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ACADEMIC DISHONESTY AMONG THE COMPUTER SCIENCE STUDENTS IN

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AN ENGLISH CRITICAL READING COURSE

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ABSTRACT

The present study examined the factors which had influenced the Computer Science students to commit academic dishonesty when writing critical analysis essays in a critical reading course and suggested some solutions to the problem. Purposive sampling technique was employed, and data were collected from a survey distributed to thirty respondents. Findings revealed that most students had the academic misconduct due to lack of confidence as they admitted that they did not trust their writing ability and were afraid of presenting something wrong to their lecturers.

Keywords: academic dishonesty; confidence, critical reading; written analysis; computer science.

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1. INTRODUCTION

Academic dishonesty is a common phenomenon in learning institutions. A lot of studies have been done to investigate and determine aspects of academic dishonesty such as the reasons and the types as well as the awareness and the solutions to the problem. Cheating and



plagiarism have been identified as the two most critical problems concerning academic dishonesty in learning institutions in Malaysia. A study conducted by [1] which was based on the data gathered in 2016 and 2017 found that 57.4% of students in higher education institutions in Malaysia admitted to committing academic dishonesty at least once throughout their study. Another study by [2] revealed that the number of plagiarism cases has grown significantly among Muslim students and faculty members in the Muslim world.

Some previous studies have also highlighted that academic dishonesty like cheating and plagiarism is different across cultures due to the perceptions that people of across cultures have towards honour codes, learning and teaching styles and priorities. Another research on plagiarism, Love and Simmons which is cited in [3] found that academic dishonesty involving plagiarism can be divided into two broad categories; external and internal. These two factors also coincide with other factors discovered by other researchers covering self and situational factors.

In general, students' personal characteristics as well as situational factors contribute to reasons for cheating and plagiarism among them [4]. Malaysian students have been found to plagiarise due to varying factors such as faculty or institution, internet access and self-attitude [1] but they are also found to be susceptible to peer pressure when committing cheats and plagiarism [5]. Cheating thus in some situations is caused by students' inability to avoid from being influenced by other cheaters and in fact, witnessing such behaviours may lead the students to cheat even further [6]. In [7] cited 20 reasons why students committed academic dishonesty involving plagiarism and they concluded that students' personal inadequacies, poor time management, values and attitude are most frequently cited reasons of plagiarism among students.

Regarding faculty or institution, despite establishing guidelines and honour codes, most institutions usually focus on combating academic dishonesty in examination but not enough is done for ongoing quizzes and assignments [8]. This flaw in administration of guidelines may contribute towards incidents of academic dishonesty in universities. Furthermore, in [9] highlighted the gap between rule implementation and inconsistencies among staff to understand how to deal with academic dishonesty. In addition, Whitley and Keith-Spiegel

cited in [10] argued that institutional policy and students' different academic background may indirectly create a situation that fosters plagiarism among vulnerable students. A study by [11] showed that instructional aspect administered by faculties could contribute towards cheating among students. He also indicated that the choice of instruction has an effect towards students' intention to cheat and the faculty or the institution should choose more appropriate and beneficial assessments for both students and institution. Furthermore, in [12] stressed that old and new faculty members in learning institutions should be given proper knowledge and new information regarding academically dishonest behaviour as conveying repeated and consistent messages to students is important.

Additionally, another aspect of academic dishonesty involving content plagiarism in Asia or in Malaysia has been associated with problems using English as a second language (ESL). In doing assignments in English, many ESL university students resort to copying directly from original sources when their ability to paraphrase and fully understand the desired information is not sufficient. According to Currie cited in [13], ESL students may not have sufficient linguistic skills to understand information written in English and to rewrite those ideas using their own words. Language factors related to academic dishonesty involving plagiarism may also be related to learners' lack of understanding of proper ways to relay citable information. This is referring to situations when ESL writers unintentionally plagiarised original work, yet their intention is not to cheat but to show that the original is best explained in its original form [13].

