Erosion of Academic Integrity in Higher Education System: Symbolization of Dishonesty
(Pencemaran kepada Integriti Akademik di dalam Sistem Pengajian Tinggi: Simbol Ketidakjujuran)

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ABSTRACT

Academic dishonesty has long been discussed in numerous researches and it has also become a common phenomenon worldwide. Most of these studies have examined the many forms of dishonesty and cheating behavior occurring in the academic field. These delinquent practices are very damaging as they, not only affect the educational system, but will also result in future problems during the students' employment phase. This paper has investigated academic dishonesty through another angle by applying the concept of fraud triangle theory. The purpose of this study is to provide a general overview of academic dishonesty which symbolizes the pollution of academic integrity. This concept paper highlights the analysis of cheating in the Malaysian education context as well as in other countries globally. In addition, discussions on various definitions in relation to pollution of academic integrity have also been taken into consideration. The elements of fraud triangle theory have also been included through examining the causes or factors that lead to students' cheating or academic dishonesty both in perception and real action. Further, the paper has also examined the various methods used in academic dishonesty and their implications to the educational system. Lastly, the preventive actions have also been discussed in the attempts to reduce the likelihood of cheating incidents.

Keywords: Academic dishonesty; academic integrity; cheating; fraud triangle.

ABSTRAK

Kesalahan akademik telah lama dibincangkan dalam pelbagai kajian dan ia juga tidak lagi luar biasa di seluruh dunia. Terdapat pelbagai bentuk ketidakjujuran dan perihal penipuan berlaku dalam bidang akademik seperti yang dibincangkan dalam pelbagai kajian. Amalan-amalan ini adalah merosakkan, bukan sahaja ia memberi kesan kepada sistem pendidikan, tetapi juga kepada masa depan; iaitu fasa pekerjaan. Kertas kerja ini melihat kecurangan akademik dengan mengambil kira sudut lain iaitu pengaplikasian konsep teori penipuan segi tiga. Tujuan kajian ini adalah untuk memberi gambaran secara am mengenai kecurangan akademik yang melambangkan pencemaran integriti akademik. Kertas kerja ini menekankan analisis kes penipuan dalam konteks pendidikan di Malaysia dan juga di negara-negara lain di seluruh dunia. Selain itu, perbincangan mengenai pelbagai definisi yang berkaitan dengan kecurangan akademik juga turut diambil kira. Unsur-unsur penipuan teori segi tiga yang diadun dalam memeriksa sebab-sebab atau faktor-faktor yang menyebabkan pelajar menipu atau kecurangan akademik samada dalam persepsi atau tindakan sebenar. Seterusnya, kertas ini juga mengambil pelbagai kaedah yang digunakan dalam kecurangan akademik dan implikasi kepada sistem pendidikan. Akhir sekali, tindakan-tindakan pencegahan yang perlu diambil juga dibincangkan sebagai percubaan untuk mengurangkan kemungkinan berlakunya penipuan.

Kata Kunci: Kecurangan akademik; integriti akademik; penipuan; penipuan segi tiga.

INTRODUCTION

As an academic institution, a University and all of its members (faculty, administrators, lecturers and other related parties) should ensure that students are being equipped not only with valuable knowledge but also a positive, ethical and well-being attitude before entering the working environment (Widianingsih 2013). Nurturing such values of integrity and other ethical values in student's thinking and behaviour will ensure that students will try to learn and gather as much information as they can for the purpose of their own knowledge enhancement instead of just to pursue high grades during examinations.

The issue of academic integrity has long been discussed and researched by many researchers in prior years. Nevertheless, from year to year, the integrity in the academic area has been eroding and somehow polluted with various means of academic dishonesty. For instance, Simkin and McLeod (2009) stressed that cheating in colleges has now become a common and growing attitude among students, rather than being perceived as an isolated event. Additionally, prior researches on academic

integrity have been conducted in various areas of studies and in different focus of studies. For instance, McCabe et al. (2001) have conducted studies on academic cheating to look into the ethical behaviour of business students and students majoring in other subjects who intend to become future business leaders. King et al. (2009), despite favoring business students as their sample study, focused instead on those taking accounting and taxation courses as their final sample. Yet, what they have highlighted, which was focused only on the student's perception of cheating in online examinations, can also be applicable to students in other academic studies. Other examples of previous studies include Harper (2006), Laduke (2013) and Park et al. (2013) who examined the academic cheating crisis among nursing students which somehow questioned their ethical practice in the nursing profession.

