

## **Who Cheats More? Gender and Academic Dishonesty among Malaysian Undergraduates in English Medium Classrooms**

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### **Abstract**

Academic dishonesty (AD) is a significant problem in tertiary institutions worldwide, including Malaysia. The self-presentation theory suggests that AD may be committed in order to make or preserve a favourable image to others. Past studies have made the generalisation that male students commit more AD compared to female students, however, few studies have looked into the actual differences in the instances and methods of AD across genders. Hence, the authors conducted a questionnaire to examine whether gender is a significant indicator of AD and whether there are differences in the types of AD committed. The results show that male students outnumbered their female counterparts in all categories except crediting absent partners in group tasks. Findings of this study suggest that assessments should be designed to reward the quality, not quantity, of output.

**Keywords:** *gender, academic dishonesty, cheating, self-presentation*

## 1.0 Introduction

### 1.1 Background of the Study

That academic dishonesty (AD) is rampant in tertiary institutions is well-documented (McCabe & Trevino, 1993; Crown & Spiller, 1998; Smyth & Davis, 2003). Not only that, it seems to be a worldwide phenomenon unlimited by geography and culture; the only difference is the extent to which AD is widespread (Finn & Frone, 2004). In Malaysia, research on the lack of academic integrity in tertiary institutions is also gaining momentum, as can be seen from numerous research on instances of students cheating in the academic setting (Shariffuddin & Holmes, 2009; Ahmad, Simun & Mohammad, 2008; Mohd, Noor, Hamid & Yusoff, 2013). One area that has received a lot of attention in the field of AD is whether, and to what extent, gender influences behaviours of AD. Crown and Spiller's (1998) survey of relevant literature found that gender is not a conclusive indicator of students' willingness to commit AD; some studies found that male students were more likely to cheat, others female, while a few others concluded that there is no significant difference between genders. On the other hand, more recent studies tend to attest to the different dishonest behaviours across genders (Egan, 2008; Mohd et al., 2013).

### 1.2 Objectives of the Study and Research Questions

In order to find ways to combat AD, academic institutions must first determine the problem areas. This study looked into the different aspects of academic life to identify whether types of assessments affect the likelihood of dishonest acts being committed. Furthermore, the study sought to discover how acts of dishonesty are committed. Finally, the study aimed to discover whether or not gender is a determining factor of AD. These questions will reveal if instances of AD are opportunistic or systemic; the former would suggest that solutions should target individual students while the latter would indicate that the way institutions administer assessments should be revamped. In short, this research asks the following questions:

- 1.2.1 What are the types of assessments where students commit academic dishonesty?
- 1.2.2 What are the methods of academic dishonesty prevalent among students?
- 1.2.3 Is there any significance difference across genders?

### 1.3 Operational Definitions

#### Academic Dishonesty

Academic dishonesty refers to any type of cheating that occurs in relation to a formal academic setting (Parther, 2016). Students are considered to commit AD when they copy the work of another during an examination or when turning in a paper or an assignment.

#### Types of Academic Dishonesty

AD may be committed during entrance, mid-term, and final exams, classroom quizzes, take-home tests, online quizzes, written reports, article reviews, term papers, case studies, individual presentations, group presentations, final presentations, reflective journals, analyses, fieldwork, simulations, research writing, and interpretation (Tong, Kho, Lau & Hasan, 2018).

## Methods of Cheating

AD is committed through cheating in examinations and quizzes, copying-and-pasting, minimal paraphrasing, minimal participation in group projects, not participating in group projects, paying someone to do an assignment, and receiving payment to do someone else's assignment.

## English Medium Classrooms

In this study, English medium classrooms refer to the setting where the students conduct the assessments that are referred to in the questionnaire, as the students' classes and assessments are conducted in English.

## 2.0 Literature Review

### 2.1 *Why Commit AD*

The reasons why people commit AD can be understood through the self-presentation theory. According to Leary (1995), a person cares about making a good impression on others. This desire to be portrayed as good may push the person to resort to extreme measures to maintain excellence. Self-presentation also refers to how people present themselves to shape how others (the audience) view them. According to Madara, Namango, and Katana (2016), there are several self-presentational strategies as explained below.

#### (a) Ingratiation

When a person uses this strategy, they aim to be likable. They expect compliments from others. This strategy is used by displaying positive personal characteristics.

#### (b) Self-promotion

This strategy is done so that the person appears to be competent. Often, they look boastful and are labelled as "showing off".

#### (c) Intimidation

A person who intimidates appears to be powerful and sometimes ruthless. They may use threats to get what they want.

#### (d) Exemplification

This type of strategy is used to create the impression that they are morally superior. They want to look virtuous and have high moral standards.

#### (e) Supplication

This strategy is used so that the person looks helpless. They exaggerate their own weaknesses and deficiencies.

