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Cheating is in the Eye of the Beholder: an Evolving Understanding of Academic Misconduct

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Abstract

Research consistently indicates that academic dishonesty is pervasive on college campuses, including in online courses. For our study we administered a survey to two groups of undergraduate criminal justice students, one group of face-to-face students of traditional college-age and the other a group of distance learners employed full-time in criminal justice professions. The survey was designed to assess prevalence, techniques, and definitions regarding online cheating. Findings indicate that a large percentage of both groups engaged in practices normatively defined as "cheating," yet they did not consider their behaviors to be violations of academic integrity. In closing, we offer suggestions for best practice techniques for communicating expectations to students and reducing online exam cheating.

Keywords Academic integrity · Cheating · Online education · Criminal justice · Virtual classroom

Due in large part to technological advancements and lower costs, online courses and exams have become a practical option for many higher education institutions and students. Although

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trust in online courses and degrees can be low (Adams & DeFleur, 2005, 2006; Carnevale, 2005, 2007), online classes can be an efficient and effective method of disseminating skills and knowledge (Driscoll, Jicha, Hunt, Tichavsky, & Thompson, 2012; Lanier, 2006; Seaman, Allen, & Seaman, 2018). There are advantages to virtual delivery, specifically flexible study times and the possibility for students to balance the demands of career and education. Further, as Lanier (2006) opined, online education can solve problems associated with classroom allocation, while providing students with greater flexibility; less need for travel; and the opportunity to pursue higher education when personal, geographic, or physical limitations exist.

In today's world college students are virtually connected with others throughout a typical day. Electronic devices of all types, including cell phones, Ipads, and computers, help students stay connected to friends, family, and instructors. Internet teaching, online learning management systems (Blackboard, Canvas, Desire2Learn), social media (Facebook, Instagram, and Twitter), and interactive video software (Skype and Facetime) are all used for online education (Kimmons, Veletsianos, & Woodward, 2017). However, academic integrity, or the commitment to and demonstration of honest and moral behavior in an academic setting in both traditional and online classrooms continues to be a concern; and educators must seek useful techniques for promoting academic integrity within both traditional and virtual classrooms settings.

From a practical standpoint, cheating online may be easier to accomplish than cheating in face-to-face classrooms, particularly during exams when students are generally not monitored. The lack of direct observation increases the temptation and opportunity for cheating. In addition, students are often more computer savvy than their instructors; and they are familiar with multiple strategies for cheating using electronic media. Furthermore, students may have less commitment to the integrity of virtual classrooms than traditional classrooms as online classes have less embedded collegiate tradition and less physical monitoring by professors or others (Renard, 2000). Students' motivation to cheat, whether online or face-to-face, emerges from several factors including not studying properly, pressure from parents to raise grades, and the availability of assistance in cheating from peers (see Michaels & Miethe, 1989). While cheating is most often considered in the academic context, cheating and other forms of misconduct exist across all competitive environments including financial markets (Hansen, 2009; Leasure & Zhang, 2018), sport (Kamis et al., 2016; Zaksaite, 2012), medical professions (Evans & Porche, 2006, Dronberger, 2003), and business (Soltani, 2013), to name a few. Regardless of the environment, when individuals "get away" with cheating, they are incentivized to continue the behavior. More broadly, cheating compromises the learning process; provides an unearned advantage; and, perhaps most importantly, can breed cynicism as it directly challenges notions of education as a meritocratic enterprise.

For the study we report here we surveyed college students enrolled in criminal justice courses with the goal of gaining understanding of the various dimensions of academic integrity violations, particularly during online exams. Two groups of students from one university were involved. One group consisted of students enrolled in traditional, face-to-face classes; and the other group was enrolled in an online version of the criminal justice program and courses. To the best of our knowledge, the distance learning program consisted exclusively of career professionals working at the time of the survey in a variety of criminal justice-related occupations including law enforcement, probation, corrections, and first responders. While a sizeable body of research regarding cheating among and by face-to-face and online students exists, few studies have examined cheating behaviors by career professionals taking courses

entirely online. This group offers a timely population for study as distance learning opportunities and online degree programs become increasingly popular at many institutions (Seaman et al., 2018). A narrower examination of professionals working in criminal justice-related fields is useful because cheating and unethical behaviors within this population have the potential to influence quite directly the wider public perceptions of fairness and the legitimacy not only of law enforcement but of the wider legal system. Comparing findings between online and face-to-face students can illuminate the ways in which all students interact with online learning tools as well as offer suggestions for curbing cheating among the broader student population.

