

Prevalence of Premeditated Academic Dishonesty at University Level. A Case Study

Elisha Tadiwa Nyamasvisva¹, Atiff Abdalla Mahmoud Arabi², Abudhahir Buhari³, Fares Anwar Hasan⁴, Janagiammal Ramasamy⁵

^{1,2} Faculty of Engineering, Science and Technology (FEST), Department of Information Technology, Infratructure University Kuala Lumpur (IUKL), Kajang, Selangor, Malaysia

Received: 14 April 2020 Revised and Accepted: 8 August 2020

ABSTRACT: Academic dishonesty is a fundamental issue for the academic integrity in higher education institutions, and one that has lately been gaining increasing unwanted attention. This study reports on a survey of 128 students from a University in Selangor state of Malaysia on student academic misconduct and the efforts of institutions in curbing premeditated examination dishonesty. The aim of the survey was to determine the prevalence of academic misconduct, and to investigate the extent to which perceptions of dishonesty are shared between students and institutions, as preliminary steps toward developing effective IoT based strategies to deal with the academic dishonesty/misconduct problem. Results indicate a higher tolerance for academic misconduct by students in comparison to staff, particularly with respect to cheating in final examinations, as well as considerable underestimation by staff of the prevalence of virtually all forms of student academic misconduct. Overall, the study's findings confirm the fact that there are so many push factors towards academic dishonesty and also there is little done to prevent this phenomenon. The results also highlighted a certain level of ignorance towards the effects of cheating as well as less levels of awareness campaigns against cheating by institutions. The survey also suggests that students cheat because they know nothing serious comes with being caught cheating. The findings motivate the need for deterrent mechanisms to make it difficult for students to plan for cheating activities in examinations. Focus should shift from hunting cheaters to preventing cheating.

Keywords: Academic Dishonesty, Cheating, Premeditated Misconduct, Deterrent Mechanisms

INTRODUCTION

Good grades are the main cause behind cheating, according to Ludeman and Covington [4]. In this sense, preventing failure is the major cause that leads to cheating. Charles Drake, a clinical psychologist, conducted a 1941 research on the causes of cheating at College, and he concluded that there is behind cheating stress and pressure for good grades [6]. Trabue and Evans and Craig in [4] showed that cheating is caused by the insignificance and difficulty of testing [4]. Cornehlisen in [4] added another reason which is parental expectations.

Moreover, students deceive because they are lazy [4], because they are exposed to peer pressure and lack of revision [12]. Similarly, Smith et al. [21] offered four reasons for cheating in examinations: "requirements for graduation, competition for grades, heavy workload and inadequate study time" [4]. In addition, Zastrow in [4] claimed that cheating is caused by a lack of study time due to the part-time work of the students, "extracurricular activities," no planning for the exam, "bad teachers," and "insufficient time to complete the exams" [4].

Students argue that "ten minutes of stealing is better than two hours of training". This is because students are unsure of how to spend time in learning because they are not inspired to rewrite their lessons. Furthermore, Haines et al. found that students cheat because of "neutralization," which Cizek [4] describes as "denial of responsibility for wrongdoing because of the wrongdoing of others". It involves learning situations created by others serving as an excuse for unethical actions by the students. A shocking factor proposed by students is the easiness of cheating in college [6]. It is noted that neutralization is supported by the students claims in this write-up. Besides, a bad relationship with the lecturers probably causes cheating [6].

The bystander effect.

Examination misconduct is usually facilitated by what has been termed the bystander effect. The bystander effect, or bystander apathy, is a social psychological claim that individuals are less likely to offer help or raise an alarm to a victim or culprit when other people are present, the greater the number of bystanders/onlookers, the less likely it is that one of them will help. Social norms are generally agreed to be important determinants of human behaviour [1][3][16-20] as they are unique to specific groups, where each group sets its own expectations for appropriate and

attractive attitudes or behaviours. In another group, what is considered normative for one group may be seen as a counter-normative. For example in examination situations, a whistle blower to a cheating incident will be seen as an enemy of progress and might suffer exclusion from the both who believe cheating is good and those who believe it is bad.

