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Research Article



The Role of Self-presentation of Low Achievement, Academic Pressure, and Home-University Dissonance on Academic Cheating Among Medical Students

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Abstract

Background: Academic cheating has been a persistent problem in educational settings. This problem is a potential risk factor in medicine and other fields related to human health.

Objectives: The present study aimed to identify the specific roles of self-presentation of low achievement, academic press, and home-university dissonance in the academic cheating behavior of medical students to provide insights into this complex issue.

Methods: This study was descriptive and correlational, and the statistical population included all medical students of Tabriz University of Medical Sciences in 2022 - 2023. The statistical sample of 372 students was selected using stratified random sampling. The variables of academic cheating behavior, academic pressure, home-university dissonance, and self-presentation of low achievement were measured through the subscales of the PALS Scale by Midgley et al. instrument. The data were analyzed using independent *t*-test, ANOVA, and multiple linear regression analysis using the enter method.

Results: Based on the results, the variables of home-university dissonance (0.39), academic pressure (0.14), and self-presentation of low achievement (0.33) had a significant correlation coefficient with academic cheating behavior (P < 0.01). Examining the gender difference in academic cheating behavior showed that male students engage in cheating behavior significantly more than female students) t = 3.71, P < 0.001(. Regression results showed that self-presentation of low achievement and home-university dissonance are meaningful predictors of academic cheating behavior; the predictor variables were able to explain 17% of the variance of academic cheating at the level of 0.001 (F = 27.01, P < 0.001).

Conclusions: This study has implications that are not only theoretical but also practical. To effectively reduce medical students' academic cheating, we must address their academic performance, their motivational factors, and the disharmony between their living and educational environments. This understanding can guide the development of interventions to curb academic cheating.

Keywords: Academic Cheating Behavior, Academic Press, Home-University Dissonance, Self-presentation of Low Achievement

1. Background

Academic cheating or cheating behavior in the educational and academic atmosphere is a phenomenon that has consistently garnered the attention of those involved in educational issues. According to the definition, academic cheating among college students consists of a series of dishonest behaviors that violate the norm of academic integrity to acquire unfair advantages in evaluating academic achievement (e.g., plagiarism in coursework and cheating on exams) (1). The impact of information technologies on how people use and interact with information has caused increasing concerns about academic cheating. Study suggests that using technology for cheating is also on the rise. There is clear evidence that it has opened up new avenues for cheating. Typical uses of technology for cheating include plagiarizing from the internet, using cell phones to look up questions during tests, programming

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answers into calculators without permission, and giving or receiving information about exams through cell phones (2).

Like many phenomena in the humanities, engaging in academic cheating can have various reasons. Academic cheating is a multifaceted phenomenon with multiple causes. Attributing it to a specific cause cannot be logical and scientific. Contextual, personal, and combined factors can significantly affect the phenomenon. Various investigations show that academic cheating exists at other stages in schools and in other university courses. For example, a study conducted in Ethiopia found that 80% of Ethiopian students cheat (2). According to Brown-Wright et al. (3), 90% of students cheated at least once until high school. Study by Smith et al. (4) indicated that 53% of the students under study committed academic cheating. Also, Blais et al. (5) estimated the prevalence rate of academic cheating among students to be 57%. Similar statistics and figures have been stated based on research among students in the medical field. This study was conducted in Saudi government medical colleges and showed that 58% of medical students cheat academically (6). Another study showed that 86% of dental students in Texas committed academic cheating at least once (7).

A rising body of evidence indicates that academic cheating is prevalent in medical and healthcare schools worldwide. Such behaviors negatively impact medical practice since students who engage in cheating during their medical education tend to exhibit similar patterns in their interactions with patients later on. Such students may not gain the competencies to become safe doctors and may not be considered fit for practice (8). Considering the high prevalence of cheating, one of the critical concerns for those involved in educational affairs and educational planners is understanding the causes of cheating and the background of this phenomenon. unfortunate educational Acting unethically in the work environment is likely related to acting unethically in the academic and instructional environment, so it is necessary to find the roots of cheating and educate people about it (9).

Researchers have examined the issue of academic cheating from different aspects and perspectives, providing various reasons for it. In this context, the student's field of study becomes especially important because, even though cheating is indisputable in all fields, the issue of cheating is more critical and sensitive in fields directly related to people's health and lives. The field of medical sciences is of particular importance for this reason.

Yee et al. (10) indicated that cheating is related to personality traits, and to understand it, one must realize personality traits. One of the causes of cheating was the lack of knowledge and awareness among healthy college students about the laws and instances of academic cheating (11). According to Borge (12), stress is a significant factor in cheating. Other researchers found that students with a performance-oriented goal orientation had more tendency and behavior toward academic cheating (13). Also, in a study that examined the relationship between personality and moral factors in cheating, it was found that honesty and humility have a significant negative relationship with academic cheating (14). Some other researchers believe that students' desire to get good grades is essential to engaging in academic cheating (4). Senel et al. (15) indicated that the more students commit to the goal and have positive moral tendencies, the less they cheat.

