

Cheating and the Pandemic: Levels of Cheating in Online and Live College Courses During COVID-19

Abstract

The topic of cheating at the college level has received greater attention since the 2019 pandemic (Newton, 2020). This is due in part because countless institutions of higher education switched many of their live/in-person classes to an online learning format. The researchers of the current study compared cheating in live classes to online classes and the impact of the COVID-19 pandemic had on student cheating during the 2020-2021 academic year. Results showed that students cheated more in online classes compared to live classes and more than half (53.2%) of the students knew of a classmate who cheated during the pandemic. The issue of gender and class rank are also discussed related to cheating.

Introduction

College student cheating is not a new topic (McCabe, et al., 2001). Diekhoff and colleagues (1996) completed a follow-up study about college cheating concluded: “Most students (61.2%) reported cheating in 1994, up significantly from 54.1% in 1984 (Haines, et al., 1986). Despite this increased cheating, students in 1994 were significantly less likely than in 1984 to neutralize (rationalize) their cheating” (p. 487). There have been many theories related to moral development, moral reasoning, and cheating (Kohlberg, 1971 and 1975; Kitchener & King, 1981 and 1990; Gilligan, 1972, 1977, 1979, and 1986; Perry, 1970) that postulate why a person cheats or engages in amoral behaviors. During the pandemic, many universities and colleges switched from traditional face-to-face classes to some type of online learning where the teaching and learning approach was delivered via the internet. Given this huge increase in

internet-based course offerings, the concern is whether student cheating increased given the lack of a professor (instructor) being physically in the classroom.

Literature Review

While many studies have been completed related to cheating in live classes, there remains limited number of comparison studies related to online cheating (Grijalva, et al., 2006; Lanier, 2006; Stuber-McEwen, et al., 2009; Szabo & Underwood, 2004; Underwood & Szabo, 2003). With the advent of web-based assessments the opportunity to use illegitimate means to improve grades is a concern (Kennedy, et al., 2000; Smith, et al., 2003). There has been an increase in media coverage related to academic online cheating (Newton, 2020). Robinson and colleagues (2004) concluded that “In the end, this quantitative analysis of 118 students reveals that the dynamics behind cheating might be universal. While rural communities might offer different dynamics for some issues, the extent of cheating at this campus mirrored the rates of studies from many urban schools” (p. 380). In alignment with this perspective that cheating is a universal process, regardless of the geolocation of the institution of higher education, it is a good baseline for this study to describe the findings of other articles related to college student cheating

Cheating, An Historically Persistent Issue

The literature reveals that cheating has been a prevalent, long-standing issue on college campuses long before the COVID-19 pandemic. According to Anderson (1998), cheating has been considered a serious problem on college campuses for over 100 years. In their longitudinal study of cheating, Vandehey, Diekhoff, and LaBeff (2007) stated that cheating has persisted over time, noting that, in 1984, 54.1% of students reported cheating, 61.2% of students reported cheating in 1994, and 57.4% of students reported cheating in 2004. Another study, by Lord and

Chiodo (1995) found that “eighty-three percent of the respondents [college students] had cheated in science sometime in their lives” (p. 317).

With the advancement of sophisticated search systems via the internet and wireless electronics, cheating has now evolved in the digital age. Students today are now part of the “copy and paste” generation in which dishonest behavior is only a mouse click away. In their study, Berry, Thornton, and Baker (2014) found that “at least 90% of students surveyed engage in some form of cheating, and students did not view digital cheating as an academic violation” (p. 82). In their study, King, Guyette, and Piotrowski, (2009) concluded that “73.6% of the students in the sample held the perception that it is easier to cheat in an online versus traditional course” (p. 1). In their study, Raines and colleagues (2001) also found that 60% of students self-reported breaking the rules, engaging in dishonesty, and not using their “own brain” to complete academic work (p. 83).