Although social norms often work against our need for individualization [2] and our desire to take charge of events in our lives [5], they also serve as important functions in the life of the group. Social norms contribute to the identity of the group [2], they create a sense of belonging [21], they provide guidance for the individual. It is not surprising, given how important social norms are to the life of a group, that individuals usually adhere to group norms [21]. Those who participate in deviant behaviours are often the perpetrators of other group members which exert pressure to achieve compliance [17]. The process is called "social regulation" [5]. For the present purposes, and in line with past literature, we describe social control as any verbal or nonverbal communication through which individuals demonstrate to another person that they disapprove of their deviant (counter normative) conduct. This is very synonymous in examination situations as students become scared that the next person might be caught cheating and get punished and they would rather assist in deceiving authorities by destruction and other means.

It should be remembered, however, that a number of activities related to social dominance have been defined with the word 'social control.' A scenario demonstrating our use of the word social control is one where a couple sees another person cheating in an examination and hiding paper notes. Cheating is considered a deviant behaviour in most societies [13]. The persons may agree to ignore the cheating. Or they might agree to convey in some way to the deviant that they disapprove of his or her actions. Group members behaving normatively are seen to be smarter, more knowledgeable, more optimistic and more honest [8][14]. Deviant group members, on the other hand, are in a difficult position: their fellow group members do not like them, their opinions are ignored, unpleasant roles are allocated, they receive less rewards and attempts are made to exclude them from the community [7][9][10][17]. The classic work on 'group thinking,' [14] discusses the cruelty with which opposing group members are related or 'cut out of the loop' through highly integrated communities. This all discourages people to willingly and confidently denounce cases of academic dishonesty.

Procedure

To ensure its validity and reliability the designed questionnaire was pretested with a sample of 10 respondents. The primary-purpose of pre-testing validity and reliability was to increase the accuracy and usefulness of findings. Since the questionnaires were distributed only to valid students who are currently enrolled with the university, descriptions such as authenticity, contingency, credibility and confirmability, are assured in this research. The mode of distribution was through University portal and could be available within the University LAN only. Reliability refers to the degree of consistency of scores obtained by tool or consistency demonstrated by the tool. Google forms is a reliable method of distributing and collecting data as long as the respondents are well defined and placed within a demilitarized zone of a network, as in this case. Responses from data collection instrument were subjected to statistical analysis to determine its' reliability and validity towards this research.

Analysis of Questionnaire Responses

Section A Demographics

A total of 128 valid responses were collected from this survey from respondents from three faculties and one centre. The responses were analysed in different sections.

Demographics

Sex	Percentage
Male	74.2%
Female	25.8%
Local Students	36.7%
Foreign Students	63.3%
Below 21	14.1%
Age 21 - 24	64.8%
Above 24	2.1%
Bachelor's Degree	87.5%

Diploma	8.6%
Postgraduate	3.9%
Fulltime Study mode	98.4%
Sponsorship (MARA, PTPTN etc)	48.4
Scholarship	8.6%

Push and Pull Factors towards Examination dishonesty

Study related pressure has been identified as one of the factors which leads to examination misconduct. To have an in-depth understanding of the relationship between pressure and studies an analysis was done to survey responses on the following questions as shown in table below.

Examinations and Cheating

	When do you feel most pressured (Factors)	Yes		No	
		Count	%age	Count	%age
1	Before examinations	107	84%	21	16%
2	During lectures	58	45%	70	55%
3	While preparing for examinations	115	90%	13	10%
4	During examinations	93	73%	35	27%
5	After examinations	35	27%	93	73%

The survey gathered that 45% of the students are not under pressure during lectures and 27% are relieved of the pressure after examinations. Study pressure has been recorded high before examinations at 84%, while preparing for examinations at 90% and during examinations at 73%. The correlation between pressure and examinations is very high ($r = -1$) confirming that examinations are a strong pressure factor. Several push factors towards examination misconduct were identified and their effect is summarised below.