We suggest that our findings may be applicable to institutions that currently offer or are considering offering entirely online programs of study to career professionals, as well as those looking to identify techniques for combatting cheating behaviors while promoting a positive attitude toward academic honesty. We discuss findings in light of prior research regarding academic integrity, suggest best practices, and offer recommendations for future research.

Literature Review

An Overview of Academic Dishonesty in Higher Education

Generally, cheating is understood to include misconduct such as attempting to use unauthorized information in the completion of an exam or assignmen; submitting as one's own the work materials prepared by another person, knowingly assisting another student in obtaining or using unauthorized information or materials, and plagiarism (Student Disciplinary Regulations Code, 2018, 4.2.1, para. A). Statistical data regarding the extent of cheating in higher education vary widely; however, recent reports attest to the undeniable fact that the degree of cheating is alarming (Arnold, 2016; Fontaine, 2012; Hsiao, 2015; Peled, Barczyk, & Sarid, 2012; Yang, Huang, & Chen, 2013).

The percentage of undergraduate and graduate students who admit to having cheated ranges from 9% to as high as 90% (Davis, Grover, Becker, & McGregor, 1992; Genereux & McLeod, 1995; Maslen, 2003; Maramark & Maline, 1993; McCabe & Trevino, 1996; Smith, 2005; Stuber-McEwen, 2005; Stuber-McEwen, Wiseley, Masters, Smith, & Mecum, 2005; Turner & Uludag, 2013). A meta-analysis of 107 studies dealing with academic integrity revealed that the mean prevalence of cheating in a university setting was 70% (Whitley Jr., 1998). Other studies, conducted over the past 25 years, also conclude that a majority of students cheat (Arnold, 2016; Brown & Emmett, 2001; Chuang, 2015; Finn & Frone, 2004; Fontaine, 2012; Hollinger & Lanza-Kaduce, 1996; Hsiao, 2015; Lambert & Hogan, 2004; Lang, 2013; McCabe & Travino, 1993, McCabe & Trevino, 1997; Michaels & Miethe, 1989; Peled et al., 2012; Whitley Jr, Nelson, & Jones, 1999; Yang et al., 2013).

The popularity of online classes is undeniable. As of fall 2016 there were 6,359,121 students taking at least one distance education course, comprising nearly 32% of total higher education enrollments (Seaman et al., 2018). Moreover, a steady increase in online course enrollment is evidenced in the previous 4 years when online enrollment climbed from 25.9% in 2012 to 27.1% in 2013, 28.3% in 2014, and 29.7% in 2015 (Seaman et al., 2018, p. 11). Graduate and undergraduate students enrolled in at least one distance education course increased 5.6% from 2015 to 2016 and 17.2% from 2012 to 2016. The 5.6% growth rate exceeds that observed between 2012 and 2013 (3.4%), 2013 and 2014 (3.3%), and between

2014 and 2015 (3.9%) (Seaman et al., 2018, p. 12). Parker, Lenhart, & Moore's, 2011 study involved college presidents, who predicted that by 2021 most of their students will be learning online. In another study 65% of the reporting institutions considered online learning to be a critical part of their long-term plan (Allen & Seaman, 2011). Yet despite the popularity of online instruction, literature regarding academic dishonesty in virtual classrooms garners less attention than do face-to-face classes (Underwood & Szabo, 2003).

George and Carlson (1999) contended that the frequency of online cheating would increase as the distance between a student and a physical classroom setting increased. The phenomenon of distance may contribute to the belief that students enrolled in online classes are more likely to cheat (Stuber-McEwen, Wiseley, & Hoggatt, 2009, p. 1). Kennedy, Nowak, Raghuraman, Thomas, and Davis (2000) found that cheating and non-cheating students and faculty members believe it is easier to cheat in a virtual classroom compared to the traditional classroom setting. In a similar study King, Guyette Jr, and Piotrowski (2009) found that the majority (73.5%) of the students believed that more cheating occurred in online courses and that it was easier to cheat in such courses as compared to traditional courses (p. 7). These results indicated that students hold rather lax attitudes toward suspect behaviors or ethical issues when taking online exams. A more recent study that explored cheating in a virtual classroom indicated that 60.0% of the student participants reported that the most common violations when they were taking online tests was the unauthorized use of notes or books and looking up information on the internet when that was not permitted (DuPree & Sattler, 2010, p. 18). As perceived by faculty participants in this study, collaborating with others when not permitted was the most common form of cheating on an online exam. Additionally, student participants reported that it is unlikely that they or another student would report someone for cheating, particularly a close friend, and that they were not sure if cheating was a problem (DuPree & Sattler, 2010).

