



Attitude towards Academic Misconduct, Cheating and Plagiarism: A Cultural & Religious Perspective

Prof. Hatem O Qutub¹, Dr. Abdul Sattar Khan², Dr. Rabel Khawaja³

¹Fellowship in Adult Critical Care and Pulmonary Medicine (Can), KFU/Saudi Board, MBBSCH,
Dean, College of Medicine King Faisal University, Saudi Arabia

²MBBS, MPH, MCPS, MMed (UK), MRCGP (UK), FRIPH, FFDFM (USA),

Head & Assistant Professor

Dept. Of Family & Community Medicine King Faisal University, Saudi Arabia

³MBBS, MPH (UK) Lecturer,

Dept. Of Family & Community Medicine King Faisal University, Saudi Arabia

Received; 27 September 2016 Accepted; 11 October 2016; © The author(s) 2016. Published with open access at www.questjournals.org

ABSTRACT

Objective: To determine the attitude of undergraduate medical students towards academic misconduct in Arab region.

Methodology: It was a cross sectional study conducted at King Faisal University, Al Ahsa Saudi Arabia in December 2015. The students were evaluated through self-reported questionnaire consisting different questions on assessing their educational dishonesty and cheating behavior.

Results: Four hundred eighty-seven students participated in the study and completed the questionnaire; of which 51% (N = 250) were males and 49% (N = 237) were females. There was a significant difference in the attitudinal response for seven scenarios, all of which were very highly significant i.e. copying answers in examination, chatting with colleague while he is done his work, copying from book without referencing, resubmitting work for another part of the course, submitted the previous year by senior, X is writing work for his colleague and writing "procedure normal" when he didn't perform ($p < 0.001$). For religious perspective, all the questions were significant in terms of year of education ($P < 0.001$).

Conclusion: Our study suggested that students are aware of the different misconduct behavior but we cannot be sure if they are indulged in certain activities or not. Furthermore, a religious perspective to be equally significant throughout however, gender difference was obvious.

I. INTRODUCTION

In an era of high demand of professionalism and competency from the physicians, it is crucial that academic misconduct should be addressed as an important element of any education, but especially for medical education. Academic misconduct in medical school produces incompetent and dishonest physicians who start their practice with same behavior and treat the patients by causing them harm. Increased rate of such misconduct among medical students affect their future and professionalism badly [1].

Academic misconduct is defined, any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community [2].

Honesty and morality are important paragons of virtue in medical profession. Despite the fact that medical students consider cheating as unethical [3], fifty-eight [1] to ninety-four percent [4] of them have been reported to admit to cheat at least once during their medical school. On the contrary, the survey conducted in University of Utah, college of Medicine suggests the opposite results where the rate of cheating among the students was found to be less [5]. It is further evidenced by research that if someone is dishonest at undergraduate level, it is more likely that he will continue this behavior throughout his studies [6]. Not only this, but these individuals have shown a positive relationship between misconduct at undergraduate level and unethical behavior at workplace [7]. Professionalism is a vital characteristic of medical profession. Unprofessional doctors usually end up in downfall towards their professional responsibilities. They

manipulate medical records, unduly hospitalize the patients for longer duration for more payments, fabricate the clinical data for research and steals other peoples' work [8]. The act of cheating is very old phenomenon. It has been in place since the examination techniques were first introduced and the trend has been continuing till date with new concerns regarding the adoption of technological devices in the modern cheating process [9]. Literature suggests that most of medical students contemplate academic misconduct to be illegal and invalid and that they would not be engaged in such act [10]. The behaviors, which lead students to indulge in such misconduct, are multifactorial and could broadly be divided as individual and environmental. Those factors may include social and behavioral development, individual characteristics, negative role models and institutional disciplines. Elzubeir & Rizk further mentioned in their study that male students were more prone to cheat as compared to females, however, Whitley [11] presents no such difference among the male and female medical students. Regarding religious perspective, Bloodgood [12] described that the relationship between religiosity and misconduct behavior could be considered as an important index in terms of religion in one's life. However, authentication of such relationship is sparse and the literature doesn't show the proper consensus due to lack of research over this perspective [13]. Literature somewhere suggests that religion might have an impact on unethical behaviour and that the religious values could possibly lead to decrease students' misconduct [13,14]. One possible reason for the disparity could be the way in which religiosity had been measured. The published work in this area includes as much as one or few simple measures of religion [15,16]. Allport [17] found that it is more important in predicting behaviour to know one's religious motivation than to which religious group he belongs.