Academic fraud; or academic dishonesty is closely related to Fraud Triangle Theory. However, instead of its common application to financial crime, this theory has also been applied to the academic field (Hayes et al. 2006; Becker et al. (2006); Malgwi & Rakovski 2009a; Malgwi & Rakovski 2009b; Tinkelman (2011) and Widianingsih (2013). Such usage of Fraud Triangle Theory could then assist in determining the ethical attitude of graduates; who will become professionals in the future. Ramos (2003) has stated that there are three main factors in assessing the occurrence of fraud; pressure, opportunity and rationalization. Pressure or incentive simply means the situation or condition which results from the individual itself or other parties that creates the motivation or pressure to commit fraud. Opportunity on the other hand, is the existence of circumstances which allow fraud to be conducted, while rationalization refers to the perception of individuals towards fraudulent acts as in line with their code of ethics. In short, they think that committing fraud is not wrong as everyone else is doing it. These three elements mentioned by Ramos in his studies were initially developed from Cressey's hypothesis in his doctorate research (Wells 2010) and have been widely used by other researchers in their studies.

By reviewing prior studies relating to academic dishonesty as a method of current study, this paper will draw the readers' attention to the specific cases of academic dishonesty which have been reported globally including in Malaysia. This will provides a background on the widespread phenomenon of academic dishonesty that is occurring all around the world. This paper will then discuss in detail the various definitions of academic dishonesty, the causes or factors that lead to students' cheating or academic dishonesty whether in perception or real action; by taking into consideration the elements of fraud triangle theory. Next, the paper investigates the various methods used in academic dishonesty. This paper then continues with the implications of academic dishonesty in the education system as a whole, and preventive actions to be taken to reduce the likelihood of cheating occurrences. The aim of this concept paper is to stress that academic dishonesty is no longer a trivial issue but a worrying matter which might have disastrous impact on future professions and the whole world.

ACADEMIC DISHONESTY AROUND THE WORLD

Academic dishonesty has been reported around the globe and involves various age groups. This paper will provide a few examples of academic dishonesty that were reported by the newspapers as well as academic papers in the last two decades. In Malaysia, the Ministry of Education disclosed that, in the years 2000 to 2005, during a question and answer session in Dewan Negara, a total of 1,710 students from 10 universities and university colleges had violated the provisions of the Universities and University Colleges Act (The New Straits Times 2005). Even though there was no breakdown of the figure, the top offence was cheating or copying during examinations.

The Sydney Morning Herald (2014) and Theage.com. au (2003) reported that in 2003, Newcastle University tried to cover up cheating cases of plagiarism, involving 15 international students at an offshore campus; in Kuala Lumpur, Malaysia, and subsequently two of its academics were found to be corrupted by the Australian Independent Commission Against Corruption. This is an example where a higher learning institution is gambling with its reputation if no action is taken to curb the cheating activities among students. Prestigious institutions of higher learning are not spared either.

In 1993, five Malaysian students enrolled in a twinning business degree programme between Penang College, Malaysia and Deakin University, Victoria, Australia were caught cheating on an examination by obtaining scored examination paper from Malaysia that had been mailed back from Deakin while completing their study in Australia (Cizek 2010).

The Wall Street Journal (2009) reported a number of cheating cases involving colleges and universities in the United States. In 2007, 34 students at Duke University collaborated on an individual take-home open-book test and subsequently were expelled, suspended or failed. In 2004, a number of Professors at University of Maryland posted "wrong" examination key answers on their websites to catch students who were using PDAs or mobile phones during the final examination and; as a result, 12 out of 400 students failed as their answers were copied from the websites. In 1994, 134 United States Naval Academy students somehow obtained the examination paper early and as a consequent 24 students were expelled. In 2001, University of Virginia expelled 45 students and revoked the degree of 3 graduate students due to plagiarism of assignments. In 2007, nine students at Indiana University School of Dentistry were expelled, 16 suspended and 21 reprimanded as these students had hacked the university's computer system that contained the examination questions.

In addition, The New York Times (2012a) reported that Harvard University suspected as many as 125 students might have been involved in cheating by collaborating in groups for an individual take-home final examination. Meanwhile, The Australian (2012) reported that 30 students at Victoria's Deakin University were found guilty of plagiarism and as a result nine students were expelled. Further, The Advertiser (2013) reported that in 2012, University of Adelaide had 95 plagiarism cases and 32 cheating cases while Flinders University had recorded 231 cases of 'academic integrity incidents' which include plagiarism and cheating.