Cheating under COVID-19

The pandemic has raised global concerns of an epic nature and resulted in lockdown and isolation for many college students in the current pursuit of their future goals and dreams. COVID-19 not only brought about Under COVID-19, but also has led to disruptions that have been unprecedentedly broad in scope and deep in extent. Most, if not all, higher education institutions were forced to shift almost all their courses to fully online almost overnight. For many students, social isolation from friends, family, and peers were the result of this shift. As concerns related to mental health and well-being of students were elevating, academic institutions also had to scramble to adjust to the rapidly changing dynamic of online education in order to keep a sense of continuity in courses and allow students to progress amidst the

pandemic. Nevertheless, because of the collaborative nature of online education, this shift to online platforms for courses brought about concerns related to academic integrity.

In a qualitative study, Adelrahim (2021) found that the pandemic's undue influence on stress and anxiety created a sense of justification of unethical behavior in cheating. The author contributed the stress to cheat related to other factors: social pressure, peer pressure, academic pressure, instructors not using anti-cheating software, the ease of cheating, the desire for an increased GPA, and worries about jobs during the economic fallout and the fear of not being competitive in the job market. Students reported feeling anxious, isolated, bored, nervous, sad, and uncertain of their future, Adelrahim (2021) postulated that the student's sense of uncertainty added untoward stress to students and exacerbated the conditions that affect ethical reasoning where there was no fear about achieving personal goals through cheating. With proctoring can come some mental health concerns. In a review of academic integrity and mental health during COVID-19, Eaton and Turner (2020) concluded that the moving to online based academic integrity tools such as e-proctoring added to the already stressful situations mounting from the pandemic for students. According to the review, students reported feelings of anxiety, discomfort, nausea during testing, and financial concerns due to costs of proctoring.

Other concerns related to cheating amidst the COVID-19 pandemic have emerged. File sharing websites are not a new thing in the academic community, but the interest in them seemingly has increased during the pandemic. According to Chegg, its online file sharing website has been used beyond "homework help" into contract cheating on exam questions during the pandemic (Lancaster & Cotarlan, 2021). The lack of monitoring mechanisms from the academic/educational institutions and communities on such websites is particularly concerning as it further threatens the already difficult job of enforcement (Chegg, et al., 2021).

Purpose of the Study

The purpose of this study was to examine: (1) the prevalence of cheating, particularly given the COVID-19 pandemic; (2) whether students cheat more in online courses than in traditional live classes; and (3) what specific dishonest behaviors students engage. The study also examined the demographic factors of gender and academic class in relation to cheating.

Methods

The quantitative study used a survey instrument modified from an existing survey instrument previously used by Watson & Sottile (2010). The instrument was divided into four sections, Demographics, Live Class Behaviors, Online Class Behaviors, and Miscellaneous, and was created and implemented through an online survey instrument platform. The Demographic section asked students their gender, race/ethnicity, academic standing (freshman, sophomore, junior, senior, and graduate), and college of their academic major (College of Education, College of Health Professions, College of Business, and the like). The Live Class Behavior and Online Class Behavior instrument contained the same 16 statements about academic dishonesty and dishonest behaviors and requested students rank their answers on a five-point Likert scale. Each statement was written in the first person and asked the students to respond with how often they have participated in the behavior (“Never”, “1-2 times”, “3-5 times”, “5-10” times, “>10 times”). For this study, live classes were defined as courses that met in person at least three times in a semester while online classes were those that were either fully asynchronous or met in person three or less times per semester, with other meetings being online. The final section, Miscellaneous, asked questions about participant feelings regarding how rampant cheating is,

how their behavior changed since the onset of the COVID-19 pandemic, and how they perceive other students' behaviors have changed since the pandemic. For each item of the survey, descriptive statistics were obtained, and a regression analysis was used on the behaviors and questions listed in the Live, Online, and Miscellaneous sections. All demographic factors except for race (due to unbalanced and insufficient sub-sample size for each sublevel) were utilized as the independent variables for regression analysis on behaviors. A review of survey questions was completed by a panel of faculty and students for content validity, and the Cronbach's Alpha on standardized items was .850.

