

Factors Affecting Students' Cheating Behaviors in Schools and Universities and Applying the Results in Quality Assessment: A Narrative Review

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Abstract

Background: The education system and society has endured a huge cost as a result of cheating. It is important to address the cheating since such persons doing cheating often transfer this inappropriate behavior into working environments after graduation. On the other hand, motivation to perform activities decreases in an honest person. We aimed to investigate factors affecting students' cheating behaviors in schools and universities.

Materials and Methods: English electronic databases, including Medline, Scopus, Web of Science, Cochrane Library, and Google Scholar were searched systematically until May 10, 2019. Search words were a combination of: (Cheating OR Plagiarism OR Dishonesty) AND (College OR Student OR School OR Exam OR University) AND (Iran OR Iranian).

Results: Finally, nine studies were included in the review. Affecting factors on students' cheating behaviors in schools and universities were grouped into four categories including: "personality factors", "educational system factors", "psychological factor", and "cultural, religious, and economic factors".

Conclusion

Considering affecting factors on students' cheating behavior, there is a need to adopt appropriate and preventive measures by researchers, faculty members, managers and policy makers to prevent the occurrence of it as much as possible.

Key Words: Cheating Behavior, Factors, School, University, Students.

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1- INTRODUCTION

The development of morality is one of the most basic goals of the education system in most societies. The education system seeks to educate young people on the importance of commitment, accountability, justice, benevolence, honesty, transcendence and good morals. In today's world, the education system, coordinated with families, is committed to teaching values, educating students, and transferring values and social norms. Cheating is a pervasive phenomenon, in conflict with moral values and norms of society (1). Cheating is a behavior involving concepts such as lies, deception, stupidity, trickery, and so on, and can lead to unfair gain or profit. Cheating on the exams and the educational tasks is considered to be an unethical phenomenon, including academic dishonesty in assignment or school work (2).

Cheating is a pervasive phenomenon that is not limited to a specific geographic boundary, university or school. Due to the abundance of cheating, some scholars have described this phenomenon as an epidemic and some as a chronic problem (3-5). The education system has endured a huge cost caused by cheating for a long time (6). Cheating is considered as one of the major factors threatening learning. Most learners have reported this academic dishonesty during their education period (3, 4).

Researches show that 80 to 90% of students have cheated in their pre-university high school years, and 70% of the students have also cheated at least once. This problem has also increased in recent years with the arrival of new technologies. The academic cheating is a serious problem at all levels of education throughout the world. In Iran, a study (2011) reported that the most common method of cheating on examinations is to look and write on paper, and the most common way of cheating on the assignments is to get them from classmates

and Internet. Regarding the causes of cheating, the participants reported that internal factors (such as lack of accountability and lack of time), and external factors (such as the difficulty of the task and the high expectations from the learner), are involved in cheating (7). In addition, the prevalence of cheating in males is more than that of females, and the belief in the generality of cheating in females was significantly higher than that of males (8). In sum, the results of the research indicate that the cheating as an educational problem is rooted in family and social training, behaviors, and relationships of communities, and is affected by religious orientation, personality, age, gender, significance of the exam and level of exam monitoring (5). In general, it is important to address the deceptive academic behavior since such persons with academic cheating often transfer this inappropriate behavior into working environments after graduation (8).

A research reported a positive and significant correlation between the prevalence of cheating in high school and university with dishonesty in the workplace (2). The high prevalence of cheating is a warning to the community. If undergraduates and learners are supposed to pass their exams through cheating, their literacy and knowledge will not be of a desirable level, thereby imposing irreparable losses on the future of society (9). The awareness of righteous people and teachers on the cheating of others can lead to a decrease in their motivation to perform activities (2). It is important to address affecting factors on students' cheating behavior since such persons doing cheating often transfer this inappropriate behavior into working environments after graduation. In the other hand, motivation to perform activities decreases in honest persons.

