Unveiling Academic Dishonesty in Online Assessment among Pre-Service Teachers

Antonio I. Tamayao, PhD
Professor VI, Cagayan State University, Tuguegarao City, Cagayan Province, Philippines
toni_tamayao@yahoo.com
ORCID ID - 0000-0003-2720-2641

Abstract
Using the mixed-research design, this study investigated the views, reasons and extent of practice of academic dishonesty in online assessment among pre-service teachers. It utilized 332 respondents and 15 study participants across year levels and programs of the College of Teacher Education enrolled for Academic Year 2021-2022. The findings revealed that the pre-service teachers practiced academic dishonesty in online assessments at a great extent and is driven by several interplaying factors. They engaged in these misbehaviors primarily to pass the subject, maintain high grades, and due to laziness or unpreparedness for the test. The availability of technology and internet access, combined with mutual support among classmates, a complacent attitude, and the normalization of cheating practices, contribute to the prevalence of academic dishonesty. Despite their engagement in these misbehaviors, pre-service teachers are not oblivious to the negative consequences. They recognize that academic dishonesty leads to a decreased quality of learning and feelings of guilt. These findings highlight the need for educational institutions to address the root causes of academic dishonesty, promote a culture of integrity, and provide support mechanisms to help students develop ethical academic practices.
Keywords: academic dishonesty, online assessment, pre-service teachers

1. Introduction

Background of the Study

The COVID-19 pandemic has struck the world, and it definitely had a significant impact on the educational landscape. Schools were forced to close and were compelled by circumstance to conduct classes online. In this trying time, implementing an online learning program appears to be a viable option to continue education (Herdian et al., 2021). Educators all across the world have embraced online learning to enable the continuance of school activities. Online learning is a form of distance education that utilizes modern technological advancements, including computers, mobile phones, and various electronic devices, alongside the internet (Gaskill, 2014). Many difficulties arose as a result of the abrupt shift to online learning. Assessments of students and how examinations were conducted became key concerns. As a result, students' tests, activities, assignments, and assessments were also completed online which is vulnerable to academic dishonesty.

Academic dishonesty has emerged as a significant issue for this new educational medium (Mills 2010). It is sometimes referred to as "E-dishonesty" or "E-cheating" to refer to behaviors that depart from academic integrity in the online environment (Holden, et al., 2021). As a matter of fact, academic dishonesty is becoming a growing concern among students in schools all across the world (Bylieva et al., 2019). It is a widespread issue present in colleges worldwide, and it has become increasingly prevalent and pervasive within the realm of higher education (Middleton, 2012). Essentially, academic dishonesty encompasses acts of "any form of cheating in official academic activities, such as plagiarism, fabrication, deception, cheating, or sabotage"(Peterson, 2019). It is also aimed at presenting one's academic work as original, and it encompasses fraudulent practices, unauthorized material usage, collusion, and plagiarism (Bemmel, 2014).

Many countries have demonstrated efforts to curb the considerable percentage of students engage in online academic dishonesty, characterized by low academic immersion and a lack of integrity (Chen et al., 2020). For instance, the United States has passed the Higher Education Opportunity Act (HEOA) to address the problem of dishonesty in online education. The HEOA includes restrictions to prevent copyrighted works from being illegally uploaded and downloaded via peer-to-peer (P2P) file-sharing. As regards practices along academic dishonesty in online assessments, researchers have discovered that students unlawfully form online groups to collaborate. Collaboration is a widespread kind of online academic dishonesty (Herdian et al., 2021) which happens when doing academic assignments,

midterm or final examination. It involves collaborating with others when the assignment or examination is intended to be completed individually without any form of external assistance.

The reasons for engaging into academic dishonesty in online assessment is manifold. But obviously students cheat in order to pass or obtain good grade. Whatever may be the reason, academic dishonesty, particularly in online assessment, is a complex phenomenon influenced by various factors. The elements influencing student academic dishonesty include personality, cognition, perceived opportunity, and attitude (Wahyuni et al., 2020; Chen et al., 2020). It is important to note that these elements interact and influence one another, making it necessary to adopt a comprehensive multifaceted approach to tackle academic dishonesty effectively. Interestingly, engaging in academic dishonesty is more convenient in an asynchronous online setting compared to a traditional face-to-face classroom because of factors such as easy access to the web, internet sharing, and the rapid spread of information (Moten et al., 2013). Due to these factors, the demand for file sharing sites that assist students with academic work has increased in comparison to past years (Herdian et al., 2021). Consequently, even the methods employed to assess learning in online courses, such as scores obtained from formative or summative evaluations, fail to genuinely reflect the level of learning achieved. This is due to the potential contamination of these assessments by instances of cheating that take place during the process (Dendir & Maxwell, 2020).