### 2.2 *Effects of AD*

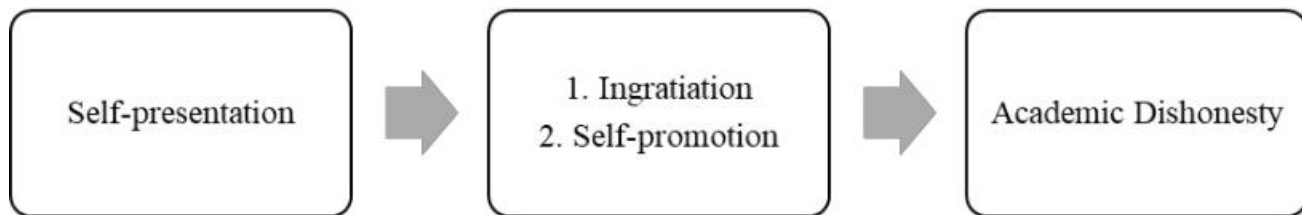
According to Langa (2013), the consequences of copying during exams affect both the education act on the whole and each student. AD may result in the occurrence of tensions between teachers and students, the frustration of students feeling aggrieved, as well as the diminishment of students' motivation for learning.

Haney, Cronan, and Douglas (2016) reported that academic integrity is essential to maintain the value of educational organisations. The lack of integrity will irreparably detract from the value of original, scholarly work, and from institutions developing to further human knowledge and create future generations of scholars. Moreover, these academic integrity principles should carry over to the workplace and to society.

In addition, another devastating effect of AD is that one act of dishonesty may snowball into other acts. Based on the social control theory (McLeod, 2016), people's relationships, commitments, values, norms, and beliefs encourage them to not break the law. Thus, if moral codes are internalised and individuals are tied into and have a stake in the wider community, they will voluntarily limit their propensity to commit deviant acts.

The social learning theory by Albert Bandura emphasises the importance of observing and modelling the behaviours, attitudes, and emotional reactions of others.

### 2.3 Theoretical Framework of Study



The theoretical framework of the study is rooted from two strategies of self-promotion suggested by Madara, Namango, and Katana (2016) whereby the strategies found suitable for this study are ingratiation and self-promotion. Self-presentation is done through ingratiation and self-promotion since a desperate need for ingratiation and self-promotion may eventually “push” people into committing AD.

### 2.4 Past Studies

#### 2.4.1 Causes of AD

There have been numerous research conducted to identify the causes or motives behind AD. Mebratu Mulatu Bachore (2016) conducted a qualitative and quantitative study to discover the nature, causes and practices of AD from the perspectives of both students and educators. The researcher conducted a survey to understand the perceptions of academic dishonesty held by 60 students and 20 instructors, followed by an interview to uncover the main reasons behind cheating and suggestions to improve the situation. From the study, the researcher found that cheating in tests/exams was perceived by students and instructors to be the highest occurring form of AD, followed by inappropriately sharing work in a group and committing plagiarism in assignments. This is in line with the study by Mohd et al. (2013) in which cheating in tests was found to be the most dominant predictor of AD. The study also found that the highest causes of cheating were the level of difficulty of the test/exam, time constraints, irrelevant course material, and pressure to achieve good grades. Additionally, the respondents stated that the misconduct was due to being unclear of policies behind what constitutes as cheating, which was similar to a study conducted by Parmjit, Roslind, and Zachariah (2015).

Jakšič and Pošpić (2015) conducted a survey study among 114 undergraduate and graduate students in the University of Rijeka, Croatia, to specifically examine whether there are differences in causes behind AD between “live” and partially online environments. The results found that students cheated in an online environment mainly because they knew they would not be discovered, and they wanted to score a better grade. Cheating in a live environment, however, was mainly due to not understanding the course material and that they did not have the time to study. An interesting point about this study was that the researchers also asked if the students believed the penalties for being caught cheating (mainly getting zero marks, with or without a second chance to repeat the

activity) were adequate. In the study, 63% said that the penalties should not be changed, 22% said they should be more severe, while 15% said they should be less severe. These numerous causes and motives of committing AD gives an interesting insight to the actual prevalence of AD among university students.

#### 2.4.2 Prevalence of AD

Tiong, Kho, Mai, Lau, and Hasan (2018) studied the prevalence of AD among academicians in Malaysian universities. They compared the prevalence between academicians of healthcare and non-healthcare courses. The study also looked at predisposing factors and implications of AD, as well as measures perceived to be effective at curbing this problem. This cross-sectional study was designed with mixed qualitative and quantitative approaches. Data collection was carried out primarily using a self-administered questionnaire. The results revealed a significantly higher prevalence of various forms of academic misconduct among healthcare academicians compared to their non-healthcare counterparts. Although respondents were generally conscious of the negative implications associated with AD, more than half of all cases of misconduct were not reported due to the indifferent attitude among them. Low levels of self-discipline and integrity were found to be the major factors leading to academic misdeeds, and respondents opined that the university management should be more proactive in addressing this issue.

Another paper examined academic misconduct in a tertiary-level institution in one of the Gulf countries (Ahmad, 2017). The main aim was to investigate if AD prevails, and if so, how and why it happens. A survey was used to gauge students' perception about AD. One hundred and eleven students who took an advanced academic writing course participated in this study. The results showed statistically significant evidence that cheating exists. While research on academic misconduct is extensive in Western contexts, it is less documented in the Middle East and North Africa regions.