Similar to situations in other universities elsewhere, Malaysian universities also must deal with academic dishonesty involving cheating and plagiarism due to the access and availability of technology such as internet and mobile smartphones. Students nowadays are more likely to use internet sources available rather than reading printed materials. Such easy access to information means students are changing and adapting to different ways of getting their study commitments done. In fact, in [14] claimed that these changes and adaptations to information had caused L2 students to commit academic dishonesty in various ways. With the advancement of internet technology, the definition and accusation of plagiarism need to be reviewed. Bloch cited in [14] also highlighted that the discussion of Internet plagiarism

should be broadened to include the fundamentally different ways online information is used and shared in comparison to printed texts.

The use of technology also means that academic dishonesty involving direct cheating such as taking pictures of sources, distributing sources, copying sources with little regard for acknowledgement necessity is rampant. In [15] termed this as E-cheating and she defined it as the use of "technology to commit academic dishonesty by cheating or plagiarizing, regardless of when or where it is happening". Furthermore, the issue is complicated as easy access and availability of technology such as smartphones may cause students to get the wrong impressions about authorship and ownership of ideas and texts which may differ with traditional academic point of views cited by Blum in [14].

Due to prevalent academic dishonesty and plagiarism cases in Malaysian universities, this study was conducted to achieve these objectives:

- 1. To investigate common factors that have influenced the Computer Science students to commit academic dishonesty when writing critical analysis essays.
- 2. To suggest possible solutions to the problem.

2. METHODOLOGY

2.1. Participants

Since this case study seeks to find out the reasons for academic misconduct of the Computer Science students, a purposive sampling technique was employed. Initially, a total number of 44 students who were found copying other students' work were carefully selected to participate in this study, but some did not cooperate and returned the questionnaire. Hence, only 30 students participated in this study. They met the requirement of the study that all of them were found deceitfully copying and submitting other students' critical analysis essays, claiming as theirs. All of them were the second-year students pursuing a degree in Computer Science with various English proficiency levels and academic achievements.

2.2. Instrument

The instrument used in this study was a self-developed questionnaire. The items were constructed in relation to the research objectives. The questionnaire which consisted of two

parts was used in the study. The first part was intended to gather some demographic characteristics of the students such as their age, gender, degree program they are pursuing, English proficiency levels and academic achievements. The second part of the questionnaire consisted of 20 questions and was intended to gather the students' reasons for committing dishonest act when completing their critical analysis essays. The questions constructed for this part were based on cheating and plagiarism factors identified from the previous studies.

2.3. Data Collection and Analysis

The questionnaire was administered at the university hostel as most of the students had just completed 14 weeks of classes and were on study-leave. Each respondent took about three to five minutes to complete the questionnaire. Data gathered were then carefully and systematically analyzed and the descriptive statistics obtained were illustrated in the form of tables.

Table 1. Demographic data of respondents

			Frequency	Percentage
			(N = 30)	(100%)
Gender		Male	17	56.67
		Female	13	43.33
Age		20-21 years	30	100
		Very good	0	0
		Good	5	16.67
		Average	21	70
English proficiency level		Poor	4	13.33
		Very poor	0	0
		3.5 and above	2	6.67
		3.00-3.49	8	26.67
Academic	Achivement-CGPA	2.5-2.99	14	46.67
(Cumulative Grade Point Average)		Below 2.5	6	20

3. RESULTS AND DISCUSSION

Out of 30 respondents of Computer Science students who participated in this survey, 17 were males (56.67%) and 13 were females (43.33%) whose age ranged from 20-21 years old. 5 respondents (16.67%) had good proficiency in English, whereas 21 respondents (70%) had average proficiency and 4 of them (13.33%) were weak in their English. Regarding their academic achievements, 2 respondents (6.67%) obtained a CGPA of 3.5 and above, 8 (26.67%) obtained a CGPA of 3.00-3.47, 14 (46.67%) obtained a CGPA of 2.5-2.99 and 6 (20%) obtained a CGPA of below 2.5 (Table 1).

Based on the responses to 20 items in the questionnaire, the contributing factors to academic dishonesty were analysed and presented in Table 2 and Fig. 1.