Push Factors

		Pressure Level				
		Extr eme	Ver y high	Som e wha t	Not so muc h	Not at all
1	Parents	15%	16%	38%	19%	12%
2	Extended family	12%	20%	27%	23%	19%
3	peers	8%	16%	45%	20%	12%
4	Scholarship	16%	23%	25%	15%	21%
5	Sponsorship	20%	19%	23%	13%	27%
6	Lack of Preparation	19%	28%	35%	10%	8%
7	Lack of study Motivation	19%	31%	32%	12%	6%
8	Lack of University	18%	30%	29%	16%	7%

	guidance					
9	Lack of family Guidance	6%	16%	34%	21%	23%

Views on cheating and academic misconduct

The candidates mind is configured *Tabula Rasa* (an absence of preconceived ideas or predetermined goals; a clean slate.) initially and all the actions they do are acquired through various means. Before a thought is cemented to become an action some useful intervention can be done to either accept it or deny it. In most instances the students do not have an idea about cheating in exams until a time when it is introduced or it becomes the only satisfying option. It all starts as a thought then matures into action. A series of questions, TABLE IV, were asked to determine the views of the students towards cheating. 65% of the students said they have never thought about cheating in examinations and 13% actually converted these thoughts into action. Of the 13% only 5% have been caught cheating. Which translates to a 62% success rate. This is an alarming statistic which confirms that the system is not efficient enough to stop cheating. If all the candidates in an exam have a cheating mind set then only 28% will be caught or stopped from cheating while the rest will benefit from their efforts. The appalling statistic is that 73% of the candidates who have taken an examination have witnessed a cheating candidate. A good 63% have witnessed a cheater being caught but only 24% of the caught candidates are reported to brought to book. Out of the 24% brought to book only 28% are punished for their offenses. These statistics highlights the weakness of the system in punishing the culprits. Examination cheating is the worst crime in academic circles yet offenders are let loose. This just encourages or motivates the other students to take this route. It is rewarding.

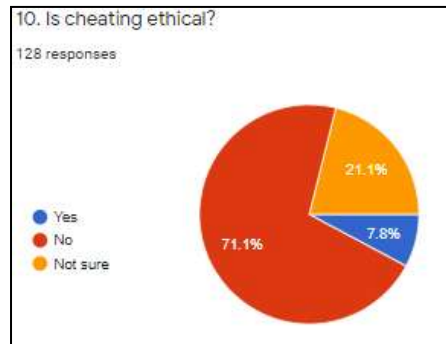
Students as Witnesses to Misconduct

		Yes	No
1	Have you ever thought of cheating in exams?	35%	65%
2	Have you ever cheated in exams?	13%	87%
3	Have you ever been caught cheating in exams?	5%	95%
4	Have you ever seen or witnessed anyone cheating in examinations?	73%	27%
5	Have you ever witnessed anyone being caught cheating in an examination?	63%	37%
6	Do you know anyone brought forward to the disciplinary committee for cheating?	24%	76%
7	Do you know anyone penalised/punished for cheating in examinations?	28%	72%

Ethical issues relating to examinations

The respondents were asked if cheating was ethical. 71.1% said no while 21.1% of the respondents were not sure. A significant 7.8% believed cheating was ethical which is very alarming. If university students do not know or believe that an act of cheating is unethical, they are bound to try it at one point or another. A strong awareness campaign should be launched to educate and discourage students and make them aware of the consequences. Three very important issues were asked to the students to (i) gauge their ethical awareness, (ii) evaluate their time distribution and (iii) to see if the university is doing enough to guide and counsel the students. Examination misconduct is discouraged by the behaviour of the other students and even more importantly the consequences of such misconducts. Informal deterrence involves social sanctions and even loss of dignity and in some cases humiliation. But are these strong enough to deter examination misconduct? Rational choice theory put forward by Cesare Beccaria in the 18th century is based on the expected utility principle which states that people will make

rational decisions based on the extent to which they expect the choice to maximize their profits or benefits and minimize the costs or losses.