In the Malaysian context, Ramlan, Zaharah, Saedah, and Ghazali (2017) conducted a study across three years using a survey to 453 students in 2014, 365 students in 2015, and 320 students in 2016 to examine both the prevalence and causes of AD among university students. From the survey, the conduct of AD was found to be committed by 47% to 51% of the respondents across the three-year study period. This number is similar to the study conducted by Clariana, Badia, and Cladellas (2013) which surveyed 306 final year secondary students and university students. The study found that around 50% of the students commonly cheat, with 45% admitting that the reason they cheated was to attain higher academic results.

Rusdi, Hussein, Rahman, Noordin, and Aziz (2019) also conducted a study among 732 respondents from a public university in Malaysia. They distributed a questionnaire to discover the extent to which students conduct AD and the reasons behind the misconduct where the respondents self-rated their own self-perception on AD based on a 5-point Likert scale. Interestingly, in Malaysia, the highest form of AD was in plagiarising the work of others, followed by using an electronic device to cheat on a test or examination. This finding is in line with other studies in the Malaysian context whereby plagiarism was the highest form of AD conducted by students (Ramlan & Nik Asilah, 2017; Ramlan, Zaharah, Saedah, & Ghazali, 2017).

#### 2.4.3 Effects of AD

According to Clariana, Badia, and Cladellas (2013), AD affects both the students who commit the act as well as the institutions that allowed it. Firstly, there is a concern that students who cheat are only interested in obtaining the certification or award, and thus completely missed the deeper context of learning (Taradi et al., 2012).

In the institution's context, Clariana, Badia, and Cladellas (2013) posited that educational institutions operate to prepare students to meet the needs of the society, which would not be met if cheating is permitted. There are also implications to the integrity of the institution, especially if the instance of cheating is discovered by external parties, if the academicians themselves are also involved in cheating, or if the academicians did not report instances of cheating. This matter is highlighted especially in the study by McCabe (2005, as cited by Witmer and Johansson, 2015) that assessed 10,000 faculty members and found that 44% who knew of their students cheating had never reported the matter to the campus authority.

Another context found in literature is the industrial context, whereby suggestions have been made to link practices of AD in academia with future acts of dishonesty in the future (Clariana, Badia & Cladellas, 2013). This has led to numerous researchers seeking to discover whether prior acts of AD may be an indicator of future decisions to act dishonestly. One such study was conducted by Harding, Carpenter, Finelli, and Passow (2004) that surveyed 130 students in two private universities. The questionnaire was designed to identify the students' decisions to cheat in college along with their decisions to violate workplace policies. The study found that 63.8% of students had cheated several times, while 79.2% cheated at least once per term, and the main pressures cited behind the act was "not enough time" (20.7%), being "unprepared" (12.6%), lack motivation (9.8%) and experiencing "grade pressure" (9.2%). From this, the study also found similar factors for cheating in the workplace, such as insufficient resources, a need/want to violate the workplace policies, and that doing so may be inconsequential or harmless. Overall, the study identified a strong relationship between self-reported AD with self-reported involvement in dishonest behaviour.

#### 2.3.4 AD across Gender

Several studies have also been conducted on the practice of AD across different gender groups. Mohd et al. (2013) conducted a survey among 348 Malaysian undergraduate students to examine the relationship between perceived practice of AD against gender, age, and program enrolment. The study found that males reported higher scores of AD compared to females. This finding is similar to the study conducted by Faizah, Zubir, and Nor (2016) with 380 university students whereby male students committed more AD compared to their female counterparts, as well as the study by Clariana, Badia, and Cladellas (2013) on 306 undergraduate students.

In conducting a larger scale study of examining AD in the perspective of gender, Witmer and Johansson (2015) reviewed the Swedish National Agency for Higher Education (SWAHE) report and asked the 10 to 30 listed Swedish universities to provide them gender-specific information of the prevalence of AD. The study found that female students committed fewer acts of AD, which is in agreement with the studies cited in the Malaysian context.

### 3.0 Problem Statement

In their handbook of AD, Whitley and Keith-Spiegel (2002, pp.4-5) listed eight reasons why educators should be concerned about AD, including "equity", "character development", and "student morale". Furthermore, they worry about AD's connection with other unethical behaviours in society, for example in the workplace, which is a view shared by many others (Crown & Spiller, 1998; Smyth & Davis, 2003; Ahmad, Simun & Mohammad, 2008; Hadijah Iberahim, Hussein, Samat, Noordin & Daud, 2013). Madara, Namago, and Katana (2016) noted how future career prospects motivate students to commit AD. Besides their willingness to commit unethical acts, this phenomenon can have far-reaching consequences if an incompetent person is unfairly hired. Since the distribution of male and female graduates in society and in the workplace is unequal, identifying which gender has a higher tendency of committing AD and their preferred methods of cheating can help tertiary institutions and employers make more informed decisions.