The academic misconduct includes different behaviors including cheating and plagiarism. Sierles defines cheating as, copying from another student or from unauthorized notes during an examination, previewing the examination illegally, submitting someone else's work as one's own, falsifying experimental data, and asking another student for answers to an examination that one student had taken but the other had not [1] whereas, plagiarism is using intellectual material produced by another person without acknowledging its source [2]. Using the same definition as Sierles and the centre of student conduct California (CSC), present study focuses on the responses from medical students with respect to their perception towards the given questionnaire involving academic misconduct and determine the association between the said and practiced attitudes and behaviours in terms of religiosity. The study will further be an aid to the literature in showing the data from Arab region, which may be used to improve controlling the misconducting measures during study at medical colleges.

II. METHODOLOGY

The study is a cross sectional survey conducted in December 2015 at College of Medicine, King Faisal University, Al Ahsa Saudi Arabia. An ethical approval has been taken from research and ethic committee from the university. In 2012, the problem-based curriculum (PBL) was introduced in the college and all the students from year preparatory to 4th year (total 5 academic years) belonging to the new curriculum were included in the study. Data was collected at the end of each session in the classroom and students were informed regarding the study. After obtaining verbal consent and assuring them regarding the anonymity, students were asked to fill the questionnaire voluntarily. The questionnaire has been adopted from the study already conducted and published paper [19] with just change of names in scenario. It was divided into three parts. The first part contained questions on demographics, second part was scenario based that mentioned different scenario and check the opinion in different situations. This questionnaire already validated and pilot tested and applied [19]. In addition, one section was included as a third part that was about religious beliefs [20] and in this section the perception of students towards cheating in terms of those religious factors was checked, this portion has been checked as pilot study and found overall around 0.75 reliability coefficient. Data was collected and then entered into SPSS version 20.0 (SPSS Inc., Chicago, Illinois, USA). Descriptives analyses were performed for demographics and chi-square test was applied to compare the different groups. P - value of <0.05 was considered as significant.

III. RESULTS

Four hundred eighty-seven students participated in the study and completed the questionnaire; of which 51% (N = 250) were males and 49% (N = 237) were females (Table 1). Thirty-seven percent students belonged to preparatory year followed by 31% who belonged to first year. The percentage decreased down to 12% for each 3rd and 4th year participants and further reduced to 8% for 2nd year. Majority of the students were from preparatory and first year hence the most common age was 18, 19 and 20 years respectively.

Table 1: Demographic Characteristics

Demographic Features	Frequency (%)
AGE GROUPS	
18 Years	93 (19%)
19 Years	165 (34%)
20 Years	101 (21%)
21 Years	45 (9%)
22 Years	46 (9%)
23 Years	33 (7%)
GENDER	
Male	250 (51%)
Female	237 (49%)
YEAR OF STUDY	
Preparatory Year	178 (37%)
1st Year	153 (31%)
2nd Year	39 (8%)
3rd Year	59 (12%)
4th Year	58 (12%)

Responses towards the questionnaire based on scenarios:

For almost half of the scenarios, there was no significant difference in the attitudinal responses between the years. There was a significant difference in the attitudinal response for seven scenarios (Table 2).

All of these were very highly significant (1st year vs others year): copying answers in examination, chatting with colleague while he is done his work, copying from book without referencing, resubmitting work for another part of the course, submitted the previous year by senior, X is writing work for his colleague and writing “procedure normal” when he didn't perform (p<0.001).