Views on cheating

The premise behind this theory is that, “crime occurs after one has weighed the costs and benefits of the crime”. People act to maximize profits and minimize costs/ losses and crime is a choice made by the offender. If the offender commits a crime and the benefits of the crime outweigh the punishment, then there is motivation for committing the crime is high. In line with this theory, if university students do not feel the pinch of examination misconduct they are bound to do it because the result is always rewarding. they come to college to get grades and that is exactly what they will get if they cheat. so cheating consequences should be harsh to out weight the benefits.

(i) reporting your colleague will help them fear humiliation and therefore deter them from cheating in examinations. Knowing that the person next to me does not support my act is good enough to discourage. In this survey 64% of the respondents will not report a cheating case if the witness it. This gives confidence to the cheating candidates. There are several reasons why one would not report a cheating case of which one has to make a rational choice, what do I gain or how will this benefit my friend if I report them.

(ii) why would one want to cheat in examinations? Mostly because of fear of failure, not lack of time for preparation. Because the offender makes a choice on how to use their time, prepare to cheat or prepare for examinations. The reward for preparing to cheat is always assured compared to the reward for preparing for examination which is a gamble. The responses to this question were 49% to 51% with the majority having no enough time to prepare for examinations. This is the pool of possible offenders because their time is misdirected and used to prepare for otherwise.

(iii) To know the benefits of NOT cheating you have to be aware of the dangers of doing so. Most of the students will only know after they have tried it and get caught. There is no formal system in the university to guarantee that the students are made aware of the consequences of cheating so that they can make some rational decisions. If the institute is serious about reducing or limiting the cases of misconduct, then a platform should be there and visible to all students. The guidance and counselling sect of the institute focuses on correction of convicted offenders. What good does it bring? what guarantee is there that the one-time offender will not do it again? 78% of the students have never gotten / received any guidance from the university. Majority of the 22% who have been counselled was after they have been identified as offenders. It means that focus is on identifying offenders and trying to correct their behaviour rather than being on preventing the misconduct after all.

Views on Cheating and willingness to take action

	Question	Responses	
		Yes	No
1	Would you report anyone cheating in an examination?	36%	64%
2	Do you have enough time to study for examinations?	49%	51%
3	Have you ever received any guidance and counselling from the university?	22%	78%

This section of the paper analyses responses to students on proposed methods of preventing cheating rather than fishing out culprits when offence had been committed. Cheating is not easy and it takes a lot of planning and

reasoning to execute. The theory of reasoned action (TRA) suggests that a person's behaviour is determined by their intention to perform the behaviour and that this intention is, in turn, a function of their attitude toward the behaviour and subjective norms. The theory of planned behaviour (TPB) and the theory of reasoned action (TRA) have been used to successfully plan and evaluate numerous interventions for many different behaviours. The aim of this study was to systematically review and synthesize TPB and TRA-based examination misconduct interventions targeting University students. In doing so the following questions as tabled in table VI below were asked to gauge the acceptance and belief of students in preventive measures.

(i) Only 16.4 % of the respondents were convinced that mixing students from different papers in the same examination room will help reduce pre-planned cheating activities. 72% agreed that this will help discourage the activity with 25.8% strongly agreeing. Students are tempted to ask, peep, or even share answer scripts in the examination room. This is done among those candidates who have trust and dependence on each other. Taking away the assurance of sitting next to their colleagues limits the dependency issue and not knowing your neighbour takes away trust dependency.

(ii) Cheating in examinations can be a lone activity or it can be a collaboration of a cluster of students. To achieve the later a lot of preplanning needs to be done. This includes even the sitting arrangements, who goes in front who is on the left and who is behind. If the seating plan is unknown to the students and the luxury of selecting their own sitting positions is taken away, the confidence of confiding in their friends will be eroded and eventually forced to prepare for the examinations. 85% of the respondents agreed that predefined seating plan from the examination management team will force the students to invest their time in examination preparation rather than planning to cheat.

