Academic Ethical Awareness and Moral Sensitivity of Undergraduate Nursing Students: Assessment and Influencing Factors

Hend Abdu Alnajjar, PhD[1] and
Ebtsam Aly Abou Hashish, PhD[1,2] (iD)

Abstract

Introduction: Nursing students are exposed to ethically challenging conditions in their future workplaces; hence, they must be ethically knowledgeable and morally sensitive to provide patients with holistic care based on sound ethical decision-making skills. **Objectives:** This study aimed to assess nursing students' perception of their academic ethical awareness and moral sensitivity and determine the relationship between these variables. **Methods:** We conducted a descriptive correlational research study with a convenient sample of nursing students (N = 246) in a Saudi University nursing college. Data were collected using the Academic Ethical Awareness Questionnaire and Moral Sensitivity Questionnaire. We used descriptive statistics, ANOVA, and regression analyses. **Results:** Nursing students exhibited moderate academic ethical awareness and moral sensitivity. The regression analysis showed that academic ethical awareness can substantially predict 28.8% of the explained moral sensitivity variance ($p < 0.001$). Nursing students were aware that the violation of patients' respect or confidentiality and cheating in examinations were unethical behaviors. However, they showed low ethical awareness toward plagiarism behaviors. Furthermore, they reported higher moral sensitivity for patient-oriented care and professional responsibility and did not experience conflict. Academic level and integrated classroom and clinical learning experiences seemed to positively impact students' academic ethical awareness. **Conclusion:** The findings provide a basis for monitoring nursing students' professional misconduct so that they maintain integrity and adhere to academic ethics guidelines. Constant exertions for fostering nursing ethics courses with inspiring learning content and innovative instructional material are vital in improving nursing students' academic integrity and ethical care.

Keywords

academic ethical awareness, moral sensitivity, nursing students, nursing

Received 30 October 2020; accepted 28 May 2021

Background

The modern healthcare system combined with an increasingly challenging healthcare environment, creates a plethora of complex ethical problems, necessitating the development of sound moral judgment and skills in healthcare practitioners (Comrie, 2012; Yeom et al., 2017). Advances in health science and technology have likewise contributed to fundamental improvements in nursing education and practice. Since the beginning of modern nursing education, ethics has been an integral part of the nursing curriculum (Hoskins et al., 2018). Many efforts to facilitate ethical education in nursing programs have been introduced to better train new nurses and nursing students to be ethically responsible

and cope with the ethical issues and decisions in their future roles (M. Park et al., 2012).

Nursing students, the future nursing workforce, will be exposed to ethically challenging nursing conditions in their workplaces, and they must be ethically knowledgeable and morally sensitive to provide patients with

---

[1]College of Nursing - Jeddah, King Saud Bin Abdul-Aziz University for Health Sciences, Jeddah, Saudi Arabia
[2]Faculty of Nursing, Alexandria University, Alexandria, Egypt

Corresponding author:
Ebtsam Aly Abou Hashish. College of Nursing - Jeddah, King Saud Bin Abdul-Aziz University for Health Sciences, Jeddah, Saudi Arabia.
Email: ebtsam_ss@hotmail.com

holistic care based on sound ethical decision-making skills (Muramatsu et al., 2019; Yeom et al., 2017). There has been little research on students' ethical knowledge and moral sensitivity skills in nursing education. Consequently, there is a need for the current research to partially fill this research gap and provide evidence for creating an ethics education curriculum design (M. Park et al., 2012).

Review of Literature

Academic ethics requires students to be conscientious, rational, have a good sense of duty to avoid unsuitable learning habits/manners, and strive for academic excellence (Cho & Hwang, 2019). *Academic Ethical Awareness (AEA)* aims to understand academic values and maintain the proper attitude to guide all learning activities. It implies mindfulness and taking a stance against non-proficient activities that may arise in various learning contexts, such as lecture, simulation, training, clinical practice, and teamwork projects (Cho & Hwang, 2019).

While students recognize academic ethics' value, some students might not view unethical behavior as a problem. Using the name of a team member who has never contributed to the project/assignment, asking someone else to write papers on their behalf, or joining the class as a substitute are examples of improper behavior (Kwon et al., 2013; Lee et al., 2011). Plagiarism, buying reports from others, stealing ideas, cheating in exams, engaging in potentially risky competitions with other students, and violating others' rights are other examples of improper conduct (Kwon et al., 2013; Lee et al., 2011). Furthermore, academic ethics violations include nursing students' participation in such significant ethical misconduct during clinical training, such as falsifying or altering patients' documents, or discussing their patients with non-medical staff publicly (E. J. Park et al., 2014). In addition, recording non-medical procedures or unmeasured, unreliable vital signs, leaving the practice location, or documenting unreliable patient data in case reports are unethical actions (Hejri et al., 2013; E. J. Park et al., 2014).