Student participants were recruited via an email sent to approximately 12,000 undergraduate and graduate students at a mid-size, major university located in an eastern state of the United States. The email invited students to participate in a study on academic dishonesty via an included web link. Potential participants were informed that their participation was anonymous, voluntary, and that no means of tracing or tracking would be implemented to potentially identify a student. Of the student population invited, 701 completed the demographic information. The university officially lists its female/male ratio of students as 60% to 40% and, of those who completed the demographic portion of the survey, 448 were female (64% of the sample), 230 were male (33%), and 23 chose "Other/Choose not to identify" (3%). The sample was congruent with the racial makeup of the student body, with 90% listing themselves as White/Caucasian, compared to the official university count enrollment of 89%. The graduate/undergraduate distribution was somewhat higher for graduate students (32% in the sample vs. 23% by the official university statistics).

Results

Survey Questions Directly Related to the COVID-19 Pandemic

The study asked participants a total of four questions directly related to the COVID-19 pandemic and academic dishonesty, two of those relating to the transition from live coursework to online/virtual in Spring 2020 (Q1 and Q2, see Table 1) and two questions related to changes in behavior since that time (Q3 and Q4, see Table 2). At the university where this research was conducted, that transition period was between mid-February and mid-March of 2020. The possible responses for the first two questions were *Yes, No, Not Sure, and I was not a student during the Spring 2020 semester*, and *Yes, No, and Don't know/Not Sure* for the third question, and *More, Less, and I do not cheat* for the fourth question. Table 1 shows the frequency distribution of the student responses for the survey questions related to live-to-online transition, and Table 2 shows the frequency distribution for the survey questions related to the changes in behavior since the transition. One interesting observation of the results is that, for the survey question, “Have you cheated more or less since the COVID-19 pandemic (February 2020) than before the pandemic?”, almost four times as many participants said they had cheated “More” than those responding “Less.”

Table 1

Frequency Distribution for Survey Questions 1 and 2

Survey Question	Yes	No	Not Sure	I was not a student during the Spring 2020 semester
During the spring semester classes of 2020 the university transitioned its in-person classes to online/virtual. Do you know of students who cheated in those classes that transitioned, during or after the move to online teaching?	115	111	102	96
During the spring semester classes of 2020 the university transitioned its in-person classes to online/virtual. Did you cheat in those classes that transitioned, during or after the move to online teaching?	71	217	34	104

Table 2

Frequency Distribution for Survey Questions 3 and 4

Survey Question	Yes	No	Not Sure
Have you researched ways to cheat since the COVID-19 pandemic (February 2020)?	18	400	7
	More	Less	I do not cheat
Have you cheated more or less since the COVID-19 pandemic (February 2020) than before the pandemic?	104	25	232

A regression analysis was performed on the data using the demographic factors of gender, academic standing, and academic major college as independent variables (Table 3). Responses that indicated “Not Sure,” “I was not a student in the Spring 2020 Semester,” “Don’t know/Not sure,” or “I do not cheat” were excluded from the analysis. Academic standing was the only demographic factor found to be a significant predictor ($p < .01$) of the survey question 1 (knowing someone who cheated) and 4 (cheat more/less under COVID).

Table 3

Regression Scores based on Demographic Factors

Survey question with Demographic Factors	95% Level for β		Std. error	β	t	p
	Lower Bound	Upper Bound				
During the spring semester classes of 2020 the university transitioned its in-person classes to online/virtual. Do you know of students who cheated in those classes that transitioned, during or after the move to online teaching?						
Gender	-.159	.090	.063	-.037	-.549	.583
Academic Standing	.023	.116	.024	.197	2.936	.004**
College of Major	-.027	.032	.015	.011	.160	.873

