

Implementation of Hidden Curriculum in Shaping Professionalism and Islamic Professional Behavior: A Correlation Study in Nursing Students

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ABSTRACT

Introduction: Both professionalism and professional behavior (PB) are important in nursing education. An explicit and/or implicit curriculum, determined by higher education, is required to achieve this. The Hidden Curriculum (HC) foundation is described as the result of education outside the formal and informal curricula, as a complement and support of the curriculum, to create a stable, strong, and professional nursing education. **Purpose:** This study aims to explore the relationship between the Hidden Curriculum and professionalism and Islamic professional behavior in nursing students. **Methods:** The study used a cross-sectional design and included 181 students and 82 clinical supervisors. Data were collected using the Hidden Curriculum in Nursing Education Scale (HCES-N) questionnaire, as well as professionalism and professional behavior (PB) questionnaires developed based on the Indonesian Nursing Competency Standards. **Results:** The results indicate that the hidden curriculum significantly influences the academic atmosphere and professional knowledge. However, it does not affect educational facilities, student-lecturer interaction, or professional attitude. Overall, the hidden curriculum contributes to the development of professionalism and Islamic professional behavior. **Conclusion and suggestion:** Nursing higher education institutions should apply the hidden curriculum to cultivate a generation of nurses who are professional and possess Islamic character.

INTRODUCTION

Professionalism and professional behavior (PB) are essential components of nursing education. Accordingly, a curriculum established by higher education institutions is necessary. The Hidden Curriculum (HC) encompasses educational outcomes that occur outside both formal and informal contexts. It serves to complement and reinforce the formal curriculum, aiming to establish a stable and robust professional nursing education (1). HC is shaped by role models, effective teaching methods, the learning process (2), learning objectives, educators' professionalism, and the presence or absence of discrimination toward students. The omission of critical elements within the HC, particularly in academic and professional education, can adversely affect the development of future health professionals (3). Consequently, HC plays a vital role in fostering a stable health education system and in producing competent health professionals (3,4).

Nursing is a profession that demands mastery of clinical knowledge and skills. Nurses are expected to demonstrate strong ethics, character, and professional behavior. Professional behavior is a core competency that must be cultivated during the educational period (5). Nursing education institutions should prioritize the development of students' professional behavior from the outset. These institutions are responsible for upholding standards of excellence, ensuring that graduates exhibit the expected professional behaviors and fulfill the community's expectations for health services (6,7). However, professionalism in nursing education remains an objective that lacks explicit guidance within the standard nursing education curriculum.

Professionalism in nursing refers to the ability to provide care based on sound clinical reasoning and to act responsibly. Within nursing education, professionalism encompasses clinical competence, responsibility, integrity, and the integration of spiritual and moral values. Nursing students, as future professionals, should be guided to embody Islamic professional behavior, which includes qualities such as honesty, trustworthiness, patience, compassion, and respect for patients' dignity as part of God's creation (8–10). Achieving mastery of professional behavior requires structured processes and stages within educational institutions. The internalization of values and responsibility is fundamental to developing nursing professionalism. This process should begin early in nursing education by embedding professional behavior into structured procedures and curricular content (11–13).

The curriculum is central to the implementation of learning, encompassing objectives, content, teaching methods, and evaluation strategies that support the attainment of educational goals. The learning process is shaped by implicit norms that convey ethical, social, and cultural values. Practices such as wearing uniforms, promoting equality, and encouraging collaboration exemplify the hidden curriculum. These informal and unwritten norms, including ethical, social, and cultural values, are transmitted unconsciously during the educational process (4,6,14). Research indicates that the hidden curriculum not only reinforces formal values but also establishes patterns of interaction and culture that significantly influence the development of student character in subtle yet impactful ways (15).

The hidden curriculum encompasses the implicit values, behaviors, and norms communicated within the educational environment. HC comprises five dimensions, including the patterns of relationships among students, lecturers, staff, clinical supervisors, nursing managers, and peers who serve as role models (16,17). Research by Afaq demonstrates that HC positively influences student discipline (up to 30.5%), professionalism (23.5%), and positive student behavior (16.6%) (18). These influences extend to professional behavior, performance, attitudes throughout education and practice, and professional acceptance by society (19,20). The hidden curriculum contributes to improving educational quality and enhancing nurses' professional behavior (20,21). Therefore, this study seeks to examine the relationship between the hidden curriculum, professionalism, and Islamic professional behavior among nursing students.

METHODS

Research design

The research conducted used a quantitative, correlational study approach. The study was conducted at Universitas Sains Al Qur'an and 9 partner hospitals of the Faculty of Health Science, Universitas Sains Al Qur'an.