Nursing students who behave unethically can harm their learning and training, exacerbating unprofessional conduct, carelessness, untrustworthy patient relationships, poor nursing care quality, and generating a risk to patient safety. Academic ethical knowledge is vital for nursing students because it ensures their potential compliance with nursing care morals and an appropriate attitude towards becoming nursing professionals (Kwon et al., 2013; McCrink, 2010).

Moral sensitivity (MS) is also an essential part of making ethical decisions. Nurses, as healthcare professionals, must have a high level of genuine ethical skills and respect the standards and rights of patients who need their care. Nurses who practice ethical mindfulness will consider others' reactions and feelings, as well as their potential acts (Comrie, 2012; Muramatsu et al., 2019; M. Park et al., 2012; Yeom et al., 2017). Lützén et al. (1995) defined moral sensitivity as an individual's ability and capacity to deal with ethical conflict in particular circumstances involving patient-nurse interpersonal relationships. Moral sensitivity entails nurses to identify a moral dilemma, show a contextual and intuitive understanding of the patient's vulnerable condition, and provide insight into the patient's situation and the ethical implications of their actions.

Lützén et al. (1995) and Han et al. (2010) identified five dimensions of moral sensitivity including: *patient-oriented care*, which focus on maintaining a trusting relationship with the patient and finding ways to respond to their needs, *professional responsibility* that refers to personal convictions and beliefs about acting professionally, avoiding conflicts of interest, and putting the interests of patients ahead of personal desires, as ethical obligations, *moral meaning* that refers to the process of reflection in structuring a moral connotation for decisions and acts, even if it may restrict the patient's autonomy, *moral conflict experience* that requires identifying a possible or real moral dilemma before expressing moral sensitivity, while acting and considering emotions, intuition, and cognitive knowledge of a moral question about what to do, and *benevolence* that refers to a moral motivation to do good or act in the patient's best interests (Han et al., 2010; Lützén et al., 1995).

Significance and Problem Statement

During their learning engagement and working with patients and staff, nursing students often confront various unexpected ethical dilemmas (Woith et al., 2012). They must be educated and professionally prepared to manage such circumstances. Previous research on nursing ethics has clearly shown the value of educating nursing students to face ethical issues in their future positions (Muramatsu et al., 2019). Education and learning experiences can profoundly affect ethical awareness and moral sensitivity, which can influence nursing students' behavior in clinical environments (Abou Hashish & Ali Awad, 2019; Woith et al., 2012). Abou Hashish and Ali Awad (2019) highlighted that nursing educators play a critical role in developing students' and nurses' professional and ethical competence by motivating them to consider ethical dilemmas and apply ethical reflection. Likewise, ethics educators believe that enhancing moral sensitivity and moral judgment is an essential and measurable aim for teaching ethics in higher education programs to better promote students'

ethical decision-making and moral behavior (Baykara et al., 2015).

A few studies on academic ethical awareness among nursing students have been conducted. Cho and Hwang (2019) studied academic ethical awareness, while Yeom et al. (2017) and Baykara et al. (2015) examined the impact of ethics training or education in nursing students' moral sensitivity development. To the best of the researchers' knowledge, no direct research or published study has been conducted in Saudi Arabia to investigate the relationship between nursing students' academic ethical awareness and moral sensitivity and the characteristics or factors that can significantly affect them. This study aimed to fill this gap by providing essential data to guide nurse educators in improving nursing ethics education strategies for undergraduate nursing students.

Aim of the Study

This study aimed to assess nursing students' perception of their academic ethical awareness and moral sensitivity in relation to their academic levels and learning experience and determine the relationship between these two variables.

Methods

Design and setting: The study utilized a descriptive cross-sectional correlational research design at the College of Nursing- Jeddah (CON-J), affiliated to King Saud bin Abdul-Aziz University for Health Sciences, National Guard Health Affairs, Jeddah, Saudi Arabia.

Participants

The researchers invited all undergraduate nursing students who were in their third and fourth years (N = 316) during the academic year 2019/2020. They constituted the fifth, sixth, seventh, and eighth academic levels. The sample size was determined using the Raosoft sample size calculator with 0.5 margin errors, 95% confidence interval; the minimum suggested sample size was 169. The researchers conducted a pre-testing of the study instruments on 16 students. Of the 300 students, 246 answered the study questionnaire with a response rate of 82.0%. Year 1 and 2 students were not invited, as they did not have any clinical placement experience.