Such trends of cheating at higher institutions might actually have started at schools or junior colleges. The Office of Qualifications and Examinations Regulation (Ofqual) of the United Kingdom (Business Insider Malaysia 2014) reported that the cheating cases involving students ranging in age from 16 – 18 in secondary schools mainly involved bringing unauthorised material into the examination room. There are 71% of the cases were linked to mobile phones or other electronic communication devices. Next, there were also 620 cases relating to plagiarism, copying from other students or collusion. However, perhaps due to stricter rules and regulations, the trend for cheating cases in the GSCE and A Level examinations in the United Kingdom is decreasing in number. Nevertheless, the most worrying trend of cheating is related to "giving of inappropriate assistance" by college staff, which contributed to 69% of total cases involving college staff (Business Insider Malaysia 2014).

The New York Times (2012b) further reported that at least 80 students at Stuyvesant High School, a prestigious Public High School in New York City, United States were involved in cheating activities by sharing information via text messages during examinations. A survey by the school's magazine involving 2,045 students in March 2012 revealed that at least 80% said they had been involved in cheating activities. Therefore, it seems cheating might be a common phenomenon at high school level. Moreover, a survey by Josephson Institute of ethics (2012), involving 23,000 high school students also found that at least 51% of students (59% in 2010) admitted that they had cheated on a test.

The above cases on cheating prove that academic dishonesty can occur in any stage of education; in the universities, colleges and high schools. These cases have demonstrated the widespread inspection of this 'virus' in the various academic areas and thus immediate action from various parties is necessary to look for the best 'antidote' for this problem.

DEFINITION OF POLLUTION OF ACADEMIC INTEGRITY

Numerous literatures which discussed on academic integrity have used different terms to represent the pollution of academic integrity. Among the most cited terms are cheating, plagiarism, academic misconduct, academic dishonesty and academic fraud.

Stephens (2008) indicated that there is no consensus in the definition of cheating in the academic field as it can be defined as specific as violation of an institution's policy on honesty and as general as leaving the definition according to students' interpretation. This argument is similar to Quaye (2013) who stated that there is confusion regarding the definition of cheating especially when it involved collaboration outside of class work. However, Stephens (2008) defined cheating as an action that involves an act of deception, fraud or betrayal and added that it resulted in cheaters gaining unfair advantage over others. Furthermore, Stephens also concluded that academic cheating can be defined as using unauthorized or unacceptable means in academic work which include lying, plagiarism, using crib note during exams and forging documents. Fawkner and Keremidchieva (2004) defined cheating in similar terms as Stephens (2008) which is using unauthorized information. However, they argued that cheating should not focus solely on academic areas only as it also occurs in the society.

Meanwhile, an earlier study by Taylor (2003) defined cheating as sitting for an exam in a dishonest way, having improper access to answers and violating rules or agreements. In addition, Taylor also argued that cheating should not only focus on students because teachers could also be involved in cheating. The examples given include erasing incorrect answers or giving students advance access to standardized test questions. A study by Sheard and Dick (2003) defined cheating by dividing it into four categories which are (1) exam cheating, fraud, plagiarism, (2) major plagiarism, (3) minor plagiarism and (4) unacceptable assistance. The first category was defined as cheating practices in examinations and obtaining an advantage by the use of fraud. The second category was defined as the action of stealing or copying other students' answers for assessment with or without their knowledge. Third category was defined as extracting material from books, websites or students. The last category was defined as illegal collaboration to complete any task given.

The definition of cheating also includes an element of plagiarism. According to O'Connor (2003), different disciplines interpret plagiarism differently. Among some of the definitions of plagiarism include cheating in assessment by presenting others' work (peer) without acknowledgement, giving or receiving unauthorized academic assistance and materials from the internet. Fawkner and Keremidchieva (2004) defined plagiarism as intentional application of others' work without acknowledgement to gain academic advantage and can range from a simple substitution to the most sophisticated rearrangement of ideas. The definition of plagiarism by Taylor (2003) is also similar, which is the use of another person's work or ideas without proper acknowledgement.

Therefore, any action of representing another's work as our own without acknowledgement should be considered as plagiarizing of other people's work.

