ACADEMIC DISHONESTY, CRUCIAL THREATS WITHOUT A REAL DETERRENCE: MEASURING MAJOR MOTIVATORS AFFECTING CHEATING AMONG STUDENTS IN MIDDLE EAST UNIVERSITIES

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Abstract

Purpose: While the most significant principle of higher education is academic integrity, various studies have revealed that academic cheating is pervasive on various university campuses in various states. Our students are expected to be our prospects and probably the leaders of our future. The decision-makers in the field of education, especially academia, must refine and correct all students' deviation in terms of beliefs, perceptions and morals, as these will one day be reflected in their decisions.

Design/methodology/approach: This empirical study explores the causes, consequences and methods of student cheating in the private and public universities in Bahrain. It evaluates the impact of effective motivators (factors) on academic dishonesty. We conducted a survey of 210 graduate and undergraduate students in two universities (one private and one public).

Findings: The results of this study revealed that some factors such as class size, class level, the lack of warning and deterrence, lack of response to the exams' rules and regulations and competitive pressures can significantly influence the prevalence of academic cheating.

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Originality/value: Thus, the value of this research is to see whether these factors are still relevant, despite the different culture, environment, traditions and conventions.

Keywords: Cheating, Academic dishonesty, Academic integrity, Ethics

Paper type: Research paper

INTRODUCTION

University education programmes aspire to prepare students not only for positions of responsibility in the 21st century's global marketplace, but also for a status where there will be vocations that have yet to be introduced or pressures and difficulties that are not yet anticipated. Thus, if students are awarded a degree that was based on cheating, this should be a matter of concern.

Academic dishonesty, or more specifically cheating, remains a key matter within all higher education institutions. University students' cheating is one of the worst forms of academic dishonesty as it obstructs the legitimacy of the student's competence. It discourages the mission of both the student and university by letting ineligible students pass courses through dishonest means and present a fake notion to others, which may lead to learning deficiencies (Carpenter *et al.*, 2006).

In higher education, verification recommends that cheating during university exams is, beyond any doubt, related to unethical and dishonest behaviour.

Nowadays, students at university are growing up in a religious culture where ethical principles, values and moral concepts which are based on the commands of God deny and renounce all forms of cheating, and pledge that all swindlers are doomed to failure. Unfortunately, however, cheating has risen among university students, leading to a failure to reject the phenomenon of cheating. This point of view leads students to believe that cheating is normal (Graves, 2008).

Students' cheating has tremendous implications on both employers and academicians as it may lead to future deviance. Graves (2008, p. 21) asserted that undergraduates who are guilty of academic dishonesty through cheating are highly expected to undertake unprincipled activities

during their professional career. An initial review of the literature strongly revealed that any cheating during the study phase leads to extreme deviant behaviour in the workplace. Harding *et al.* (2006) also emphasized the relationships between university students cheating and professional dishonesty, and that students who habitually partake in academic dishonesty become unprincipled in their professional career later.

Nonis and Swift (2001) and Blankenship and Whitley (2000) surveyed a very high number of students from different academic institutions and discovered that students who are involved in academic dishonesty are most likely to be insincere during their professional career. Another study found that cheaters scored higher than "non cheaters" on measures of unreliability and risky driving behaviour (Blankenship and Whitley, 2000).

Over the past few decades, various studies of academic cheating have focused on measuring the extent of cheating in American and European academic institutions, the motives behind students cheating, and factors that impact such manners. While it is difficult to uncover the most frequent factors that are affecting and encouraging cheating, this research strives to reveal insights into the types and extent of academic dishonesty, with an initial focus on private and public universities in Bahrain. It then aims to evaluate the impact of effective motivators (factors) of cheating on academic dishonesty and to propose the ideal method of preparing to mitigate this academic challenge.

The objective of this paper is to explore and measure the impact of students' cheating motivators (factors) on encouraging academic cheating. The paper presents and measures a conceptual research model (Figure 1) containing the most important cheating motivators, which significantly exacerbate students' cheating.

The main cheating motivators (factors) used as independent variables during this study are: students' gender, class size, class level, academic effectiveness (level of GPA), lack of warning and deterrence, lack of response to exam rules and regulations, and competitive pressures.

