Academic dishonesty on online learning among vocational high school students

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Article Info

ABSTRACT

This study described the academic dishonesty phenomenon in accounting subject online learning at the business and management vocational high schools and identify the factors that influenced students to commit academic dishonesty. This was case study research with a qualitative approach. The participants were four teachers and six students from accounting and institutional finance classes. The data were collected using interviews and documentation, then being analyzed using interactive analysis techniques. The results showed that most students' academic dishonesty behaviors were cheating and collaborating during examinations or assignments and doing individual assignments together. Several factors related to academic dishonesty among students include: i) Rationalization, stating rational reasons about the teacher not explaining the material thoroughly, which impacted students' lack of material understanding; ii) Pressure, which comes from a desire within the students and parents' demands to get good grades; iii) Opportunity, which arises due to the lack of direct teacher supervision on students' work and the openness of internet access; and iv) Lack of academic ability, showing that the students who commit academic dishonesty are usually lacking in terms of academic ability.

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1. INTRODUCTION

Learning using technology takes precedence over face-to-face learning in this era. The increasingly sophisticated communication and information technology has an impact on learning that can be done anywhere, with anyone, and anytime. This learning is commonly known as online learning, which is currently a standard delivery method worldwide [1]. This online learning method does not require students to be present; students can access learning via the internet [2]. Online learning is a medium for educators to convey material or remind students of assignments [3].

Several educators have implemented online learning in Indonesia before implementing "social distancing" as required by the government due to the coronavirus disease 2019 (COVID-19) pandemic. Syarifudin [4] defined online learning as a learning process that uses the internet to distribute knowledge. Furthermore, internet-based technology has encouraged the massive application of distance learning and more significant innovation in creating teaching methods inside and outside the classroom [5]. Online learning can be held through the internet and web 2.0 networks, such as YouTube, Wikipedia, Flickr, Google

Docs, and Gmail [6]. Online learning provides everyone accesses to learning, thereby removing physical barriers to learning in the classroom [7].

There are several obstacles during the implementation of online learning. They include student boredom, complaints from parents who feel they could not explain the learning materials well to students, connection problems, lack of parental assistance time because the parents had to work from morning to evening, so they only have time to assist students in doing assignments at night only [8]. Learning boredom occurs due to demands for students to always comply with the tasks' rules and because the activities are monotonous for them [9]. Lack of students' material understanding and parental assistance in the learning process implicates the opportunity for academic dishonesty to occur. Difficulties in understanding the material arise because of several things, such as the teacher not explaining thoroughly, the students find it hard to understand the books used in teaching and learning activities, and there is no sufficient time for learning because students take part in many extracurricular activities that take time [10].

Academic dishonesty defined as a form of rule violation in educational institutions [11]. Academic dishonesty is a growing concern among school-age teenagers starting from elementary school to college. Several reasons for the emergence of academic dishonesty are pressure from teachers, parents, and peers, including the influence of the classroom environment, selfish culture, and technological changes [12]. Academic dishonesty also occurs because teenagers believe cheating can elevate their grades and please their parents [13]. In the educational field, the value of honesty is costly [14]. According to Hakim *et al.* [15], academic dishonesty is caused by students' incompetent feelings or facing difficulties in accounting subjects and getting pressure to achieve specific targets.

Dishonesty can be caused by three factors: pressure, rationalization, and opportunities, also known as the fraud triangle [16]. Academic dishonesty that has occurred indeed harms education itself. Personally, students who commit academic dishonesty will get sanctions for their behavior, from being warned to expelled from school. The development of social media usage and online sites provide opportunities for academic dishonesty to increase because it can facilitate student searches teaching notes, or connect students who want to use assignment or essay completion services from individuals or organizations that provide pre-existing assignments or can place their special orders. According to Rohmah [17], at least four essential components in building a learning culture using the e-learning model in schools. They are: i) Students are required to be independent, supported by various appropriate approaches so that students can direct, motivate, organize themselves in learning; ii) Educators can develop knowledge and skills, facilitate learning, understand learning and things needed in learning; iii) The availability of adequate infrastructure; and iv) The existence of creative administrators and preparation of infrastructure in facilitating learning. Learning with this e-learning model can make it easier for students to commit academic dishonesty [18].