1-1. Designing Research Question Using ECLIPSE Pattern

ECLIPS pattern was used to formulate the research question, review objective and inclusion criteria (10). The present review article aimed to investigate affecting factors on students' cheating behaviors in schools and universities. Prior studies showed various factors affected students' cheating behaviors. Aim of the systematic review is to reach a comprehensive understanding of affecting factors on students' cheating behaviors in schools and universities and to apply the results in quality assessment of students.

2- MATERIALS AND METHODS

2-1. Method

Preferred Reporting Items for Systematic review and Meta-Analysis (PRISMA) checklist was used as a template for this review (11). To conduct this review article, English electronic databases, including Medline (via PubMed), Scopus, Web of Science, Cochrane Library, and Google Scholar were searched systematically until May 10, 2019 without time and language restrictions. Search words were a combination of: (Cheating OR Plagiarism or Dishonesty) AND (College OR Student OR School OR Exam OR Evaluation OR University) AND (Iran OR Iranian). In order to complete the study, Persian databases such as SID and Magiran and Barakat were also searched using equivalent keywords. The search query in Medline (via PubMed) is shown in **Table.1**. The references of review articles and included articles that were also explored for more articles.

2-2. Study selection

Database search was done for possible studies, abstracts of the studies were screened for identification of eligible studies, full text articles were obtained and assessed and a final list of included studies was made. This process was done independently and in duplication by two

researchers and any disagreement was resolved by the 3rd researcher. Two authors independently reviewed the titles and abstracts of the articles and any disagreement between the reviews was resolved by the supervisor. If the subject matter appeared to be relevant, the full text of the article would be extracted and reviewed. Finally, the articles meeting the study inclusion criteria were evaluated for quality assessment.

2-3. Eligibility criteria

Participants, interventions, comparators, and outcomes were used to formulate the review objective and inclusion criteria. The inclusion criteria searched were English or Persian articles examining the prevalence of cheating in school and academic students, published from March 2005 until February 2019, and with cross-sectional, cohort, observational retrospective or prospective design.

2-4. Data extraction

Two reviewers collected the data independently, collected data were combined and compared for accuracy, and any discrepancies were solved by a third reviewer. The required data for these review articles were name of first author, year of publication, country or continent of study, design of study, size of study samples, age of subjects, prevalence of cheating, and score of STROB checklist (12).

2-5. Quality assessment

The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist was used to assess the quality of included studies, indicating adherence to seven items as high, six items as medium, and two or more items as low quality studies (12). The assessment was done by two reviewers independently and any discrepancies were resolved by the third reviewer (**Table.2**).

Table-1: Search strategy for Medline (via PubMed).
Cheating[All Fields] OR ("plagiarism"[MeSH Terms] OR "plagiarism"[All Fields]) OR Dishonesty[All Fields] AND (College[All Fields] OR ("students"[MeSH Terms] OR "students"[All Fields] OR "student"[All Fields]) OR ("schools"[MeSH Terms] OR "schools"[All Fields] OR "school"[All Fields]) OR exam[All Fields] OR ("universities"[MeSH Terms] OR "universities"[All Fields] OR "university"[All Fields])) AND (("Iran"[MeSH Terms] OR "Iran"[All Fields]) OR Iranian[All Fields]).

Table-2: Some of the characteristics of 9 included studies.

Author, Year, Reference	Sample size	Country, City	Grade	Quality assessment by STROB score (11).
Ejei et al., 2012, (7)	302	Iran, Tehran	School students	18
Fareast et al., 2017, (13)	153	Iran, Mashhad	School students	16
Barzegar Bafrooei, 2014, (14)	477	Iran, Yazd	School students	17
Amini et al., 2016, (15)	136	Iran, Shiraz	School students	17
Kazemian et al., 2017, (16)	77	Iran, Mashhad	Students of Dental School	16
Sanagoo et al., 2017, (17)	524	Iran, Gorgan	University Students	17
Feli et al., 2014, (18)	196	Iran, Gorgan	University Students	19
Abedinipoor et al., 2015, (20)	536	Iran, Gom	School students	15
Bakhtiari and Soleimani, 2017, (21)	40	Iran, Urmia	University Students	18