Setting and samples

The sampling technique employed was purposive, with 62 clinical supervisors from hospitals and 182 students. The inclusion criteria for students were 2nd-, 3rd-, and 4th-year undergraduate nursing students, as well as nursing students who were actively undertaking clinical practice in hospital settings during the study period, who were academically active, and who provided informed consent to participate. Students who were not undertaking clinical practice during the study period, were on academic leave, did not provide consent, or submitted incomplete questionnaires were excluded. For clinical supervisors, the inclusion criteria were: being actively involved in supervising nursing students during the study period, holding a certified preceptor qualification, having at least 5 years of clinical experience, and agreeing to participate in the study. Clinical supervisors who did not meet these criteria or declined to participate were excluded.

Measurement and data collection

Data were collected via a Google Form in 2024. Each respondent who completed the questionnaire indicated their agreement on the informed consent sheet. The hidden curriculum data were obtained from 2nd-, 3rd-, and 4th-year students, or from students who have taken nursing clinical practice at hospitals. The questionnaire used is the Scale in Nursing Education (HCES-N), which comprises 5 dimensions in 30 items. The instrument has been tested for its convergence validity from the outer loading value $> 0,5$ and Average Variance Extracted (AVE) prior to usage with the following results: Academic atmosphere (0.602), Professional knowledge (0.592), Educational facilities (0.640), Lecturer-Student interaction (0.645), Professional attitude (0.779). All variable items passed the outer loading test and were declared valid. The reliability test was carried out using the Cronbach's Alpha test with the values of the academic atmosphere (0.934), professional knowledge (0.885), educational facilities (0.723), lecturer-student interaction (0.901), and professional attitude (0.914). They showed that the instrument was valid and reliable. Professionalism and professional behavior are assessed using a questionnaire developed from the professionalism attitude that health workers must possess, namely: altruism, competence, honesty (sidiq), integrity, performance, trustworthiness, tabligh, fatonah, respect for others, and humanism. It consists of 15 question items. The results of the validity test are convergent with the outer loadings, with an Average Variance Extracted (AVE) of 0.507, and the reliability test, using Cronbach's Alpha, shows a result of 0.930. Both show the instrument is valid and reliable.

Data analysis

Data analysis is presented using the results of the structural model test (inner model) on the coefficient of determination (R^2). In determining the coefficient of determination (R-square, R^2), the value ranges from 0 to 1 and is divided into three categories. The first assessment for the R-square (R^2) value (1 - 0.75) is in the category of substantial/strong, the second for the R-square (R^2) value (0.74 - 0.5) is moderate/medium, and the third for the R-square (R^2) value (0.49 - 0.25) is weak.

Ethical considerations

The study has been approved by the Research Ethics Committee of Universitas Sains Al Qur'an (657/2024). The study also maintained the confidentiality of all information shared. Written informed consent was obtained from each respondent prior to participation, and respondents had the right to decline to participate or to withdraw from the research activities.

RESULT AND DISCUSSION

RESULT

Respondents' characteristics in the study consisted of 161 nursing students who had taken clinical practice in academic service settings and professional stages. Clinical supervisors involved are spread across 9 hospitals where students do nursing practice totaled 82 They can be seen in the table.

Table 1. Respondents' characteristics

Students characteristics n=161		
	n	%
Sex		
Male	43	26,7
Female	118	73,3
Age (years)		
18 – 21	117	72,3
22 – 24	25	15,5
25 - 27	6	3,7
>27	13	8,0
Academic Year		
2nd year	83	51,6
3rd year	37	22,9
4th year	23	14,3
5th year	18	11,1
Preceptors characteristics n = 82		
	n	%
Sex		
Male	22	26,8
Female	60	73,2
Age (years)		
28 – 30	4	4,9
31 - 33	5	6,1
33 - 36	6	7,3
>36	67	81,7
Work experience (years)		
5 - 10	11	13,4
11 - 15	17	20,7
16 - 20	18	21,9
>20	36	43,9

The above table shows the characteristics of respondents in the study, showing that most of the students in this study were female with a percentage of 73.3%. Those aged 18-21 years are 72.6% and in the 2nd year as much

as 51.6%. The clinical supervisors are mostly female as much as 73.3% while the most age is more than 36 with a total of 81.7%. The highest work experience is more than 20 years as much as 43.9%.