According to Sun'iyah [19], the use of online media for learning evaluation in education is prone to fraud, as found in several cases of children's work being done by parents. It was indicated that the parents were the ones who operated the smartphone device to fill in some answers, or even the parents acted as jockeys who did all the students' tasks without involving the children at all. E-learning learning media is used because it is flexible, not limited by time, and facilitates learning for students and teachers [20]. Academic dishonesty can also be influenced by environmental factors [21]. Research by Lento, Sayed, and Bujaki [22] showed that female academics generally perceive academic dishonesty as an issue that needs to be given more attention, and they tend to apply control over it more often than male academics do.

Regarding research on academic cheating at the vocational education in Indonesia, Rahmayanti [23] examined the phenomenon of academic dishonesty more deeply associated with the theory of the pentagon dimensions of fraud. The results showed a simultaneous influence of academic pressure, opportunity, rationalization, ability, personal ethics, and religiosity on students' academic dishonesty behavior. Academic dishonesty can be avoided if students realize that academic rules bind them. Students will continue to maintain their integrity during the educational process. It is even possible that the integrity may last longer even though they are no longer in an academic environment [24]. Academic dishonesty is usually carried out by students with low learning seriousness [25].

This study is an in-depth study and a follow-up to Rahmayanti's [23] which uses the pentagon fraud theory containing personal ethics and religiosity variables to examine the causes of academic dishonesty in private vocational schools in Indonesia. In this study, the definition of pentagon fraud is a theory that states five reasons for a person's tendency to commit fraud, namely pressure, opportunity, ability, rationalization, and arrogance [26]. This study focuses on public and private vocational schools in the Sukoharjo regency, Indonesia. The researchers tried to explain the academic dishonesty in accounting subject online learning at the vocational high school business management in Sukoharjo and look for the dominant factors causing academic dishonesty using a qualitative data analysis approach. The results were expected to be more comprehensive than the previous studies to ease accounting teachers at vocational high school business management in Sukoharjo regency to find solutions to overcome student academic dishonesty. This study

was conducted during the COVID-19 pandemic when the learning process was conducted online, making the opportunity to perform academic cheating higher. This study aimed to discover how the academic dishonesty phenomenon happened in online accounting subject learning at SMK business management.

2.   RESEARCH METHOD
2.1.   Research design
This study was carried out in Sukoharjo, Indonesia on January to May 2021. It employed a case study research design with a qualitative approach proposed by Creswell [27]. This research stage included making proposals, making research instruments, collecting research data, processing research data, and making publication manuscripts. SMK Negeri 6 Sukoharjo (State Vocational High School) and SMK Muhammadiyah Watukelir Sukoharjo (Islamic Vocational High School) were taken as the settings, with some reasons to be considered. Both have accounting and institutional finance expertise program. They were equivalence in the ability of national exam results.

2.2.   Research subject
The research subjects for the qualitative data collection were 10 people consisting of four accounting and institutional finance female teachers aged 45-60 years old and six female students of grade XI of accounting and institutional finance at State Vocational High School 6 Sukoharjo and Islamic Vocational High School Watukelir Sukoharjo. The accounting and institutional finance teachers were chosen as research subjects because they also act as evaluators in online learning to review every assignment. The students were selected because they were the subjects who did the online assignments from the teachers and had an experience of the online learning process since 2020. The six students were around 17 years old and initially were recommendations from the teachers. However, during interviews, all of the students stated that they had committed academic cheating so that further information on academic cheating research could be done.

2.3.   Data collection technique
The researchers used interviews and documentation for the data collection techniques. The interview was used to obtain qualitative data regarding the students' academic dishonesty behavior in accounting subject online learning, to gather information about how accounting teachers can minimize the students' academic dishonesty behavior and the obstacles in detecting it, and also get data about dominant factors that influence the students' academic dishonesty, as seen from the pentagon fraud theory. The interview questions developed were open questions which included nine questions for the teachers and 14 questions for the students. Table 1 describes question descriptor developed and applied in this study.

