Investigating academic dishonesty and its relationship with moral competence and professional identity of nursing students: a cross-sectional study

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Abstract

Background Academic dishonesty as a fundamental challenge in adherence of ethical principles in providing care to patients has caused concern to the scientific community of nurses. In addition, positive professional identity and high moral competence are important for nurses to perform multiple care roles in high quality care of patients. The purpose of the present study is of investigating academic dishonesty and its relationship with moral competence and professional identity of master's and PhD nursing students.

Methods This descriptive-analytical study was conducted by census method on 65 master's and PhD nursing students in Shiraz University of Medical Sciences, Iran in 2023. Data collection tools included 4 questionnaires (Demographic information, Academic Dishonesty Scale (DAS), Nurses' moral competence and Professional Identity Scale for Nursing Students (PISNS)). Data collection was done within 2 months. Descriptive and inferential analyzes including independent t-test, Pearson correlation coefficient and linear regression were used to analyze the data. The collected data were analyzed by SPSS.V.22 software. P-value less than 0.05 was considered significant.

Results The average age of 65 participants was 31.5 ± 5.61 years. The majority of the participants in this study were women 48 (73.8%). There is a significant and negative correlation between academic dishonesty and moral competence (r=-0.260, P-value=0.036). There is no significant correlation between academic dishonesty and professional identity (r=0.154, P-value=0.22). Also, a significant positive correlation was found between moral competence and professional identity (r=0.294, P-value=0.018).

Conclusion Therefore, considering that the fact that students have a great impact on patient care, Researchers suggest that educational institutions should prevent the increase of academic dishonesty among students by establishing new rules and regulations.

Keywords Academic dishonesty, Moral competence, Professional identity, Nursing students

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Background

One of the important issues in the health system is providing ethical care. Ethical care is an essential part of the nursing profession The actual academic dishonesty is a fundamental challenge in adherence to ethical principles in providing care to the patient [1]. Honesty is considered a fundamental moral value in all educational environments, and academic honesty is of unquestionable importance in educational environments, academic dishonesty and theft have been one of the most challenging and controversial ethical issues in academic debates for years [2, 3]. Academic dishonesty is defined as the use of illegal aid to deceive an instructor or professor, a deliberate attempt by a student to falsify data, or any other fraud on campus. Globally, more than 80% of students agree that cheating is necessary to progress at higher levels [4] And more than 70% of students admit that they have been involved in various forms of academic dishonesty [2]. The study of Alotaibi and et al., (2024) showed that the prevalence of dishonesty among nursing students is at a high level [5] This is a concern for the scientific community of nurses, because there is a positive correlation between academic dishonesty and ethical behavior in the future [6, 7]. Students who engage in academic immorality will have difficulty in acquiring the necessary skills for their future jobs [8] and these inefficient and unskilled people will cause irreparable problems in the clinical environment. In addition, paying attention to ethical competence in the nursing profession is essential, because the quality of patient care depends on the ethics of nurses [9].

Ethical competence is an ethical imperative that health care professionals must embody in their day-to-day functioning in order to identify ethical dimensions in their decisions. Ethical competence helps healthcare professionals find the best solution for their patients. Therefore, it is an essential component for providing high-quality care [10, 11]. Moral competence is an abstract concept that consists of cognitive, emotional and behavioral components [12]. The results of a qualitative study in Iran showed that the ethical competence of nursing includes wide dimensions such as moral character, moral decision-making and moral care [9]. Since most of the decisions and procedures that are made in the nursing profession have an ethical dimension [13], developing students' ethical competence is of great importance. Today's students are future nurses who will make decisions about human health and life. Therefore, these students should attain an appropriate level of moral competence during their studies, which is a good opportunity for learning and both ethical and professional development [14] In this regard, the study of Haghighat, et al. stated there is a significant relationship between the formation of professional identity and the development of ethics in nursing students, so that by strengthening the professional values of students,

their moral competences grow [12]. In addition to individual effects, unethical acts can have a negative impact on both the patient and the profession. Therefore, investing in nursing students' moral competency improves professional identity and quality of nursing services [15].