Our study involved students majoring in the field of criminal justice, an area in which high levels of personal integrity and a strong sense of morals and ethics is of particular concern (Conti & Nolan III, 2005; Ferrell, 2012). Criminal justice students sanctioned with academic dishonesty charges may face significant barriers to employment with agencies or organizations that require disclosure of academic behavior as part of their recruitment processes. Additionally, many criminal justice students will eventually oversee the enforcement of laws and regulations. This reality is not to suggest that other disciplines would be willing to accept or welcome cheaters, but rather to emphasize that the criminal justice discipline and work force places a premium on integrity – in reality and in the perception of the public. In their review of studies of face-to-face students in criminal justice courses, Eskridge and Ames (1993) found few or no differences between criminal justice majors and non-majors, while Tibbetts (1998) found that criminal justice majors were more likely to be influenced to cheat by their friends when compared to non-majors. A study of academic dishonesty comparing 850 face-to-face criminal justice majors and non-majors found that the two groups of students were similar for most measures, with high levels of cheating for both criminal justice and non-criminal justice students (Lambert & Hogan, 2004). Lanier (2006) examined 1262 undergraduates enrolled in core criminal justice courses, both online and in traditional classes, and found that most students cheat and that the rate of cheating for virtual classrooms was greater than that experienced in the traditional classroom setting. The documented existence of high levels of academic dishonesty online, the continuing growth of distance education, and the limited data available on the topic, warrants the need for further study.

The Study

Research Question

Our study compared the prevalence, techniques, and definitions of cheating as understood and practiced by both face-to-face students and a novel group of respondents who are both online undergraduate students and practicing professionals in the field of criminal justice. Our approach allowed the authors to examine the nature and nuances of academic misconduct from the perspective of criminal justice students and professionals. To do so, in spring of 2015 we surveyed students studying criminal justice in both face-to-face and distance learning courses. While a wide range of cheating behaviors exist, we asked primarily about cheating during online exams, both in-and-out of the classroom. The results revealed similarities and important distinctions and nuances that exist between the behaviors and perceptions of face-to-face college students and distance learning students.

Sample

One hundred-nineteen of one hundred-thirty criminal justice majors at a mid-sized southeastern university responded to a request to participate in a departmental survey, yielding a response rate of nearly 92%. All students at the University, both face-to-face and distance learning students, are expected to abide by the University's Academic Integrity policy, described in the University handbook, which explicitly defines cheating, plagiarism, and facilitation as violations and subject to sanction. While rarely subjected to direct oversight, instructors' syllabi are expected to contain a standardized list of definitions and descriptions of various forms of academic dishonesty along with a statement describing the possible consequences of academic dishonesty and links to additional information and institutional resources. The University has also adopted a "Community Creed" that encourages students to conduct themselves with high standards of academic and personal integrity. Numerous flyers and physical copies of the "Community Creed" are regularly posted in public locations and distributed throughout campus.

Of those who responded to the invitation to participate in the survey, 65% were enrolled in face-to-face classes, while 35% were distance learners and career professionals enrolled in the online program. Both groups of students enroll in the same core courses for the undergraduate Bachelor of Science degree in Criminology and Criminal Justice, and both groups have the option of various electives and special topics courses.

Significant demographic differences exist between these two populations. Acceptance into the online program requires applicants to be employed full time, having been so for at least 1 year, in a criminal justice related profession. Students in the online program tend to be older than their residential counterparts. As law enforcement seeks to further professionalize its occupations, many employees view completion of the degree as a requirement for promotion; and in many cases employers finance their education. As professionals working in agencies throughout the United States, these students typically enroll in one or two courses per semester, while the vast majority of residential students are enrolled in full-time coursework, consisting of four to six courses per semester. The authors cannot state with full confidence that none of the face-to-face students were employed full-time in criminal justice occupations, but such a scenario is highly unlikely given the age-related demographics of the undergraduate population at this particular university.

Instrument

Following institutional review board approval, a survey consisting of eight sections with 63 item responses and Likert scales for closed ended questions including a "not applicable" option where appropriate, was distributed via email. This instrument measured prevalence, techniques, and attitudes of student cheating. Both distance learners and face-to-face students received the same survey. The participants received no incentives for participating, and participation was voluntary.