In the Philippines, online class and online assessments are generally a novel learning platform that is adapted to allow students to continue their education while the COVID-19 pandemic is ongoing. Higher Education Institutions (HEIs) use a variety of online virtual learning platforms and learning management systems (LMS) such as Google Classroom, Zoom, and Moodle, among others, to suit to their online learning requirements. In particular, Cagayan State University (CSU), uses the Learning Environment Network System (LENS) vis-à-vis other platforms depending on the accessibility and convenience of the students and teachers. With the abrupt shift to these platforms, however, the researcher's personal observations have revealed instances where the results of examinations indicate a high level of similarity among students' answers, suggesting potential collaboration or unauthorized sharing of information. Furthermore, the examination scores obtained by the students fail to authentically reflect their actual learning levels during discussions and oral tests, thereby compromising the accuracy and reliability of the assessment results.

It is in this context that this study seeks to examine the extent of practice of academic dishonesty in online assessment of the pre-service teachers delving deeper into their views and reasons behind such e-cheating behavior. This is imperative considering that they are future educators who are expected to promote academic integrity, uphold professional standards, and serve as ethical role models in the classroom.

Objectives of the Study

This study unveiled the practice of academic dishonesty in online assessments among pre-service teachers in Cagayan State University (CSU) particularly at the College of Teacher Education (CTEd). Specifically, it examined the participants' views, reasons and extent to which they practice academic dishonesty in online assessments.

Conceptual Framework

Academic dishonesty in online assessments is explained by the Opportunity Theory suggesting that individuals engage in deviant behavior when they perceive a favorable opportunity to do so (Ramos, 2003). In the context of online assessments, several factors contribute to the increased opportunity for academic dishonesty. Online assessments often lack direct supervision, making it easier for students to cheat without immediate detection. This is in contrast with traditional classroom settings wherein instructors can monitor students more closely, making it harder to engage in dishonest behaviors. Moreover, the availability of high technology can facilitate cheating in online assessments. Students can use search engines, mobile phones, online forums, or communication tools to seek answers or collaborate with others during the assessment, thus, facilitating a variety of dishonest behaviors. Also, time constraint is another enabling factor for academic dishonesty. Usually, online assessments have time limitations and this leads to increased pressure and stress. Such pressure can push some students to resort to dishonest methods to achieve higher scores or meet deadlines.

In this study, academic dishonesty is used as the unethical behavior and practices manifested by students in their online assessments. The practices of academic dishonesty in online assessments are the different acts of cheating methods employed by students. These practices are executed through different modes of operation, including cheating, collaboration, plagiarism, manipulation of technology, seeking internet assistance, and employing diverse methods to engage in academic dishonesty within distance education (Farisi, 2013). These various cheating practices occur in relation to formal academic exercises (Peterson, 2019).

Significantly, the views of the participants about academic dishonesty revolves around their perspectives and experiences about the prevalence of e-cheating in online assessments in class. This includes their thoughts about academic dishonesty, how it is done and what they feel about it. Understanding the participants' perceptions provide valuable reflection of their belief, which is the foundations of their actions, and illustrates the implications of cheating to the overall learning experience (Raines et al., 2011). Additionally, the participants' reasons for engaging in academic dishonesty in online assessment can occur due to a variety of purpose. These reasons may be intrinsic or extrinsic shedding light on their motivations behind academic dishonesty. Some intrinsic reasons that may contribute to such cheating behavior include pressure to succeed, lack of motivation or interest, time constraints, and lack of understanding or preparation, among others. On the other hand, some extrinsic reasons include accessibility to resources, lack of supervision, and technological loopholes, among others.

Significance of the study

The information gained from this study will contribute towards knowledge of academic dishonesty practice by students in the context of online assessments in the Philippines. This study could help educational institutions assess potential practice of academic dishonesty by the students in the conduct of online assessments. Specifically, the study's findings will help the learning institutions in crafting school policies and strategies to prevent academic integrity issues. It could help the school administrators to resolve this dilemma through alleviating a stricter rule, policies, and enforcing code of conduct. With the knowledge about the practices and reasons concerning academic dishonesty, it could help the teachers in improving their methods of teaching and conducting assessments in online environment. This will also benefit the students in upholding the practice of academic integrity.