Table 1. Information about the interview question instruments applied in this research

Aspect descriptors	Core questions for teacher and student instruments
Information on the condition of academic fraud behavior in online accounting learning	A description of how academic cheating behavior is, teacher's efforts to minimize academic cheating behavior, teacher obstacles in detecting student academic cheating behavior, teacher treatment when facing/finding academic cheating behavior in online learning.* What is academic cheating behavior, how does academic cheating in class like, have the students ever been committed academic cheating, with answer options: If the students have ever done it, what form of academic cheating behavior was committed, the reason why committed academic cheating, the obstacles faced when committing fraud. If not, ask questions related to having seen another friend commit academic cheating, when did the friend do academic cheating, what form of academic cheating was committed, and what reason the friend did academic cheating.**
Information about the pentagon fraud dimension:	What factors encourage students to commit academic fraud, and is there a possibility of pressures within students or outside students to commit academic cheating.*
(1) The pressure factor in committing academic cheating	The possible factors/causes that encourage the students to do academic cheating and the pressures from inside the students (such as difficulty understanding the material) or outside the student (such as pressure from parents).**
(2) The opportunity factor for academic cheating	Identification regarding whether there is an opportunity for students to commit academic fraud in online learning.* In implementing online learning, are there many opportunities to commit academic fraud?**
(3) The student rationalist factors on academic cheating behavior	Identification of its presence, the teacher finds students who think academic cheating is understandable.* Identification of academic cheating views is understandable or not.*
(4) The factors of students' ability to commit academic cheating behavior	Identification of the students' academic abilities who often commit academic cheating.* Identification of information about academic cheating perpetrators, whether or not their academic abilities are indeed lacking so that they commit academic cheating.**
(5) The factors of student arrogance in committing academic fraud	Have teachers ever found students who always commit academic cheating, even though they have been repeatedly given sanctions or warnings?* Identification of having or not finding friends/perpetrators who always commit academic cheating, even though they have been repeatedly given sanctions or warnings.**

*Questions for teachers; **Questions for students

The research question about the pentagon fraud dimension refers to the literature review on the previous research [28]–[30]. Documentation was used to obtain qualitative data regarding assignment documents, worksheets or files, and students whose scores were indicated as academic dishonesty results. These documents were reviewed and compared with the interview results to strengthen the conclusion to become complete, precise, and objective.

2.4. Data validity

This study used data triangulation to validate the qualitative data by involving more than three informants to confirm the study results. In addition, peer checking and member check techniques were also carried out when collecting and analyzing the data. Next is a discussions about interpreting the data collection results and reconfirming the results of researchers' interpretations to the research informants [27].

2.5. Data analysis technique

The qualitative data analysis in this study used interactive analysis proposed by Miles, Huberman, and Saldana [31] consisting of data condensation, data display, and drawing and verification conclusion. The flow of the data analysis process began with conducting interviews with four accounting and institutional finance teachers and six students of class XI in state and private vocational schools in the Sukoharjo regency. The results of the interviews were recorded in the form of recorded conversations then converted into interview transcript notes. In addition, the researchers collected assignment documents, worksheets/files, and students whose scores were indicated as academic dishonesty results. Researchers carried out the process of selecting and interpreting answers, then matching them with the documents. The researchers then reviewed the results so that further results presentation and conclusions drawing can be done objectively.

3. RESULTS

Table 2 shows the in-depth interview results with accounting teachers at State Vocational High School 6 Sukoharjo (Mrs. SM and Ms. SP), Islamic Vocational High School Watukelir (Mrs. CD and Ms. S), and document reviews. The in-depth interview results with students of class XI accounting and financial institutions at State Vocational High School 6 Sukoharjo (students with the initials AAR, APW, and NNT) and Islamic Vocational High School Watukelir (students with the initials AD, AYA, and LR) are accompanied by the results of the document review. The complete results are presented in Table 3.

Table 2. Accounting teachers' perceptions on academic dishonesty

Research question items	The conclusion of accounting teachers' perceptions on academic dishonesty
Academic dishonesty in accounting subject online learning process	Academic dishonesty in learning during the pandemic does allow for opportunities to commit academic fraud. Opportunities for academic dishonesty occur due to the teacher's absence of direct supervision and easy access to the internet network that allows students to seek answers from assignments or collaborate with other students through social media.
Forms of academic dishonesty	Students' academic dishonesty when learning accounting is generally copying/cheating other friends' assignments answers.
Obstacles in detecting academic dishonesty	i) the students' internet connection, especially during online learning or collecting assignments; ii) teachers cannot directly observe them when they do the tasks.
How teachers minimize academic dishonesty	i) give different assignments/questions for each student; ii) students are always given warnings and reminded to do assignments honestly; iii) the teacher limits the assignment working and submission time, which can minimize cheating.
Sanctions for academic dishonesty	i) students should adequately do an additional task under the teacher's direct supervision; ii) students are given a task to write a statement about not repeating the act of academic dishonesty, accompanied by advice by the teacher about the importance of honesty.