Finally, nine studies were selected and included in the review. Some characteristics of 8 studies are shown in **Table.2**. In the first study of Farasat et al., there was correlation of 0.88 between the attitude to cheating and committing it. Moreover, there was a negative correlation between the attitude toward cheating and the perceptions of students of teaching components, teacher, learning space, academic self-efficacy, and mastery assessment. These variables altogether could explain 86% of total changes. Two variables of mastery-oriented and performance-oriented assessments could predict the positive attitude toward cheating (13). In the second study, Barzegar Bafrooei's study, the relationship

between individual and situational factors with elementary fifth grade students cheating, was done. The author stated that there are three types of goal orientation: performance orientation, mastery goal orientation and performance-avoidance orientation. Students with performance orientation are looking to prove their competence and virtues. In contrast, students with mastery goal orientation focus on learning, understanding, high-level homework and personal improvement. Students with performance-avoidance orientation are seeking to avoid incompetency. There was a significant inverse relationship between mastery goal orientation, classroom mastery goal structure, academic self-efficacy, and

academic pressure and cheating score. In addition, a direct and significant relationship was obtained between the scores of the performance orientation, classroom performance goal structure, and classroom performance-avoidance structure and the academic of self-handicapping strategies with cheating score. Moreover, the regression analysis results indicated that these variables together could explain 24% of the variance of cheating (14). In a third study, Amini et al. (15), results confirm that a correlation of 0.88 was observed between the attitude to cheating and committing it. In the fourth study conducted by Kazemian (16), three classes of student responses were extracted about the causes of cheating occurring in student projects: 1- Behavioral factors (students' current dominant culture, absence of student, heavy student schedules, student making money through this situation, and creating a role for students in this field), 2- Educational capability (inability, student's unwillingness to research and students' inability to work with computers), and 3- Personality factors (laziness, indolence, lack of creativity and insufficient self-confidence).

Teachers' responses about the causes of cheating in student projects were failure to provide curriculum, lack of serious feedback in similar cases, student's assessment of lack of opportunities or failure to review projects by the teacher, downplaying the issue by some teachers, hardware shortages, and the macro responses including neglect of the educational system to research, the fall of religious beliefs, the basic problems of the educational system inherited from education, the normality of this behavior in

this age, academic years, grade, field of study and gender (16). In the fifth study, significant relationships were observed between the attitude and creating ($P = 0.001$). Male and employed students had more positive attitudes towards cheating and actually did it more frequently than their female counterparts (17). In Feli et al.'s study (18), the results of correlation coefficient showed that there was a significant association with what was observed between demographic variables such as (age, gender, and years at the university), and psychological factors such as (motivation and attitude to cheating on exams) with their cheating behaviors. The results of the bivariate regression analysis showed that these variables can predicate 39% of change on cheating behavior of students. In Yarmohammadzadeh et al.'s study, cheating was affected by the type of evaluation, the conditions for test implementation and monitoring, the characteristics and methods of teacher, the impact of the peer group and environmental expectations affect the commission of cheating (19).

In Abedinipoor et al.'s study, the most common reason of cheating was due to the only evaluation criterion which is taking a good score (20). The results of Ejei et al.'s study (7), two aspects of conscientiousness ($p=0.001$; $r=-0.29$), and agreeableness ($p=0.001$; $r=-0.23$) had a significant positive association with cheating. The results of Bakhtiari and Soleimani's study showed that moral intelligence and its components (such as responsibility and forgiveness) were more common in cheating students in comparison to non-cheaters (21). Some of the factors affecting Iranian students' cheating behaviors are shown in **Table.3**.

Table-3: Some factors affecting Iranian students' cheating behaviors.