Another factor that has a significant impact on the quality of patient care is professional identity. In fact, professional identity is a fundamental element in nursing [16]. The professional identity of "perception of the professional self" is based on attitudes, beliefs, feelings, values, motivations and experiences related to a particular profession [16–18]. Professional identity is a part of the care structure and is the main consequence of the education and socialization of nurses [19, 20]. Positive and flexible professional identity is important for performing multiple roles of nurses in quality care of patients and reducing workplace stress [19, 20]. It is also one of the most important factors affecting employees' commitment to their profession [16]. The formation of professional identity is a dynamic process that starts from the time of training students for a future job and continues throughout one's professional life [21–23]. Positive professional identity will ultimately increase the quality of care and negative professional identity and decrease the quality of care and motivation for professional learning of nursing students [20]. The results of a systematic review study showed that the most important factors related to the formation of nursing professional identity include poor team and communication activities, role of clinical instructors, educational methods, individual characteristics (age, sex, self-confidence, job satisfaction, etc.) and the role of culture and media [24]. In another study, the gap and lack of coordination between theoretical and clinical education, the amount of support that students receive from the educational system and lack of a clear and acceptable picture of nursing profession in the community are the factors affecting the development of professional identity [25].

On the other hand, academic dishonesty affects the formation of professional identity in nursing students, so the results of the study of the Krueger(2014) study reported that more than half of the nursing students reported academic dishonesty in the classroom and almost the same number of cheating in the clinical environment, which reflects the unprofessional behavior of the students in the clinical environment [26]. Also, in Bloomfield et al.(2021)'s study, the participants stated that academic dishonesty is a violation of the code of conduct, and a high percentage of them stated that academic dishonesty should be considered as a professional offense [27].

Considering the importance of academic honesty and the negative consequences of engaging in academic dishonesty, as well as the importance of moral competence and professional identity in nursing students, so far no

study has investigated the relationship between academic dishonesty and the moral competence and professional identity of nursing students. Most of the studies conducted in the field of academic dishonesty have investigated its situation and methods [6, 28, 29] and the effective factors in creating academic dishonesty and cheating [2, 29]. Therefore, this study aimed to determining the relationship between academic dishonesty with moral competence and professional identity of nursing students was accomplished.

Methods
Study design and subjects
In The present study 70 students (Master and PhD) participated in the study. Five students were excluded from the study due to the failure to complete the questionnaire and the analysis was done on the data of 65 students of Shiraz School of Nursing and Midwifery, Iran from June to November 2023. The Sampling method used in this study was census and all nursing students in master and PhD nursing students with inclusion and exclusion criteria were enrolled. Inclusion criteria included at least one semester of study. Exclusion criteria were deficiency in filling out the questionnaire, unwillingness to participate in the study and presence of self-reported mental illness. The current study was designed based on the STROBE guidelines for observational studies.

The present study has been approved by the ethics committee of Shiraz University of Medical Sciences with the Code of Ethics (IR). SUMS. NUMIMG. REC.1401.054 and access link (B2n.ir/z74571). After receiving the code of ethics, the researcher received a list of names along with the contact numbers of MS and PhD nursing students who met the inclusion and exclusion criteria. In the next step, the link of online questionnaires (all questionnaires were designed in one link) was sent to the target group via short message service (a system used for sending text messages to and from mobile phones).

The online questionnaire link was sent up to 3 times. In the design of the online questionnaire, IP filtering was used to prevent repeated responses, and the participants could refuse to complete the questionnaire at any time.

Before completing the questionnaire, participants were informed of the objectives of the study and informed written consent was obtained from each participant electronically before completing the questionnaire. There are 80 students nursing (master's and PhD degree) in college. Finally, 70 of 80 nursing students participated in the study and after collecting questionnaires, 5 questionnaires were excluded due to failed to completion. Finally, data from 65 participants were analyzed.

Data collection tools
In this study, 4 questionnaires were used, including: Demographic information questionnaire (age, gender, grade point average), Academic Dishonesty Scale (DAS) [30], Nurses' moral competence [9]and Professional Identity Scale for Nursing Students (PISNS) [16].