There has been a steady increase in the recognition of the detrimental effects of AD to the society in Malaysia, and this trend is reflected in the growing body of research. Hadijah Ibrahlim et al. (2013) looked into factors of AD among Malaysian students while Mohd et al. (2013) determined that of the two genders, male students were more prone to committing AD. Moreover, Suhaiza and Salwa (2016) found that not only were male students more likely to cheat, they were also more likely to justify the act. However, the question of how AD is committed across different genders is left unanswered. This void has to be filled before findings of different studies can be reliably compared and analysed without compromising the validity of the conclusion (Crown & Spiller, 1998). Sharifuddin and Holmes (2009) attempted to answer this question qualitatively using voluntary accounts of six students previously caught displaying dishonest behaviours and two instructors at a Malaysian college; the current study seeks to bridge this gap in a quantitative manner. Therefore, despite indications on the tendencies of cheating between the two genders in past Malaysian literature, the question remains on which gender is more prone to certain methods of AD such as cheating in examinations, plagiarism, ghost-writing and minimal participation in group assessments.

#### 4.0 Methodology

This section explains the methodology employed in this study, specifically the research design, the samples, the research instrument, data collection, and data analysis methods.

##### 2.1 Research Design

This study employed a quantitative approach utilising the descriptive design where the purpose is to describe the phenomenon via descriptive and frequency statistics.

##### 2.2 Samples

Our samples consisted of 246 Malaysian undergraduates from both the public (universiti awam “UA”) and the private (universiti swasta “US”) sectors. These respondents were selected via the simple random sampling method. However, due to the nature of this research, the names of the institutions are kept confidential. All of the students were bachelor’s degree students coming from different fields of study.

##### 2.3 Instrument

The study employed a survey questionnaire which comprises of three sections as follows:

- Section A – Respondents’ Demographic Data
- Section B – Types of Academic Dishonesty
- Section C – Methods of Cheating

The questionnaire consisted of ordinal, nominal, and scale type questions which sought to measure the acts of AD together with the types of AD.

As for the reliability of the instrument, we tested the questions using Cronbach’s alpha for internal consistency and the results show that the items are consistent.

Table 1: Reliability Analysis

<u>Reliability Statistics</u>	
Cronbach’s Alpha	<u>.859</u>

## 5.0 Findings

### 5.1 Types of Assessments where Students Commit Academic Dishonesty

Table 2: Academic Dishonesty based on Types of Assessment

Types of AD	Yes	No	Not Applicable
Entrance Exams	12.6% (31)	59.8% (147)	27.6% (68)
Mid Term Exams	22.8% (56)	65%(160)	12.2% (30%)
Final Exams	15% (37)	83.7% (206)	1.2% (3)
Classroom Quizzes	54.9% (135)	44.3%(109)	0.8% (2)
Take Home Tests	54.9% (135)	32.9% (81)	12.2% (30)
Online Quizzes	66.3% (163)	28.5% (70)	5.3% (13)
Written Reports	35.4% (87)	60.2% (148)	4.5% (11)
Article Reviews	29.7% (73)	65.4% (161)	4.9% (12)
Term Papers	16.3% (40)	63.8% (157)	19.9% (49)
Case Studies	27.2% (67)	63.4%(156)	9.3% (23)
Individual Presentations	17.1% (42)	80.9% (199)	2% (5)
Group Presentations	18.7% (46)	80.9% (199)	0.4% (1)
Final Projects	16.3% (40)	73.9% (181)	9.8% (24)
Final Presentations	14.2% (35)	78 (192)	7.7 (19)
Reflective Journals	15% (37)	58.9% (145)	26% (64)
Analysis / Interpretations	19.5% (48)	65.4%(161)	15% (37)
Fieldwork	18.3% (45)	55.7% (137)	26% (64)
Simulations	15.1% (37)	64.1% (157)	20.8% (51)
Research Writing	25.3% (62)	60% (147)	14.7% (36)



Table 2 reveals the respondents admitting to committing AD based on different types of assessments. Every item recorded students to have committed AD with the highest being Online Quizzes (66.3%, N=163), Classroom Quizzes (54.9%, N=135) and Take Home Tests (54.9%, N=135). This indicates that the quiz / test type assessments recorded the highest incidences of AD. On the other hand, items Entrance Exams, Final Presentations, Reflective Journals, Final Exams and Simulations recorded an incidence of below 16% with 12.6% (N=31), 14.2% (N=35), 15% (N=37), 15% (N=37) and 15.1% (N=37) respectively. The other items recorded incidences between 16.3% (N=40) and 35.4% (N=87).