Scope and Delimitation

The main purpose of this study was to identify the views, reasons and extent to which the pre-service teachers practice academic dishonesty in the conduct of online assessments. Academic dishonesty in online assessments revolved around students' cheating practices in an online environment. The data were gathered in one college for 2nd semester of Academic Year 2021-2022 when COVID-19 pandemic was at its height and the use of online learning and assessments were pervasive. Lastly, the study was dependent on the respondents' perceptions and experiences on the practice of academic dishonesty in online assessments across their classes.

Literature Review

Perceptions about Academic Dishonesty in Online Classes

There is a widespread notion that cheating is more prevalent and accessible in online classes compared to traditional on-campus courses. The faculty members' attitudes against cheating online versus on campus revealed that "about one-third believed that an online course is most favorable to cheating for undergraduate students" (Peterson, (2019). Other research has indicated that both educators and students share the same perception that cheating is simpler in an online course (Elsalem et al., 2021).

According to Moten et al. (2013), numerous previous researchers and the students involved in their study concurred that there is a higher incidence of cheating in online courses. The notion that online students possess greater proficiency in utilizing internet resources, which in turn contributes to an increase in cheating, holds some validity. Peterson (2019) also reveals that numerous professors expressed the belief that identifying instances of cheating in online courses posed greater challenges. They observed that technologically proficient students have discovered methods to cheat effectively in online courses, enabling them to excel with minimal exertion while making it arduous to detect their dishonest behavior.

In an online course, the physical separation between the teacher and the student, coupled with the absence of regular face-to-face interaction, is believed to amplify the likelihood of cheating. As a matter of fact, the extent and frequency of engaging in cheating behavior were more pronounced in unproctored online tests, whereas no disparities in reported cheating were observed between face-to-face (F2F) exams and remotely proctored online tests (Owens, 2016).

With respect to views on academic dishonesty in online assessment, there is a notable disparity between the perspectives of today's college-age students and their instructors when it comes to defining what actions qualify as cheating. Younger generations often view the internet as a vast pool of publicly accessible information, regardless of its source. As a result, they fail to recognize the need to properly cite the information they utilize. They do not consider this dishonest conduct as morally incorrect (Peterson, 2019).

Practices and extent of Academic Dishonesty in Online Assessments

Survey responses from students indicate that a higher incidence of cheating takes place during online exams, commonly involving practices such as searching for answers on different devices, utilizing social media platforms, or seeking unauthorized assistance from friends (Dendir & Maxwell, 2020). Interestingly, online students frequently adopt a "waiting" strategy as well. Several online instructors provide a grace period of a few days for students to complete an exam. Due to the somewhat flexible timeline, some students may choose to delay taking the exam until others have already completed it, enabling them to request the questions from their peers.

Also, students are currently employing novel techniques to engage in online cheating. For example, a student starts an examination with the intention of accessing all the questions beforehand. Subsequently, the questions are printed, allowing the student ample time to search for the answers. Once the questions are printed, the student proceeds to disconnect from the Internet, resulting in the exam being locked and preventing them from re-entering to complete it (Paullet et al., 2007). Upon finding the answers, the student sends an email to the instructor, often accompanied by a screenshot indicating the loss of internet connection, and requests a reset of the exam (Bylieva et al., 2019). This style facilitates passing of control by the weaker students because those who take the tests at a later time are furnished with the questions by those who have already completed them.
Moten et al. (2013) emphasized that in unproctored exam settings, students may resort to utilizing multiple computers as a means to facilitate cheating. One computer is dedicated to having the exam open, while other computers are utilized to provide internet access for browsing answers. Moten et al. (2013) also noted that students deceitfully assert that their computer displayed error messages as a way to justify their misconduct. While the instructor investigates the technical issue, the student seizes the opportunity to search for the answers. Students may also enlist the help of others to take the exam on their behalf by sharing their username and password with third parties.
The prevalence of digital tools and technologies has revolutionized various aspects of students' lives, including the way they process and manipulate text. One such tool, the convenient "copy-and-paste" feature found in most word processing software, has undoubtedly enhanced their efficiency and productivity. However, as noted by Gaskill (2014), this seemingly innocuous function also poses a significant challenge in the realm of academic integrity, providing an ideal avenue for engaging in plagiarism. In an ever-evolving digital landscape, students are constantly exploring innovative ways to gain an unfair advantage in academic settings. One prevalent method that has emerged as a popular choice among students is the utilization of mobile phones to facilitate dishonest activities. With this gadget, students have the ability to store cheat sheets, employ text messaging to ask a friend for help with exam answers, or capture photos of tests and share them with fellow students (Farisi, 2013).