Academic misconduct or dishonesty has also been discussed in various literatures on academic integrity. Hughes et al. (2002) found that the University of Guelph defined academic misconduct as offenses against the academic integrity of the learning environment. Furthermore, they classified academic misconduct into academic dishonesty, misinterpretation of personal performance and damage to the integrity of scholarly exchange. The researchers also observed that with the advancements in technology, academic dishonesty is also prevalent in online education. A study by Adkins, Kenkel and Lim (2005) which examined the deterrents to online academic dishonesty highlighted that numerous educational institutions now offer online courses or programmes. However, the online medium of course delivery creates plenty of opportunities for students to engage in academic dishonesty. Among the acts of online academic dishonesty defined by Adkins et al. (2005) includes using online websites offering services to do assignments (paper mills), students plagiarizing online content in their assignments, using gadgets (cell phone) to copy notes during exams and using "ringers" service where students hire representatives to take their exams.

On the other hand, Malgwi and Rakovski (2009a) defined academic fraud as an intentional action by an individual to obtain unfair advantage in academic performance by doing things like cheating, lying, stealing and plagiarism. In contrast, Hayes et al. (2006) did not specifically define the term academic fraud. However, they list out the actions that can be considered as academic fraud. They are; giving, taking or receiving information from other students, using prohibited materials to complete any tasks given and making use of others' weaknesses to gain an unfair advantage.

Why Do Students Cheat?

The factors for cheating have long been of major interest to researchers in numerous studies for quite some time. Furthermore, an alarming increase in the rate of cheating has caused various reasons or factors towards academic cheating to be discussed from many perspectives and theories. For instance, Kalhori (2014) despite of non-supportive evidence from his research that rapport between students and teachers may encourage cheating, but it is also clear from the study that students' cheating habits relates to some other variables such as culture, school environment, poor teaching, students' financial situation, age, gender and so forth. However, this paper aims to discuss the motives for academic cheating from the perspective of the fraud triangle. The fraud triangle elements consist of three components which are identified as pressure, opportunity and rationalization. These three components of fraud triangle will be used to explain the reasons behind academic cheatings.

PRESSURE ELEMENTS

Compared to other elements or components in the fraud triangle, pressure remains as the most common reason on why the students are likely to engage in cheating behaviour. This has been proven in a study by (Widianingsih 2013) where she stated that the pressure or incentive variable has a significant value to the cheating behaviour among the students. Research by Malgwi and Rakovski (2009b) also supported Widianingsih's (2013) findings, based on the consistency of the students in their study ranking the pressure element as the most important components in the academic triangle. This is followed by opportunity and rationalization elements.

The pressure among the students can originate from many factors. The most common source of pressure comes from a commitment to have a higher grade (Park et al. 2013). This behaviour is commonly seen among the students who have lower grades. The feeling of pressure is progressively felt especially for the students with lower grade points compared to the students who have better grade points. A number of previous studies have observed that students with lower grade point average are more inclined to engage in such behaviour (Hogan & Jaska 2000). Furthermore, fear of failure also contributes to the cheating behaviour (Monica et al. 2010; Sheard & Dick 2003) especially for those who are already receiving low scores. The possibility of failing due to poor performance in attaining a good score has caused the students to be deceitful. Batool, Abbas and Naeemi (2014) discovered that this behaviour is not limited to students who are low achievers as their study indicated that the students with high grade points might also be potential cheating candidates. However, instead of the aspect of avoiding failure, such students are inclined to cheat because they desire to have higher grades (Park et al. 2013; Raines et al. & Schiff 2011); Agud 2014; Smith 2008). These students perceive cheating as a way to achieve success (Raines et al. 2011) and it gives them a sense of self-achievement (Orosz & Roland-Lévy 2013; Brent & Atkisson 2011).

In addition, the cheating behaviour can be explained through financial pressure where the students might be facing the loss of financial aid by losing scholarship or parents' allowance withdrawal if they do not perform well academically (Malgwi & Rakovski 2009b). Moreover, for those students who are self-sponsoring their study like part-time students, the financial pressure has also given them more reasons to cheat (Faucher & Caves 2009) in order to finish their studies quickly rather than extending and incurring more costs. Besides, the pressure suffered by the students can be related to their workplace as well (Ruto et al. 2011). The pressure from having to work whilst studying has resulted in cheating as an easier

solution to achieve the goal. Students argued that; time constraints (Park et al. 2013; Smith 2008); and lack of preparation for assessments (Batool et al. 2014; Ruto et al. 2011) have motivated them to cheat as an easy way out. The students see cheating behaviour as a useful tool to attain whichever goals they need to accomplish.