Contributing	Items	Respondents (%)	Total of
Factors			Respondents
			(%)
Writing Task	The writing task is too difficult for	8 (26.66)	33 (36.67)
	me.		
	I do not understand certain critical	9 (30.00)	
	thinking concepts.		
	I do not know how to go about	16(53.33)	
	writing critical analysis essay.		
Laziness	It is easy to copy other writing critical	6 (20.00)	17 (18.88)
	analysis essay.		
	I do not want to think hard on the	7 (23.33)	
	topic.		
	"Less work, more gain" is my nature.	4 (13.33)	
Language	I am not good in English to express	17(56.66)	26 (28.89)
Problems	my own ideas.		
	I cannot express the right meaning by	2 (6.66)	
	using my own words.		
	It is difficult for me to understand the	7 (23.33)	

Table 2. Contributing factors to academic dishonesty

Contributing	Items	Respondents (%)	Total of
Factors			Respondents
			(%)
	assigned article due to my language		
	ability.		
Grade	I want to get a better grade by	1 (3.33)	6 (6.67)
	copying other students' work.		
	I believe if I copy other students'	3 (10.00)	
	work, I can produce a better critical		
	analysis essay.		
	Copying other students' work can	2 (6.66)	
	make my critical analysis essay		
	perfect.		
Lack of	I do not trust my writing ability.	17 (56.66)	42 (46.66)
confidence	I am afraid of presenting something	16 (53.33)	
	wrong to my lecturer.		
	I want to get more confident ideas by	9 (30.00)	
	copying other students' work.		
Time	I do not have time to write my own	7 (23.33)	32 (35.56)
management	critical analysis essay.		
	I have too many assignment deadlines	21 (70.00)	
	to meet.		
	I prefer to work until the last minute	4 (13.33)	
	to complete my assignments.		
Lecturer	My lecturer cannot detect if I copy	2 (6.66)	4 (6.67)
	others' work.		
	My lecturer will not penalize if I copy	2 (6.66)	
	others' work.		

3.1. Contributing Factors

Table 2 and Fig. 1 show the percentage of 7 contributing factors identified in the study. 46.66% of the respondents agreed that lack of confidence was the major reason why they were involved in academic dishonesty. This was because they did not trust their writing ability and were afraid of presenting something wrong to their lecturers. Besides, they also copied their friends' work because they wanted to get more confident ideas. 36.67% respondents agreed that the writing task was too difficult for them. They admitted copying because they did not understand certain critical thinking concepts and terms such as inductive and deductive reasoning, inferences, assumptions and types of supporting details namely expert opinions and testimonies. Thus, they failed to produce the critical analysis essay and resorted to copying their friends' work. 35.56% of the respondents agreed that they had problem managing their time to write their own critical analysis essays, they had too many assignment deadlines to meet and they preferred to work until the last minute to complete their assignments. Similar finding was also revealed by [7] who found that many students committed dishonest acts due to poor time management. The fourth factor which led them to involve in academic dishonesty was language problems (28.89%). They admitted that they were not good in English, which hindered them from using the correct words in expressing their own ideas in the critical analysis writing. A similar finding was also revealed by [16] who found that the students' English language proficiency levels would influence the tendency to plagiarize. They have firmly concluded that "the more proficient an individual is in English, the less frequently an individual is likely to commit an act of plagiarism". Lastly, the least factors contributing to academic dishonesty were grades and lecturers with 6.67% percentage.