Study Instruments

We used a three-part questionnaire to collect the data for this study:

Part 1- Socio-Demographic Questionnaire. This part included four questions asking about the students' age, academic level, previous education on ethics, and the influential learning experience, whether classroom, clinical setting, or both.

Part 2- Academic Ethical Awareness Questionnaire (AEAQ). The academic ethical awareness questionnaire developed originally by Kwon et al. (2013) and modified by Cho and Hwang (2019) was used to test academic ethical awareness among nursing students. It consisted of 30 items allocated to 7 subscales: behaviors related to plagiarism (8 items), inappropriate behaviors in class (6 items), behaviors violating the respect or confidentiality of patients (5 items), dishonest behaviors during clinical practice (4 items), free-riding in group activities (4 items), unfaithful behaviors in clinical practice (2 items), and cheating in exams (1 item). Each item was rated on a 4-point Likert scale ranging from 1 (Allowable to do) to 4 (Must not do). A higher mean score indicated greater level of awareness.

Part 3- Moral Sensitivity Questionnaire (K-MSQ). The Korean version of the Moral Sensitivity Questionnaire (K-MSQ), developed initially by Lützén et al. (1995) and modified by Han et al. (2010) was used. The K-MSQ comprised 27 items with five dimensions: patient-oriented care, moral conflict, moral meaning, and benevolence, with five items for each in addition to professional responsibility with seven items. Responses were scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A higher score indicated a higher level of moral sensitivity.

Validity and Reliability

The study instruments exhibited high internal reliability with a Cronbach's alpha correlation coefficient of 0.954 and 0.888 for AEAQ and K-MSQ, respectively. The instruments were tested for content validity in their English form by academic experts. Also, the pre-testing of the tools yielded no modification in the final instruments.

Data Collection

After receiving the Institutional Review Board (IRB) approval from King Abdullah International Medical Research Center (KAIMRC), the researchers distributed the questionnaire to nursing students who agreed to participate in the study during their break time. The researchers clarified the study's purpose to all participants. After receiving complete instructions, each student took about 20 minutes to complete the questionnaire. The data were collected over four weeks during the fall semester of the academic year 2019-2020.

Ethical Considerations

The study obtained the KAIMRC IRB approval (RJ19/135/J). The researchers clarified the study's purpose and the participants' right to refuse or withdraw at any time without affecting their classes or grades. The researchers obtained participants' informed consent to participate in the study and assured data privacy and confidentiality.

Data Analysis

The researchers analyzed the data using the Statistical Package for Social Sciences (SPSS). The data was tested for normal distribution using the Shapiro-Wilk test. The researchers used frequencies and percentages to describe the demographic characteristics, descriptive statistics (means and standard deviation) to summarize the results, Analysis of Variance (ANOVA) to compare means, and Pearson's correlation to assess the relationship between studied variables. Also, we applied Regression analysis (R^2) to test the predictive power of the independent variable (AEA) on the dependent variable (MS). The level of p value significance was 0.05.

Results

Sample Characteristics

Table 1 illustrates the demographic characteristics of 246 students who participated in the study. The nursing students' mean age was 22.13 years ($SD = 1.17$) with the highest percentage (70.7%) belonging to the age group ≥22 years. For the academic levels, the percentage of participants from fifth-, sixth-, seventh- and eighth-level students were 28.0, 17.1, 38.6 and 16.3, respectively. All students reported that they were taught ethics as a regular course in their nursing curriculum. The highest proportion of nursing students (66.7%) perceived both classroom and clinical experiences together as learning experiences that positively affect their knowledge, attitude, and practice regarding ethical issues in nursing.

Nursing Students' Academic Ethical Awareness *and* Moral Sensitivity.
The results displayed an average mean percent score of nursing students' overall academic ethical awareness (66.88 ± 20.96). Behaviors violating the respect or confidentiality of patients had the highest mean awareness score (74.82 ± 25.26) followed by attitudes towards cheating in examinations (72.63 ± 33.55), while behaviors related to plagiarism had the lowest mean score (62.23 ± 24.27). In addition, the mean percent score of nursing students' overall moral sensitivity was moderate (61.13 ± 14.15). The patient-oriented care dimension and the moral conflict experience displayed the highest

Table 1. Distribution of Nursing Students According to Demographic/Academic Data (N =246).