Survey question with Demographic Factors	95% Level for β		Std. error	β	<i>t</i>	<i>p</i>
	Lower Bound	Upper Bound				
During the spring semester of 2020 classes Marshall transitioned its in-person classes to online/virtual. Did you cheat in those classes that transitioned, during or after the move to online teaching?						
Gender	-.115	.089	.052	-.016	-.260	.795
Academic Standing	-.007	.063	.018	.095	1.589	.113
College of Major	-.014	.032	.012	.049	.801	.424
Have you researched ways to cheat since the COVID-19 pandemic (February 2020)?						
Gender	-.058	.020	.020	-.047	-.949	.343
Academic Standing	-.007	.018	.006	.041	.818	.414
College of Major	-.008	.010	.005	.011	.217	.828
Have you cheated more or less since the COVID-19 pandemic (February 2020) than before the pandemic?						
Gender	-.207	.068	.069	-.088	-1.003	.318
Academic Standing	.013	.106	.024	.217	2.511	.013*
College of Major	-.048	.009	.014	-.121	-1.379	.170

* $p < .05$, ** $p < .01$

Live Course Academic Dishonesty Behavior

As noted above, live or in-person courses were courses where students were physically in the same classroom as the instructor at least three times during the semester. It is necessary to note that, 178 of the 701 participants who completed the demographic section of the survey chose to stop participating at the first question about specific academically dishonest behaviors. While it is beyond the scope of the current study to explain this not-minor exit of participation, it has implications for future research as will be addressed later in this paper. Of those who did respond ($n = 523$), 28.3% of students said they have cheated on an assignment, quiz, or test at

least once. Table 4 lists the frequency of each academic dishonesty behavior, with the last column showing the cumulative percentage of the participants who have answered to committing the behavior at least once.

Table 4

Frequency of academically dishonest behaviors in live courses

Dishonest Behavior	Never	1-2 times	3-5 times	5-10 times	>10 times	Cumulative % of those who cheated at least once
I have cheated on an assignment, quiz, or a test.	375	87	30	11	20	28.3
I have submitted others' work as my own.	507	9	3	0	2	2.7
I have had someone give me answers during a class quiz or test.	468	42	9	2	2	10.5
I have received answers to a quiz or test from someone who has already taken it.	449	49	17	4	3	14.0
I have helped someone cheat on an assignment, quiz, or test.	436	62	14	8	3	16.6
I have used instant messaging through a cell phone, smartwatch, or handheld device during a quiz or exam.	484	22	6	2	8	7.3
I have used a cell phone, smartwatch, or handheld device to look up answers during a quiz or exam, when the instructor did not allow it.	459	30	17	5	11	12.1
I have copied another student's work with their permission and submitted it as my own.	489	21	5	2	5	6.3
I have copied another student's work without their permission and submitted it as my own.	509	9	1	0	1	2.1
I have been caught cheating by the instructor.	511	9	0	0	0	1.7
I have knowingly copied passages from an article or book directly into a paper without citing it as someone else's work.	490	26	3	0	1	5.8
I have let someone else take an exam for me.	515	4	0	0	1	1.0
I have used a term paper writing service to complete an assignment.	510	9	0	0	1	1.9

Dishonest Behavior	Never	1-2 times	3-5 times	5-10 times	>10 times	Cumulative % of those who cheated at least once
I have placed notes out of sight of cameras during an online exam.	445	51	11	5	8	14.4
I lied and told the instructor that my computer crashed during the exam, just so I could see the test questions and look up the answers.	509	10	1	0	0	2.1
I used a second computer during an exam, when the exam software “locked” my computer screen to prevent me from looking things up.	491	21	4	1	3	5.6

The top four specific dishonest behaviors for in-person classes as self-reported by student participants were helping others cheat (16.6%), placing notes outside of camera range (14.4%), getting answers from someone who has already completed a quiz or test (14.0%), and using a smart cellphone or tablet during a quiz or test (12.1%). Furthermore, the extensiveness of cheating, particularly related to using a cell phones or other handheld devices was alarmingly concerning, with over half of those admitting to using a device three or more times (n=33, 52.4%) and 17.7% (n=11) having done so more than 10 times.

The regression analysis on demographic factors to the dishonesty behaviors revealed that gender, academic standing, and College of Major were statistically significantly related to certain cheating behaviors (see Table 5). The positive beta on the gender factor suggested that females were more likely to engage in these two noted cheating behaviors than males. Likewise, the positive beta on the academic standing factor indicated that students with a higher academic standing tend to cheat by receiving answers to a quiz or test from someone who has already taken it. The results on academic major, or more accurately the college in which the major is

housed, showed that students in the sciences and health professions (excluding pharmacological and graduate medical programs as housed in difference colleges) were most likely to receive answers to quizzes and tests from students who had previously taken the assessment, whereas students whose majors were housed in the College of Business were most likely to help others cheat on assignments.