Cheating through collaboration is another prevalent form of academic dishonesty commonly observed in online education settings. It is a method wherein students engage in unauthorized cooperation within online groups to collaborate with one another (Herdian et al., 2021). With such effective cooperation, there is a belief that the metrics employed to evaluate learning in online courses, such as scores on formative or summative assessments, may not genuinely reflect the level of learning achieved. This is due to concerns that cheating during these tests could compromise the accuracy of the results (Dendir & Maxwell, 2020).

Reasons in the practice of Academic Dishonesty in Online Assessments

Students obviously cheat in order to get a better grade. The reasoning behind this might be based on a variety of reasons such as personal-intrinsic and extrinsic factors. (Amzalag et al., 2021). Personal-intrinsic factors encompass elements such as a strong drive to excel, a competitive nature, apprehension towards failure, inadequate subject knowledge, reduced self-belief, excessive academic workload, lack of diligence, fatigue, prior academic struggles, and limited moral development. On the other hand, extrinsic factors consist of behaviors that disregard ethical standards and a lack of disciplinary consequences for cheating, parental pressure to achieve, dissatisfaction with instruction, abundant opportunities for cheating, time constraints in submitting assignments, and excessively demanding academic requirements. Notably, many students will take advantage of the opportunity to increase a grade in some way if the opportunity arises because they have the capacity to rationalize it (Becker et al., 2006; Ramos, 2003). A significant number of students prioritize their grade point average (GPA) in a class over genuine learning outcomes. Also, due to reliance on technology, a considerable number of students fail to recognize the importance of acquiring and retaining fundamental knowledge. They question the necessity of recalling basic knowledge, arguing that their phone can instantly generate a comprehensive list of such concepts (Elsalem et al., 2021).

In a recent study conducted in the Philippines about academic dishonesty, it was revealed that students engage in academic dishonesty due to an excessive workload, insufficient teacher support, a lack of motivation or effort, peer influence, and the pursuit of high grades (Aguilar, 2021). These factors interact and influence students' decisions to engage in academic dishonesty, highlighting the complex nature of this issue. Addressing these underlying factors and promoting a culture of integrity can help mitigate academic dishonesty among students.

Methodology

Research Design

This study used the mixed-research design. The qualitative design was utilized to examine the participants' views on academic dishonesty in online assessment while quantitative design was employed to ascertain their reasons and extent of practice in performing this misconduct.

Locale of the Study

The study was conducted at Cagayan State University (CSU), Andrews Campus specifically in the College of Teacher Education (CTEd). In this campus, teacher education is one of the flagship programs. The college has 6 programs namely: Bachelor of Elementary Education, Bachelor of Secondary Education, Bachelor of Technology and Livelihood Education, Bachelor of Technical Vocational Teacher Education, Bachelor of Culture and Arts Education, and Bachelor of Early Childhood Education.

Respondents of the Study

The respondents were the 1st to 4th year pre-service teachers who were enrolled across all programs of CTEd for 2nd semester Academic Year 2021-2022. There were 332 respondents determined through Slovin's Formula and were selected through stratified random sampling.

Table 1. Distribution of the Respondents Per Program

Program	Total Population (N=1,966)	Sample (n=332)
BSED	1142	193
BEED	370	63
BTLED	134	23
BECED	120	20
BCAED	61	10
BTVTED	139	23

For the qualitative part of the study, there were fourteen (14) study participants who were selected based on the following criteria: (a) They represented those who have cheated and not; (b) They have rated their classes with the highest or lowest practice of academic dishonesty based on the survey

questionnaire; (c) They were willing to be interviewed, and (d) They represented the year level and the program of the college.

Research Instruments

To elicit the quantitative data, the researcher administered a 5-point Likert scale survey questionnaire in measuring the level of practice of academic dishonesty in online assessments. This instrument was developed by the researcher and it was subjected for face and content validation by experts. The instrument consists of twenty (20) different activities and practices of academic dishonesty in the context of online assessments. The items in the questionnaire were crafted based on the literature review on academic dishonesty in online assessments. On the other hand, the reasons for engaging in academic online dishonesty were ascertained using a checklist. This instrument presents 10 possible reasons why students may engage into online academic dishonesty. Meanwhile, the qualitative data were elicited through the conduct of 2 sets of focus group discussion to uncover the views of the participants relative to academic dishonesty in online assessment. The interview guide for this purpose underwent face and content validation before it was used in the data gathering process. This process allowed the researcher to obtain think descriptions of the phenomenon and determined the time allotment required to finish the interview.