Academic dishonesty scale
The scale was designed by Bashir & Bala in 2018 in 23 items and 6 dimensions. Dimensions of the scale include Cheating in examination (items 1 to 5), Plagiarism (items 6 to 9), Outside help (items 10 to 13), Prior cheating (14 to 16), Falsification (items 17 to 19), and lying about academic assignments (items 20 to 23). The items of this scale are scored on a 5-degree Likert range from never (score 0) to always (score 4) [31]. The upper limit of the score in this questionnaire is 92 and the lower limit is 0. (Low range: 0–30, Intermediate range: 31–60, High range: 61–90) This scale has been Translation and validated in Iran. Validity and reliability of the questionnaire were confirmed by face, content and construct validity (confirmatory factor analysis and internal consistency) and Cronbach's alpha. Confirmatory factor analysis with fitting indices ($2X=317$, $1.63 \times 2/df$, 0.81 NFI, 0.93 TLI:, 0.89 GFI:, 0.95 CFI:, 0.05 RMR:, 0.68 PNFI:, 0.73 PCFI:, 0.63 PGFI:, 0.86 AGFI:, 0.95 IFI:, 0.06 RMSEA:, 0.19 PCLOSE:) showed the fit of academic dishonesty scale with the data. In order to investigate the internal consistency of academic dishonesty scale, correlation between the scores of academic dishonesty dimensions with each other and with the total score of the scale was used [30]. Cronbach's alpha was 0.93 in the version Translation and validated in Iran.

Nurses' moral competence
This questionnaire was designed in 2017 by Zafarnia et al. in Iran. The questionnaire consists of 46 items, including 6 domains including Responsible Behavior (item 1 to 15), Reliability (16 to 23), Service Enthusiasm (24 to 28), Utility (29 to 33), Client-centered (4 to 42) and Ethical Knowledge (43 to 46). The questionnaire is based on a 4-point Likert scale with always (score 4), often (score 3), sometimes (score 2) and never [1]. Therefore, the minimum score on this scale is 46 and its maximum is 184 (Low range: 46–92, Intermediate range: 93–138, High range: 139–184). A higher score indicates greater moral competence. The content validity of this questionnaire was 92% by researchers [9]. Internal consistency was used to determine the reliability and Cronbach's alpha was 0.93. To determine the reliability of the test-retest with a two-week interval, the nurses' moral competency scale was administered again. Test-retest reliability was found to be 0.84 with CI 0.71–0.92 [9].

Table 1 Demographics information of the participants with the Mean and standard deviation (*n*=65)

variables	Category	*N* (%)	Academic Dishonesty Scale (Mean±SD)	Moral competence (Mean±SD)	Professional Identity (Mean±SD)
Gender	Female	48 (73.8)	8.19±9.79	157±19.5	56.4±11.4
	Male	17 (26.2)	6.76±4.71	161±17.9	62.4±11.3
Educational degree	PhD student	13 (20)	7.77±12.8	159±23.9	51.8±11.6
	Master's student	52 (80)	7.83±7.55	157±17.9	59.5±11.1

Table 2 Descriptive information of dimensions of academic dishonesty scale, Moral competence, and Professional Identity (*N*=65)

Variable	Dimension	Mean±SD	Lower score	Highest score
Academic Dishonesty	Cheating in examination	1.57±2.47	0	11
	Plagiarism	1.49±2.17	0	11
	Outside help	2.28±2.25	0	10
	Prior cheating	0.89±1.51	0	6
	Falsification	0.49±1.08	0	6
	Lying about academic assignments	1.06±1.64	0	8
	Total Academic Dishonesty	7.82±8.84	0	46
Moral competence	Responsible Behavior	52.4±6.29	30	60
	Reliability	28.8±3.29	16	32
	Service Enthusiasm	15.6±3.31	7	20
	Utility	17.6±2.52	10	32
	Client-centered	29.7±4.49	18	36
	Ethical Knowledge	13.6±2.09	8	16
	Total Moral competence	158±19.1	92	184
Professional Identity	Professional self-image	19.7±5.76	8	30
	Benefit of retention and risk of turnover	13±3.6	4	19
	Social comparison and self-reflection	11.8±2.15	3	15
	Independence of career choice	5.42±1.35	2	8
	Social modeling	7.93±2.01	2	10
	Total Professional Identity	58±11.5	29	79

Professional identity scale for nursing students

The scale was created by Hufang Hao in 2011 and consists of 17 questions and 5 dimensions. Professional self-image, benefit of retention and risk of turnover, social comparison and self-reflection, independence of career choice, and social modeling. Items were graded from 1 (completely disagree) to 5 (completely agree), with scores ranging from 17 to 85. (Low range:17–39, Intermediate range: 40–62, High range:63–85) A high score denoted a high professional identity. In his study, the reliability coefficient of the total scale was 0.926 and the reliability coefficients of all subscales were more than 0.7 [32, 33]. Translation and validated of tools in Iran has been confirmed by Haghighat et al. in 2017 with Cronbach's alpha (α: 0.787) [16].