The students' parents themselves could be another source of pressure. Their urge for their children to succeed in meeting their expectations has led the students to feel pressured and burdened with the situation. Instead of feeling that their parents are trying to help or support them, the students see such urgings from their parents as pressure. The students feel pressured to impress their parents with their achievements (Niels 1995). However, this parental pressure factor does not have any significant findings in a study by Batool et al. (2014). This indicates that the requirement or obligation to do well in academic by parents does not significantly contribute to the students' cheating behaviour. Furthermore, past studies regarding cultural issue have shown that it is the international students who tend to engage in cheating behaviour because of language barriers and instruction ambiguity from the instructors (Smithee 2009). These students did not understand their lecturers because they were not competent in the medium language of instruction and thus the instructions were unclear to them. This scenario may lead to the foreign students' misconceptions and misinterpretations which have resulted in cheating becoming the best solution.

Furthermore, Stanculescu (2013) argued that students who desire to preserve good image with their peers (peers pressure) may also be involved in academic dishonesty. Her findings show a significant relationship between students with high level of 'shame-proneness' and 'guilt-proneness' and low levels of academic cheating behaviours. It is fascinating to see how some students are indulging themselves in the cheating arena owing to sensational seeking purposes (Faucher & Caves 2009). These types of students are looking forward to experience such behaviour and ready to face any risks in the undertaking.

OPPORTUNITY ELEMENTS

The students tend to cheat when the opportunity to cheat exists. It offers an opportunistic environment where students may engage in academic dishonesty without being punished. Most of the studies blame the faculty and instructors for the occurrence of opportunities for cheating. Prenshaw, Straughan and Albers-Miller (2001) suggested that lenient lecturers may have the potential to damage the university reputation. This is because their attitude may nurture the cheating behaviour as a common practice among students. The poor in-class deterrents (Smith et al. (2002) and unobservable actions (Hutton 2006) also contribute to the cheating behaviour. In Haswell, Jubb and Wearing (1999), they found that a substantial amount

of students will cheat if the risk of detection is zero and 40% of the sample were ready to cheat even when the risk of detection increase to 10%. Therefore, they suggested a penalty to make risk detection more effective. But from the findings of a study by Simkin and McLeod (2009), it seems that the fear of penalties does not contribute to the reduction of cheating behaviour.

The role of faculty also contributes to the cheating behaviour engagement. Lack of academic integrity culture (Hughes et al. 2002), low enforcement (Engler et al. 2008), ineffective honour codes (Agud 2014), and rarely investigating the cheating cases (Scott 2001), as well as reluctances to report any cheating cases (Hutton 2006) will contribute to the opportunity for students to engage in such negative behaviour. In addition, the nature of online courses itself offers even more opportunities for students to cheat (Raines et al. 2011; King et al. 2009; Miller & Young-Jones 2012; Keresztury & Cser 2013). Students may download any free assessment available on the internet as simple as copying and pasting without crediting the source. Futhermore, Witherspoon et al. (2012) found that contemporary cheating usually occurred inside of the classroom while traditional cheating commonly occurred outside the classroom setting.

RATIONALIZATION ELEMENTS

For the third element, rationalization, students tend to justify or neutralize their academic dishonesty in order to minimize the damage that has been done by cheating. The most common factor of rationalization is students cheat when they see everyone else doing it as well (Błachnio & Weremko 2011; Crittenden et al. 2009). When they perceived that other people cheat more than they do, they then have an increased tendency to cheat (Rettinger & Kramer 2009). The study further found that the percentage of cheaters increased with the participant of the fraternity due to too much time spent with the fraternity. The students are also subjected to the perception of peers' dishonesty and collegues' cheating behaviour (Farnese et al. & Paciello 2011). If their peers approve of the cheating behaviour, they would then engaged in such dishonesty. Basically student cheats because they are looking for approval. Thus Smith et al. (2002) proved that alienation, the feeling of isolation also result in cheating behaviour. Additionally, most students put the blame on instructors citing reasons such as poor pedagogy and academic setting (Murdock et al. 2008), poor conduct and teaching (Carpenter et al. & Passow 2006a), and ambiguity of instructions (Smithee 2009). This is in line with the studies by Brent and Atkisson (2011), and Roig and Caso (2005) that condemning the condemners appear to be the most common reason why students cheat. Both studies also found a considerable support for denial of responsibility by students as the top reason for cheating behaviour as well. Futhermore, Crittenden et al. (2009) found that cheating is common among students from corrupt or deemed corrupt countries

but findings in Simkin and Mcleod's (2009) study on culture dissaproved of such view.