LITERATURE REVIEW

A systematic review of the literature has permitted absolute determinants of the likelihood of students cheating, not yet examined. It has been

revealed that academic dishonesty has dramatically increased by 70 to 75 per cent during the past 25 decades (Graves, 2008).

Cheating is a notion that may be hard to outline. Dick *et al.* (2003) revealed extensive possible types of academic cheating, determining that cheating results in breaching the rules and regulations that are outlined and agreed to. Copying in exams is a type of cheating, which is usually referred to in studies concerned with academic cheating (Hrabak *et al.*, 2004).

Sheard *et al.* (2003, p. 92) stated that "…cheating is described in terms of a series of practices, which cover a range of areas that can be defined as illegal, unethical, immoral or against the regulations of the course or institution." McCabe *et al.* (2006) was more precise in categorizing academic cheating, such as cheating in exams, which may comprise: students copying from each other, the use of crib notes, assisting students to cheat in an exam, discovering the exam beforehand from someone, and finally, plagiarism. In this research, academic cheating comprises all of the above types of exam cheating.

Although Smyth *et al.* (2009) and Bisping *et al.* (2008) present a comprehensive definition of academic cheating, in spite of the variety of academic cheating and practices within academia, cheating in exams is commonly treated as dishonest behaviour. Students cheating has an extremely negative impact on the achievements of the higher education system for any country as it corrupts the competition between students (Magnus *et al.*, 2002).

Meier and Griffin (2005) emphasized that dishonesty in education produces unsatisfactory educational quality; they also stated that "corruption in education is also incompatible with one of education's major aims: producing citizens that respect the law and human rights". Glater (2006) explained how big the problem of students' cheating is, how alarmingly fast its popularity is growing within academia and its prospective influence on real-world principles.

Nowadays, students are sometimes expected to hold senior positions in business; therefore, their way of life is likely to influence their opinion on what constitutes satisfactory business ethics. Students' awareness of what is ethical will directly or indirectly impact the professional career they take on when they enter the business world (Lawson, 2004). Kidwell (2001) believes that students have matured in a culture where the characteristics

of correct and incorrect have been mixed together and where dishonorable behaviour by high-profile leaders is slightly anticipated.

Most of the literature on cheating that has been reviewed in this study has explored its relationship with students' individuality and inspirational factors. Some of this research was founded on theoretical models such as Murdock and Anderman (2006) and Bong (2008). Others explore this phenomenon based on the perspective of achievement goal theory (Murdock *et al.*, 2007). At present, students are confronting substantial types of competitive pressure to do well in their academic study. McCabe *et al.* (2008) reveal this fact by identifying different types of pressure as a factor which may have a significant influence on academic dishonesty. These competitive pressures may comprise: competitive pressure to obtain high grades, parental pressures, pressure to acquire a job, especially with today's rising competition for the preferred job in the marketplace, and a lack of personal integrity.

Naturally, students who are not making a real effort during study (i.e. they are academically ineffective) are more likely to cheat than students who are academically successful (Finn and Frone, 2004; Lambert and Hogan, 2004). Lambert and Hogan (2004) revealed that students with low grade point averages (GPAs) tend to be the biggest culprits in academic dishonesty.

One significant factor that has received much interest in the literature is gender. Hrabak *et al.* (2004), Iyer and Eastman (2008) and Brown and Emmett (2001) revealed that men have a greater tendency for academic dishonesty than women. In contrast, Eastman *et al.* (2008) and Teodorescu and Andrei (2009) did not support this fact. Above all, Teixeira and Rocha (2008) during their research in Spain and Portugal did not find sufficient evidence that gender has a significant impact on students' academic dishonesty.

The literature also discusses the impact of student class level on academic dishonesty. Hrabak *et al.* (2004) and Eastman *et al.* (2008) found that higher-level students cheat more than lower-level students. On the other hand, Bisping *et al.* (2008) showed that older students (higher-class level) were potentially less likely to be academically insincere than lower-class students. Conversely, Teixeira and Rocha (2010) stated that higher-level students who are near to receiving their graduate degree are more prone to cheat during their exams.