Part I: demographic/ academic data.	No.	%
Age (years)		
<22	72	29.3
≥22	174	70.7
Mean ± SD.	22.13 ± 1.17	
Academic level		
Fifth	69	28.0
Six	42	17.1
Seventh	95	38.6
Eighth	40	16.3
Previous education of nursing ethics		
Yes	264	100.0
No	0	0.0
Which of the following learning experience do you think that it affects your knowledge, attitude and practice regarding ethical issues in nursing?		
Classroom learning experience	49	19.9
Clinical learning experience	33	13.4
Both	164	66.7

SD: Standard Deviation.

(67.93 ± 17.65) and lowest mean score (54.27 ± 18.70), respectively (see Table 2).

Correlation and Linear Regression Between Academic Ethical Awareness and Moral Sensitivity.
Table 3 shows a significant moderate positive correlation between academic ethical awareness of undergraduate nursing students and moral sensitivity ($r = 0.454$, $p < 0.001$). The regression coefficient value between academic ethical awareness as an independent variable and moral sensitivity as a dependent variable is $R^2 = 0.288$. This means that academic ethical awareness significantly predicted 28.8% of the explained moral sensitivity variance where the regression model is significant ($F = 12.0$, $p < 0.001$). Awareness of behaviors violating patients' respect or confidentiality ($p = 0.01$) and medical history ($p = 0.003$) has a significant value in this prediction.

Relationship Between Students' Academic Factors With Their Academic Ethical Awareness Moral Sensitivity.
Students' academic factors in terms of academic level and learning experience showed a significant relationship with academic ethical awareness moral sensitivity. Senior students representing the eighth level had a higher academic ethical awareness mean than other academic levels ($F = 34.273$, $p < 0.001$). In contrast, junior students representing the fifth level had a higher moral sensitivity mean compared to all senior levels ($F = 24.453$, $p < 0.001$). Learning experiences showed a significant difference among the classroom, clinical, and learning experiences mean scores regarding academic ethical

Table 2. Mean Score of Academic Ethical Awareness and Moral Sensitivity of Nursing Students.

Variables/dimensions	Mean % score[a] ±SD
I-Overall academic ethical awareness	66.88 ± 20.96
Behaviors related to plagiarism	62.23 ± 24.27
Inappropriate behaviors in class	64.52 ± 25.96
Behaviors violating the respect or confidentiality of patients	74.82 ± 25.26
Medical history or examining the patient's body	66.08 ± 27.16
Dishonest behaviors during clinical practice	65.99 ± 11.84
Free riding in group activities	69.55 ± 25.50
Unfaithful behaviors in clinical practice	66.12 ± 29.31
Attitudes towards cheating on examination	72.63 ± 33.55
II-Overall moral sensitivity	61.13 ± 14.15
Patient-oriented care	67.93 ± 17.65
Professional responsibility	66.41 ± 20.86
Experience of conflict	54.27 ± 18.70
Structuralizing of moral meaning	59.11 ± 18.47
Benevolence	55.85 ± 14.17

SD: Standard Deviation.
[a]Low (<50%), Moderate (50%–75%), High (≥75%).

Table 3. Multivariate Linear Regression for Overall Moral Sensitivity of Nursing Students.

Academic ethical awareness dimensions	B	Beta	t	p
Behaviors related to plagiarism	−0.026	−0.045	0.543	0.587
Inappropriate behaviors in class	0.098	0.180	1.977	0.049
Behaviors violating the respect or confidentiality of patients	0.140	0.249	2.606	0.010*
Medical history or examining the patient's body	−0.122	−0.235	3.007	0.003*
Dishonest behaviors during clinical practice	0.091	0.077	1.354	0.177
Free riding in group activities	0.075	0.135	1.431	0.154
Unfaithful behaviors in clinical practice	0.069	0.143	1.741	0.083
Attitudes towards cheating on examination	0.040	0.096	1.308	0.192
$r = 0.454$, $R^2 = 0.288$, $F = 12.00$, $p < 0.001$*				

B: the coefficient estimate; t: t-test value; r: Pearson correlation coefficient.
R^2: regression coefficient; F: F-test. *Statistically significant at $p \leq 0.05$.

awareness ($F = 3.062$, $p < 0.049$). Students rated integrated classroom and clinical experience as the highest influential learning experiences, while there was no significant difference among the different learning experiences concerning the perception of moral sensitivity (Table 4).