Data Analysis

Univariate statistics are presented in the form of percentages with accompanying graphs to illustrate these findings. We analyzed open ended questions inductively utilizing an interactionist approach from which several themes emerged. We present the findings of this investigation and offer possible explanations below, as well as policy implications and suggestions for future research.

Results

Demographic information regarding respondents is as follows: 3% freshmen, 18% sophomores, 22% juniors, and 29% seniors. Twenty-seven percent did not know their class standing or skipped the question. Fifty-five percent were criminology and criminal justice students enrolled in face-to-face classes on campus, while 30% of the respondents were distance learning students whose criminal justice degree is facilitated completely online. Fourteen percent of respondents skipped this question. Sixty-seven percent indicated they were unaware of another student cheating during an online test or assessment in their criminal justice courses, while 33% responded that they were aware of students cheating. This question allowed the participants to conceptualize for themselves what constituted "cheating" as no examples or definitions were provided.

One item asked respondents, both face-to-face students taking online exams in class and distance learning students, the following question. "How often, if ever, do you know of another student who cheats during an on-line test or assessment at the university in your criminal justice courses?" Response items were ordinal categories consisting of "never; once; a few times; several times; and many times." For those who responded "never," 47% were face-to-face students; and 53% were distance learning students. For those who responded that they knew of a student cheating one time, 90% were face-to-face; and 10% were distance learners. For those who indicated that they knew of students who had cheated only a few times, 95% were face-to-face; and 5% were distance learners. Of those who responded that they knew of a classmate who had cheated several times, 89% were face-to-face; and 11% were distance learners. Of those students who responded to the question that they knew of many times that a student had cheated, 100% were face-to-face students. Importantly, face-to-face students were more aware of the cheating behaviors as the frequency of accounts of cheating by peers increased. This observation is understandable given that face-to-face courses typically involve regular student to student communication and interaction.

Both groups were asked how many times in the past year they had looked at or opened other documents on their computer during an online test/assessment when it was likely that the

instructor did not intend for them to do so. Of those who responded "never," 62% were face-to-face students; and 38% were distance learners. Of those who responded "rarely," 61% were face-to-face students; and 39% were distance learners. Of those who indicated they "sometimes" open documents, 79% were face-to-face students; and 21% were distance learners. Neither group responded that they opened documents during an online test or assignment "often," and only two face-to-face students indicated they do it "all of the time." While more face-to-face students were likely to report that they never open other documents while taking an online test when the instructor intended them not to do so, it does appear that once this group decided to do so, the frequency increases.

To access a deeper understanding of the technical aspects of cheating, an open-ended response option was offered for the following question. "If a student wanted to use outside material during an online test, how would the student go about it?" In total, 119 respondents provided comments. The most frequent theme that emerged from these responses is the use of multiple online sources during test taking. Students described strategies for opening and hiding multiple browser windows during online exams in face-to-face courses as the following responses detail. "... open other tabs on the computer. With apple computers, it is easy to move a document behind another to where the teacher does not realize he/she is cheating." Another student noted "… have the word document or internet open on their computer at the bottom and click back and forth…, or they have a second home page they can swipe between." Another frequently used technique involves accessing images and text from another device, most commonly from one's phone or smart watch. Importantly, these strategies require that students have specific skills to use the technologies in dishonest ways. Collectively, these findings indicate that students are not only familiar with but have a detailed understanding of multiple ways to cheat.

Figure 1 illustrates the specific techniques utilized to cheat by both face-to-face students and the distance learning students. The figure reveals that both groups of students used similar techniques, with face-to-face students more likely to report incidents of cheating across all
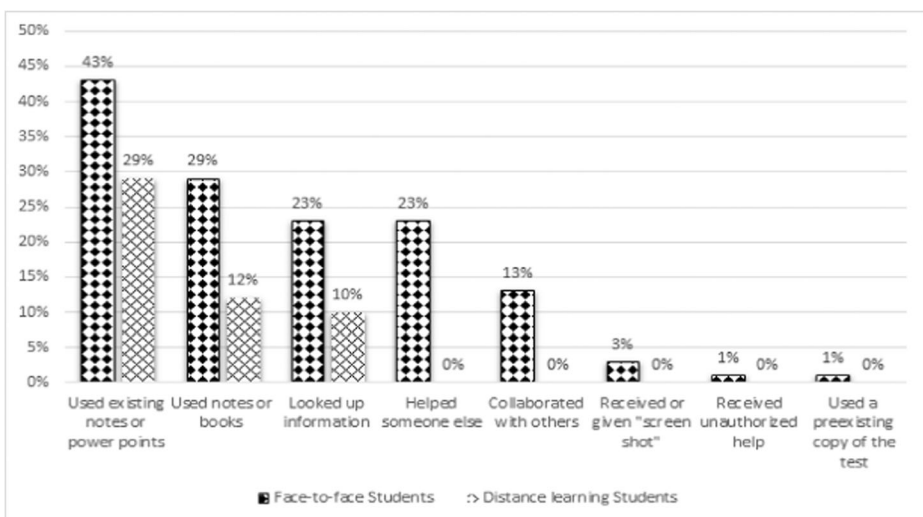