There are also studies which have found other factors aside from the fraud triangle perspective. These factors sometimes are viewed as the profile of the cheater which more or less can contribute to the cheating behaviour. Those factors include the gender of cheaters. The studies on gender as a factor however have never found a conclusive result as it always gives mixed results. Some of the studies discovered that males are more incline to commit academic cheating (Hughes et al. 2000; McCabe et al. 2001; Smith et al. 2002; Hogan & Jaska 2000). However in a study of Miller and Young-Jones (2012), gender as a factor was not significant in the research.

The next factor which has contributed to academic cheating is age. Most of the studies found that the younger ones have a higher propensity to engage in academic dishonesty behaviour (Hughes et al. 2000; Prenshaw et al. 2001), compared to the older ones. This result is in line with the study of Elias (2009) where he found that those who are over 25 years old (non-traditional age) viewed cheating outside classroom as most unethical. In contrast, Hogan and Jaska (2000) found that seniors are more inclined to cheat. Thus, Smith et al. (2002) have concluded that age is not a significant predictor for cheating behaviour. Moreover, there is a growing concern as most of the students who undertook a business major were found to have a higher propensity to cheat (McCabe 2005; Elias 2009). They seem to be more tolerant of unethical behaviour than their non-business major peers and this attitude might be continued and practiced in their future professions (Smith et al. 2002).

Personal moral philosophy can also be a good predictor of cheating behaviour (Crittenden et al. 2009). Simkin and McLeod (2009) suggested that moral philosophy can deter the attitude of cheating. Sierra and Hyman (2008) found the same result but this factor is mediated by moral intensity before a student proceeds with cheating behaviour. Khodaei et al. (2011) observed that the commitment to discipline and a lower socio economic status have resulted in less cheating but this still depends on inner motivation for the latter factor. Giluk and Postlethwaite (2015) conducted a study on the relationship of each of the Big Five personality traits to academic dishonesty and they found that students who are highly in conscientious and agreeable are less likely to cheat.

METHODS OF ACADEMIC CHEATING BY STUDENTS

Academic cheating or academic dishonesty is an unethical behavior that involves undergraduates as well as postgraduates (Metwally 2013).There is extensive literatures pertaining to the methods and techniques used by the students to perform cheating. As such, Hayes et al. (2006); Faucher and Caves (2009) classified three areas of innovative cheating techniques that can be carried out during the examinations, writing papers, with group work, or during clinical practice. These categories are 1) students will take, give, or receive information from others during the examination; 2) the use of forbidden materials and information such as the cheat sheets that are hidden under the table, calculator, or restrooms and any other places that are possible to hide the notes; and 3) circumventing the process of assessment where a student simply does not attend the exam and tries to get the questions from their colleagues. Such techniques will allow the students the possibility to prepare better for the next occasion or if he/she is able to get the questions before the exam ends, he/she can solve the quiz in an uncontrolled environment and start the exam late (Keresztury & Cser 2013).

The term plagiarism has also been used very often in academic cheating discussions. As can be seen in Fawkner and Keremidchieva (2004); Taylor (2003); Park (2003) and Niels (1995) who focused on plagiarism issues among students from various perspectives. As cited in Park (2003), among the types of techniques used to plagiarized are cheating on tests and assignments, falsification of data, plagiarism, inappropriate use of resources, taking credit for work done by others and manipulation of academic staff (Raffetto 1985; Saunders 1993; Ferrell & Daniel 1995; Baldwin et al. 1998). Park (2003, p. 475) also mentioned authors such as Wilhoit (1994); Brandt (2002); and Howard (2000) who, listed out four main ways for the students to plagiarized namely: (1) stealing material from another source and passing it off as their own; (2) submitting a paper written by someone else (e.g. a peer or relative) and passing it off as their own; (3) copying sections of material from one or more source texts, supplying proper documentation (including the full reference) but leaving out quotation marks, thus giving the impression that the material has been paraphrased rather than directly quoted; and (4) paraphrasing material from one or more source texts without supplying appropriate documentation.