5.2 Methods of Cheating Prevalent among Students

Table 3: Methods of Cheating

<b>Methods of Cheating</b>			
	<b>N</b>	<b>M</b>	<b>SD</b>
Referring to notes or crib sheets during an examination	246	1.50	.968
Referring to notes or crib sheets during a quiz	245	1.90	1.104
Referring to another student's paper during an examination	245	1.54	.943
Referring to another student's paper during a quiz	246	1.93	1.067
Copying and pasting from articles or Internet sources	245	2.50	1.144
Asking someone or paying someone to do the assignment for you	246	1.11	.443
Not or minimally participating in a group assignment	245	1.47	.827
Assisting another student to cheat in an examination	246	1.56	.949
Assisting a friend to cheat in a quiz	245	1.84	1.026
Agreeing or receiving a paid job to do someone else's assignment	245	1.19	.585
Putting a friend's name in a group assignment who either has not been or minimally participating	245	2.32	1.378
Fabricating or creating fake information or fake data	246	1.50	.837

Likert Scale Variables: 1 – Never 2 – Occasionally 3 – Sometimes 4 – Often 5 – Always

Table 3 indicates the descriptive statistics of the methods of AD committed by the Malaysian undergraduates. Based on the data, the actions of “Copying and pasting form articles or Internet sources” recorded the highest mean score of 2.50 (SD=1.144) with the item “Putting a friend’s name in a group assignment who either has not been or minimally participating” being a close second (M=2.32, Sd=1.378). The item that recorded the lowest mean score is “Asking someone or paying someone to do the assignment for you” with a mean score of 1.11 (SD=0.443). The other items recorded mean scores ranging from 1.19 (item “Agreeing or receiving a paid job to do someone else’s assignment”) to 1.90 (item “Referring to notes or crib sheets during a quiz”).

### 5.3 Significant Difference across Gender

Table 4: Comparison of Mean Scores between Gender

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Referring to notes or crib sheets during an examination	Male	71	1.8732	1.17022	.13888
	Female	175	1.3486	.82954	.06271
Referring to notes or crib sheets during a quiz	Male	70	2.2571	1.20007	.14344
	Female	175	1.7600	1.03369	.07814
Referring to another student's paper during an examination	Male	71	2.0000	1.14642	.13606
	Female	174	1.3563	.77500	.05875
Referring to another student's paper during a quiz	Male	71	2.3239	1.26236	.14981
	Female	175	1.7657	.93278	.07051
Copying and pasting from articles or Internet sources	Male	71	2.7042	1.23513	.14658
	Female	174	2.4195	1.09748	.08320
Asking someone or paying someone to do the assignment for you	Male	71	1.2535	.62606	.07430
	Female	175	1.0514	.32640	.02467
Not or minimally participating in a group assignment	Male	70	1.6571	.89904	.10746
	Female	175	1.3886	.78629	.05944
Assisting another student to cheat in an examination	Male	71	2.1127	1.11547	.13238
	Female	175	1.3314	.76855	.05810
Assisting a friend to cheat in a quiz	Male	70	2.4286	1.16185	.13887
	Female	175	1.6057	.86368	.06529
Agreeing or receiving a paid job to do someone else's assignment	Male	70	1.3714	.81953	.09795
	Female	175	1.1143	.44018	.03327
Putting a friend's name in a group assignment who either has not been or minimally participating	Male	71	2.1831	1.35552	.16087
	Female	174	2.3793	1.38732	.10517
Fabricating or creating fake information or fake data	Male	71	1.7183	1.01676	.12067
	Female	175	1.4114	.73648	.05567

Table 5: Independent Samples T-Test

		Independent Samples Test								
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Referring to notes or crib sheets during an examination	Equal variances assumed	23.727	.000	3.967	244	.000	.52467	.13227	.26414	.78519
	Equal variances not assumed			3.443	99.784	.001	.52467	.15238	.22234	.82699
Referring to notes or crib sheets during a quiz	Equal variances assumed	5.500	.020	3.244	243	.001	.49714	.15323	.19531	.79898
	Equal variances not assumed			3.044	112.116	.003	.49714	.16334	.17351	.82077
Referring to another student's paper during an examination	Equal variances assumed	17.254	.000	5.091	243	.000	.64368	.12645	.39461	.89275
	Equal variances not assumed			4.343	97.173	.000	.64368	.14820	.34955	.93781
Referring to another student's paper during a quiz	Equal variances assumed	12.677	.000	3.822	244	.000	.55823	.14607	.27051	.84594
	Equal variances not assumed			3.371	102.426	.001	.55823	.16558	.22982	.88664

Copying and pasting from articles or Internet sources	Equal variances assumed	2.102	1.148	775	243	.077	.28469	.16038	-.03122	.60059
	Equal variances not assumed			1.689	117.437	.094	.28469	.16855	-.0491148	.618
Asking someone or paying someone to do the assignment for you	Equal variances assumed	40.265	3.000	309	244	.001	.20209	.06108	.08179	.32240
	Equal variances not assumed			2.581	85.870	.012	.20209	.07829	.04646	.35773
Not or minimally participating in a group assignment	Equal variances assumed	4.513	2.035	316	243	.021	.26857	.11595	.04018	.49697
	Equal variances not assumed			2.187	113.470	.031	.26857	.12280	.02529	.51185
Assisting another student to cheat in an examination	Equal variances assumed	21.199	6.000	294	244	.000	.78125	.12412	.53675	1.02574
	Equal variances not assumed			5.404	98.097	.000	.78125	.14457	.49436	1.06814
Assisting a friend to cheat in a quiz	Equal variances assumed	8.691	6.004	075	243	.000	.82286	.13546	.55604	1.08968
	Equal variances not assumed			5.362	100.919	.000	.82286	.15345	.51845	1.12726
Agreeing or receiving a paid job to do someone else's assignment	Equal variances assumed	34.772	3.000	168	243	.002	.25714	.08117	.09725	.41704
	Equal variances not assumed			2.486	85.393	.015	.25714	.10345	.05147	.46282
Putting a friend's name in a	Equal variances assumed			2.486	85.393	.015	-.19621	.19409	-.5785210	.186
		.969	-.326	1.011	243	.313				

group assignment	Equal variances	not									
who either	has not been	assumed	1.021	-	132.809	.309	-.19621	.19220	-.57638	.18396	
or minimally participating	Fabricating	Equal variances	8.556	.004	2.638	.244	.009	.30688	.11632	.07776	.53600
ng or creating fake information or fake data	Equal variances	not assumed		2.309	101.129	.023	.30688	.13289	.04327	.57050	