Discussion

This cross-sectional descriptive study aimed to assess the level of AEA and MS of nursing students and the relationship between these variables. The findings indicated that nursing students exhibited a moderate level of academic ethical awareness and moral sensitivity. Furthermore, academic ethical awareness displayed a significant predictive power (28.8%) of the explained variance of moral sensitivity. That means that the higher the ethical awareness, the higher the moral sensitivity. This finding was logically expected and supports

the idea that these two ethics education concepts are mutually interrelated. Moral sensitivity is the affective ethical decision-making aspect, and ethical awareness is the logical aspect of professional reasoning for ethical actions. To assist nursing students and nurses in improving their professional and moral integrity, the nursing ethics education content should include these elements (Hoskins et al., 2018).

According to Kamali et al. (2019), moral reasoning and awareness are the core parts of clinical decision-making. Sound decisions should be taken based on ethical norms, decision-making principles, and ascertainment of its consequences. Many studies support this result and assert that ethics education and awareness positively affect moral sensitivity (Baykara et al., 2015; M. Park et al., 2012). Nurse educators should reform teaching ethics so that all students are encouraged to become involved in and aware of the importance

Table 4. Academic Ethical Awareness and Moral Sensitivity of Nursing Students According to Academic Levels and Learning Experience.

Variable	Overall academic ethical awareness Mean % ± SD	Overall moral sensitivity Mean % ± SD
Current academic level		
Fifth	74.03 ± 16.74	70.42 ± 9.48
Six	46.32 ± 20.15	50.88 ± 12.60
Seventh	64.09 ± 18.79	58.09 ± 15.30
Eighth	82.75 ± 13.05	63.10 ± 8.75
F(p)	34.273 (<0.001*)	24.453 (<0.001*)
Learning experience		
Classroom	62.52 ± 20.45	57.67 ± 13.08
Clinical	61.85 ± 21.41	61.05 ± 11.94
Both classroom & clinical experience	69.19 ± 20.76	62.18 ± 14.75
F(p)	3.062(0.049*)	1.934 (0.147)

SD: Standard Deviation. F: Analysis of Variance (ANOVA), f test*: Statistically significant at p ≤ 0.05.

of nursing ethics. Education and knowledge of ethical obligations, ethical breaches, precautions to avoid them, ethical codes, learners' experiences, and triggers are requisites to increase students' awareness and develop moral sensitivity in clinical practice (Baykara et al., 2015).

The nursing students seemed aware that exchanging patient information with unauthorized persons and looking at exam answers from another student (cheating) were highly unethical academic activities. The result is consistent with the findings of McCrink (2010), Cho and Hwang (2019), who found violating patients' respect or confidentiality had the highest scores, while class-inappropriate behaviors scored the lowest (i.e. being late to class, leaving the lecture room after checking attendance, not paying attention in class. Baykara et al. (2015) stated that breaching patient respect and confidentiality is an ethical violation that damages the nurse-patient therapeutic relationship and precludes nurses from gaining a professional identity. Another study reported that nursing students' compliance with professionalism and confidentiality are crucial attributes (Bayoumy et al., 2015). Furthermore, Theart and Smit (2012) reported that students enthusiastically stand by the rules and monitor their friends' behaviors regarding cheating in exams, which are more strictly regulated.

Unfortunately, students showed the lowest ethical awareness on plagiarism-related behaviors. A possible reason might be that students who are not ethically conscious and oriented towards plagiarism-related academic policy and related punishment are more likely to indulge in such behaviors. Consistent with this result, many authors indicated that the increasing tendency towards plagiarism as an unintentional misconduct among university students could be due to several factors such as lack of basic ethical knowledge, inadequate plagiarism

education, vague plagiarism standards, individual dishonesty, peer culture, and inappropriate penalty. The use of the Internet for completing tasks, lower English language mastery level, heavy academic workloads, fear of failure, and the significance of grades for potential job opportunities are also among these factors (Choi, 2019; Fischer & Zigmond, 2011; Hosny & Fatima, 2014). These results concur with those of Hosny and Fatima (2014) and Lee et al. (2011) who showed that university students had low ethical compliance with anti-plagiarism rules. In this regard, Cho and Hwang (2019) stressed the need to provide students with a rational explanation of academic ethics standards to ensure their responsibility and compliance starting from their academic enrollment in university life. There are numerous approaches to strengthen academic integrity. For instance, Choi (2019) emphasized on an honor code and pledge adoption, a comprehensive academic integrity policy and guideline implementation, the ethics curriculum, students' knowledge about the severity of plagiarism, and the documentation of cheating and plagiarism by students.