Table 3. Academic dishonesty perceptions result among students

Research question items	The conclusion of academic dishonesty perceptions results among students
Definition of academic dishonesty behavior	Deliberately cheating behavior that students carry out during examinations and assignments is also done secretly and contrary to school regulations.
Academic dishonesty behaviors that repeatedly done	The dominant forms of academic dishonesty include cheating during examinations or assignments, working together during examinations, and doing individual assignments together.
Dominant reasons that influence students to commit academic dishonesty	i) Lack of material understanding due to the teacher not thoroughly explaining the materials; ii) The students' desire to get good grades; iii) The demands of parents who want good grades; iv) Many opportunities to commit academic fraud during learning online.
Academic dishonesty performers	The majority stated that their lack of academic ability also encouraged to commit academic fraud, although some said that there were also students with high academic abilities committing it.
Excuses toward academic dishonesty behavior	Academic dishonesty during online learning accounting is understandable because the teachers in delivering/providing the material was incomplete or too difficult for students to understand. Besides, other students stated that some questions or assignments were not following the material presented.

4.   DISCUSSION

The research participants in this study agreed on a definition of academic dishonesty behavior, as a fraudulent behavior that students intentionally carry out, such as cheating on examinations and assignments and is done deliberately and secretly and contrary to school regulations. This definition is suitable with the statement that academic dishonesty is defined as an act of violation in educational institutions [11]. In addition, the accounting teachers and students also stated that the form of academic dishonesty behavior in accounting subject online learning could be in the form of cheating during examinations or assignments, collaborating during examinations, or doing individual assignments together. Academic dishonesty can be in the form of cheating notes, copying friends' answers either intentionally or unintentionally, committing and assisting fraudulent acts, and deliberately committing plagiarism [32].

Previous study [33] showed that opportunity influences academic dishonesty to occur. Accounting subject online learning opens up more significant opportunities for academic dishonesty due to the teachers' absence of direct face-to-face supervision and easy access to the internet network that allows students to seek answers from other people's assignments or even collaborate with other students through social media. In addition, the distrust of the agreed sanction implementation causes someone to commit fraud [34]. The less strict sanction application provides opportunities for academic dishonesty performers to commit fraud. However, accounting teachers at the business and management vocational schools in Sukoharjo regency have tried to minimize the opportunities for academic dishonesty by doing several ways. The first way was in the form of assigning different assignments/questions to each student. For example, teachers could give an assignment of inventory cards with the first in first out (FIFO) method, and if there are 33 students, the numbers in the questions are made to vary from one student to another so that each student has a different assignment/question. This method differs from Faucher and Caves [35], suggesting making the assignments specific and topic-focused, aiming to minimize students' opportunity to have the same answer, copy and paste, and compare their assignments with the other students' assignments. The second way was by always giving warnings and reminders to do the assignments honestly. Teachers can also motivate their students to prioritize the learning process rather than achieving grades to reduce academic cheating practices [36].

Moreover, the last attempt gave a time limit for processing and collecting assignments to minimize cheating. This research also supports the research carried out by Lento, Sayed, and Bujaki [22] which shows that female academics generally perceive academic dishonesty as an issue that needs to be given more attention and apply more control over academic dishonesty. This study also shows how the perceptions and efforts of accounting teachers who happen to be female in their view and efforts to minimize the occurrence of academic fraud in the learning process carried out.

However, from students' perspective, they stated a need to excuse academic dishonesty in accounting subject. The students put forward the reasons that cause students to commit academic dishonesty. The rational reasons for the students were that the teacher did not thoroughly deliver/provide the materials, so it was difficult for them to understand. Besides, some questions or assignments have not followed the material delivered by the teacher. Meanwhile, the dominant reasons for doing academic dishonesty were: i) Lack of material understanding due to the teacher not thoroughly explaining the materials; ii) The desire in students to get good grades; iii) The demands of parents who want good grades; iv) The number of opportunities to commit academic dishonesty during online learning; and iv) The lack of academic ability, even though there were also students whose high academic abilities committed academic dishonesty.