Various researchers have mentioned the following reasons for academic cheating: Peer recognition of cheating behavior, the less seriousness of cheating in the opinion of the perpetrators, and the difficulty of exam materials (16). Having psychotic personality traits (17), age and gender (18), efforts to neutralize attitudes (19), fear of academic failure, procrastination, and stress (20), low self-confidence, and being encouraged to cheat (21), previous history and experience in academic cheating (22), being anti-social and prone to academic boredom (5), perfectionism (23), self-enhancement, and desire for social approval (24).

In qualitative studies, students who have experienced cheating generally reported that they consider cheating to be their most challenging experience; they would like their family not to know about it, and they become more sensitive to future assignments and adopt a path of academic honesty after being caught cheating. Study shows that effective strategies have been implemented in addressing academic cheating, drawing upon the theory of planned behavior (TPB). In this model, attitudes, mental norms, behavioral control, intentions, and justifications are related to cheating behaviors. Academic cheating can be reduced by cultivating students' attitudes regarding dishonest behavior, altering their views on the perceived frequency of cheating, and reducing their sense of control by emphasizing the consequences of getting caught (25). Another study showed that implementing academic tests without the presence of a proctor causes students to engage in academic cheating. Based on this, teachers or proctors have been deemed necessary to reduce cheating in the exam session (26).

Personal and contextual factors are two critical factors in the tendency and action of academic cheating. Among the personal factors in the tendency of students to cheat academically, based on theoretical foundations, is the personality and emotional-cognitive variable of self-presentation of low academic achievement. According to the definition, this refers to students' preference to keep peers from knowing how well they are. In other words, those who have self-presentation of low achievement do not want other students to learn about their knowledge and information in a specific scientific field (27). In contrast, perfectionistic selfpresentational styles, which represent interpersonal expression and communication, refer to how an individual represents himself/herself as a perfect person to others (28). Some researchers believe selfpresentation of low achievement can be due to low selfevaluation, which is related to low self-confidence (29). According to these researchers, the lack of selfpresentation in some people, including girls, may be because they do not know how to express themselves. It was also found that gender is the determining factor in self-presentation. In this way, the girls' self-presentation is lower than their real achievement, while the boys' selfpresentation is higher than their natural ability (29).

Self-presentation can be related to people's social acceptance or non-acceptance. The feeling of belonging, dependence, and concern from the point of view of others towards the individual is a critical factor in social anxiety and, as a result, self-presentation (30). The opinions and views of others about the individual put pressure on the individual in a way that makes the individual feel pressured by others. Accordingly, another variable related to the academic cheating of university students and learners in general is the feeling of pressure that students feel from institutions, friends, peers, and teachers. In research, it was found that the students' feeling of pressure from the school can be related to their abnormal and contrary behaviors, as well as to the health of the students and their selfcontrol (30, 31). Pressure from others and the expectation of better performance can make students engage in unusual behavior, including academic cheating (32). This is especially true if students negatively evaluate the exam and feel it is difficult (33). Based on this, environmental expectations increase academic pressure, and the feeling of pressure can also increase academic cheating behavior (34).

Endarty et al. (35) recently reviewed 24 studies in a systematic review to identify key factors influencing academic cheating. Meanwhile, educational pressure and opportunity are among the most important factors affecting academic cheating, and 17 studies have investigated them. Academic pressure from parents, classmates, and teachers can cause students to feel stressed, and the results of studies show a positive and significant correlation between academic cheating and stress, as well as a negative and significant correlation between stress and self-control (12). Moreover, evidence suggests a correlation between perceived stress and moral injury among healthcare workers (36). Furthermore, Hasanvandi et al. (37) demonstrated that different levels of education indirectly influence healthcare workers' financial resources, social standing, social connections, and health-related behaviors, which may be associated with their perceived academic pressure.

One of the essential instances of academic pressure can be the pressure that a person feels from their family and the dissonance between the conditions at home and the conditions at university (home-school dissonance). This means that the expectations, standards, and conditions necessary for concentration and study at home and university are inconsistent. Although this is often the case in countries that accept immigrants, where cultural conflicts and differences can be pronounced, it can also occur in other countries. This issue is associated with low academic grades, low hope for the future, low self-efficacy, and low self-esteem (38). Cultural differences can influence home-university dissonance in these two environments. A meta-analysis examining 80 studies on the relationship between performance/learning orientations and academic cheating in 27 countries suggests that cultural values are essential in influencing the relationship between achievement orientations and academic cheating (39). Therefore, cheating prevention programs should consider culture to achieve the desired effects.

All three variables of home-university dissonance, academic pressure, and self-presentation of low achievement are related to an individual's perceptions of many influential factors. Academic pressure and selfpresentation of low achievement are related to the individual's perception of academic strategies and beliefs, while home-university dissonance is related to the individual's perceptions of the home and school environment. It is assumed that many factors are influential in cheating behavior; among these factors, the relationship of these three variables with cheating behavior has been investigated according to theoretical principles. These three variables can predict the cheating behavior of agents. According to studies, academic cheating behaviors can be the basis of fraudulent behaviors in other fields, including life and

work (9). Undoubtedly, understanding the causes of any behavior can make facing and managing these behaviors reasonable and acceptable.