Regarding moral sensitivity dimensions, students showed more sensitivity to patient-oriented care and professional responsibility, although they were less concerned about the experience of conflict. This finding links to the influence of nursing ethics education provided to students by their fourth and fifth academic levels, which might positively impact their moral reasoning and ability to be respectful and ethically sensitive to the patients' rights, and their duty to provide moral care. This result is in line with previous research, where Yeom et al. (2017) stated that nursing ethics education had a substantial influence on patient-oriented care as a moral sensitivity sub-domain. Kim et al. (2012) also stipulated that ethical education aimed at making nurses

more delicate such that moral sensitivity would positively impact ethical care implementation. Similarly, Han et al. (2010) reported strong agreement about nurses knowing patients' care needs, and overall situation, and being honest with patients, as part of their moral responsibilities. In addition, Robichaux (2012) and M. Park et al. (2012) highlighted the significance of teaching and developing moral sensitivity among nurses while making ethical patient care choices. M. Park et al. (2012) indicated that it is inevitable to provide a curricular strategy for a systematic, organized approach to foster moral awareness in students in all areas, including patient-oriented care, professional obligation, conflict, benevolence, and moral meaning.

Our findings indicated that academic level positively affects students' academic ethical awareness. Senior students (level 8) displayed a higher ethical awareness mean than juniors (level 5). One explanation might be that senior nursing students have academic experience and knowledge of college life and clinical training rules. In addition, they are more aware of the consequences of academic misconduct, and are more likely to comply with academic rules. While junior students might be more concerned with their academic workload, grades, and courses, their awareness and sensitivity to academic misconduct might still need development. Cho and Hwang (2019) reported similar findings. However, these findings are inconsistent with Vengoechea et al. (2008), who indicated that the risk factor for academic misconduct is higher in advanced academic semesters and years.

In contrast, the findings revealed that moral sensitivity is higher among junior nursing students. We relate this result to the direct effect of teaching nursing ethics course at the fifth academic level. Students might become more emotional and sensitive to ethical issues and dilemmas that they learned in their lectures. Consistent with this result, Choi (2019) and Cho and Hwang (2019) established that moral sensitivity was negatively correlated with school years, whereas moral sensitivity decreased with advance in study years. In contrast, M. Park et al. (2012) found that senior nursing students had greater moral sensitivity than freshman students. Choi (2019) declared that it was not explicit if those results were affected by the ethics curriculum's hidden effect, but the academic year was still considered a significant factor. We can ascertain that, depending on the colleges' nursing curriculum, the discrepancies in academic ethical knowledge may vary by year, and hereafter there is a need for comparative studies with university students in other colleges to validate such results.

Students reported that both classroom and clinical learning experiences significantly impacted development of their academic ethical awareness. Students can gain the required knowledge in human rights, value disputes, ethical breaches, dilemmas, and ethical decision processes during the ethics lectures. Facing ethical issues in the clinical learning environment makes them more aware of their ethical responsibilities, patient rights, and ability to better distinguish ethical problems in a clinical setting. Examining cases faced by students from an ethical point of view and thus addressing the reality of ethical infringement, steps are taken to protect patient rights, and ethical values will boost the development of moral sensitivity (Baykara et al., 2015). Similarly, Bayoumy et al. (2015) and Levett-Jones et al. (2011) contended that clinical training promotes professional socialization by facilitating internalizing the core values, attitudes, and ethics of the nursing profession. In this vein, Bah and Sey-Sawo (2018) emphasized that nursing ethics and values should also be learned in clinical practice areas through role modeling and supervision by mentors and preceptors who should be experienced nurses with an excellent moral disposition.

Conclusion

Nursing students exhibited moderate academic ethical awareness and moral sensitivity. Ethical awareness showed a significant correlation and predictive power with moral sensitivity. Students were aware of the ethical violation of patients' respect or confidentiality and cheating in examinations as unethical behaviors. However, they showed low awareness of plagiarism behaviors. They conferred higher moral sensitivity on patient-oriented care and professional responsibility and disagreed with having conflict experience. Academic level and integrated classroom and clinical learning experiences seemed to positively impact students' academic ethical awareness. The findings provide a ground for monitoring nursing students' professional misconduct and maintaining academic ethics guidelines and integrity. While most nursing curricula include nursing ethics and values as part of the introductory courses, this may not be enough to produce highly qualified and ethically focused skilled nurses. Principles and concepts of nursing ethics and values should not be treated as a single course but have to be integrated into the different nursing curricula and content. Nurse educators have the ability and responsibility to teach nursing students about ethical grounds such as ethical ideologies, awareness, moral judgment, interpretation, and ethical decision-making to develop professional nurses who are able to cope with ethical challenges in their professional careers (Abou Hashish & Ali Awad, 2019; Bah & Sey-Sawo, 2018).