Category of problems	Reasons
Personality factors	Moral intelligence level of students, student's assessment of self-efficacy gender, job status (employed students), (age, gender, and years at the university, laziness, indolence, lack of creativity and insufficient self-confidence.
Educational system factors	Type of evaluation, the conditions for test implementation and monitoring, the characteristics and methods of teacher, the perceptions of students of teaching components such as teacher, learning space problems related to curriculum absence of student, heavy student schedules, educational capability (inability, student's unwillingness to research and students' inability to work with computers), lack of serious feedback in similar cases, student's assessment of lack of opportunities or failure to review projects by the teacher, downplaying the issue by some teachers, neglect of the educational system to research, the basic problems of the educational system inherited from education, hardware shortages.
Psychological factor	Motivation, attitude, types of goal orientation (performance orientation, mastery goal orientation and performance-avoidance orientation).
Cultural, religious, and economic factors	Students' current dominant culture, student making money through this situation, fall of religious beliefs.

References: (7, 13, 14-18, 20, 21).

4- DISCUSSION

In situations where national documents such as the delivery of basic education goals adopted by the Council of Higher Education, strategic delivery document of the official and public education system of the Islamic Republic of Iran emphasize on nurturing people with commitment, responsibility, justice, benevolence, positive thinking, integrity and excellence with good morals, the cheating within the education system is considered to be an act contrary to the objectives of national documents, and in the wake of the challenges and problems for the education system and the community. Nevertheless, the findings of this research did not reveal the negative attitudes of the students and showed that 96% of students cheated (13). This immoral phenomenon is not limited to a specific country or university, and can be seen in the whole world and in all universities. In a study, the Russian students believed that 69% of their peers were dishonest on exams, while this was 24% in the American students (22). Grimes in 2004 conducted an international study to ask college students for reporting what proportion of their fellow classmates

cheated. The results were 87% in Albania, 91% in Belarus, 55% in Croatia, 89% in Kyrgyzstan, 88% in Latvia, 81% in Lithuania, 30% in Russia, and 91% in Ukraine (23). Therefore, it is important to address affecting factors on students' cheating behavior in school and university. It seems that students with more responsibility are independent, have an advanced goal orientation, are exposed to more perseverance and responsiveness, are honest in academic performance, and have the ability to control and regulate their own behavior, thereby resulting in a refusal to cheat. They practice study habits that would lead to satisfactory results through educational effort rather than cheating (14). Comparison of cheating rate between male and female as secondary outcome showed that, the prevalence rate of cheating was higher in male students (22). This can be due to several reasons: First, it may be rooted in the fear of female students of cheating and its consequences. Second, this low rate can be attributed to the more studious nature of girls. Third, it may be related to their attitude which a poll of students on their attitudes toward the right or wrong nature of cheating

showed that girl students consider this behavior a more incorrect action than boys (22), or the sensitivity of girls to ethical issues and the environment is more than that of boys (24).

4-1. Study Strengths and Limitations

One of the strengths of this review was the high percentage of respondents to the questionnaire in some studies, such that this rate was 100% in one of the studies, probably due to assuring students about the confidentiality of information, and the lack of mentioning the name in the questionnaire. However, there were also some limitations in the study. For example, in one of the studies, 20% of the students did not attend the classroom while distributing the questionnaire. In a study, instead of asking the students directly about cheating by themselves, they were asked about cheating frequency among their classmates, because even if there is no name in the questionnaire, a significant number of schoolchildren may deny cheating in spite of doing it. Researchers believe that the prevalence of cheating in different universities is increasing over time. Because of the limited number of studies, it is impossible to evaluate this issue. According to the findings, the lowest prevalence of cheating was related to the presence of a student in the exam instead of the main individual (15).

5- CONCLUSION

Considering the significant percentage of cheating in the academic environments and schools, there is a need to adopt appropriate and preventive measures by researchers, faculty members, managers and policy makers to prevent this problem as much as possible. In addition to raising the knowledge level of students, the dissemination of immoral issues and the violation of rights must also be prevented. According to the findings of this research, it is suggested that teachers and educational staff emphasize the

competence and personal improvement in the classrooms and avoid unhealthy competition, which would increasingly reduce the phenomenon of academic cheating.

6- CONFLICT OF INTEREST: None.

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