Table 2: Responses towards the questionnaire based on scenarios

Scenarios	Responses	Frequency (%)					P - value (95%CI)
		Prep-Year	1 year	2 year	3 year	4 year	
Abdullah forges Dr. X's signature on a piece of work—for example, patient presentation, record of achievement.	YES	118 (66%)	112 (73%)	31(30%)	45 (76%)	41 (72%)	0.141 (0.083 - 0.146)
	NO	19 (11%)	6 (4%)	4 (10%)	4 (7%)	7 (12%)	
	NOT SURE	39 (22%)	35 (23%)	4 (10%)	10 (17%)	9 (16%)	
Abdullah copies answers in an exam from Hassan	YES	137 (77%)	149 (97%)	35 (90%)	54 (91%)	47 (81%)	0.005 (0.00 - 0.006)
	NO	29 (16%)	2 (1.5%)	2 (5%)	4 (7%)	8 (14%)	
	NOT SURE	11 (7%)	2 (1.5%)	1 (2%)	1 (2%)	3 (5%)	
Abdullah chats to Hassan about the OSCE/OSPE. Hassan has just completed and Abdullah is about to go into	YES	45 (25%)	84 (55%)	19 (49%)	26 (44%)	36 (62%)	0.0005 (0.000-0.006)
	NO	52 (29%)	21 (14%)	12 (31%)	20 (34%)	13 (22%)	
	NOT SURE	80 (46%)	48 (31%)	8 (20%)	13 (22%)	9 (16%)	
Abdullah copies from textbooks or published papers and lists them as references	YES	37 (21%)	18 (12%)	7 (18%)	7 (12%)	20 (34%)	0.288 (0.234 - 0.313)
	NO	105 (59%)	128 (84%)	30 (77%)	42 (72%)	32 (55%)	
	NOT SURE	35 (20%)	7 (4%)	2 (5%)	9 (16%)	6 (11%)	
Abdullah copies directly from textbooks or published papers without acknowledging the source.	YES	94 (53%)	122 (80%)	31 (79%)	49 (83%)	42 (72%)	0.005 (0.000-0.006)
	NO	42 (23%)	12 (7%)	2 (6%)	7 (12%)	9 (15%)	
	NOT SURE	43 (24%)	19 (13%)	6 (15%)	3 (5%)	7 (13%)	
Abdullah copies Hassan's work—for example, patient presentation, SSM report, and case discussion	YES	125 (71%)	125 (82%)	26 (66%)	40 (68%)	41 (71%)	0.19 (0.001 - 0.019)
	NO	31 (18%)	16 (10%)	3 (8%)	11 (19%)	10 (17%)	
	NOT SURE	20 (11%)	12 (8%)	10 (26%)	8 (13%)	7 (12%)	
Abdullah lends Hassan his work to look at, and he copies it without telling him.	YES	115 (65%)	114 (74%)	30 (77%)	40 (69%)	43 (74%)	0.141 (0.087 - 0.143)
	NO	44 (25%)	30 (20%)	4 (10%)	16 (28%)	9 (16%)	
	NOT SURE	17 (10%)	9 (6%)	5 (13%)	2 (3%)	6 (10%)	
Abdullah lends Hassan his work to copy.	YES	106 (61%)	94 (61%)	17 (44%)	31 (52%)	30 (54%)	0.97 (0.054 - 0.102)
	NO	46 (26%)	19 (12%)	9 (23%)	17 (29%)	14 (25%)	
	NOT SURE	23 (13%)	40 (26%)	13 (33%)	11 (19%)	12 (21%)	
Abdullah writes a piece of work—for example, patient presentation etc., for Hassan	YES	73 (31%)	96 (62%)	20 (51%)	27 (46%)	25 (44%)	0.01 (0.000 - 0.006)
	NO	54 (31%)	27 (18%)	10 (26%)	16 (27%)	17 (30%)	
	NOT SURE	49 (28%)	30 (20%)	9 (23%)	16 (27%)	15 (26%)	
Abdullah writes "Nervous system examination—normal" in his patient presentation when he hasn't performed the procedure	YES	71 (40%)	118 (77%)	29 (74%)	50 (85%)	40 (72%)	0.005 (0.000 - 0.006)
	NO	39 (22%)	11 (7%)	5 (13%)	6 (10%)	8 (14%)	
	NOT SURE	67 (38%)	24 (16%)	5 (13%)	3 (5%)	8 (14%)	
Abdullah resubmits work already submitted for a different part of the course—for example, a report for his fourth year project	YES	65 (37%)	55 (36%)	14 (36%)	19 (32%)	28 (49%)	0.166 (0.118 - 0.182)
	NO	38 (22%)	40 (26%)	10 (26%)	24 (41%)	18 (32%)	
	NOT SURE	72 (41%)	58 (38%)	15 (38%)	16 (27%)	11 (19%)	