Fig. 1 Cheating behaviors by face-to-face and distance learning students

behaviors, including doubling the percentage of students that report helping someone else, looking up information on the internet, and using existing notes or books.

As indicated in Fig. 1, when participants were asked if a student wanted to use outside material during an online test or assessment, there was little variation between the groups except that distance learning students were more likely to utilize a second computer.

When respondents were asked to rate whether specific examples constitute a violation of academic integrity, the data indicate some variation between the two groups. While a slight variation existed regarding looking up information online, using a preexisting copy of the test, and getting or sending a "screen shot" of questions, the biggest variation can be found in the use of notes and PowerPoint images and collaboration between students. For the item regarding the use of notes or PowerPoint images, 46% of the face-to-face students believed the behavior is *not* cheating at all or *trivial* cheating compared to 71% of distance learning students who believed the behavior is *not* cheating or *trivial* cheating.

In Figs. 2 and 3, respondents were given the opportunity to rate the degree of cheating. For the example of "working on an online test or assessment with other students," distance learning students were more likely to rank the behavior as a more serious violation. The most noticeable difference between the groups was that 39% of face-to-face students viewed "working on an online test or assessment with other students" as low-level cheating, with 9% not considering the behavior cheating at all. In comparison, 6% of distance learning students viewed the behavior as low-level cheating, while none of the distance learning students ranked collaboration on tests or assessments as not being a violation of academic integrity. Of those who considered the behavior to be higher-level cheating, 61% were face-to-face students, with 28% indicating the behavior was "*serious* cheating." By comparison, 94% of the distance learning students viewed the practice as higher-level cheating, with 62% indicating that the behavior constitutes "*serious* cheating."
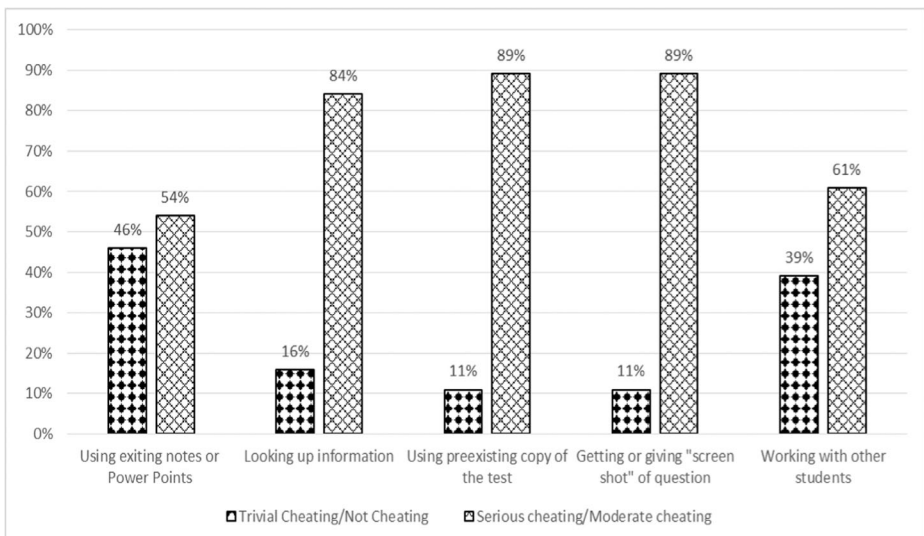