Based on Table 5, the results indicate that there were significant differences in students' performance between all the items with the exception of "Copying and pasting from articles or Internet sources" and "Putting a friend's name in a group assignment who either has not been or minimally participating" with  $t(246) = 3.443, 3.044, 4.343, 3.371, 2.581, 2.187, 5.404, 5.632, 2.486, 2.309$ ,  $p\text{-value} = .001, .003, .000, .001, .012, .031, .000, .000, .015, .023$  respectively. The average score of the methods of AD for items "Referring to notes or crib sheets during an examination", "Referring to notes or crib sheets during a quiz", "Referring to another student's paper during an examination", "Referring to another student's paper during a quiz", "Asking someone or paying someone to do the assignment for you", "Not minimally participating in a group assignment", "Assisting another student to cheat in an examination", "Assisting a friend to cheat in a quiz", "Agreeing or receiving a paid job to do someone else's assignment", and "Fabricating or creating fake information or fake data" was significantly different between the male and female students.

## 6.0 Discussions

### 6.1 Summary of the Findings

Based on the results of the survey conducted, the highest occurrence (more than half) of AD was with online quizzes (66.3% of the respondents) followed by classroom quizzes (54.9% of the respondents) and take-home tests (54.9% of the respondents). Slightly lower on the prevalence scale (less than half) were acts of AD for mid-term exams (22.8% of the respondents), written reports (35.4% of the respondents), article reviews (29.7% of the respondents), case studies (27.2% of the respondents), and research writing (25.3% of the respondents). The remaining types of AD, as detailed in the table, were below 20%.

The next section was on discovering the ways students commit the act of AD. Based on the findings, the most prevalent method was copying and pasting from articles or internet sources (mean of 2.50), followed by including the name of a friend in a group assignment who did not or only minimally participated in the task (mean of 2.32). Next is referring to another student's paper during a quiz (mean of 1.93), referring to notes or crib sheets during a quiz (mean of 1.90), and assisting a friend to cheat in a quiz (mean of 1.84). The results of the methods of committing AD, in this case, seemed to match the prevalent types of AD committed among university students in general.

When comparing between acts of AD across genders, interestingly, the mean scores showed that male students admitted to all methods of committing AD significantly more than their female counterparts.

In short, when looking at how students commit AD, male students admitted to conducting more acts of AD compared to females. However, there was one exception, which was in putting a friend's name in a group assignment who either has not been or had only minimally participated in the task (male mean 2.1831, female 2.3793).

In order to discover the significance of the differences in the actual practice of AD, a t-test was then conducted on the results. Interestingly, even though the mean score for female students was higher than males for putting a friend's name in a group assignment who either has not been or had only minimally participated in a task, the difference was not significant;  $t(132.809)=1.021$ ,  $p = .309$ ). Furthermore, the act of copying and pasting from articles or internet sources was also not significant between the two genders;  $t(117.437)=1.689$ ,  $p = .094$ ).

In contrast, there was a significant difference in the results between male and female students for referring to notes or crib sheets during an examination,  $t(99.784)=3.443$ ,  $p = .001$ ; referring to note or crib sheets during a quiz,  $t(112.116)=3.044$ ,  $p = .003$ ; referring to another student's paper during an examination,  $t(97173)=4.343$ ,  $p = .000$ ; referring to another student's paper during a quiz,  $t(102.426)=3.371$ ,  $p = .001$ ; asking someone or paying someone to do the assignment,  $t(85.870)=2.581$ ,  $p = .012$ ; not or minimally participating in a group assignment,  $t(113.470)=2.187$ ,  $p = .031$ ; assisting another student to cheat in an examination,  $t(98.097)=5.404$ ,  $p = .000$ ; assisting a friend to cheat in a quiz,  $t(100.919)=5.362$ ,  $p = .000$ ; agreeing or receiving a paid job to do someone else's assignment,  $t(85.393)=2.486$ ,  $p = .015$ ; and fabricating or creating fake information or fake data,  $t(101.129)=2.309$ ,  $p = 0.23$ .

## 6.2 Discussion

When comparing the results of the study to previous studies, in looking at the prevalence of AD among university students, this study found that acts of AD were found among 88% of the total participants of the study. This number is extremely high compared to past research in the Malaysian context which put the number at around 46% to 51% of the students (Ramlan et al., 2017; Clariana, Badia & Cladellas, 2013). This could either mean that the number is increasing, or that students are becoming more open to anonymously admitting to academic cheating.