(iii) Some candidates go to the extent of hiring imposters to sit for them in examinations. The examination unit of this institute have caught a number of imposters. They however admit that it was not guaranteed that they can identify all imposters if the planning was done well. The fact that a few have been caught cements the presumption that imposter cases are practical. The loophole is on the fact that the verification system is human centred. Invigilators depend on the information they are given by the candidates to verify their identity. If the verification documents are well done (carefully forged) the security personnel doing the verification will need to personally know the students. There are three common factors used for authentication which are something you know (such as a password), something you have (such as a smart card) and something you are (such as a fingerprint or other biometric method). The first and the second are the commonly used authenticating methods which have dismally failed especially in our case. These fail to have a factor which is permanently associated with their owners leaving the something you are as the only reliable factor. 89% of the respondents agree and believe that fingerprints as an authenticator can eliminate the imposter cases. 35.9% strongly agreed with that.

(iv) Majority of the respondents do not agree that cheating is done at the beginning of the examination. It is well spread activity which needs careful planning and perfect execution. At the beginning of the examination students are still too scared to try and execute. But as the examination matures the students will start to get braver and braver.

Potential solutions to premeditated cheating

		Totally Disagree				Totally Agree
		1	2	3	4	5
1	Do you agree that mixing candidates from different subject will prevent/reduce cases of cheating?	16.4 %	11.7 %	32.0 %	14.1 %	25.8 %
2	Do you agree that predefined seating positions in an examination will prevent/reduce cases of cheating?	17.2 %	10.9 %	28.9 %	19.5 %	23.4 %

3	Do you think use of fingerprint-based system will prevent/reduce imposter cases during examinations?	10.9 %	8.6 %	27.3 %	17.2 %	35.9 %
4	Do you agree that most cheating is done during the first few minutes of the examination when candidates are moving around looking for their sitting places?	23.4 %	18.8 %	34.4 %	10.9 %	12.5 %

Table Stress Factor

		Totally Disagree -----				Totally Agree
What stresses you most?		1	2	3	4	5
1	Lectures	27%	23%	31%	13%	5%
2	Projects	16%	14%	20%	26%	24%
3	Assignments	17%	19%	32%	19%	13%
4	Examinations	20%	8%	28%	19%	26%
5	Results	26%	12%	19%	16%	27%

Discussion

An Internet of Things Based Preventive Solution

Empathy is a quality which can not be taken away from human nature. It makes us as human beings vulnerable. Felling pity and being unfair are all human properties which can be abused by offenders many a times. We propose a machine-based solution with the aim of minimizing dishonesty cases through disruptive measures towards pre planning of such cases. If the candidate is not sure of success in cheating and if they are not confident of their plans they will resort to other alternatives and in this case the only alternative is being honest. An IoT based examination verification, management and monitoring system is therefore proposed. As supported by the statistics presented in the previous sections, all the weaknesses of the current human maned systems can be overcome by using technology from the verification stages, student arrangement, student monitoring, examination conduct and report preparation with documented evidence of each and every step. IoT based systems are fast and they ensure minimum human intervention thereby eradicating the weaknesses of human mentioned above. A blind source seating plan randomly generated by the computer system and information gathering using some carefully placed sensors and monitors will ensure the cheating culprits are all identified and most importantly discouraged by knowing that they are being watched. As with all systems, a strong policy must be developed, implemented and enforced to compliment the system. And to be fair the students need to be educated and always be reminded of the implications of cheating.. As proposed by Davis and his colleagues, we are suggesting a very useful forum for educating students of the reasons why it may be an effective solution to avoid cheating. Therefore a code is required to explain what shouldn't students do and what should they do instead of cheating. The existence of a student-run honour code is important tool of academic integrity for the university. It has been proven that students at such schools with honour codes typically record half the non-honour-code school cheating rates. Ironically, there is a lack of deterrence and indifference behind the excess of academic dishonesty in institutes of learning. Lecturers and examination administrators must therefore act as soon as possible if honesty is in jeopardy.

Punishment is the first practical solution which could serve as a strategy for deterrence. It could be achieved by corrective courses, through instructors or administrators.

Conclusion and Recommendations

Cheating is a dishonest activity which requires punishment as a strategy of deterrence. The authors highly recommend technology solutions not to catch the cheaters while they are cheating or after they have cheated, but to deter the would be cheaters from even thinking about it. technology can eliminate chances of premeditated cheating.

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