Professors persistently attempt to detect evidence of cheating, which consequently reduces the total dishonesty in academia in terms of both serious and trivial cheaters. Hrabak *et al.* (2004) also acknowledged that warning and deterrence is a highly significant factor in academic dishonesty (McCabe *et al.*, 2008), presumably affecting their attitude.

The literature research also shows a lack of harmony between the spirit of academic dishonesty and the spirit of higher education (Hrabak *et al.*, 2004). Consistent with faculty self-reports, almost half of the faculties surveyed admit closing their eyes to incidents of cheating (McCabe, 2005; Nadelson, 2007). This awareness of weak supervision and the need for better quality control and measurements by university lecturers remains the biggest challenge to introducing a better evaluation system for cheating (Kasprzak and Nixon, 2004). The logic behind this is that if students cheat and find a state of apathy and lack of warning and deterrence among lecturers, and then survive, this may encourage other students to do the same. This is what we referred to earlier as lack of response to the exam rules and regulations. Teodorescu and Andrei (2009) revealed this notion and exposed the fact that a lack of responses and deterrence is a type of peer dishonesty, which is the most significant factor that affects academic dishonesty.

Other research on academic integrity has focused on the influence of class size on academic dishonesty. Cummings and Romano (2002) and Lester and Diekhoff (2002) believed that class size has a strong impact on the ways in which students can cheat during exams.

Bearing in mind the extensive review of the literature, the gap that can be identified which requires plugging is that most of the above literature on academic cheating has focused on the impact of effective motivators (factors) on academic dishonesty in American and European academic institutions. This research focuses on measuring the impact of prevalent motivators of academic cheating in the Middle East and especially in Bahrain. Its aim, therefore, is to see whether these factors are still relevant, despite the different culture, environment, traditions, conventions, and even religions.

CONCEPTUAL RESEARCH MODEL AND HYPOTHESIS

Based on a review of the extensive literature relating to academic dishonesty, the current study has developed a conceptual research model (Figure 1).

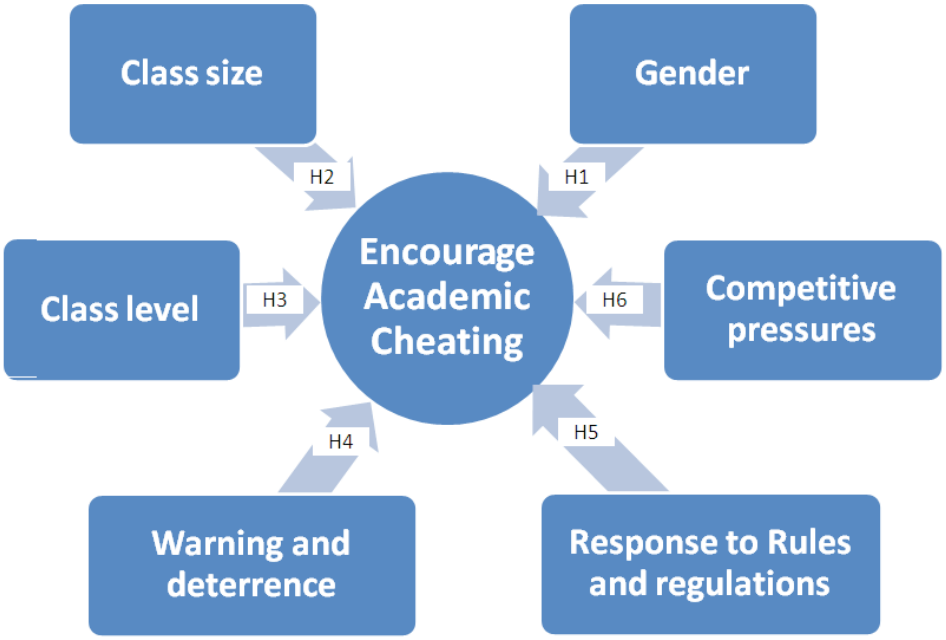

Figure 1.
Conceptual research design

The representation of the proposed framework depicts the pattern and structure of relationships between the set of measured variables.

This conceptual research model was empirically tested and assumes that the seven selected factors – gender, class size, class level, lack of warning and deterrence, responses to exam rules and regulations, and competitive pressures – are all independent variables and have a positive impact on encouraging academic cheating, which is considered a dependent variable.