As mentioned earlier, academic cheating is multifactorial. First, family, religious, and cultural values have been acquired long before medical school, and some values in home and university environments can conflict. For example, there are countries, cultures, and subcultures where bribery and dishonesty are almost the norm, while others have much higher standards for ethical behavior. Secondly, academic pressure, the stressful atmosphere related to educational environments, and the strict views of professors can be factors in the tendency to cheat academically. Interpersonal factors such as orientation and individual tendencies also affect this. For this purpose, the variables of self-satisfaction with low progress, homeuniversity inconsistency, and academic pressure in medical students can provide the basis for predicting, explaining, and dealing with academic cheating. Therefore, special attention is needed because understanding its contextual and personal causes can guide decision-makers in making correct and logical decisions and provide more ways to prevent behavioral and moral damage.

Although there has been extensive research on academic cheating, the majority of studies have focused on gender differences, and no study was found that directly examined internal and external motivational factors with a sample of Iranian students. Based on this, studies examining the relationship between factors such as home-university dissonance, academic pressure, and self-presentation of low achievement with students' academic cheating shows the necessity of the present study. Also, the study was necessary to consider the negative consequences of academic cheating and the need to identify the influencing factors and provide solutions for educators and parents.

2. Objectives

The present study investigates whether variables such as self-presentation of low academic achievement, academic pressure, and home-university dissonance can contribute to academic cheating behaviors among medical students and how each can predict academic cheating.

3. Methods

This study was both descriptive and correlational. The statistical population comprised all students of Tabriz University of Medical Sciences in the fields of medicine, pharmacy, dentistry, and nursing, from which 372 students were selected across these four fields of study. The sampling method was stratified random sampling. To choose the sample, the number of students in each college was determined first. Then, based on the ratio of the sample to the total number of students, the studied students were randomly selected from all colleges in the desired ratio.

Among the criteria for inclusion in the study were informed consent and enrollment in one of the selected faculties. The criterion for exclusion from the study was the incompleteness of the questionnaire and the absence of inclusion criteria. One of the ethical principles of the current study was to ensure confidentiality, and the students were assured that they could stop participating whenever they chose not to continue.

During the 2022 - 2023 academic year, after obtaining consent from the authorities of Tabriz University of Medical Sciences and receiving the timetable for attending classes, the research assistants prepared the measurement instruments and obtained consent from the subjects. They then distributed the questionnaires among the students in groups, providing the necessary explanations regarding how to complete the questionnaires.

This study used the following tools to measure the variables: Patterns of Adaptive Learning Scales (PALS), developed by Midgley et al. at the University of Michigan. The scales of adaptive learning patterns were created over time by a group of researchers to investigate the relationship between the learning environment, motivation, emotions, and behaviors of students and were reviewed and modified. This questionnaire has used different subscales to measure general personal and contextual factors. This questionnaire contains 26 scales, four of which were used in this study. The scales used for the present study were:

1. Academic cheating behaviors: Refers to students' use of cheating in class, measured by three items.

2. Academic pressure: Refers to students' perceptions that the teacher pressures them to understand, measured by seven items.

3. Home-university dissonance: Relates to students' concerns or discomfort because their home and school lives differ, measured by five items.

4. Self-presentation of low achievement: Refers to students' preference to keep their peers from knowing how well they achieve in school, measured by seven items.

This questionnaire uses a five-point Likert scale. The items on the student scales are rated on a scale where one represents "Not at all true", three indicates "Somewhat true" and five signifies "Very true". The authors' study found that Cronbach's alpha reliability for subscales, academic cheating behavior, academic and press, home-university dissonance, selfpresentation of low achievement was 0.87, 0.79, 0.76, and 0.78, respectively. This scale has been translated and standardized during several studies in Iran. The scale's psychometric properties with the Iranian sample showed that the reliability coefficients of the scales used were obtained between 0.55 and 0.80 using Cronbach's alpha and split-half reliability. Also, the validity of the scale was investigated using the criterion method, and the results showed that the correlation of all the coefficients between the scales taken from PALS and the criterion questionnaire was significant at the level of 0.001, which indicated the acceptable validity of the scale with the Iranian sample (40).

In the present study, the translated scale version was provided to the sample after face and content validation by experts and university professors without special modification or cultural adjustment. The reliability of the above variables was obtained as 0.70, 0.73, 0.78, and 0.69, respectively. Data were analyzed with SPSS 25 software. An independent samples *t*-test was conducted to explore differences in academic cheating based on gender. One-way ANOVA was used to examine the role of the educational field in cheating, while multiple linear regression was utilized to evaluate the research hypothesis.

4. Results

In this study, among the 372 questionnaires completed by students that were analyzed, it was found that 90 subjects were male and 276 were female. Among these subjects, 218 studied pharmacy, 20 in medicine, 70 in dentistry, and 58 in nursing. The study participants' average age and standard deviation were 22.49 and 1.64, respectively. Additionally, 147 participants studied in semesters one to four, 132 studied in semesters five to seven, and 93 studied in semesters eight and above. The educational distribution of the subjects also showed that 314 were studying at the doctoral level, and 58 were studying at the bachelor's level.