A study by Witherspoon et al. (2012) examined the frequency of engagement in academic dishonesty among undergraduate students at a large urban college and explored the use of traditional cheating methods and contemporary cheating methods. In their study, the traditional cheating methods include cheating inside of the classroom, cheating outside of the classroom, and plagiarism, whereas the contemporary cheating methods include the use of computers and internets, personal data assistants (PDAs) and also cell phones. The use of high technology devices such as phones, micro recorders, iPods, cameras, ultraviolet pens and the usage of internet access are also new techniques widely used by the students (Faucher & Caves 2009). Even an electronic device such as a handheld scanner also serves as a useful tool for the students to cheat (Underwood & Szabo 2003).

Meanwhile Keresztury and Cser (2013) added that; the examinations held in computer labs not only

allow a great opportunity for cheating but it also affects security issues as well. Furthermore, Seitz et al. (2011) investigated the video sharing website www.youtube.com for the presence of instructional videos that teach students how to cheat on academic work. Their study's results suggest that; instructional cheating videos are popular among students around the world and the positive viewer feedback indicates that the videos have educated and motivated students to put the methods of cheating found in the videos to use. Besides the YouTube channel, another way for students to cheat electronically is through electronic communication that facilitates the exchange of work across institutions. According to Underwood and Szabo (2003), "students may use research papers purchased or downloaded from web sites such as http://www.schoolsucks.com. Many of these term paper sites offer papers at no charge. The researchers further said that, "The Evil House of Cheat" (http://www.cheathouse.com) claims more than one million hits". The existence of these websites could result in negative implications in the academic field as students may hire someone else to do their assignments and research papers.

IMPLICATIONS AND PREVENTION

Academic dishonesty will certainly contribute to negative consequences. Despite the rationalization element in the Fraud Triangle, the public at large and in general are well aware that cheating, plagiarism, academic misconduct and any other related terms to pollution of academic integrity are truly in contrast to good culture that should be exhibited in any nation and thus should not become a habit among students. The academic dishonesty among college students is rampant (Jordan 2003) and it can result in short-term and long term consequences. Some of the short-term consequences are, it will damage the reliability of the students' performance and evaluation in education and those who cheated will have an unfair advantages compared to other students, while for the long-term consequences, cheating will result in the students developing unethical behaviours such as lower ethical sensitivity and always pretending to have a good attitude when they become employees (Carpenter et al. 2006b).

In addition, Khodaei et al. (2011) stated that graduate students with cheating behaviour might develop unethical and non-professional behaviour, irresponsible attitude and they also tend to be dishonest in relationships. This inappropriate attitude will continuously result in a negative influence in their workplace (Nazir et al, 2011) when they are employed as an employee such as accountants, lawyers, engineers and other kinds of jobs offered. Their attitudes may then significantly bring about risks of uncommon mistakes, damages and losses to the employers as well as the society. For example, in the nursing profession, a patient's health and life can be at risk when students obtained higher GPA due to cheating,

easily getting the job and then working without solid knowledge and qualification (Park et al. 2013).

Similarly, Hogan and Jaska (2000) agreed that cheating will produce graduate students without sufficient skills and their dishonest behavior may; then subsequently ruin the image of the professional qualifications gained by them. Moreover, the researchers suggested that dishonesty among employees may abolish the trust and confidence of the managers. Thus, students who are involved in academic dishonesty are more likely putting themselves to be seen as a person who likes to break the rules (Hensley et al. 2013) and this will certainly demolish their image in the future.

Looking at the ever increasing attitude of cheating and all other sorts of academic dishonesty, actions and steps should be taken in order to reduce or in fact prevent it from happening anymore; not only in a student's learning environment; but the workplace as well. Keresztury and Cser (2013) stated that academic dishonesty among students can be prevented by focusing on these two tiers; organizational and technical. The relevant organizations or institutions should have one solid policy that clearly clarify the aids which are allowed and not allowed to be brought in the exam hall, explain the responsibilities of teachers clearly and ensure the availability of proctors to help in preventing academic dishonesty. The consequences of students caught involved in academic dishonesty should also be described in detail. Additionally, Faucher and Caves (2009) suggested that the policy should be clearly explained during academic integrity events that involve students' participation.

For the technical part, they suggested that high-tech cheating method should be prevented especially when the examinations are held in the computer labs. The researchers recommended the following methods for high-tech cheating prevention. Internet access must be blocked either by firewall or internet restriction during the examination; disable the copy function in the browser to avoid the questions from being copied electronically, distribute the question on paper or beam the questions on the wall using a projector instead of giving the questions in a single file of softcopy to avoid the file being transferred out as an attachment, forbid the use of hand phone and censor the uninvited traffic by installing a content-sensitivity proxy. Faucher and Caves (2009) further stated that the faculty should also remind the students regarding the usage of forbidden aids such as calculators, MP3 players and headsets. In addition, when it comes to writing assignments or term papers, the faculty should consider enforcing a requirement for drafts, outlines of submission, bibliographies and references used by the students as well as using software like turnitin.com and others to detect cheating among the students. (Jurdi et al. 2012).