This study also found that the highest occurrence of AD was for quizzes (online and in the classroom) along with take-home tests, which is in line with the findings by Mohd et al. (2013). This finding is interesting, as it points to the classroom quizzes being the most common platform where students would cheat. This finding raises the question especially on why cheating is so prevalent in the classroom. Was it easier to cheat because there were less invigilators? Or perhaps, as suggested by Parmjit, Roslind, and Zachariah (2015), students cheat because they are unsure of the policies or consequences of cheating. When compared to cheating during final exams, where students could be dismissed from university, cheating in class often does not carry the same weightage; or, if it does, perhaps it was not communicated well, which opens room for future research.

However, the most prevalent method of committing AD was in copying and pasting from online sources. This is in line with the results obtained by Rusdi et al. (2019), who found plagiarism to be the highest form of AD, followed by cheating on a test or examination. This study also highlights the significant act of including a person's name in an assignment who did not or only minimally participated in the task which has not been highlighted in previous studies.

When comparing the results across genders, this study echoes past studies in which the prevalence of AD was found to be higher in male students than female students (Mohd et al., 2013; Faizah, Zubir & Nor, 2016; Clariana, Badia & Cladellas, 2013; Witmer & Johansson, 2015). One interesting finding from this study is that females committed more acts of including a friend's name in a group assignment who either has not been or had only minimally participated in the task, however, the difference is not significant when compared to male students who did the same. Also, the difference was not significant between female and male students who copied and pasted from articles or internet sources, which also had not been highlighted in previous studies.

### ***6.3 Pedagogical Implications***

This study provides valuable evidence on specific acts of AD across genders. The theoretical framework of this study rooted in the strategies of self-promotion by Madara, Namango, and Katana (2016) would explain the potential causes of committing acts of AD. In this study, it is theorised that ingratiation (wanting to be likeable) and self-promotion (wanting to appear competent) are the drivers behind committing acts of AD, which has also been proven in results from past studies (Mohd et al., 2013; Jakšiü & Pošpiü, 2015). Additional reasons cited in literature include level of difficulty of the test/exam, time constraints, irrelevant course material, and being unclear of what constitutes as cheating (Mohd et al., 2013; Parmjit, Roslind & Zachariah, 2015).

With this in mind, this research sought to take a closer look at the differences of AD prevalence across genders. While past studies have highlighted a higher occurrence of AD in male students than female students (Mohd et al., 2013; Faizah, Zubir & Nor, 2016; Clariana, Badia & Cladellas, 2013; Witmer & Johansson, 2015), this research adds to the literature by highlighting that more female students (although not significantly different) included a friend's name in a group assignment who either has not been or had only minimally participated in the task. Also, the difference was not significant between female and male students who copied and pasted from articles or internet sources, which also had not been highlighted in previous studies. This finding has several pedagogical implications to the field of education.

Firstly, it may be important for educators in the future to design new assessment methods that do not reward students for the amount of content given (thus minimising the need to commit acts of plagiarism) and instead assess the way information is reworded or linked to produce an answer (process versus results). Secondly, peer-review may be proposed to carry weightage in overall marks whereby group members are asked to anonymously rate the contribution of their peers to identify if a member is not contributing to the group work, as the results reflect if students are loyal to their friends by giving them credit even when it is not due. Lastly, educators in the future may need to devise a way to create assessments that boost ingratiation and self-promotion through individualistic, unique work. This requires future studies and trials to combat instances of AD in the future.

### ***6.4 Suggestions for Future Study***

Even though this study has contributed significant findings to the current body of literature, there are several limitations that may be suitable to be addressed in future studies. Firstly, this study is purely quantitative in nature to understand the prevalence of AD across genders. A future study may include a qualitative aspect of conducting interviews to further understand the causes of AD and whether such causes are different across genders.

Secondly, this questionnaire was conducted through the simple random sampling method, where students were not pressured to answer the questionnaire if they did not feel comfortable doing so. This means that the questionnaire may not capture the full extent of the rate of AD among university students. A future study may utilise a different sampling method, for instance via stratified random sampling, to better reflect the population.

Lastly, it may also be interesting for future studies to compare the results of the questionnaire with the actual reported incidents of students caught performing acts of AD. This may shed a different light on the findings and enable educators to implement better methods to eliminate instances of AD among university students in the future.