Statistical analysis

Data were analyzed using descriptive analysis including frequency, percentage, mean and standard deviation. Pearson correlation coefficient was used to determine the relationship between academic dishonesty and professional competence and academic dishonesty with students' professional identity. Independent t-test was used to determine the relationship between demographic variables and academic dishonesty. Linear regression model was used for modeling. In this model, the dependent variable was professional competency and predictor variable were academic dishonesty, gender, grade, and grade point average. The collected data were analyzed using SPSS software version 22. *P*-value less than 0.05 was considered statistically significant.

Results

The average age of 65 participants was 31.5±5.61 years. The majority of the participants in this study were women (48, 73.8%). The mean GPA for nursing PhD students was18.09±0.63 and 17.09±1.15 in MS students. The details of frequency, percentage, mean and standard deviation of variables based on demographic information are reported in Table 1.

According to the findings of this study, the mean and standard deviation for academic dishonesty was 7.82±8.84, which is lower than average. Also, the mean and standard deviation for total moral competency was 158±19.1 (High average) and total professional identity was 58±11.5 (Intermediate average). The mean and standard deviation of the dimensions of all three variables are given in Table 2.

Table 3 The correlation between the academic dishonesty, Moral competence and Professional Identity

Variable	*P*-value Moral competence	*P*-value Professional Identity
Academic Dishonesty	0.036 -0.260	0.22 0.154
Moral competence		0.018 0.294

Note: In each table cell, the first-row number indicates the significance level (*P*-value) and the second-row number indicates the correlation coefficient (r)

Table 4 The relationship of moral competence as a dependent variable with independent variables in linear regression in students

Predictor	Estimate	SE	T	*P*-value
Intercept	164.080	2.970	55.25	< 0.001
Academic Dishonesty	-0.829	0.254	-3.26	0.002

Adjusted for gender, educational degree and GPA

The results of data analysis showed that there was a significant and negative correlation between academic dishonesty and moral competence (r=-0.260, *P*-value=0.036, df=63). On the other hand, there was no significant correlation between academic dishonesty and professional identity (r=0.154, *P*-value=0.22). Also, there was a significant positive correlation between moral competence and professional identity (r=0.294, *P*-value=0.018). The analytical results of the relationship between academic dishonesty, moral competence and professional identity are shown in Table 3.

In the linear regression model, first, the relationship between each independent variable (academic dishonesty, gender, grade, average) with the dependent variable (moral competence) was measured by simple linear regression. If the *p*-value was below 0.2, the variable was included in the multiple model.

In this model, a significant relationship was found between moral competence and academic dishonesty (*P*-value=0.002). The model shows that for every increase in academic dishonesty, moral competence decreases by an average of 0.829 points. Details are shown in Table 4.

Discussion

The aim of this study was to investigate academic dishonesty and its relationship between moral competence and professional identity of nursing students. In this study, less than half of these nursing students reported academic dishonesty. By comparison, the results of the Amutairi et al.study also -found that more than half of nursing students had academic integrity and a smaller percentage of them reported academic dishonesty with half of them saying that they participated in more than two cases of academic dishonesty during their education [34]. Maracle et al.'s study stated that nursing students got used to doing dishonest behaviors and they think those behaviors are acceptable and normal, and this has caused an increase in dishonest behaviors among them [6]. Conversely, the results of the Alotaibi et al. study, contradicted the results of the current study, They found that a high percentage of students cheated on exams and assignments, and reported that more than three-quarters of students cheated before and during exams [5]. A study conducted in Saudi Arabia by Alnjjar et al. also found that a high percentage of nursing students reported at least one case of academic dishonesty in exams and homework [35].

In the other part of the study, the results showed that the moral competency of nursing students was moderate to high. In this regard, in the study of Alnajjar et al., it also indicated that nursing students had a moderate level of academic moral awareness and moral sensitivity [35]. On the other hand, Choi's study emphasized that it is necessary for students to be given reasonable explanations about academic ethical standards at the same time as the beginning of academic enrollment to ensure that they are aware of their responsibilities and adherence these principles during their studies [36]. Therefore, ethical principles should be institutionalized during nursing students' education in order to ensure safe and optimal care for patients in the future.

The results of another study indicate that professional identity of nursing students is higher than average. In this regard, the Amutairi study was similar to the results of the current study, with more than half of the students having a high professional understanding [34]. The Gilvari study showed that students had a high professional identity [37]. The study in Iran also showed the professional identity score of nursing students was higher than half of the expected score [16].