Research Procedure

After obtaining permission from university authorities, the consent form, questionnaire, and checklist were distributed through google form to the respondents. The administration of questionnaire was done through the assistance of the researcher's colleagues who were the teachers of the identified students. On the other hand, the two focus group discussions were conducted via video conferencing, utilizing the zoom platform. The video conferencing sessions were scheduled at convenient times for the participants and they were recorded for accurate transcription. The video conferencing sessions lasted for 20-30 minutes, enabling rich and in-depth discussions among the participants.

Data Analysis

Frequency and mean were utilized to describe the extent of practice of online academic dishonesty. On the other hand, ranking was used to ascertain the reasons for engaging in academic dishonesty in online assessment. Qualitative data were also used to deepen the analysis of the extent of practice and reasons of the participants for engaging in academic dishonesty in online assessments.

The following scale was utilized to describe the extent of practice of academic dishonesty in online assessments:

Scale	Frequency	Interpretation
4.20 – 5.00	Always	Very high extent
3.40 – 4.19	Often	High extent
2.60 – 3.59	Sometimes	Moderate extent
1.88 – 2.59	Seldom	Low extent
1.00 – 1.79	Never	Very low extent

Thematic analysis was employed to analyze the qualitative data, adhering to the recommended procedures outlined by Braun and Clarke (2012). These steps included becoming familiar with the data, coding, identifying themes, reviewing themes, defining and labeling themes, and documenting the findings.

Ethical Considerations

The study was conducted in accordance with ethical guidelines and protocols. Approval was obtained from the college dean, and the respondents/participants provided their free and informed consent prior to the commencement of the study.

Results

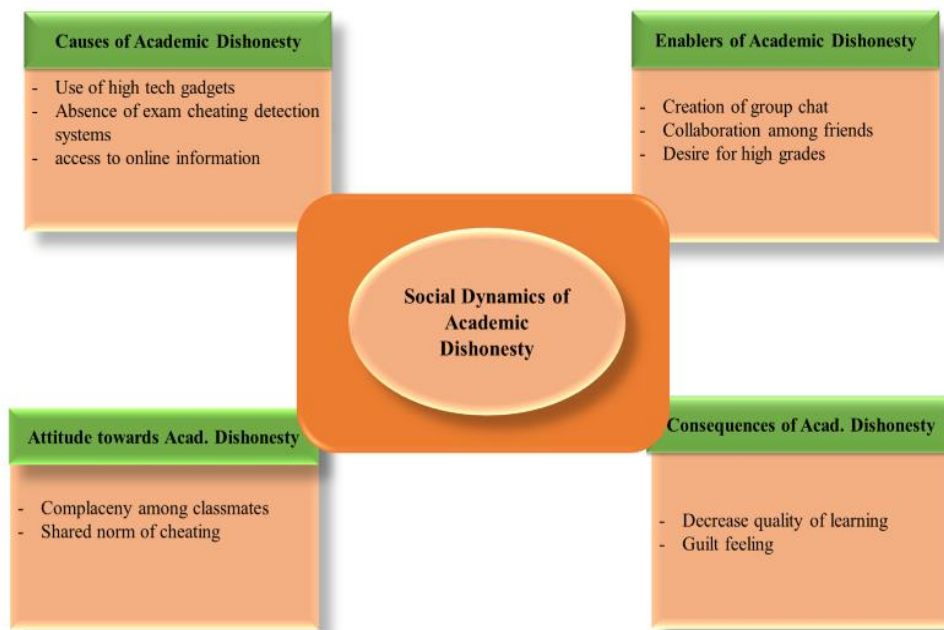<div align="center">Views about Academic Dishonesty</div>

Figure 1. Views about Academic Dishonesty

The views of the pre-service teachers on academic dishonesty has uncovered the social dynamics surrounding this phenomenon. In terms of causes, its pervasiveness and prevalence are generally attributed to the proliferation of high-tech gadgets, absence of exam cheating detection systems, and access to online information or resources. This was revealed by the participants in the following words: *"The main reason why cheating happens a lot is because there are so many gadgets like smartphones that allow us to do it."* – **P2**; *"Cheating happens in our class because our teachers don't have software programs to check if our answers are plagiarized, anyway."* **– P11**. *"Online cheating is so common among us because we can easily find information or answers online."* – **P8**.