Table 5

Significant Regression Findings for Live Course Academic Dishonesty Behaviors

Survey question with Significant Demographic Factors	95% Level for β		Std. error	β	<i>t</i>	<i>p</i>
	Lower Bound	Upper Bound				
I have received answers to a quiz or test from someone who has already taken it.						
Gender	.006	.203	.050	.091	2.090	.037*
Academic Standing	.012	.076	.016	.119	2.730	.007**
I have helped someone cheat on an assignment, quiz, or test.						
Gender	.034	.245	.054	.113	2.590	.010**
College of Major	-.050	.002	.012	-.093	-2.127	.034*
I have used instant messaging through a cell phone, smartwatch, or handheld device during a quiz or exam.						
College of Major	-.057	-.012	.011	-.131	-3.000	.003**

* $p < .05$, ** $p < .01$

Online Course and Academically Dishonest Behaviors

The same set of dishonest behavior questions were asked for online courses as well. The student responses revealed that for almost every behavior listed, students in online courses scored higher for academic dishonesty, with 42.3% admitting that they have cheated on an assignment, quiz, or test, an almost 50% higher score than that of live courses (28.3%). Table 6

lists the frequencies of academic dishonesty with the cumulative percentage of those who cheated at least once listed in the final column.

Table 6

Frequency of academically dishonest behaviors in online courses

Dishonest Behavior	Never	1-2 times	3-5 times	5-10 times	>10 times	Cumulative % of those who cheated at least once
I have cheated on an assignment, quiz, or a test.	250	74	50	19	40	42.3
I have submitted others' work as my own.	418	9	3	2	0	3.2
I have had someone give me answers during a class quiz or test.	374	35	10	6	5	13.0
I have received answers to a quiz or test from someone who has already taken it.	367	37	19	2	4	14.5
I have helped someone cheat on an assignment, quiz, or test.	357	46	15	6	6	17.0
I have used instant messaging through a cell phone, smartwatch, or handheld device during a quiz or exam.	362	38	13	7	11	16.0
I have used a cell phone, smartwatch, or handheld device to look up answers during a quiz or exam, when the instructor did not allow it.	331	47	24	13	15	13.0
I have copied another student's work with their permission and submitted it as my own.	409	10	8	1	1	4.7
I have copied another student's work without their permission and submitted it as my own.	423	3	3	0	0	1.4
I have been caught cheating by the instructor.	427	3	0	0	0	.7
I have knowingly copied passages from an article or book directly into a paper without citing it as someone else's work.	416	11	3	0	0	3.3
I have let someone else take an exam for me.	422	5	3	0	0	1.9
I have used a term paper writing service to complete an assignment.	424	4	0	0	0	.9
I have placed notes out of sight of cameras during an online exam.	357	42	16	13	2	17.0

Dishonest Behavior	Never	1-2 times	3-5 times	5-10 times	>10 times	Cumulative % of those who cheated at least once
I lied and told the instructor that my computer crashed during the exam, just so I could see the test questions and look up the answers.	423	4	1	1	0	1.4
I used a second computer during an exam, when the exam software “locked” my computer screen to prevent me from looking things up.	398	17	10	3	1	7.2