Fig. 2 Techniques of cheating by level of seriousness – face-to-face students
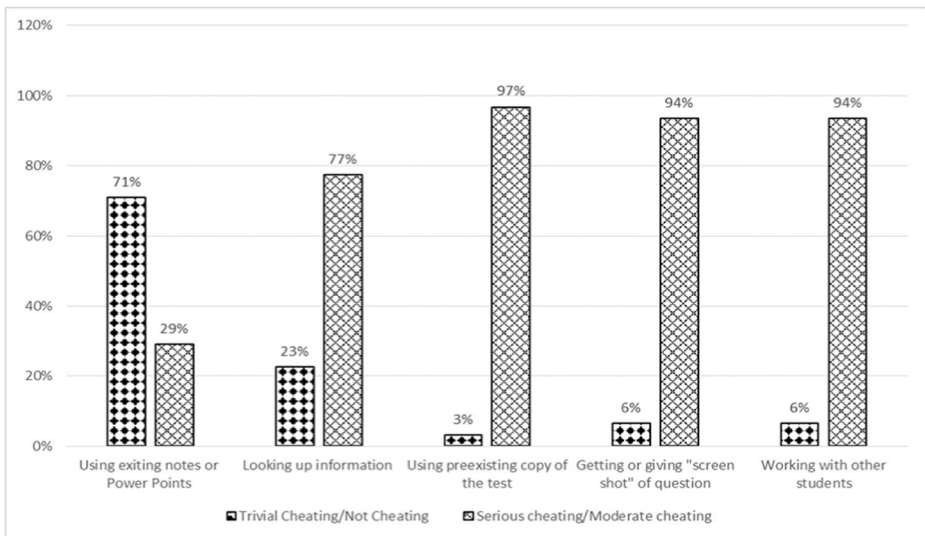
Fig. 3 Techniques of cheating by level of seriousness – distance learning students

Discussion

There are important distinctions between the online and face-to-face groups. Two findings are particularly worthy of discussion. First, 46% of face-to-face students stated that using existing notes or PowerPoints during an online test was *not* cheating at all or *trivial* cheating compared to 71% of distance learning students who expressed the same understanding. As mentioned earlier, the lack of face-to-face, direct interaction with the instructor and the interactive nature of the classroom environment likely played a significant role in explaining the discrepancy between the two groups. Distance students rarely, if ever, meet with their instructor face-to-face. The only traditional "lecture" they experience may involve reviewing PowerPoints provided by the instructor and taking notes. Consequently, as the distance learners do not have the advantage of participating in an actual physical classroom, they may believe that use of the PowerPoint images and notes serve as their "lecture." Additionally, the pressure of working full-time in a demanding field while simultaneously trying to obtain a degree, may help to explain why a majority of distance learning students viewed the use of Power Point images as little more than *trivial* cheating. Second, the data reveal that collaboration is understood quite differently between the two groups, as only 61% of face-to-face students believed that collaboration is *moderate* or *serious* cheating compared to 94%, of the distance learning students. Recruiting assistance to complete an exam fits every definition of cheating and academic integrity as detailed in all prior research mentioned in this article as well as in academic conduct policies in general. One possible explanation could involve a maturation effect as nearly all of the online practitioner students are older than the traditional university students, and thus they may be more likely to view such behavior as more egregious. Another possibility involves the presumed elevated level of honesty and integrity associated with those employed in the criminal justice field. Unlike the use of notes and PowerPoints, the involvement of another student in cheating could be viewed as a more serious offense. Alternatively, it may be possible that distance learners have fewer opportunities to cheat than face-to-face students. Consequently, some distance learning students view the use of recruiting others to

assist with exams as an unfair advantage not available to them and only available via the face-to-face classroom experience. Consequently, distance learners might judge student collaboration more harshly.

More than half of all respondents admitted to engaging in actions normatively considered cheating such as looking at notes during an exam. These actions were viewed by 46% of face-to-face students and 71% of distance learning students as *not* cheating or *trivial* cheating. These data suggest a lack of consensus regarding behaviors that constitute cheating. The lack of definitional consensus might be attributed in part to instructors failing to clearly convey course expectations, rules, and consequences relating to academic integrity. Roger's (2006) work supports this hypothesis as he found that faculty members using online testing were concerned about cheating but were not proactively implementing measures to combat the behavior. In addition, faculty members did not devote time to communicate to students the importance of academic integrity and what behaviors constitute cheating.