The correlation between variables showed that there is a significant and negative relationship between academic dishonesty and moral competence of nursing students. That is, the less academic honesty students had, the less moral competency they showed. In this regard, Chang's study is in line with the results of this study. This study showed that students with high ethical attitude were less involved in academic dishonesty, In this study the ethical behavior of participants showed a significant relationship with academic dishonesty [38]. Therefore, doing

unethical activities may lead to normalization of this behavior and nursing students' interest in ethical behaviors after graduation decreases. Academic honesty is usually **an issue** earlier in life than **being specifically taught about** ethical behavior. **In the course of their training and clinical practice**, nursing students **like other professionals** will encounter ethical **dilemmas** in professional life. Therefore, universities should plan to promote students' culture of academic honesty in order to prevent unethical activities, and take necessary measures and inform students of existing policies.

In another part of the study, no significant relationship was found between academic dishonesty and professional identity. Bloomfield et al.'s study stated that high percentage of participants stated that academic dishonesty should be attended as a Professional misconduct [27]. Also, a study showed that there is a positive relationship between academic dishonesty and professional dishonesty [39]. On the other hand, most of the available studies are in the field of professional identity formation and ethical growth [40, 41], which considering that academic dishonesty can have adverse effects on ethical and professional behaviors, therefore, with the help of professional identity formation, it can be expected that ethical competencies can be developed in students. In this regard, nursing education has an important impact on the development of nursing students' professional identity and values [12]. Professional values are one of the important parts of professional identity. In the process of forming professional identity, a system of norms and values is formed in students and nurses. Nursing students learn these values from educators and other nurses as well as from other students. Their experiences of faculty and hospitals also play an important role in the development of professional values [42]. Therefore, it seems that by forming professional identity, indirectly the desire for students' moral performance will be formed, and ultimately students will not go to unethical acts such as academic dishonesty.

Ethical values in nursing students are affected by different factors in a process [40]. Perhaps this is because in this study no significant relationship was found between academic dishonesty and professional identity and on the other hand, nursing schools and educational system have an important role in the formation of professional identity if educational centers focus solely on increasing knowledge and skills, graduate nurses may be able to Do not have appropriate internalized professional values, which include moral and ethical values. The emphasis on professional values from the beginning of the study helps students develop the competencies they need to work in accordance with ethical and professional values.

The study by Alnajjar et al. showed that academic dishonesty has adverse effects on workplace honesty and health care system quality [35] Therefore, given that academic honesty is a serious issue in nursing and nursing students who are involved in academic dishonesty have the potential to conduct deceptive and unethical behaviors in clinical settings [43]. Nursing requires high professional and ethical standards for protecting people's lives and a reliable profession is known, so lack of academic honesty such as cheating in exams in nursing students can have inappropriate consequences in developing unethical behaviors and have adverse effects on the future of the profession [27].

Therefore, the academic honesty of students should be examined from different dimensions, and nursing teachers will be effective in reducing academic dishonesty by implementing specific educational programs in this field, therefore they will provide a basis for patient safety and will prevent dishonest behaviors in the professional future of students.

This study has limitations. One of the limitations of the study is that due to the fact that the sampling was done from a nursing school, the number of samples is small, so the generalizability of the data should be taken into account. Therefore, it is suggested that future studies be conducted with a higher sample size and sampling from several nursing schools. It is also suggested to conduct studies considering the variables of the current research in undergraduate nursing and various levels of other medical fields. It is also recommended to conduct qualitative studies in this field.

Conclusion

In the present study, there is a significant relationship between academic dishonesty and moral competencies, but there is no relationship between academic dishonesty and professional identity. Therefore, considering that students will work as nurses and nursing instructors in the future, if it becomes a habit for students to do dishonest things during their studies, it can cause harm to the patient and reduce the quality of nursing care. Researchers suggest that educational institutions should prevent the increase of academic dishonesty among students by establishing new rules and regulations, and professors should try to focus more on moral issues and honest academic activities in addition to increasing the level of knowledge and skills of students.

Declarations

Ethics approval and consent to participate
The present study has been approved by the ethics committee of Shiraz University of Medical Sciences with the Code of Ethics (IR). SUMS. NUMIMG. REC.1401.054 and access link (B2n.ir/z74571). Before completing the questionnaire, participants were informed of the objectives of the study and informed written consent was obtained from each participant electronically before completing the questionnaire. In this study, the participants were not required to mention their names and surnames and the participants were assured of confidentiality and confidentiality.

Consent for publication
Not Applicable.

Competing interests
The authors declare no competing interests.

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