Interestingly, academic dishonesty in online assessments among pre-service teachers is facilitated by various factors, including the creation of private group chats, collaboration among friends, and the desire to pass or obtain high grades. These enablers contribute to a higher likelihood of cheating and undermine the integrity of the educational system. This was unveiled by two participants in these words: *"Our private group chat makes us easy to send our answers or to copy the answers of my friends. We usually help each to arrive at correct answers."* – **P1.** *"My desire to have high grade like my sister drives me to cheat."* – **P13.**

Meanwhile, the pre-service teachers' attitude towards academic dishonesty in online assessments is a vehicle for its pervasiveness. Such attitude can be influenced by factors such as complacency among classmates and shared norm of cheating in class. This is clearly expressed by one participant as she said: *"We continue cheating during online assessment because everyone does it, anyway. No one tells it to the teacher because online cheating benefits all of us. I'm afraid I might get the lowest grade if I don't cheat."* – **P5.**

Despite their engagement in these cheating practices, the pre-service teachers are conscious about the negative consequences of their academic dishonesty. They believe that their engagement in such misconduct affects the quality of their learning and gives them a feeling of guilt. Such is well explained by a participant in these words: *"I'm very much aware that online cheating is wrong that is why I sometimes feel guilty doing it. Looking at my high grades this semester, I feel like they do not reflect the level of my knowledge in all my subjects."* – **P9.**

Reasons in the Practice of Academic Dishonesty
Table 2. Reasons in the practice of academic dishonesty

Reasons	Frequency (Multiple Response)	Rank
To pass and comply in the subjects, assessments, and deadline	298	1
Unpreparedness to take examination due to laziness	281	2
Influence of peers	198	5
Maintaining grade/ pressure to earn good grades	266	3
Excessive workload	225	4
Limited Resources (i.e., internet and learning materials)	173	6
Lack of time Management	132	7
Parents expectations to pass the course	45	10
lack of teacher support/supervision	85	9
Helping the other struggling classmates/students	94	8

Table 2 shows that the foremost reason for committing acts of academic dishonesty is *to pass and comply with the subjects, assessments, and deadlines* (n=298). The pre-service teachers desire to finish their degree and at all cost they have to complete it no matter what. They felt that online teaching was not interesting, and they don't have the motivation to study. One participant explains this reason in the following words: *"Being a wise student, I need to pass in this semester. Online learning is not interesting at all, and it is boring. I don't have the will to study with this set-up. There are lot of disturbances in my environment that take away my drive in learning. This made me prefer to cheat because everything was very easy"* – **P5**.

The second dominant reason for the academic dishonesty of the participants is caused by their *unpreparedness to take the exam due to laziness* (n=281). A great number of pre-service teachers have procrastinated, neglected studying, or underestimated the importance of being prepared. When faced with the consequences of their lack of preparation, they resorted to cheating. This finding is vividly explained by a participant as she shares her thoughts and experiences in this way: *"Many students, including myself at times, cheat because they didn't get ready for the test and they were too lazy to study. They think it was easier to cheat instead of working hard."* – **P15**

The third reason to engage in academic dishonesty in online assessment is *Maintaining grade/pressure to earn good grades* (n=266). The pre-service teachers felt compelled to maintain a certain grade point average or achieve specific academic standards. The fear of falling behind, facing consequences for poor performance, or not meeting external expectations made them resort to dishonest practices to secure higher marks.

Practices and Extent of Academic Dishonesty
Table 3. Practices and Extent of Academic Dishonesty

Practices and Extent of Academic Dishonesty	Mean	Adjectival Value
Got questions or answers who had already taken the test	4.10	Great Extent
Use of open Portable Document Format (PDF) and soft copies of learning resources while taking online exams, quizzes, and other online assessments	4.08	Great Extent
Taking pictures/screenshots of questions/answers	4.15	Great Extent
Use of multiple devices when taking online exam, quizzes, and other assessments	4.17	Great Extent
Participating/ collaborating in group chats for dissemination of answers/questions	4.13	Great Extent
Use of answer keys in online exam, quizzes, and other form of online assessments	3.36	Moderate Extent
Use of split screen when taking online exam, quizzes, and other online assessments	3.34	Moderate Extent

Use of search engines and open web browsers when taking online exam, quizzes, and other online assessments	4.02	Great Extent
Impersonation in the assessment or taking the test.	3.15	Moderate Extent
Parent/peer assisting when answering exam, quizzes, and other online assessments	3.13	Moderate Extent
Copy pasting of answers on the internet	3.34	Moderate Extent
Pay an academic server to make or answer modules, exams and other online assessments	3.14	Moderate Extent
Fraudulently claim that their computer or internet isn't working	3.04	Moderate Extent
Use of internet sites such as Brainly, Course hero and Quizlet to solicit answer	3.14	Moderate Extent
Use of system hacking commands to see the answers in online exams, quizzes, and other online assessments	3.07	Moderate Extent
Listening to a phone recording related to the course to solicit answers	3.37	Moderate Extent
Plagiarism or copying the published work of others	3.33	Moderate Extent
Passing an output that is blank or files without content or answer just to comply to a deadline	3.19	Moderate Extent
Duplicate submission of assessment of classmates	1.74	Very low Extent
Changing time in devices to extend the time in answering a test, quizzes, and other online assessments	3.13	Moderate Extent
Grand Mean	3.41	Great Extent