Table 1 reports descriptive information related to academic cheating, home-university dissonance, academic pressure, and self-presentation of low achievement. Based on Table 1, the study variables' skewness and kurtosis were under 3 and 10, respectively. Therefore, the distribution of all study variables was normal and can be analyzed using parametric tests. The average academic cheating behavior in male students was 9.67, and the average in female students was 7.52. Table 2 shows that cheating behavior is different in male and female students, with male students engaging in cheating behavior significantly more than female students.

Based on the information in Table 3, there is a significant relationship between all predictor and criterion variables at the 0.01 level. Additionally, the average cheating behavior among pharmacy, medicine, dentistry, and nursing students was 8.46, 7.60, 7.57, and 7.21, respectively. A one-way ANOVA revealed a significant difference in academic cheating across fields of study [F = 3.161, df (4, 367), P < 0.014]. After the significance of the ANOVA test was determined, Bonferroni's post hoc test was used to investigate the difference between academic fields in academic cheating and compare two-by-two averages of the fields. The results showed that the average cheating rate among pharmacy students is significantly higher than that of nursing students (I-J = 1.31, P < 0.05). However, there was no significant difference in average cheating between pharmacy and medical students (I-J = 0.91, P > 0.05) and between pharmacy and dentistry students (I-J = 0.95, P > 0.05). There was no significant difference in the average level of cheating among students in medicine compared to those in dentistry (I-I = 0.03, P > 0.05) and between medical and nursing students (I-J = 0.39, P > 0.05).

A multiple regression analysis was conducted to identify the role of predicting variables such as academic press, home-university dissonance, and selfpresentation of low achievement in the academic cheating behavior of medical students. Before performing the multiple regression, non-violation of the assumptions of normality, linearity, and collinearity were investigated. The values reported for tolerance and variance inflation factor (VIF) in Table 4 indicate that the assumption of collinearity has not been violated. The Durbin-Watson test was employed to assess the independence of the errors, and its rate was 1.71, indicating the errors' independence. The assumption of normality of the residuals was checked using the Kolmogorov-Smirnov test. The Kolmogorov-Smirnov test showed that the residuals were normal for the study variables (P > 0.05). Examining the assumptions of the analysis method showed that the data sufficed to perform the analysis. Data were analyzed using multiple linear regression analysis with the enter method. Table 5 presents the results of coefficient indicators based on a multiple linear regression analysis utilizing the enter method.

Table 1. Descriptive Statistics of the Study Variables							
Variables	Skewness	Kurtosis	Range	$Mean\pm SD$			
Academic cheating	0.242	-0.652	3 - 15	8.07 ± 3.09			
Home-university dissonance	0.324	-0.170	5-34	13.32 ± 3.92			
Academic press	0.085	-0.523	12 - 32	21.34 ± 4.49			
Self-presentation of low achievement	0.736	1.120	10 - 32	18.94 ± 3.91			

Table 2. Results of Independent Samples t-Test on Gender Effect on Academic Cheating								
Variable	t	df	P-Value	Mean Difference	Std. Error Difference			
Academic cheating	3.71	364	0.001	2.15	0.35			

Variables	1	2	3	4
Academic cheating	1	-	-	-
Home-university dissonance	0.391 ^a	1	-	-
Academic pressure	0.143 ^a	0.314 ^a	1	-
Self-presentation of low achievement	0.335 ^a	0.495 ^a	0.430 ^a	1

According to Table 5, 17% of the variability in academic cheating behaviors can be explained by selfpresentation of low academic achievement, academic pressure, and home-university dissonance. Table 6 shows the results of the ANOVA test for multiple regression estimation. The findings suggest that at least one of the predictor variables significantly influences the criterion variable and that the model fits the data well. Based on the information in Table 4, it is clear that both predictor variables, home-university dissonance and self-presentation of low achievement, have been able to predict the academic cheating behavior of medical students meaningfully. Although academic pressure is notably linked to cheating behaviors among students, it does not significantly predict these behaviors.

5. Discussion

The present study identified that academic pressure, home-university dissonance, and the self-presentation of low achievement are positively and significantly associated with students' academic cheating behaviors. This result aligns with earlier findings (12, 32-34, 38, 41). Regarding the relationship between academic cheating and academic pressure, it can be said that the academic pressures that students receive from their environment and the expectations of the people around them, i.e., professors, peers, parents, and society's standards, cause stress and psychological pressure on students. Sometimes, students feel that they cannot meet these expectations and, therefore, suffer from stress and mental pressure. To reduce mental pressure and the gap between their performance level and external expectations, they engage in academic cheating to improve their performance.