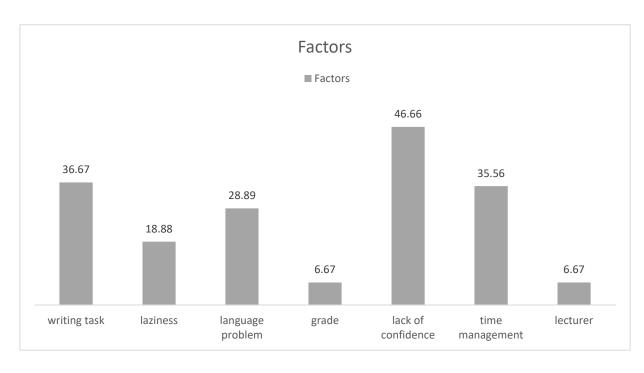


Fig.1. Factors contributing to academy dishonesty

3.2. Possible Solutions to the Problem Identified

3.2.1. Lack of Confidence

Combating academic dishonesty among the students is not an easy task. Though many studies have suggested various solutions to plagiarism, cheating or any other forms of academic dishonesty acts, there is no one-size-fits-all solution to the problem as different students commit the act for different reasons. Hence, when dealing with academic dishonesty among the students, the root cause of the problem must be first identified before putting forth workable solutions to the problem. The students in this study were mainly found committing the act due to lack of confidence, difficult writing task and poor time management. One possible solution to solve 'lack of confidence problem' is to encourage students to read more materials which require critical reading skills. Reading such materials will help to stimulate the mind and develop critical reading skills which are essential in writing critical analysis essays. Furthermore, the lecturers may recommend some reading notes or materials which can help the students to learn how to evaluate authors' interpretations and viewpoints and reflect on the content, structure of the text, language used and the way the authors write. The lecturers must also provide extra writing exercises for the students to help them regain the trust in their writing ability and be confident with their own ideas.

3.2.2. Difficult Writing Task

Next, this study also revealed that students also cheated when writing the critical analysis essays because they felt that the writing task was too difficult and they did not know how to go about writing the critical analysis essays as they also did not understand certain critical thinking concepts and terms. The lecturers must understand that writing itself is considered as one of the most difficult skills for the students to master [17], as it does not only require them to acquire good linguistic skills but also good critical thinking skills. Thus, the lecturers must provide sufficient writing practices for the students to help them grasp and adopt the right way of presenting and developing their ideas on paper. Besides, the lecturers must clearly explain each critical thinking and reading concept and term to the students. Extra exercises can be provided so that they will be able to fully understand the concepts and terms like inductive reasoning, deductive reasoning, assumption, inference, relevance, consistency, credibility, tone, validity, bias and etcetera.

3.2.3. Poor Time Management

Finally, this study also found that the students committed academic dishonest act because they had poor time-management. They admitted not having enough time to write the critical analysis essay as they also had too many assignment deadlines to meet and preferred to do the assignments at the last minute. Being university students with many classes to attend, assignments and projects to complete and co-curricular activities to be involved in, managing time wisely pose a great challenge to many students. As the students in this study failed to manage their time wisely, organizing time-management workshops for them seems to be a great idea. Next, since writing is a process not a product, the lecturers may manipulate this idea by breaking down the task into outlining, writing the first and final drafts. The lecturers may set different deadlines for each of the task and this will definitely help the lecturers to monitor the writing process that each of the student has to undergo, thus avoiding the problems of late submission or copying other students' work.

3.3. Other Possible Solutions

Generally, prevention is the best way to deal with academic dishonesty. One way of deterring it from becoming endemic is by implementing clear honour codes. A previous research by [18] shows that implementation of honour codes can make a difference. The universities which do not have the academic honour codes would have lower academic integrity and higher cheating cases than those universities with the honour codes. Therefore, the university lecturers and academic staff must proactively make the students aware of the honour codes and provide clear explanations of academic dishonest acts among the students. They must be clearly informed about the penalties and punishments that await them should the honour codes are violated. Besides, the universities could also take initiatives to put up academic dishonest acts posters in the classrooms. Furthermore, faculties should also organize workshops to create academic dishonesty awareness among the lecturers and students.

Another way to combat academic dishonesty is by using technology [19]. The lecturers need to be able to manipulate technology to detect academic dishonesty in the students' writing. To deter students from copying from the internet, the lecturers can make it compulsory for all of them to use the university-provided tool to detect plagiarism such as Turnitin. The students should be asked to submit their assignments to Turnitin and print out the report before submitting the assignments to the lecturers. The lecturers may ask the students to redo and resubmit the assignments should the reports reveal more than 20% match.

Next, the lecturers must carefully select the types of assignments given to the students as certain types of assignments may encourage the students to cheat. This is due to the reasons that some of the materials can easily be copied from the internet. Hence, to avoid internet cheating, the lecturers should assign the topics which require the students to evaluate, self-reflect and present their viewpoints. Next, in [19] also mentioned that if the assignments involve group work, lecturers must ensure that the students understand that collaboration is allowed but not collusion. The lecturers must also keep reminding the students consistently of the academic integrity policy. Apart from that, the lecturers can also ask the students to come up with a portfolio in which the students are required to print out or photocopy all the materials they have read and referred to.