Table 3 shows that the pre-service teachers practiced academic dishonesty in online assessments at a "great extent" ($\overline{x}$ 3.41) which implies that they engaged in dishonest behaviors frequently and to a significant degree. It also suggests that a large portion of them were involved in cheating, plagiarism, or other forms of dishonest practices.

Among the twenty different practices of academic dishonesty, cheating *using multiple devices* obtained the highest mean ($\overline{x}$ 4.17). This finding signifies that most of the pre-service teachers employed different gadgets such as smartphones, tablets or personal computers in cheating during summative and formative assessments. One participant narrated that *"Because of the global pandemic, there were also changes in everything we do and we learn through online teaching. Academic dishonesty is prevalent online because of the growing use of technology and social media, with the use of different devices or tool we can be able to access everything and anything online without our limitation. I believe that with the use of online platform it is easy to cheat on online assessment"* – **P1.**

The practice of *taking pictures/screenshots of questions/answers* ($\overline{x}$ 4.15 – great extent) obtained the second highest mean which implies that taking pictures or screenshots of questions and answers allows them to capture and store the information for later reference, potentially sharing it with others or using it during assessments to gain an unfair advantage. It also suggests that the pre-service teachers have tools that facilitated their dishonest actions, taking advantage of the convenience and accessibility it offers.

The third highest mean was also obtained by *use of open Portable Document Format (PDF) and soft copies of learning resources while taking online exams, quizzes, and other online assessments*. This finding implies that pre-service teachers heavily relied on external materials and unauthorized resources to cheat. It also means that they have accessed to materials that provided them with answers or information that they were not supposed to have during the assessment.

Discussion
The preservice teachers practiced academic dishonesty in online assessment at a great extent. This finding is an affirmation of the study of Middleton (2012) that academic dishonesty is a pervasive problem observed across colleges worldwide, and its occurrence has been on the rise within the context of higher education. It also strengthens the assertion that cheating in academic settings is more

convenient and more prevalent in online courses compared to traditional in-person classes (Moten et al., 2013; Owens, 2016; Watson & Sottile, 2010). The most common "e-dishonesty" practices of the participants includes (a) using multiple devices when taking online exam, quizzes, and other assessments, (b) taking pictures/screenshots of questions/answers, and (c) participating/ collaborating in group chats for dissemination of answers/questions. All of these practices are unique to online environment and are consistent with the e-cheating practices as revealed by numerous researchers (Jung & Yeom, 2009; Moten et al., 2013; Rogers, 2006; Underwood & Szabo, 2003).

The three primary reasons of the pre-service teachers for engaging in academic dishonesty in online assessment include (a) passing the subject with good grades; (b) unpreparedness to take examination due to laziness; and (c) maintaining grade/pressure to earn good grades. Such motives for cheating, which are internal in nature, are consistent with the view that personal-intrinsic factors play a crucial role in the engagement of students in academic dishonesty (Amzalag et al., 2021). The pre-service teachers have a personal belief system that devalues academic integrity or prioritizes achieving certain outcomes over ethical behavior. These values, which may be shaped by various influences, contributed to their decision to engage in dishonest practices. Additionally, the pre-service teachers struggled with intrinsic motivation, such as a lack of interest in the subject matter, low self-efficacy, or a disconnection between their academic goals and personal aspirations. Faced with challenges or a lack of interest, they resorted to dishonest behaviors as a means of achieving desired outcomes without investing the necessary effort. Significantly, the predominant reasons for engaging in academic dishonesty also affirms earlier finding in the Philippines that Filipino students participate in academic dishonesty as a result of insufficient motivation or effort to study, as well as the desire to attain high grades (Aguilar, 2021). These individual motivations for academic dishonesty intertwine and are impacted by various other factors, underscoring the intricate nature of this problem.