This research then measures the quantitative indicators of the above framework to gain a high knowledge base and some test hypotheses, and to confirm the introduced conceptual research model.

Quantitative research uses survey as the main instrument to collect data.

Research question

Based on the preceding discussion and in order to achieve the purpose of the current study, the author formulated the following two research questions:

1. To what extent do the academic cheating motivators (factors) influence academic integrity?

2. To what extent do the cultural, traditional, environmental and regional differences among the developed and developing countries affect the process of accepting or rejecting the influence of those motivators?

Hypothesis

The research questions posited require empirical clarification if this study is to produce a superior theoretical perception of academic dishonesty. The literature review reveals that the curve has increased in the number of empirical studies of academic cheating, but that more is still required. To answer the two research questions, the current study focuses on the following six hypotheses:

Hypothesis 1: There is a significant relationship between gender and encouraging academic cheating.
Hypothesis 2: There is a significant relationship between class size and encouraging academic cheating.
Hypothesis 3: There is a significant relationship between class level and encouraging academic cheating.
Hypothesis 4: There is a significant relationship between warning and deterrence and encouraging academic cheating.
Hypothesis 5: There is a significant relationship between response to rules and regulations and encouraging academic cheating.
Hypothesis 6: There is a significant relationship between competitive pressures and encouraging academic cheating.

METHODOLOGY

There are a number of phases involved in the production of research documents; however, we used empirical and descriptive methods to reach the objective of this study.

To assess the factors influencing academic dishonesty, a survey was conducted during the last three months. A questionnaire was designed and distributed to students of two universities in Bahrain. The students were from different age groups and had attained different educational levels across the island.

Survey instrument

The questionnaire we prepared for this exercise was divided into 2 sections. The first section concentrates on the general profile of the respondent including gender, age group, and class level.

In the second section we were interested in finding the factors motivating the students to cheat during exams. The respondents were provided with a list of 13 questions: 2 questions on the perceived gender, 2 questions on the perceived class size, 2 questions on the perceived class level, 2 questions on the perceived warning and deterrence, 2 questions on the response to rules and regulations, 2 questions on the perceived competitive pressures and finally, 1 question regarding the students' preferences to academic cheating.

The participants were asked to indicate their perception on a Likert scale (1-5) with responses ranging from "strongly disagree" to "strongly agree". The collected data were analyzed based on correlation and regression analyses using the statistical package for social sciences (SPSS) computer program version 17. *P* values of less than 0.05 were deemed significant.

Data collection

The questionnaires were distributed directly among the students throughout the researchers' students; a sample of 210 people were randomly chosen from the two Bahraini Universities, and all participants were selected randomly from universities from private and public sectors, malls, internet cafés and some organizations for students who are working at the same time.

The questionnaire we prepared and used had been pre-tested initially with a small number of students (15 users) studying at different universities to ensure consistency, clarity and relevance to the Bahraini case. Minor changes (related to the questions' content, wording and sequence) were requested by those students, and we implemented them before carrying out the final copy.

A total of 200 useable responses were obtained.

Pilot study

With the purpose of confirming that the survey was valid and reliable, a pilot study was conducted before the final distribution process. As the aim was to find out whether the questionnaire is reliable or not, we measured the internal consistency, which is the most popular method of estimating reliability.

Cronbach's alpha test was used for this purpose (Nunnaly and Bernstein, 1994). She suggested that a minimum alpha of 0.7 is sufficient for the early stage of research.
As shown in Table 1, the Cronbach's alpha scores in this study were all higher than 0.6. The constructs were therefore deemed to have adequate reliability.

ANALYTICAL RESULTS AND DISCUSSION

Correlation test

The Pearson correlation coefficient is designed to evaluate the strength and direction of relationship that may exist between two variables measured on at least an interval scale. It illustrates the strength and direction of the linear relationship between seven variables. Studies stressed that prior to the regression testing, the correlations between variables (Coakes and Steed, 2007) should be achieved. The result of this research, as illustrated in Table 2, showed that four independent variables were found to be strongly correlated to boosting competitive advantage.