Abdullah submits his thesis from a previous degree for his special study module.	YES	53 (30%)	67 (44%)	16 (41%)	23 (39%)	26 (46%)	0.22 (0.001 - 0.019)
	NO	47 (26%)	29 (19%)	6 (15%)	17 (29%)	18 (31%)	
	NOT SURE	78 (44%)	57 (37%)	17 (44%)	19 (32%)	13 (23%)	
Abdullah submits work submitted the previous year by his senior	YES	86 (48%)	111 (73%)	26 (67%)	39 (66%)	41 (72%)	0.005 (0.000 - 0.006)
	NO	39 (22%)	19 (12%)	7 (18%)	11 (19%)	11 (19%)	
	NOT SURE	53 (30%)	23 (15%)	6 (15%)	9 (15%)	5 (9%)	
Abdullah and Hasan submit the same report.	YES	89 (50%)	108 (71%)	26 (67%)	35 (59%)	39 (68%)	0.0005 (0.000 - 0.006)
	NO	40 (22%)	25 (16%)	6 (15%)	11 (19%)	8 (14%)	
	NOT SURE	49 (28%)	20 (13%)	7 (18%)	13 (22%)	10 (18%)	

Religious Perspective:

There were six questions on religious perspective in terms of cheating and responses were collected on Likert scale. The questions were analyzed with two variables i.e. gender and year of study. Regarding gender difference, results were found to be highly significant in between males and females for two questions i.e. responsibility (p-value 0.002) and self-accountability (p-value 0.004) respectively. However, the year of education was found to be quite significant for all the questions with p-value of < 0.001.

DISCUSSION

The present study was focused to investigate the attitude and behavioral response of undergraduate medical students towards scenarios describing academic misconduct. Approximately half of the scenarios were found to have significant results where students know what is academic misconduct and rest of the seven scenarios where there was no significant difference. Therefore, based on the results we may not argue whether they had or would consider engaging in those behavior during their practices as physicians. While taking academic misconduct in terms of religious perspective, we found a significant difference in the years however gender was found to influence only two factors i.e. responsibility and self-accountability. Unfortunately, the collected data was skewed therefore; we could not compare the results among each year. Literature suggests that students get involved in academic misconduct behavior in order to achieve good grades however they are not aware of the consequences which may affect their future professional development; and the punishment which they may face against this unlawful activity [20]. Hafeez K et al conducted a study and found that 55% of the medical students were indulged in cheating and a large number of students accepted copying assignments from their senior classmates [21]. S C Rennie [18] reported in his study that he found a significant difference among the year of study and attitude towards misconduct where first year students were not aware of the different behavior regarding misconduct. Similar results reading difference among year were suggested in 2013 by Kamran and 1996 by Baldwin [22]. This suggests that the new comers as first year students may not have a broader idea of misconduct. Increased honesty in year one in such areas reflect integrity amongst the new comers to medical school, a greater ignorance of the complexity of the issues, and/or the lack of experience or opportunity to engage in the scenarios. Different educational experiences at different institutes of the different years of students may be the influential factors towards their behavior.

A new perspective has been explored in our study which so far not being addressed in Saudi Arabia. It was related to perception based on religious faith regarding to their understanding relevant to misconduct in educational activities. Regarding religiosity and academic misconduct, we have found significant differences among the gender. Though Huelsman, M.A. suggests that religiosity and academic dishonesty were not significantly associated [23], but cannot comparable to this study as this one has checked only their perception. Another study conducted by John R. Godfrey compared the behavior among religious and non-religious school in terms of academic misconduct and he found that there was no difference among cheating patterns however, the awareness regarding such terms were well understood by students attending religious schools [24]. Burton JH found some similar results in his study conducted in business school and suggested that there were positive indications in terms of religiosity and unethical test- behaviors and students who were more 'religious' and participated more in religious activities were less likely to engage in unethical test taking practices. This may indicate not just higher ethical values in these students but also the positive impact of participating in religious activities that reinforce ethical values [25].

Our study suggested that students are aware of the different misconduct behavior but we cannot be sure if they are indulged in certain activities or not. Furthermore, a religious perspective to be equally significant throughout however, gender difference was obvious for a few factors. Due to lack of symmetrical data, we could not compare the results among the different year Nevertheless no empirical data available to depict that the data collection in Arab culture seems difficult, however in our experience, our students were reluctant to take part in the study thus results in such asymmetry either because they don't understand the questionnaire or

the new PBL system already carries a number of paper work for them which might result in the exhaustion and one more paper as research questionnaire looks burden to them.

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