4. CONCLUSION

In conclusion, academic dishonesty is not a new trend but a common global problem which

has been widely discussed across the world. Many studies have been conducted to identify the factors, which influence the students to indulge in this immoral act and propose possible ways of putting a stop to this academic misconduct. This study is one of the attempts to explain the factors which have triggered the Computer Science students to commit the dishonest act which are lack of confidence, difficult task and poor time management. It is hoped that the current study will be able to motivate more research to be conducted on this problem to help broaden our understanding of this disturbing issue and offer more effective and better solutions to the problem. Finally, it would also be a great discovery if future research could investigate factors which deter students from cheating or committing any dishonest academic acts. One interesting deterrent factor that can be examined is religiosity. Not much research has been done on this topic alone, hence exploring the relationship between different religious beliefs with academic dishonesty might yield interesting findings.

5. REFERENCES

[1] Mustapha R, Ali N A. An empirical survey of an academic dishonesty at a major public university in recent years: The Malaysian evidence. Asian Journal of Educational Research, 2017, 5(3):43-49

[2] Moten A R. Academic dishonesty and misconduct: Curbing plagiarism in the Muslim world. Intellectual Discourse, 2014, 22(2):167-189

[3] Smith M, Ghazali N, Fatimah N M S. Attitudes towards plagiarism among undergraduate accounting students: Malaysian evidence. Asian Review of Accounting, 2007, 15(2):122-146

[4] Sheard J, Dick M. Computing student practices of cheating and plagiarism: A decade of change. In ACM 16th Annual Joint Conference on Innovation and Technology in Computer Science Education, 2011, pp. 233-237

[5] Shafie L A, Nayan S. The net generation and academic dishonesty in Malaysia. In Technology Innovations in Education, 2012, pp. 181-186

[6] Rettinger D A, Kramer Y. Situational and personal causes of student cheating. Research in Higher Education, 2009, 50(3):293-313

[7] Harji M B, Ismail Z, Chetty T N, Letchumanan K. Technical and non-technical

programme students' attitudes and reasons for plagiarism. English Language Teaching, 2017, 10(11):141-155

[8] Singha P, Thambusamy R X, Druckman Z A. Insidious, invasive, invisible: Academic dishonesty and on-going assessments in higher education. European Journal of Social and Behavioural Sciences, 2015, 17:2154-2167

[9] Breen L, Maassen M. Reducing the incidence of plagiarism in an undergraduate course: The role of education. Issues in Educational Research, 2005, 15(1):1-16

[10] Volpe R, Davidson L, Bell M C. Faculty attitudes and behaviors concerning student cheating. College Students Journal, 2008, 42:164-175

[11] Costley J. The instructional factors that lead to cheating in a Korean cyber university context. Interactive Technology and Smart Education, 2017, 14(4):313-328

[12] Payan J, Reardon J, McCorkle D E. The effect of culture on the academic honesty of marketing and business students. Journal of Marketing Education, 2010, 32(3):275-291

[13] Gilmore J, Strickland D, Timmerman B, Maher M, Feldon D. Weeds in the flower garden: An exploration of plagiarism in graduate students' research proposals and its connection to enculturation, ESL, and contextual factors. International Journal for Educational Integrity, 2006, 2(2):13-28

[14] Pecorari D, Petrić B. Plagiarism in second-language writing. Language Teaching, 2014, 47(3):269-302

[15] Bain L Z. How students use technology to cheat and what faculty can do about it.Information Systems Education Journal, 2015, 13(5):92-99

[16] Eccles M, Arnold J, Rubin S, Lambarey Z, Van Belle JP. Technological and societal factors influencing plagiarism among information systems students. In International Science and Technology Conference, 2006, pp. 1-14

[17] Vig I Z. Writing-A difficult skill to master. 2017, http://rate.org.ro/blog2.php/1/writing-a-difficult-skill-to

[18] McCabe D, Trevino L K. Honesty and honor codes. Academe, 2002, 88(1):37-41

[19] Hart M, Friesner T. Plagiarism and poor academic practice-A threat to the extension of e-learning in higher education? Electronic Journal on E-Learning, 2004, 2(1):89-96

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