Strengths and Limitations

This study was the first to assess nursing students' levels of ethical awareness and moral sensitivity, and measure the relationship between these two crucial academic variables. Our study has some limitations. Firstly, the sample was taken from only one nursing college; therefore, the results cannot be generalized to nursing students in other regions. Besides, we used convenience sampling and self-reported measures, which might include the risk of bias. Hence, we recommend several future studies.

Implications for Education and Practice

This study has important implications and recommends more integration of ethics teaching in the undergraduate program through the different academic levels, parallel with the clinical training. More versatile use of teaching and evaluation methods is necessary to understand the importance of nursing care dilemmas and ethics. Constant exertions for fostering nursing ethics courses with inspiring learning contents and innovative instructional materials are vital in improving nursing students' affective and cognitive moral skills as the future healthcare workforce.

Also, cultivating inter-professional ethics education by including a mixture of senior and junior nursing students from other disciplines could help nursing students develop collaborative teamwork in care provision. Moreover, it is necessary to provide the students with specific education about the importance of plagiarism and how it affects their academic performance and future career. To prevent plagiarism, administrators and faculty members should assist students by developing their language, writing skills, and teaching correct referencing, quoting, paraphrasing, and citation styles. Furthermore, the need for an authentic assessment of class activities and tasks will enable nursing students to comply with rules and regulations, and cultivate a positive attitude towards learning (Choi, 2019; Hosny & Fatima, 2014).

We Recommend That Future Researchers

- Conduct a mixed-method study that may reduce the identified potential bias of self-reported measures. Applying qualitative methods might provide a greater in-depth understanding of the different contexts of academic ethical awareness and moral sensitivity.
- Assess academic integrity policies, violations, the factors affecting academic ethical awareness such as non-academic and professional misconduct, culture, academic workload, and stress levels.
- Undertake comparative analysis of students' experiences with educators' and clinical teachers' perspectives which might help to understand both positive and adverse aspects of ethics teaching and the need for any change.

Author Contributions

Both authors (Alnajjar H & Abou Hashish E) have substantial contributions to Conceptualization, Methodology, Software, Data curation, Writing- Original draft preparation Abou Hashish E: final manuscript draft and correspondence.

ORCID iD

Ebtsam Aly Abou Hashish https://orcid.org/0000-0003-0492-7615

References

Abou Hashish, E., & Ali Awad, N. (2019). Relationship between ethical ideology and moral judgment: Academic nurse educators' perception. *Nursing Ethics*, *26*(3), 845–858. https://doi.org/10.1177/0969733017722825

Bah, H. T., & Sey-Sawo, J. (2018). Teaching and practicing nursing code of ethics and values in the Gambia. *International Journal of Africa Nursing Sciences*, *9*, 68–72.

Baykara, Z., Demir, S., & Yaman, S. (2015). The effect of ethics training on students recognizing ethical violations and developing moral sensitivity. *Nursing Ethics*, *22*(6), 661–675. https://doi.org/10.1177/0969733014542673

Bayoumy, H. M., Shaqiqi, W. A., & Albogami, N. (2015). Exploring importance of professional attributes of nursing students as prior indicators of preparedness for successful clinical education. *International Journal of Nursing & Clinical Practices*, *2*(2), 127. https://doi.org/10.15344/2394-4978/2015/127

Borhani, F., Alhani, F., Mohammadi, E., & Abbaszadeh, A. (2010). Professional Ethical Competence in nursing: The role of nursing instructors. *Journal of Medical Ethics and History of Medicine,* *3*(3), 1–8.

Cho, O. H., & Hwang, K. H. (2019). Academic ethical awareness among undergraduate nursing students. *Nursing*

Ethics, 26(3), 833–844. https://doi.org/10.1177/0969733017727155

Choi, J. (2019). Cheating behaviors and related factors at a Korean dental school. *Korean Journal of Medical Education*, 31(3), 239–249. https://doi.org/10.3946/kjme.2019.134

Comrie, R. W. (2012). An analysis of undergraduate and graduate student nurses' moral sensitivity. *Nursing Ethics*, 19(1), 116–127. https://doi.org/10.1177/0969733011411399

Fischer, B. A., & Zigmond, M. J. (2011). Educational approaches for discouraging plagiarism. *Urologic Oncology: Seminars and Original Investigations*, 29(1), 100–103. https://doi.org/10.1016/j.urolonc.2010.11.014

Han, S., Kim, J., Kim, Y., & Ahn, S. (2010). Validation of a Korean version of the Moral Sensitivity Questionnaire. *Nursing Ethics*, 17(1), 99–105. https://doi.org/10.1177/0969733009349993

Hoskins, K., Grady, C., & Ulrich, C. M. (2018). Ethics education in nursing: Instruction for future generations of nurses. *OJIN: The Online Journal of Issues in Nursing*, 23(1), 1–4.