Similar to the results for cheating in the live courses, the item rated the highest was “I have cheated on an assignment, quiz, or test.” Also, the behaviors rated the highest for the live courses were also the ones that made to the top on the list for the online courses, as self-reported by the student participants in the study: helping others cheat (17.0%), placing notes outside of camera range (17.0%), getting answers from someone who had already completed a quiz or test (14.5%), and using a smart cellphone or tablet during a quiz or test when the instructor did not allow such items (13.0%). Unlike the results from the live courses, another two cheating behaviors were rated high for the online courses, that is, using instant messaging through a cell phone, smartwatch, or handheld device during a quiz or exam (17%) and having someone provide the respondent answers during a quiz or test (13.0%). Furthermore, the volume or number of times participants claimed to have engaged in these cheating behaviors tended to be higher for online classes, particularly concerning using electronic devices during quizzes and tests (n=99 for online versus n=63 for live, at least once). As an example, for the statement, “I have placed notes out of sight of cameras during an online exam,” 32.0% of live class participants admitted to this behavior more than 1-2 times, but 42.4% did so more than 1-2 times in online classes. The regression analysis on demographic factors on cheating behaviors did not reveal any statistically significant results.

Discussion and Conclusions

It is important to note that the study was conducted to get a timely glimpse of academic dishonesty in an unprecedentedly wide-scope shift to online instruction under highly stressful circumstances associated with a global pandemic. While the issue of academic dishonesty is a long-standing issue (Berry, et al., 2014; King, et al., 2009), the overall results of the current study showed not only the continuity in such a trend but also indications of the growing severity as a result of increasing access to digital based tools students have and are capable of mastering on one hand and the lag-behind institutional mechanism (i.e., faculty technology competency, online program/course structures, etc.), resources, and policies in preventing and addressing online cheating on the other hand. The study's findings revealed that almost 17% of students knowingly cheated during the transition period of the in-person to virtual/online teaching. It was no secret to all that instructors, faculty, and administrators were under enormous pressure to make the change in short order, and so were students. Classwork under the best of circumstances caused students an enormous amount of anxiety, and having to transition to platforms in which they did not choose to learn with instructors who may or may not have the technological savvy to work in an online environment, placed a much higher level of consternation upon them. One could argue that this additional stress may have played a role in increasing the level of cheating at that time.

Furthermore, the findings of the study also revealed that approximately 30% of those who did respond to the question admitted to cheating more now than before the pandemic, where the ratio for "More" versus "Less" was 4:1, as shown in Table 2. Such results really speak to the compounding effects of more opportunities to cheat and easily to do so in online courses and increased stress level under COVID-19 on the motives and actual engagement of cheating. This

was supported by the fact that very few students, when asked in the survey, stated that they had researched ways to cheat since the pandemic transition. In other words, the students already knew methods of cheating but somehow the pandemic circumstances had weakened extant ethical principles, promoting certain justifications for engaging in academically dishonest behaviors and subsequently the actual enactment of such behaviors.

The findings of this study confirmed with what the existing literature indicated, that cheating in online courses is more prevalent than cheating in live courses (Bilen & Matros, 2021; Newton, 2020). The specific cheating behavior that scored high for online courses but not live courses was using instant messaging during a quiz or exam. This was not surprising, given it would be very difficult to do so without being caught cheating in a live course. Also, it is clear from the findings of this study that few students were caught for cheating. Only 1.7% of students responded they have been caught cheating in a live course, even though 28.3% admit to cheating. The numbers are similarly, if not more, concerning in online courses, with only 3 of the 186 (about 1.6%) students admitted to cheating indicated that they got caught. All these could at least suggest two things: there is a lack of consequences associated with engaging in academic cheating and the prevention and discovery of cheating is challenge for faculty and institutions.

While differences were observed in the findings regarding the types and prevalence of cheating between live and online courses, there was no difference related to being the receiving or initiating end of such cheating behaviors. In both live and online courses, the high prevalent cheating behaviors involved both types at relatively similar extent. It seems to suggest that self-serving motives may not fully explain the student participants' motives to cheat. Admittedly, one could argue that the so called helping someone to cheat may also be self-serving, if the

“someone” is likely to be a friend or a teammate. The current data do not allow the researchers to answer such speculations with certainty; future research is needed.