Deviance, Definitions, and Academic Dishonesty

Michaels and Miethe (1989) observed that cheating shares many characteristics of other forms of deviance including a focus on risk versus reward, which is often motivated by internal and external pressures; and as such, cheating may be deterrable. Given these similarities, knowledge drawn from particular theories of deviance may help illuminate these findings and provide suggestions for reducing cheating. The concept of *differential association* argues that deviance is more likely to occur when individuals have learned during peer interaction the techniques and justifications to engage in the behavior, as well as experienced positive rewards for the behavior (see Sutherland & Cressey, 1970). The data we present in this article largely support core elements of differential association. Students are familiar and competent with a range of cheating techniques and practices. Students indicated that many of their peers cheated with impunity. Finally, students' description of cheating behaviors does not comport with normative definitions of cheating. While online students may experience little if any face-to-face interaction with their classmates, significant opportunities exist for online interaction. Indeed, instructors often require peer-to-peer online engagement via course discussion boards and collaborative assignments. One can surmise that these virtual interactions allow ample opportunity for students to interact with peers that hold pro-cheating attitudes. Collectively, it appears that students have adopted the skills to cheat, the attitudes to justify cheating, and experienced positive rewards for cheating. As with other social learning theories, differential association would suggest that curbing deviant behaviors requires at least in part, encouraging bonds with institutions and peer groups that promulgate anti-deviance attitudes and beliefs.

Policy and Practice

Student acceptance of cheating and the knowledge and ease with which to cheat, coupled with the perceived low risk of getting caught and high reward, collectively conspire to make reducing cheating challenging. We now examine several suggestions for reform to address these issues, many of which align with differential association. Reducing cheating in the online environment will likely require strategies tailored specifically to the realities of the online environment. Some practical techniques to reduce cheating in an online class have already been identified and implemented including proctoring exams (Richardson & North, 2013); requiring frequent, brief, and time-intensive exams (Grijalva, Nowell, & Kerkvliet, 2006); and

utilizing open ended, essay style questions. These strategies provide a more accurate assessment of a student's unique grasp of the material and make responses more difficult to replicate (Gibelman, Gelman, & Fast, 1999). If instructors employ multiple choice exams, as is popular among online assessments, we suggest using a lockdown browser and ensuring that all available security functions are activated. Security functions can include, but are not limited to, randomized questions, randomized answers, presenting one question at a time with no backtracking, and limiting both the time in which the exam is available and the time to complete the exam.

In addition to the suggestions presented above, instructors may wish to reconsider the methods by which they evaluate student performance in online classes. We suggest alternative assessment methods such as writing-based and collaborative assignments, case studies, and online debates, all of which can be readily adapted to the online environment (McCord, 2008; McLafferty & Foust, 2004; University of Waterloo, n.d.). When implemented properly, these forms of assessment can limit problems often associated with tests and quizzes because they do not rely on a single, fixed, correct answer. Utilizing a less rigid approach to assessment can also involve drafting problem-oriented questions that require students to create their own correct responses. Problem-oriented questions that do not rely on basic recall and memorization but demand that students critically examine spatial relationships and processes can be helpful, although they do require more grading time on the part of the instructor.

Utilizing online based discussion assignments that address questions related to a particular reading or case study provides students the opportunity to read peer responses while ensuring they become actively engaged in a particular question or scenario that may have multiple avenues for arriving at a correct answer. Indeed, discussion-based assignments expose students to what their peers have written; but it will be obvious if an answer has been copied from another student or source.

We agree with Kelly (2014) that student assessment should be learner-centered and authentic. In an online environment making discussion and open-ended questions more authentic and less susceptible to cheating can also involve students writing about their personal experiences as they relate to the topic at hand. For example, replying to a case study involving racial profiling by the police, students could write about their own experiences or what they would have done differently had they been the responding officer. We believe these suggestions can produce more collaborative and engaged participants as well as a deeper and more rewarding student learning experience, all while limiting cheating behaviors.

Hinman (2004) argued that the three most important defense strategies against cheating are good teaching, the development of integrity in students, and helping students recognize that academic dishonesty hurts not only the individuals engaging in such behavior but also other students and the institution at large. To foster academic integrity some institutions try to address cheating by developing honor codes and systems (Melgoza & Smith, 2008; Stuber-McEwen et al., 2009). While some research suggests that cheating is less prevalent at institutions of higher learning that have an honor code (Bowers, 1964; McCabe & Trevino, 1997), the presence of an honor code alone is insufficient. While honor codes are one tool to encourage academic integrity, success is contingent upon the institutions, departments, and individual faculty members holding student's accountable to standards and behaviors reflecting academic integrity (Hunt et al., 2014; Mansbach & Austin, 2018; Melgoza & Smith, 2008; Orr, Williams, & Pennington, 2009). More specifically, accountability must involve communicating clear expectations to students regarding what behaviors constitute cheating and how cheating will be addressed disciplinarily. Instructors' syllabi can be a key

medium for communicating expectations. Syllabi should include detailed discussion of institutional and instructors' expectations of students' academic behavior, descriptions and examples of behavior that violate academic integrity, the consequences for violating these rules, and a statement detailing the individual and collective importance of academic integrity in the higher education setting. Instructors should review this material in detail with students early in the course.