The results of this study, therefore, when viewed with the pentagon fraud dimension theory [28], show the dominance of the factors that influence academic dishonesty in online learning accounting at the business and management vocational school in Indonesia. The first is called rationalization in the form of rational reasons that arise from the teacher not thoroughly explaining the materials, which impacted the students' lack of understanding. The second is a pressure which contains students' desire to get good grades and demands from parents who want their children to get good grades. The next is an opportunity that explains that academic dishonesty may happen mainly due to the lack of direct teacher supervision on students' works and the openness of internet access that allows students to find and copy answers from examinations and assignments through the Google search engine. This statement supports Artani and Wetra's view [37] that the greater the opportunities available for someone to commit fraud, the greater the possibility of committing fraud. Someone can commit fraud because of opportunities and benefits from other sources. The last is an ability related to lack of academic ability. The majority of informants stated that, generally, the performers of academic dishonesty are indeed known to students who, in terms of academic ability, are indeed lacking, so they need special attention and guidance from teachers.

An opportunity will arise when a weakness in an existing system and a lack of control and strict sanction enforcement in responding to the fraud. Opportunity will positively affect the fraudulent behavior, where the greater the chance available for someone to commit fraud, the greater the possibility of that person to commit fraud [38]. Of course, this makes it easier for the performers of fraudulent acts [39]. Students who are detected and indicated to commit academic dishonesty during accounting subject online learning would

be given additional assignments by teachers. They have to do the assignment properly under the teacher's direct supervision. In addition, sanctions are also provided in the form of a task to write a statement about not repeating academic dishonesty, accompanied by advice by the teacher about the importance of honesty. In addition to providing strict sanctions, accounting teachers have also made efforts to raise awareness of the commitment to good character values in students. Qudsyi, Sholeh, and Afsari [24] found that students can avoid academic dishonesty if they realize that academic rules bind them. If the students are aware of this and are committed to maintaining their integrity during the educational process, the integrity may last longer even though they are no longer in an academic environment. The forms of dishonesty behavior are very diverse. Although in the context of cooperation and mutual tolerance, the actions are considered wrong when not following the instructions and the academic regulations. Therefore, it is necessary to understand further learning, where changing attitudes and behavior to do good is one way to avoid dishonesty [40].

5.   CONCLUSION

Academic dishonesty is fraudulent behavior that students intentionally carry out, including cheating on exams and assignments, and secretly and contrary to school regulations. The dominant forms of academic cheating in online accounting learning are cheating during examinations or when doing assignments and collaborating during examinations or doing individual assignments together. The factors that influence the behavior of academic dishonesty in accounting online learning consist of: i) Rationalization, in the form of rational reasons that arise due to the teacher not explaining the material thoroughly; ii) Pressure, there is a desire in students to get good grades, and there is encouragement from outside the students in the form of demands from parents who want their children to get good grades; iii) Opportunity, the number of opportunities to commit academic dishonesty during online learning, mainly due to the lack of direct teacher supervision on the work of students and the openness of internet access that allows students to find and copy answers from other people's examinations and assignments through the Google search engine; and iv) Ability, related to the academic ability of students who are lacking.

The results of this study encourage the schools, especially the teachers, to manage online accounting learning effectively and comprehensively explain the materials. Educators/teachers need to close students' opportunities to perform academic dishonesty, for example, by giving problem-based assignments, projects, or products that allow students to work on them individually. Each student gets a varied or different assignment topic. Furthermore, they must also map the students' conditions, especially students with insufficient academic abilities, to provide additional extra services for remedial activities. Remedial activities aim to increase students' understanding, so it does not put pressure on students who are stressed because they do not understand the materials then tempted to choose shortcuts to do academic dishonesty.

For future research, it is necessary to consider the number of the compositions of research subjects so that they are balanced, especially on the difference between the sexes of male and female research subjects. In this study, both teachers and students were female. Moreover, future research also needs to involve a more comprehensive number of research respondents in quantitatively testing the theory of the academic cheating causes seen from the pentagon fraud theory and the latest developments, namely the hexagon fraud theory.

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