The pervasiveness and prevalence of academic dishonesty in online assessment among the pre-service teachers was attributed to multifarious interplaying factors. Primarily, it was accounted to the proliferation and introduction of high-tech gadgets, such as smartphones, tablets, and smartwatches, which has made it easier for participants to engage in academic dishonesty during online assessments (Harmon & Lambrinos, 2008; King & Case, 2014). At the teachers' end, the absence of exam cheating detection systems played a crucial factor. The absence of these reliable proctoring tools created an environment where participants felt less accountable and engaged in cheating behaviors. Also, the internet offered an abundance of information and resources that participants can access during online assessments, which tempted them to cheat. With just a few clicks, they found answers to questions, accessed textbooks or lecture materials, or even collaborated with others through online platforms.

Interestingly, academic dishonesty in online assessments among the pre-service teachers was nourished by the creation of private group chats, collaboration among friends/classmates, and the desire to pass or achieve high grades. Online platforms and communication tools have made it easier for the pre-service teachers to create private group chats where they shared answers, discussed questions, or collaborated on assignments. These private spaces allowed them to exchange information covertly, making it difficult for instructors to detect cheating. Moreover, collaboration among friends/classmates was one facilitating factor for academic dishonesty to happen in online assessment (Herdian et al., 2021). Online assessments fostered an environment where the pre-service teachers collaborated with their peers, especially when they faced with challenging assignments or time constraints. Expectedly, the desire to pass or achieve high grades was an interesting factor. The pressure to excel academically has led the pre-service teachers to engage in dishonest practices. This was evident among those who faced the prospect of failure in a certain subject.

Academic dishonesty in online assessments among pre-service teachers was nourished by prevailing attitudes such as complacency among classmates and the shared norms of cheating. The pre-service teachers became indifferent or apathetic towards academic dishonesty because they perceived it as common or acceptable behavior (Peterson, 2019). Considering that physical monitoring and proctoring were limited, the pre-service teachers felt that the risk of being caught cheating is low. This complacency led to a normalization of dishonest practices, creating an environment where academic integrity was undervalued. Significantly, the shared norm of cheating played a significant role in shaping attitudes towards academic dishonesty. Since majority of the pre-service teachers perceived cheating as a widespread phenomenon and they believed that everyone was doing it, they conformed to these norms and engaged in dishonest practices themselves. Such "cheating culture" developed by the pre-service teachers strengthens the view that academic dishonesty occurs when students view cheating as consistent with their personal ethics and believe that their behavior is within the bounds of acceptable conduct (Becker et al., 2006; Ramos, 2003).

Although the pre-service teachers engaged in academic dishonesty, they were conscious of the adverse repercussions associated with their misbehavior. They were aware that it decreased the quality of their learning as it prevented them from developing essential skills, such as critical thinking, problem-solving, and independent research. This finding is consistent with the assertion of Dendir & Maxwell (2020) that engaging in cheating during online tests undermine the accuracy of the results and compromise academic integrity. On the other hand, the pre-service teachers who engaged in academic dishonesty experienced guilt and inner conflict. They felt a sense of moral unease, knowing that their actions were ethically wrong. They felt inadequate or undeserving of their grades, knowing that they obtained them through dishonest means.

Conclusion

The pre-service teachers engaged in academic dishonesty to a significant degree during online assessments and is driven by several interplaying factors. Technology and digital tools play as fertile grounds for such misbehavior as they made the pre-service teachers vulnerable to e-cheating in their desire to succeed in their studies. The availability of such technology and internet access, combined with mutual support among classmates, a complacent attitude, and the normalization of cheating practices, contribute to the prevalence of academic dishonesty. Despite their engagement in these misbehaviors, the pre-service teachers are not oblivious to the negative consequences. They recognize that academic dishonesty in online assessment leads to a decreased quality of learning and feelings of guilt. These findings highlight the need for educational institutions to address the root causes of academic dishonesty, promote a culture of integrity, and provide support mechanisms to help students develop ethical academic practices.

Recommendation

The CSU must implement educational programs specifically designed to promote academic integrity and ethical behavior, ensuring that students understand the importance of honesty in their academic pursuits. It has to develop robust strategies that integrate technology into online assessments while implementing effective monitoring systems to detect and deter cheating. Moreover, faculty members of CSU need to design assessments that prioritize critical thinking, application, and understanding, moving away from rote memorization to encourage genuine engagement with the subject matter. Lastly, the university has to place an emphasis on character development by encouraging students to reflect on the values of integrity, honesty, and responsibility, and their application to their academic journey and future roles as educators. In this way, CSU can create an environment that cultivates integrity, discourages academic dishonesty, and equips all students with the necessary values and skills to uphold ethical standards throughout their academic and professional careers.

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