The results presented in Table 2 show the Pearson correlation coefficient, the significance value and the sample size that the calculation is based on. The data showed no violation of normality, linearity or homoscedasticity.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.975	.976	8

Table 1. Cronbach's alpha estimation

Table 2. Results of correlation analysis

Correlations								
		Gender	Class size	Class level	Warning and deterrence	Competitive pressures	Response to rules and regulations	Students preferences to academic cheating
Gender	Pearson correlation	1	.775**	.767**	.765**	.773**	.784**	.776**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200
Class size	Pearson correlation	.775**	1	.969**	.941**	.968**	.964**	.992**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200
Class level	Pearson correlation	.767**	.969**	1	.927**	.951**	.950**	.974**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	200	200	200	200	200	200	200
Warning and deterrence	Pearson correlation	.765**	.941**	.927**	1	.926**	.912**	.946**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200	200
Competitive pressures	Pearson correlation	.773**	.968**	.951**	.926**	1	.956**	.973**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200	200
Response to rules and regulations	Pearson correlation	.784**	.964**	.950**	.912**	.956**	1	.970**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	200	200	200	200	200	200	200
Students preferences to academic cheating	Pearson correlation	.776**	.992**	.974**	.946**	.973**	.970**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200	200

**. Correlation is significant at the 0.01 level (2-tailed).

There was a strong correlation in the results which showed that gender (r=.776, n=200, $p < 0.001$), class size (r=.992, n=200, $p < 0.001$), class level (r=.974, n=200, $p < 0.001$), warning and deterrence (r=.946, n=200, $p < 0.001$), competitive pressures (r=.973, n=200, $p < 0.001$) and response to rules and regulations (r=.970, n=200, $p < 0.001$) are clearly correlated to encourage academic cheating.

Regression test

For further analysis, linear regression was carried out to study the extent to which the independent variables influence the dependent variable. The independent variables were regressed across creating competitive advantage for the selected organizations. Table 3 summarises the results of the linear regression analysis.

The results of the regression in the coefficients table (Table 3) revealed that class size (t=14.047, sig <0. 001), class level (t=4.532, sig <0. 001), warning and deterrence (t=3.464, sig <0. 001), competitive pressures (t=4.028, sig <0. 001), and response to rules and regulations (t=3.825, sig <0. 001) were found to significantly affect academic cheating.
The result also indicates that the gender (t=-1.115, sig> 0. 05) variable is not significantly good enough at affecting students' academic cheating.

Coefficients[a]

Model		Unstandardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.030	.028		-1.069	.286
	Gender	-.011	.011	-.012	-1.065	.288
	Class size	.574	.041	.572	14.047	.000
	Class level	.133	.029	.137	4.532	.000
	Warning and deterrence	.074	.021	.075	3.464	.001
	Competitive pressures	.123	.031	.123	4.028	.000
	Response to rules and regulations	.112	.029	.112	3.825	.000

a. Dependent Variable: Students Preferences to Academic Cheating

Table 3. Regression (coefficients)

DISCUSSION

We examined the variables of gender, class size, class level, lack of warning and deterrence, competitive pressures, and responses to exam rules and regulations, to determine whether these independent variables significantly affected the academic cheating variable.

Generally, the results of this study were not unexpected; on the contrary, they strengthened most prior research. Students who were under competitive pressure, such as pressure to obtain high grades, parental pressures, and pressure to acquire a job, especially in today's tough marketplace, were apparently more likely to take part in cheating. This result is consistent with previous study findings such as those of McCabe *et al.* (2006).

The result of this research also supports the notion that students who are not making a real effort during their study (i.e. they are not academically effective) will be under pressure and consequently expected to cheat more than students who are academically successful. This supports the findings of Finn and Frone (2004) and Lambert and Hogan (2004). In fact, a student who has lower GPAs and is aiming to enhancing their grades is the most likely to cheat (McCabe *et al.*, 2008). Therefore, it was not surprising to find a significant impact between competitive pressure and cheating.

At present, students believe that they are facing increasing pressure to reach a level of excellence in order to secure an outstanding job with a high salary. In fact, due to the volatile global economic situations and high unemployment, the desire to graduate with high qualifications is increasing.