When it comes to demographic factors, overall, such factors do not dictate the cheating patterns, except in a few very specific circumstances for live courses. Academic standing was found to be a significant indicator for the cheating behavior of receiving answers to a quiz or test from someone who has already taken it. There are two possible explanations for that: First, comparing to lower academic standing peers such as undergraduates, graduate students are more likely to be married, raising children, having a fulltime professional job, and/or being caretakers for elders. The pandemic could hit them much harder as a result of multi-front challenges such as losing a job and/or having to homeschooling and the mounting pressures associated with such challenges. All these could trigger a motive to cheat when it was not the case necessarily prior to the pandemic. Second, it is often the case that courses in higher grade levels tend to have more project-based assignments rather than quizzes or exams due to considerations such as curricular objectives and/or class size. The shift to online instruction in weeks because of the COVID-19 could force instructors for those courses to rely on quizzes or exams as an only feasible alternative – a change could lead to pressure and testing anxiety that were not present previously and have been noted in the literature as factors contributing to cheating (Adelrahim, 2021; Nguyn, et al., 2020).

Gender was found to be a significant indicator for cheating behaviors of receiving answers to a quiz or test from someone who has already taken it and helping someone cheat on an assignment, quiz, or test. However, it is worth of noting that the sample contained over 60% female respondents. While this was representative of the university’s student body, it is possible that the unbalanced subsample sizes between genders could contribute to this result. It is also

possible that social desirability bias was much stronger among male survey respondents than female respondents. Finally, it is possible that for this sample, female respondents did tend to cheat more under these two circumstances. Given the scope of the current data collected, no definite explanation can be supported with confidence.

Lastly, while not directly related to the statistical results, one interesting observation in the survey responses is worth noting. As noted earlier, there were a high number of survey participants who completed the demographic section of the survey exited right after seeing the questions related to cheating. Typically, in an electronic survey, some respondent attrition occurs, as participants will either skip questions or stop answering after a certain point, due to lack of interest, connectivity issues, or other reasons (Fan & Yan, 2010). Having stated this, the number of respondents ($n = 178$) who stopped immediately after seeing the first academic dishonesty question is high, and the researchers can only conjecture as to why this may have occurred, since survey respondent anonymity prevented any type of follow-up. The researchers of the study believe this could have something to do with the topic itself making some students uncomfortable answering the survey questions. This is understandable in the sense that the survey potentially asked students to admit to behaviors that may lead to academic sanction, despite of all the mechanisms in place to ensure anonymity and confidentiality. This could mean that the presence of student cheating might very well be higher if the non-responders were hiding their academically dishonest behaviors by not answering the questions in the survey.

All these observations and findings noted above have implications. For future studies, replications and expansion beyond a single institution to a variety of institutional types, sizes, and geographic locations can help test the applicability of the current findings. Qualitative or mixed-methods studies need to be conducted where relationships between demographic factors

and cheating behaviors can be investigated in depth from the participants' own perspectives, so do those related to how students define, experience, and explain academic dishonesty in general and under a pandemic. For educators and educational institutions, it is necessary to realize that cheating is not going away any time soon, especially in a more and more digitalized world. As King and Case (2014) found, the most common form of cheating reported by students was downloading papers from the internet and claimed them as their own. Often students justify such behavior with a mentality that other students cheat more (King & Case, 2014). Given education is a significant factor in increasing moral development (Kohlberg, 1984), it is essential for institutions to continue address the need of moral or ethical development within each major, even when students have already been oriented to ethical behaviors prior to entering higher education. The ethical behavior and moral development should be an integral part of the curriculum for all majors and be structured so as a continuous and reflective process throughout rather than a single-course, once-for-all afterthought. Collaborations across sectors to strengthen the institutional and faculty capacity to detect and catch cheating are essential. While the best outcome is increased moral values and decision making in students, appropriate policies (i.e., consequences for academic dishonesty) and infrastructures should not be overlooked nor should their effects be underestimated or understated. It is important for faculty to recognize that such disciplinary actions, while undeniably having consequences, are educating opportunities for impactful life lessons. Helping faculty and staff to engage such difficult circumstances skillfully through meaningful professional development; rather than the typical sit-in lecture and discussion format, multimodal training such as simulations can more effectively building the competencies in faculty and staff as they not only learn the knowledge, skills, and dispositions but also apply and practice them in real-life scenarios.

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