Various studies emphasize the role of the competitive environment in the field of academic cheating. Anderman and Won (42) showed that class goal structures, especially performance goal structures, can increase students' tendency to cheat, not necessarily behavior. However, the competitive cheating environment and student pressure can turn that desire into action. Another study found that the competitive environment of students is the best predictor of the tendency to cheat in exams, and cheating in online exams is more than cheating in traditional exams (43). In addition, the available evidence shows that highstress and high-pressure environments can increase the tendencies related to academic cheating (32). In this context, in addition to the competitive environment, companionship and coordination with the peer group can also affect people's moral decisions and cause the

Model		В	SE	SB	t	P-Value	95% Confidence Interval			
							Lower Bound	Upper Bound	lolerance	VIF
1										
Но	me-university dissonance	0.239	0.043	0.303	5.542	0.001	0.15	0.32	0.743	1.346
Sel	f-presentation low achievement	0.159	0.046	0.201	3.489	0.001	0.06	0.24	0.672	1.489
Aca	ademic pressure	-0.026	0.036	-0.038	-0.72	0.471	-0.09	0.04	0.802	1.247
bbreviati	ion: VIF, variance inflation factor.									
able 5. Re	egression Analysis of Self-presentation of Lo	w Achievem	ent, Acade	emic Pressu	ıre, and Ho	ome-Universi	ty Dissonance on Ad	ademic Cheating		
	Multiple Correlation Coefficient (R) (0	efficient o	of Determi	ination (R	²) Adj	usted R ² Stan	dard Error of Estimat	e F	P-Value
Model	manapre correlation coefficient (A		cinciente o	n beterini		, ,				

desire to commit fraud (44). Ip et al. (20) found that students' fear of failure and stress significantly predict academic cheating. Consequently, experiencing academic pressure can result in stress and fear of failure, which may drive students to engage in behaviors they believe will alleviate these feelings. Students try to alleviate their stress by seeking to improve their grades through any means necessary, which can sometimes lead to academic cheating. Smith et al. (4) revealed that among the students they studied who cheated academically, half of the students' main goals were to get better grades. Of course, in this study, despite the significant relationship between academic pressure and academic cheating, academic pressure could not predict cheating behavior alone because the correlation coefficient of these two variables is relatively low. However, it could predict academic cheating in combination with other predictive variables.

This study showed that disconnection between home and university environments makes students more likely to engage in academic cheating. This relationship was strong enough to predict cheating behavior among medical students. The finding aligns with previous studies (3, 31, 38). This connection may exist because parents and community members in a student's hometown sometimes lack understanding about academic integrity or because there are conflicting home expectations between and university environments. This is illustrated by studies showing that some university students were not even aware that their actions constituted cheating (2, 3, 29). The dissonance between home, place of residence, and the university can be explained by cultural differences and the way of looking at the issue of cheating. Different target structures in the university and home systems can cause internal conflicts and contradictions among students, and to reduce the tension, they may look for more effortless success, and cheating is the best way to achieve it. Also, the culture of individualism and collectivism and not having the spirit of teamwork and cooperation in both university and home systems can provide the ground for individual excellence and getting a top rank through cheating. Also, dissonance can cause stress or perfectionism in people, each of which can lead to cheating behaviors among students (2, 23, 45-47). Home-university dissonance can lead to the adoption of different goal orientations, which cause confusion and stress in students, and they resort to academic cheating to reduce (48). Parents' expectations and the performance goals they set can lead students to feel immense pressure to succeed. As a result, these students may believe that cheating is their only option achieving that success. Also, the family's for expectations and cultural outlook on the issue of cheating and its difference from the rules and regulations governing the university environment can provide a platform for uncommunication between the university and home and prepare students to perpetrate academic dishonesty and can cause anxiety and stress in students. Previous studies suggest that stress and anxiety create an environment conducive to engaging in unethical behaviors like cheating and academic misconduct (12).

Moreover, previous studies revealed that selfpresentation of low achievement had a significant relationship with academic cheating and can be predicted meaningfully and positively. Self-presentation of low achievement, as one of the personal motivational variables, can be related to other psychological variables. The ability to self-express can be related to

Tabl	Table 6. The ANOVA test for Self-presentation of Low Achievement, Academic Pressure, and Home-University Dissonance on Academic Cheating									
Мо	del	Sum of Squares	df	Mean Squares	F	P-Value				
1										
	Regression	642.636	3	214.212	27.01	0.001				
	Residual	2919.174	368	7.93	-	-				
	Total	3561.810	371	-	-	-				

high self-confidence; conversely, low self-expression can be related to low self-confidence. In previous studies, it has been determined that students who have low selfesteem and consequently have low self-confidence and high stress are likely to commit academic cheating in favorable and suitable conditions (12, 17). Students with a self-perception of low achievement are those who suffer from low self-esteem and self-confidence. Accordingly, when they feel that they may have lower performance and cannot handle the exams relying on their abilities, they cheat academically to increase their self-confidence and sense of self-worth.

The findings and results of this study can encourage the decision-makers of the university of medical sciences' educational affairs to work on their students' motivational aspects, reduce academic cheating, and eliminate the factors related to cheating. Results indicate a link between academic cheating and factors such as self-presentation of low achievement, academic press, and home-university dissonance. Therefore, one effective way to decrease cheating among medical students is to alleviate the academic pressure they experience. The likelihood of academic cheating increases significantly when students experience pressure, whether from the university, their peers, or their professional environment. Also, if the level of coordination and alignment between the conditions and atmosphere of the home and the conditions and atmosphere of the university is low, the tendency to cheat will be high.