Success in quelling academic misconduct has been reported when clear expectations by the instructor have been expressed at the beginning of each semester (Gibbons, Mize, & Rogers, 2002; Scanlon, 2004). We would add that such integrity-related explanations and reminders should be repeated throughout the semester, particularly when announcing upcoming exams and projects. Making students aware of disciplinary actions that will be taken when academic integrity is violated has also been reported as a successful step in reducing such infractions (McCabe & Travino, 1993). When implemented in concert, the strategies detailed above can foster what McCabe, Trevino, and Butterfield (2001) termed an "ethical community," one that includes clear communication of rules and standards, moral socialization of community members, and mutual respect between students and faculty members (p. 228). For online learners perhaps the most effective strategy for conveying expectations regarding academic integrity while promoting comradery and a positive collective (virtual) classroom atmosphere involves utilizing the existing learning management systems such as Blackboard or Canvas. Most learning management systems have some form of discussion board or announcements page that allows for threaded responses. Regularly posting information regarding expectations of academic integrity in these online areas would be useful. Instructors should leave these forums open for threaded comments, questions, notes, and even ungraded "academic integrity" pop quizzes for students to review on a regular basis. The interactive nature of open ended discussion boards may help to decrease the social distance that can be experienced by distance learning students and encourage attachment with their online classmates and the larger university. In short, it is important to establish a culture that does not tolerate academic dishonesty. In the end each institution must find its own direction and develop standards that best fit its mission statement, goals, and budget; and each faculty member must provide students with open and clear communication regarding what constitutes violations of academic integrity and the repercussions of such violation.

Future Research

As the majority of studies relating to academic integrity are descriptive in nature, future investigation would likely benefit from theoretically driven research. Additionally, larger and more diverse samples from different regions of the country need to be examined and compared. Practices designed to reduce online cheating, such as those suggested here, warrant further study. Future research would also benefit from exploring in greater detail the range of online cheating techniques used by students. Research that uncovers new and inchoate online cheating practices and techniques may afford instructors and institutions the opportunity to address new cheating practices as they emerge. Finally, it may be helpful to study cheating in other entities and enterprises. While the motivations, consequences, and rewards vary among academic and other forms of cheating, it may be useful to examine how other kinds of organizations respond to cheating and unethical behaviors.

Limitations

This study is not without limitations. First, as a convenience survey from a medium sized southeastern university, the findings cannot be generalized. Second, given the voluntary nature of the survey, survey participants may be the least likely to engage in cheating behaviors. Finally, participants' ability to skip questions, coupled with the natural attrition of a voluntary survey (students beginning but not completing the survey), may suggest that students did not want to respond to inquiries about academic integrity. Logically, students that dropped out of the survey would have made scores for academic integrity violations higher.

Conclusion

Students are frequently presented with opportunities to cheat. Instructors should not be surprised that the frequent temptations, combined with accessible technological tools and blurred definitions of honest and dishonest academic behavior, conspire to increase the likelihood that some students may turn to cheating to be successful in their pursuit of higher education. As such, instructors and institutions alike may be currently ill-prepared to address such practices in our rapidly evolving technological era.

In this study, which focused on students in the field of criminal justice, 51% of the distance education students utilized notes and books and accessed information to assist them with examinations. A staggering 94% of students conceptualized these practices as "trivial" cheating. These findings suggest that online students view academic integrity differently than do their instructors and the University. The isolation of the online environment and perception of non-accountability to the institution, professor, and peers may be fostering an attitude that the online student can pursue educational goals independently and within the realm of acceptable practices defined *by the student,* rather than defined by the institution and the instructor. The results of our study led us to an enhanced understanding of academic dishonesty in the online environment, and we hope that our findings and suggestions contribute to promoting a climate in both the online and face-to-face environments in which academic integrity is increasingly valued, honored, and respected.

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