Another finding of the current research is that class size positively predicts cheating. This result was consistent with previous research by Cummings and Romano (2002) and Lester and Diekhoff (2002). The impact of class size on exam cheating is a main concern for various universities. Based on this fact, and in respect of the class size, the current study concludes that in order to prevent academic dishonesty during exams, we should try to keep class sizes manageable. During exams, if the instructor(s) cannot control the class, then more instructors along with greater vigilance are needed to achieve cheating deterrent strategies.

The current study also found that the warning and deterrence factor has a highly significant impact on academic dishonesty. In fact, this result is in harmony and consistent with most previous research, including that of Hrabak *et al.* (2004); Teodorescu and Andrei (2009); McCabe (2005); Nadelson (2007); and McCabe *et al.* (2008).

The majority of students moved to academic dishonesty because it goes undetected and unpunished, and the scale of this phenomenon is therefore frustratingly minimized by most of the academic community. The result also indicates that the faculty avoid this duty because it likely requires a stressful interface with students. It shows that faculty inaction in enhancing exam security is a contributing factor to the increasing occurrences of academic dishonesty.

Furthermore, the result also revealed that there was almost a consensus among the students that any weakness and laxity in the process of explanation and clarification of examination rules and regulations by the inspectors will have a negative impact on their response to those laws and regulations and consequently, will increase the tendency to cheat during exams.

Regarding the associations between students' gender and their cheating deeds during exams, the current study surprisingly confirmed that this factor has no significant impact on students' academic dishonesty.

Due to commitment to ethical responsibility, the results of the current study revealed an urgent demand to establish moral foundations in higher education. The research strongly supports the need to include ethical foundations as part of the curriculum. As previously noted, cultural importance may play a significant role in determining academic dishonesty. Collaborative academic dishonesty, such as copying another student's exam paper with his permission, is more frequent than observed among US students (McCabe *et al.*, 2008). The results of the current study clearly revealed that students' collaborating with each other in exams and supporting each other in cheating is increased in collectivist societies.

In our western society, the most frequent factors that were selected from previous studies have the same impact on academic dishonesty as in eastern society. For further research, we suggest investigating how the norms of Middle East culture influence students' academic dishonesty.

Finally, like most of the other studies that are related to academic dishonesty, the current study has some limitations that should be taken into account before trying to generalize the results and their extension. First, in this study, academic dishonesty was restricted to students cheating in class during exams. This study may not cover other types of cheating, such as cheating on homework papers or projects. Second, the process of measuring the impacts of cheating motivators are mainly based on students' self-admitted reports to gather information. Although most research uses students' self-admitted reports to examine cheating, this way of collecting information seems to present a challenge as it makes it difficult to achieve the desired accuracy in the results of any research. Students' self-admitted reports might not be the best way to measure cheating factors. Therefore, it is highly recommended that qualitative methods are included for further research, as this might elevate the accuracy of the results.

CONCLUSION

The objective of this study was not to discuss the techniques that need to be followed to prevent students from cheating during exams. These techniques have been identified by most universities around the world through rules and regulations, which students need to follow, and inspectors need to observe to discourage cheating. Instead, the purpose of this study was to measure the impact of prevalent motivators of academic dishonesty in the Middle East and especially in Bahrain. This research is therefore designed to see whether these factors are still influential, despite the different culture, environment, traditions, conventions, and even religions.

Academic dishonesty is a highly sensitive problem; however, this study confirmed that most students tend to cheat but in varying degrees.

The real challenge in this research concerns the student's self-admission, especially for those who practiced or tended to cheat in exams previously. It was not easy to convince those students to answer the questionnaire accurately and openly, although the questionnaire did not ask for the name of the student nor the university to which he/she belongs. However, the introduction that was written at the beginning of the questionnaire has a significant impact by urging students to answer what is right and realistic, because the expected results of this research may be followed by further studies and important decisions, which may have an important effect on the advancement of educational level.

Although the incidence of academic dishonesty is accepted to be significantly higher at present, it is still largely unobserved and there have been no real scientific efforts to study the problem in all its dimensions and to give solutions to deter it.

Finally, students are not expected to get involved in cheating in classes in which comprehending the subject is the main objective, making an effort is essential, and self-reformation is accentuated.

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