Hosny, M., & Fatima, S. (2014). Attitude of students towards cheating and plagiarism: University case study. *Journal of Applied Sciences*, 14(8), 748–757. https://doi.org/10.3923/jas.2014.748.757

Kamali, F., Yousefy, A., & Yamani, N. (2019). Explaining professionalism in moral reasoning: A qualitative study. *Advances in Medical Education and Practice*, 10, 447.

Kim, Y. S., Knag, S. W., & Ahn, J. A. (2012). Moral sensitivity relating to the application of the code of ethics. *Nursing Ethics*, 20(4), 470–478. https://doi.org/10.1177/0969733012455563

Kwon, H. J., Lee, Y. M., & Lee, Y. H. (2013). Development of an inventory assessing medical students' attitudes towards academic misconduct. *Korean Journal of Medical Education*, 25(3), 211–220. https://doi.org/10.3946/kjme.2013.25.3.211

Lee, S. H., Yoon, C. H., & Choi, S. B. (2011). Importance-performance analysis on college students' conceptions of academic ethics. *Asian Journal of Education*, 12(4), 75–94. https://doi.org/10.15753/aje.2011.12.4.004

Levett-Jones, T., Lapkin, S., Hoffman, K., Arthur, C., & Roche, J. (2011). Examining the impact of high and medium fidelity simulation experience on nursing students' knowledge acquisition. *Nurse Education in Practice*, 11(6), 380–383. https://doi.org/10.1016/j.nepr.2011.03.014

Lützén, K., Nordstr, M. G., & Evertzon, M. (1995). Moral sensitivity in nursing practice. *Scandinavian Journal of Caring Sciences*, 9(3), 131–138. https://doi.org/10.1111/j.1471-6712.1995.tb00403.x

McCrink, A. (2010). Academic misconduct in nursing students: Behaviors, attitudes, rationalizations, and cultural identity. *Journal of Nursing Education*, 49(11), 653–659. https://doi.org/10.3928/01484834-20100831-03

Mortaz Hejri, S., Zendehdel, K., Asghari, F., Fotouhi, A., & Rashidian, A. (2013). Academic disintegrity among medical students:A randomised response technique study. *Medical Education, 47*(2), 144–153. https://doi.org/10.1111/medu.12085

Muramatsu, T., Nakamura, M., Okada, E., Katayama, H., & Ojima, T. (2019). The development and validation of the Ethical Sensitivity Questionnaire for Nursing Students. *BMC Medical Education*, 19(1). 1–8. https://doi.org/10.1186/s12909-019-1625-8.

Park, E. J., Park, S., & Jang, I. S. (2014). Clinical misconduct among South Korean nursing students. *Nurse Education Today*, 34(12), 1467–1473. https://doi.org/10.1016/j.nedt.2014.04.006

Park, M., Kjervik, D., Crandell, J., & Oermann, M. (2012). The relationship of ethics education to moral sensitivity and moral reasoning skills of nursing students. *Nursing Ethics*, 19(4), 568–580. https://doi.org/10.1177/0969733011433922

Robichaux, C. (2012). Developing ethical skills: From sensitivity to action. *Critical Care Nurse*, 32(2), 65–72. https://doi.org/10.4037/ccn2012929

Theart, C. I., & Smit, I. (2012). The status of academic integrity amongst nursing students at a nursing education institution in the Western Cape. *Curations*, 35(1), 1–8. https://doi.org/10.4102/curationis. v35i1.27

Vengoechea, J., Moreno, S., & Ruiz, A. (2008). Misconduct in medical students. *Developing World Bioethics*, 8(3), 219–225. https://doi.org/10.1111/j.1471-8847.2007. 00194.x

Woith, W., Jenkins, S. D., & Kerber, C. (2012). Perceptions of academic integrity among nursing students. *Nursing Forum*, 47(4), 253–259. https://doi.org/10.1111/j.1744-6198.2012.00274.x

Yeom, H., Ahn, S., & Kim, S. (2017). Effects of ethics education on moral sensitivity of nursing students. *Nursing Ethics*, 24(6), 644–652. https://doi.org/10.1177/0969733015622060