Those concerned about the educational affairs of the university of medical sciences students should try to reduce disharmony by establishing more communication with the parents and influential people at home and encouraging them to align and coordinate with the university education programs. The present study indicates a relationship between low self-esteem and academic dishonesty. Additionally, earlier studies have demonstrated that students who struggle with selfpresentation tend to resort to dishonest actions to enhance their self-esteem. This underscores the pivotal role of addressing students' psychological well-being. Educational administrators, faculty, and parents of

medical students are empowered to play a crucial role in this regard, taking responsibility for the well-being of the students they serve. Their efforts to support and nurture students' self-confidence can significantly contribute to our goal of reducing academic dishonesty.

According to the observed relationships between the study variables, it is suggested that trainers, professors, and planners adjust their executive duties so that students of medical sciences feel less academic pressure. For this purpose, it is possible to create a noncompetitive atmosphere in classes, foster mastery learning instead of performance learning, consider students' capabilities, and create variety and new opportunities for exams. Those involved in and responsible for educating medical students are advised to coordinate and comply more closely with the students' parents in their educational decisions. Greater coordination with parents will enable university officials to provide parents with the necessary recommendations for better student adjustment so that they do not cause stress to students through unreasonable and unrealistic expectations and, consequently, do not pave the way for unethical actions related to academic dishonesty. Finally, by teaching methods of increasing self-confidence in students, it is possible to make them understand that success can be achieved not through cheating but through hard work.

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Footnotes

Authors' Contribution: Study concept and design: A. F. and S. Q. M.; Analysis and interpretation of data: A. F.; Drafting of the manuscript: S. Q. M.; Critical revision of the manuscript for important intellectual content: A. F. and S. Q. M.; Statistical analysis: S. Q. M.

Brieflands

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References

- Zhang Y. Academic cheating as planned behavior: the effects of perceived behavioral control and individualism-collectivism orientations. *Higher Educ*. 2023;87(3):567-90. https://doi.org/10.1007/s10734-023-01024-w.
- 2. Dejene W, Hui SKF. Academic cheating in Ethiopian secondary schools: Prevalence, perceived severity, and justifications. *Cogent Educ*. 2021;**8**(1). https://doi.org/10.1080/2331186x.2020.1866803.
- 3. Brown-Wright L, Tyler KM, Stevens-Watkins D, Thomas D, Mulder S, Hughes T, et al. Investigating the Link Between Home-School Dissonance and Academic Cheating Among High School Students. *Urban Educ.* 2013;**48**(2):314-34. https://doi.org/10.1177/0042085912469203.
- 4. Smith TM, Burnett AJ, Wessel MT. Use of the Social Cognitive Theory to Explain Cheating in College: Implications for Future Health Professionals. *Health Educator*. 2017;**49**(2):2-9.
- Blais J, Fazaa GR, Mungall LR. A Pre-Registered Examination of the Relationship Between Psychopathy, Boredom-Proneness, and University-Level Cheating. *Psychol Rep.* 2023:332941231184385.
 [PubMed ID: 37322882]. https://doi.org/10.1177/00332941231184385.
- Abdulghani HM, Haque S, Almusalam YA, Alanezi SL, Alsulaiman YA, Irshad M, et al. Self-reported cheating among medical students: An alarming finding in a cross-sectional study from Saudi Arabia. *PLoS One*. 2018;13(3). e0194963. [PubMed ID: 29596538]. [PubMed Central ID: PMC5875787]. https://doi.org/10.1371/journal.pone.0194963.
- Muhney KA, Gutmann ME, Schneiderman E, DeWald JP, McCann A, Campbell PR. The prevalence of academic dishonesty in Texas dental hygiene programs. *J Dent Educ.* 2008;**72**(11):1247-60. [PubMed ID: 18981203].
- Abdulrahman M, Alsalehi S, Husain ZSM, Nair SC, Carrick FR. Professionalism among multicultural medical students in the United Arab Emirates. *Med Educ Online*. 2017;**22**(1):1372669. [PubMed ID: 28918704]. [PubMed Central ID: PMC5653941]. https://doi.org/10.1080/10872981.2017.1372669.
- Auger GA, Waters RD. An Analysis of Discussions on Academic Dishonesty in Journalism & Mass Communication Educator, Volumes 1 Through 74. J Mass Commun Educator. 2020;75(4):483-99. https://doi.org/10.1177/1077695820930941.
- Yee S, Xu A, Batool K, Duan TY, Cameron CA, Lee K. Academic cheating in early childhood: Role of age, gender, personality, and self-efficacy. J Exp Child Psychol. 2024;242:105888. [PubMed ID: 38430869]. https://doi.org/10.1016/j.jecp.2024.105888.