Furthermore, McCabe (2005) stated that integrity is the key to prevent academic dishonesty; and the institution and the faculty should take part to actively

promote integrity among students. He also suggested that the faculty must take further appropriate action instead of just ignoring the situation when a student is caught for cheating as cheating should not be tolerated (Hogan & Jaska 2000). There is also a need for the faculty to reduce any attempts of cheating by providing clear and clean expectations for tests and assignment. As for the institution, an honor code policy should be implemented which explains the importance of academic integrity and emphasize on the vital role of the students themselves to reduce academic dishonesty. Additionally, Park et al. (2013) cited that instead of just penalizing students who were involved in academic dishonesty, the institution also needs to care and give encouragement to its other students who are trying hard to avoid cheating but feeling disadvantaged when their friends cheated, and still succeed in their examination.

As many methods have already been introduced to prevent academic dishonesty, what is crucial is to change the social norm behaviours that assume cheating is normal and to cultivate the attitude of self-esteem among students (Błachnio & Waremko 2011).The concept of honesty and being trustworthy should therefore be elaborated to the students thoroughly (Khodaie et al. 2011). Nowadays, with the new generation of students experiencing too much exposure to new technology tools and facing pressure to obtain better results in order to compete with each other, the development of policies and procedures should be implemented in order to strengthen the academic integrity (Błachnio & Waremko 2011). However, it should be noted that the objective of these policies should not be to solely punish the students but there should be more emphasis on the achievement of educational goals (Park et al. 2013). On the whole, all these preventive actions are somehow a good initiative to reduce the elements of pressure, opportunity and rationalization in the Fraud Triangle, which have led to the occurrence of academic fraud and academic dishonesty.

CONCLUSION

Undeniably, academic integrity is a fundamental concept to the academic life in any learning institutions. Despite the importance of academic integrity, issues on academic dishonesty are no longer uncommon as they have been found in multiple studies to occur in various time periods and settings. Cheating, plagiarism, academic misconduct, academic dishonesty and academic fraud are amongst some of the most discussed elements that have various definitions on the matter. Further, it has been a growing issue when multiple cases of cheating in universities worldwide have been disclosed involving students from various races, age and gender. This indicates that pollution of academic integrity should not be taken lightly and the seriousness of such problems might have infected Malaysia as well.

Accordingly, our study has used Fraud triangle Theory as the framework to explain the factors and causes for the pollution of academic integrity. It can be seen that pressure elements is the most common factors followed by opportunity and rationalization elements. Pressure can be explained by internal or external factors that can be influenced by financial and non-financial factors. Subsequently, opportunity element exists in the environment where students engage in academic dishonesty without being punished. Meanwhile the third element rationalization, occurs when students neutralize their academic dishonesty through the perception that it is a common practice, denial of responsibility by passing the blame to the instructors for such as poor pedagogy and academic setting.

Thus, academic dishonesty as per the fraud triangle can occur in various settings be it during examinations, writing papers, with group works, or during clinical practices, tests and assignments. Common techniques used to cheat include falsification of data, plagiarism, inappropriate use of resources, taking credit for work done by others and manipulation of academic staff. Consequently, academic dishonesty could cause unethical and non-professional behaviour that may result in risks of uncommon mistakes, damages and losses to the employers as well as the society.

To prevent academic dishonesty, any elements as per the fraud triangle must be ceased to exist. For instance, integrity element among students, institution and the faculty inclusive of the stakeholders as a whole must be embedded to prevent pressure element. Inculcating an attitude of self-esteem among students, and being honest and trustworthy may also help to prevent misconceptions about the academic dishonesty that can lead to unnecessary rationalization elements. In terms of opportunity elements, clear policies must be established organizationally to eliminate the opportunities to commit academic dishonesty whilst technically high technology cheating methods should be prevented in the academic settings.

As discussed above, we can conclude that pollution of academic integrity could occur if there is a pressure (internal or external influenced by financial or non financial reasons), opportunity (reflected by the environment) and rationalization (denial of responsibilities). Therefore, focus can be made organizationally or technically on the three elements of fraud triangle as mentioned above in order to mitigate these issues.

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