## References

- Ahmad, K. (2017). Student Perceptions of Academic Dishonesty in a Private Middle Eastern University. *Higher Learning Research Communications*, 8(1). Retrieved from <https://doi.org/10.18870/hlrc.v8i1.400>
- Ahmad, Z., Simun, M. & Mohammad, J. (2008). Malaysian university students' attitudes to academic dishonesty and business ethics. *Asia Pacific Journal of Education*, 28(2), pp. 149-160.
- Carpenter, D. D., Harding, T. S., Finelli, C. J., & Passow, H. J. (2004). Does academic dishonesty relate to unethical behavior in professional practice? An exploratory study. *Science and Engineering Ethics*, 10(2), 311–324. doi:10.1007/s11948-004-0027-3
- Clariana, M., Badia, M. & Cladellas, R. (2013). Academic cheating and gender differences in Barcelona (Spain). *Summa Psicológica UST* 10, pp.65-72.
- Crown, D. F. & Spiller, M. S. (1998). Learning for the Literature on Collegiate Cheating: A Review of Empirical Research. *Journal of Business Ethics*, 17, pp. 683-700.
- Egan, V. (2008). A cross-cultural and cross-gender comparison of attitudes towards plagiarism: the case of Malaysian and Australian business students. *Asian Forum on Business Education*, 1(1), pp. 19-33.
- Faizah, I., Zubir, A., & Nor, M. (2016). Academic Dishonesty and Achievement Motivation: A Delicate Relationship. *Higher Education of Social Science*, 11(1), pp 1-8. doi: 10.3968/8738
- Hadijah Iberahim, Norashikin Hussein, Nusrah Samat, Fauziah Noordin & Normala Daud (2013). Academic dishonesty: Why business students participate in these practices? 6th International Conference on University Learning and Teaching (InCULT 2012), pp.152-156.
- Jakšič, D. & Pošpić, P. (2015) Reasons for academic dishonesty in a traditional and a partially online environment: A survey. *CompSysTech '15 Proceedings of the 16th International Conference on Computer Systems and Technologies*, pp. 342-349. doi:10.1145/2812428.2812468
- Langa, C. (2013). Investigation of Students' Attitude to Academic Dishonesty Empirical Study. *Procedia-Science and Behavioural Sciences*, 76, pp. 426-430.
- Leary, M. (1995). *Self-Presentation: Impression Management and Interpersonal Behaviour*. Boulder: West-view.
- Madara, D.S., Namango, S.S., & Katana, H. (2016). Theories and Models Relevant to Cheating-Behaviour. *Research on Humanities and Social Sciences*, 6(17), pp. 108-139.
- McCabe, D.L. & Trevino, L.K. (1993). Academic Dishonesty: Honor Codes and Other Contextual Influences. *The Journal of Higher Education*, 64(5), pp. 522-538.
- McHaney, R., Cronan, T.P., and Douglas, D.E. (2013). Academic Integrity: Information Systems Education Perspectives. *Journal of Information Systems Education*, 27(3), pp153-158.
- McLeod, S. (2016). Bandura-Social Learning Theory. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/bandura.html>
- Mebratu Mulatu Bachore (2016). The Nature, Causes and Practices of Academic Dishonesty/Cheating in Higher Education: The Case of Hawassa University. *Journal of Education and Practice*, 7(19), pp. 14-20. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1109249.pdf>



- Mohd I.M. Salleh, Noor R. Alias, H.A. Hamid, Z. Yusoff (2013). Academic dishonesty among undergraduates in the higher education. *International Journal of Academic Research*, 5(2), pp. 222-227. doi: 10.7813/2075-4124.2013/5-2/B.34
- Parmjit, S., Roslind, X.T., & Zachariah, A.D. (2015). Insidious, Invasive, Invisible: Academic dishonesty and ongoing assessments in higher education. *The European Journal of Social and Behavioural Sciences*, 17, pp. 2154-2167. Retrieved from <https://www.futureacademy.org.uk/files/images/upload/ejsbs193.pdf>
- Parnther, C. (2016). It's on Us: A Case Study of Academic Integrity in a Mid-Western Community College (Doctoral Thesis Western Michigan University). Retrieved from <https://pdfs.semanticscholar.org/d79b/76ba75396a09418ce092060d3fc6440f63e4.pdf>
- Ramlan, M. & Nik Asilah, N. A. (2017). An empirical survey of an academic dishonesty at a major public universities in recent years: The Malaysian evidence. *Asian Journal of Educational Research*, 5(3), pp. 43-49. Retrieved from <http://www.multidisciplinaryjournals.com/wpcontent/uploads/2017/05/Full-Paper-AN-EMPIRICAL-SURVEY-OF-AN-ACADEMIC-DISHONESTY.pdf>
- Ramlan, M., Zaharah, H., Saedah, S., & Ghazali, D. (2017). Academic Dishonesty Among Higher Education Students: The Malaysian Evidence (2014 to 2016). *The Official Journal of the Centre for Civilisational Dialogue*, 13, pp. 73-93. Retrieved from <https://ejournal.um.edu.my/index.php/KATHA/article/view/10903>
- Suhaiza, I. & Salwa, H. Y. (2016). Cheating behaviour among accounting students: some Malaysian evidence. *Accounting Research Journal*, 29(1), pp. 20-33.
- Tiong, J. J. L., Kho, H. L., Mai, C., Lau, H. L. & Hasan, S. S. (2018). Academic Dishonesty among Academics: A Comparison between Healthcare and non-Health academics. *BMC Medical Education*, 18. Retrieved from <https://doi.org/10.1186/s12909-018-1274-3>
- Witmer, H. & Johansson, J. (2015). Disciplinary action for academic dishonesty: Does the student's gender matter? *International Journal for Educational Integrity*, 11(6). doi:10.1007/s40979-015-0006-2