- Kazley AS, Andresen C, Mund A, Blankenship C, Segal R. Is use of ChatGPT cheating? Students of health professions perceptions. *Med Teach*. 2024:1-5. [PubMed ID: 39099009]. https://doi.org/10.1080/0142159X.2024.2385667.
- 12. Borge S. Academic Cheating and Stressors at the University Level [thesis]. Bangkok, Thailand: Assumption University; 2024.
- 13. Daumiller M, Janke S. The Impact of Performance Goals on Cheating Depends on How Performance Is Evaluated. *AERA Open.* 2019;**5**(4). https://doi.org/10.1177/2332858419894276.
- Reinhardt N, Trnka LM, Reinhard MA. The correlation of honestyhumility and learning goals with academic cheating. *Soc Psychol Educ*. 2023;26(1):211-26. [PubMed ID: 36531529]. [PubMed Central ID: PMC9734770]. https://doi.org/10.1007/s11218-022-09742-2.
- Senel E, Yıldız M, Can S. The Role of Moral Attitude, Goal Commitment, and Cheating Tendency in Academic Achievement. *Educ Policy Analysis Strategic Res.* 2020;15(1):63-72. https://doi.org/10.29329/epasr.2020.236.4.
- Kukolja Taradi S, Taradi M, Dogas Z. Croatian medical students see academic dishonesty as an acceptable behaviour: a cross-sectional multicampus study. J Med Ethics. 2012;38(6):376-9. [PubMed ID: 22240586]. https://doi.org/10.1136/medethics-2011-100015.
- Ljubin-Golub T, Petričević E, Sokić K. Predicting Academic Cheating with Triarchic Psychopathy and Cheating Attitudes. J Acad Ethics. 2019;18(4):377-93. https://doi.org/10.1007/s10805-019-09338-0.
- Williams S, Patel K, Baker M, Campbell S, Ranellucci J, Talwar V. Elementary school-aged children's perceptions of academic dishonesty: Definitions and moral evaluations of cheating behaviors in school. *J Exp Child Psychol.* 2024;242:105893. [PubMed ID: 38479320]. https://doi.org/10.1016/j.jecp.2024.105893.
- Meng CL, Othman J, D'Silva JL, Omar Z. Influence of Neutralization Attitude in Academic Dishonesty among Undergraduates. Int Educ Stud. 2014;7(6). https://doi.org/10.5539/ies.v7n6p66.
- Ip EJ, Nguyen K, Shah BM, Doroudgar S, Bidwal MK. Motivations and Predictors of Cheating in Pharmacy School. *Am J Pharm Educ.* 2016;80(8):133. [PubMed ID: 27899829]. [PubMed Central ID: PMC5116785]. https://doi.org/10.5688/ajpe808133.
- 21. Williamson W, Assadi A. Religious Orientation, Incentive, Self-Esteem, and Gender as Predictors of Academic Dishonesty: An Experimental Approach. *Arch Psychol Religion*. 2005;**27**(1):137-58. https://doi.org/10.1163/008467206774355411.
- Kadayam Guruswami G, Mumtaz S, Gopakumar A, Khan E, Abdullah F, Parahoo SK. Academic Integrity Perceptions Among Health-Professions' Students: A Cross-Sectional Study in The Middle East. J Acad Ethics. 2023;21(2):231-49. [PubMed ID: 35815317]. [PubMed Central ID: PMC9255445]. https://doi.org/10.1007/s10805-022-09452-6.
- 23. Hayes LJ, Bays R, Arthur S, Ghani N, Vazquez C. Predictors of Attitudes Toward Pharmacological Cognitive Enhancers in College Students. *Emerging Adulthood*. 2022;**10**(3):609-19. https://doi.org/10.1177/21676968221084846.
- Pulfrey C, Butera F. Why neoliberal values of self-enhancement lead to cheating in higher education: a motivational account. *Psychol Sci.* 2013;24(11):2153-62. [PubMed ID: 24058068]. https://doi.org/10.1177/0956797613487221.
- Stone TH, Jawahar IM, Kisamore JL. Using the theory of planned behavior and cheating justifications to predict academic misconduct. *Career Dev Int.* 2009;14(3):221-41. https://doi.org/10.1108/13620430910966415.
- Zhao L, Zheng J, Mao H, Yu X, Ye J, Chen H, et al. Effects of Trust and Threat Messaging on Academic Cheating: A Field Study. *Psychol Sci.* 2021;**32**(5):735-42. [PubMed ID: 33858257]. https://doi.org/10.1177/0956797620977513.
- 27. Midgley C, Maehr ML, Hruda LZ, Anderman E, Anderman L, Freeman KE, et al. *Manual for the patterns of adaptive learning scales. Ann Arbor:*

University of Michigan. 2000. Available from: http://websites.umich.edu/~pals/PALS%202000_V13Word97.pdf.

