an honor code’s effectiveness for online instruction. Slight variations in overall cheating rates between the studies are probably best explained by individual student differences (e.g., different majors, ranks, ages), and thus, the pattern of group differences within a study provides more meaning than the pattern of cheating rates across studies.
General Discussion

Across three studies, the majority of students readily took advantage of risk-free cheating during at least one of the 14 online quizzes. Perhaps even more distressing is that an honor code had no effect on self-reported cheating in the fully asynchronous online class. Fortunately, an honor code did reduce self-reported cheating in the blended course, suggesting that the academic environment plays a critical role in a student’s decision to abide by such a pledge.

Which environmental factors are most likely to influence compliance? One possibility is the apparent immediacy (i.e., perceived social distance; Kelley & Gorham, 1988; Gibbons et al., 2002) between the instructor and the students. Drawing from Bandura’s (1991) theory of thought and action, Nadelson (2006) suggested that students who are socially disconnected easily justify dishonest behavior. However, students in blended courses have at least some personal interaction with their instructor and fellow students, and this social connection might make them feel more obligated to stand by their pledge. Researchers should explore factors that strengthen social connections between online students and their instructors. For example, the authors are now testing if personalized video messages strengthen this connection and increase compliance with an honor code.

Although honor codes are effective in certain situations, instructors should maintain realistic expectations when teaching online - students will likely cheat. Thus, the authors recommend that honor codes be used whenever possible, but that they must be augmented by common sense strategies, such as proctoring. Although proctoring is less convenient for students and instructors, it is one of the most reliable methods for ensuring academic integrity.

References


Appendix A

Online Cheating Survey

As I mentioned via email, your responses to this survey are anonymous. After everyone has completed the survey, I will only be able to view a summary of the responses. In other words, I will NOT be able to see how any individual student responded. When you complete the survey, I will see a checkmark next to your name in my grade book. That's how I will know to award you 5 points of extra credit. Read the questions carefully and respond honestly.

Please indicate your sex:

__Male

__Female

By the end of the quarter, you will have completed 14 quizzes worth 5 points each (70 points total). As you know, you were able to complete the quizzes anytime, anywhere, as long as you completed each quiz by its corresponding due date. The instructions for each quiz clearly stated that "This is a closed-book quiz." Furthermore, the instructions advised, "Don't cheat, because you will only cheat yourself." I'm interested in studying the private behaviors of online students, and specifically, I'm interested in knowing if you ever cheated on one of the weekly quizzes. Cheating includes consulting your textbook, notes,
friends, family, the Internet, etc. To the best of your recollection, of the 14 quizzes, how many quizzes did you cheat on?

__I did NOT CHEAT on any of the quizzes.
__I cheated on 1 quiz.
__I cheated on 2 quizzes.
[options continue to 14 quizzes.]

If you cheated on any of the quizzes, please mark the ways in which you cheated. Don't be bashful. Let me know about the different cheating strategies that you've used. Again, be sure to check ALL the cheating strategies that you've used.

__I did NOT CHEAT on any of the quizzes.
__I used the textbook or another book.
__I used class-related notes or the online Blackboard course materials.
__I used the Internet to find information outside of our Blackboard course.
__I received help from another student, or a friend or family member.
__I used a method not listed above.

Appendix B

Honor Code

Consistent with the Ohio University Student Code of Conduct, I agree that all the assignments, quizzes, and exams I complete will represent my work and my work only. I also understand that all forms of academic misconduct are prohibited. Academic misconduct includes, but is not limited to, all forms of cheating, including the use of unauthorized materials, plagiarism, false identification, and forgery. In addition, I understand that it is my duty and my responsibility to inform the instructor if I become aware of any violations to this Honor Code.

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