- Babaei S, Barani M, Khanjani S, Ashouri A. The Persian Version of the Perfectionistic Self-Presentation Scale: Psychometric Properties. *Iran J Psychiatry Behav Sci.* 2024;18(3). https://doi.org/10.5812/ijpbs-132901.
- Swanson MA, Tjosvold D. The effects of unequal competence and sex on achievement and self-presentation. Sex Roles. 1979;5(3):279-85. https://doi.org/10.1007/bf00287395.
- Bober A, Gajewska E, Czaprowska A, Swiatek AH, Szczesniak M. Impact of Shyness on Self-Esteem: The Mediating Effect of Self-Presentation. Int J Environ Res Public Health. 2021;19(1). [PubMed ID: 35010490]. [PubMed Central ID: PMC8744881]. https://doi.org/10.3390/ijerph19010230.
- 31. Deb S, Strodl E, Sun H. Academic stress, parental pressure, anxiety and mental health among Indian high school students. *Int J Psychol Behav Sci.* 2015;**5**(1):26-34.
- 32. Wenzel K, Reinhard M. Tests and academic cheating: do learning tasks influence cheating by way of negative evaluations? *Soc Psychol Educ*. 2020;**23**(3):721-53. https://doi.org/10.1007/s11218-020-09556-0.
- 33. Kanto DS, Kisman Z, Efendri E, Murdiana M. The Influence of Academic Pressure, Academic Procrastination and Ability with Self Efficacy as a Moderating Variable on Student Academic Fraud Behavior. Islamic Banking : Jurnal Pemikiran dan Pengembangan Perbankan Syariah. 2023;8(2):375-94. https://doi.org/10.36908/isbank.v8i2.698.
- 34. Susanti S, Lestari D, Takidah E. The Influence of Pressure, Opportunity and Rationalization on Academic Fraud of Vocational Student. *Univ J Educ Res.* 2019;**7**(9):1976-82. https://doi.org/10.13189/ujer.2019.070918.
- 35. Endarty K, Widyaningsih A, Arief M. Factors Causing Academic Cheating Behavior in the online system: A Systematic Literature Review. *JEKAMI J Account*. 2024;4(1):15-20.
- Ebrahimi S, Bazrafshan A, Kamyab A, Pakdin M, Ebrahimi A. Moral Injury: A Challenge for Healthcare Workers During the Pandemic and Beyond. *IJ Psychiatry Behav Sci.* 2024;18(3). e146570.
- Hasanvandi S, Saadat SH, Shahyad S. Predicting the Possibility of Post-Traumatic Stress Disorder Based on Demographic Variables, Levels of Exposure to Covid-19, Covid-19 Anxiety and Sleep Quality Dimensions in Health Care Workers. Trauma Monthly. 2022;27(Especial Issue (COVID-19 and Emergency Medicine)):8-17. https://doi.org/10.30491/tm.2021.293711.1326.

- Arunkumar R, Midgley C, Urdan T. Perceiving High or Low Home-School Dissonance: Longitudinal Effects on Adolescent Emotional and Academic Well-Being. J Res Adolescence. 1999;9(4):441-66. https://doi.org/10.1207/s15327795jra0904_4.
- 39. Zhao L, Yang X, Yu X, Zheng J, Mao H, Fu G, et al. Academic Cheating, Achievement Orientations, and Culture Values: A Meta-Analysis. *Rev Educ Res*. 2024;**13**. https://doi.org/10.3102/00346543241288240.
- 40. Haji-yakhchali AR, Haghighi J, Shokrkon H. A Study of Simple and Multiple Relationships of important Antecedents of Mastery Goal Orientation and Its Relationship with Academic Performance of First Grade Boy Students at Ahvaz High Schools. *Psychol Achievements*. 2001;8(1):31-48. https://doi.org/10.22055/psy.2001.16465.
- Jiang MM, Gao K, Wu ZY, Guo PP. The influence of academic pressure on adolescents' problem behavior: Chain mediating effects of selfcontrol, parent-child conflict, and subjective well-being. *Front Psychol.* 2022;**13**:954330. [PubMed ID: 36211862]. [PubMed Central ID: PMC9534181]. https://doi.org/10.3389/fpsyg.2022.954330.
- 42. Anderman EM, Won S. Academic Cheating in Disliked Classes. *Ethics* Behav. 2017;**29**(1):1-22. https://doi.org/10.1080/10508422.2017.1373648.
- Akhtar H, Firdiyanti R. Predicting Academic Dishonesty Based on Competitive Orientation and Motivation: Do Learning Modes Matter? Int J Cognitive Res Sci, Engin Educ. 2023;11(3):439-47. https://doi.org/10.23947/2334-8496-2023-11-3-439-447.
- 44. Santos JVL. Exploring the Influence of Situational Ethics on Cheating Behavior of College Students: A Comparative Analysis of Moral and Academic Dilemmas. *Psychol Educ: A Multidisciplinary J.* 2024;**17**(8):1.
- 45. Azam M, Naeem SB. Academic integrity among medical students and postgraduate trainees in the teaching hospitals of South Punjab Pakistan. *Health Info Libr J.* 2022;**39**(4):377-84. [PubMed ID: 36239300]. https://doi.org/10.1111/hir.12458.
- 46. Mohamed ME, Mohy N, Salah S. Perceptions of undergraduate pharmacy students on plagiarism in three major public universities in Egypt. Accountability Res. 2018;25(2):109-24. [PubMed ID: 29397776]. https://doi.org/10.1080/08989621.2018.1435997.
- Tyler K, Brown-Wright L, Stevens-Watkins D, Thomas D, Stevens R, Roan-Belle C, et al. Linking Home-School Dissonance to School-Based Outcomes for African American High School Students. J Black Psychol. 2009;36(4):410-25. https://doi.org/10.1177/0095798409353758.
- Kumar R. Students' experiences of home-school dissonance: The role of school academic culture and perceptions of classroom goal structures. *Contemporary Educ Psychol.* 2006;31(3):253-79. https://doi.org/10.1016/j.cedpsych.2005.08.002.