In the first stage, we used SMART PLS to analyze and assess the reliability and validity of the measurement module. SMART PLS is also employed for the assessment of the R-square (R²) value, which can be seen in the PLS algorithm as follows

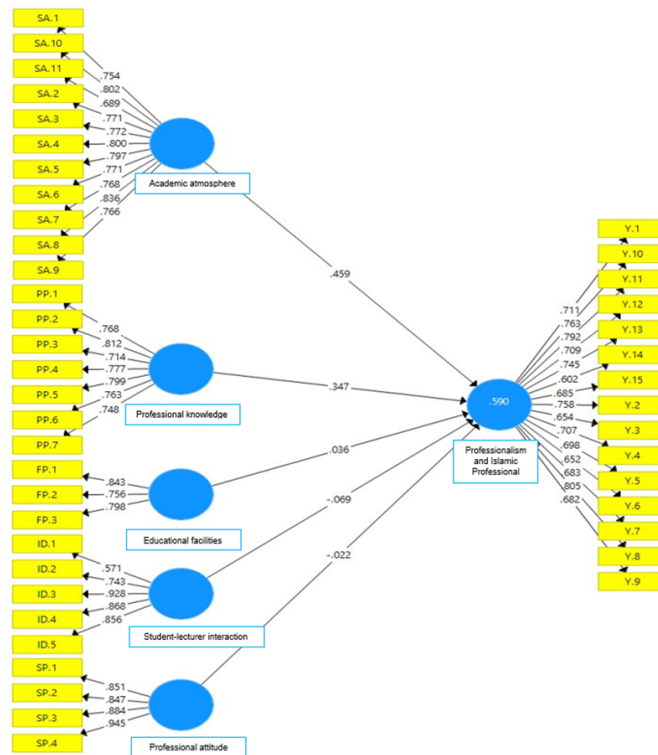


Figure 1. PLS algorithm

The R-Square Determination Coefficient Can Be Explained In Table

Table 2. R-Square Result Values

Variable	R Square
Professionalism and Islamic Professional Behavior	0,590

Source: Smart PLS

Based on the results of the coefficient of determination (r square) value produced by the research construct, the academic atmosphere, professional knowledge, educational facilities, student lecturer interaction and professional attitudes affect the variable forming professionalism and Islamic professional behavior by 0.590 or 59%. While the remaining 41% (100-59) is influenced by variables outside the study. The significance test can be seen in table 3:

Table 3. Bootstrapping calculation result Implementation Of Hidden Curriculum In Shaping Professionalism And Islamic Professional Behavior

Hypothesis	Original Sample	T statistics	P values	Conclusion
Educational facilities	0.036	0.408 < 1,96	0.684 > 0,05	No effect
Student-lecturer interaction	-0.069	0.944 < 1,96	0.346 > 0,05	No effect

Professional knowledge	0.347	3.553 > 1,96	0.000 < 0,05	No significant effect
Professional attitude	-0.022	0.288 < 1,96	0.773 > 0,05	No effect
Academic atmosphere	0.459	5.460 > 1,96	0.000 < 0,05	Significant effect

The table exhibits that educational facilities, student-lecturer interaction, professional attitudes have no influence on professionalism and professional Islamic behavior in nursing students. Meanwhile, professional knowledge and academic atmosphere have a significant influence in shaping professionalism and Islamic professional behavior.

DISCUSSION

As nursing curricula evolve to advance nursing knowledge, students are required to continually develop their knowledge and skills. Educational institutions are responsible for ensuring optimal student competence. This study analyzes the influence of the hidden curriculum on the development of professional behavior, including Islamic professional behavior, among nursing students at Universitas Sains Al Qur'an. The Hidden Curriculum in Nursing Education Scale (HCES-N) is employed to assess the hidden curriculum, which encompasses the academic atmosphere, professional knowledge, educational facilities, student-lecturer interactions, students' organizational patterns as social value systems, and professional attitudes as future nurses. To provide comprehensive educational and learning experiences, professional behavior must align with the expectations of the nursing profession, the graduate standards outlined in the higher education curriculum, local content, and the distinctive strengths of Universitas Sains Al Qur'an.

The findings indicate that the hidden curriculum plays a significant role in shaping professional nurses who embody Islamic values. The study was conducted among nursing students who had completed clinical practice in both academic service settings and the professional stage, thereby enhancing the validity of clinical supervisors' assessments. Professional behavior among nurses is demonstrated through actions such as greeting patients and communicating respectfully (22). The religious attitudes and professional behaviors exhibited by nursing students reflect the educational processes implemented during theoretical instruction at educational institutions.

The results demonstrate a relationship between the hidden curriculum and professional behavior in nursing students, with an R-square value of 0.590 (59%). The remaining 41% is attributed to factors beyond the scope of this research. These findings are consistent with previous studies indicating that educational diversity, academic atmosphere, and educational facilities influence the achievement of student competencies and, consequently, professional behavior during nursing practice in health services (23–25). Further research suggests that nurse professionalism is also shaped by knowledge, ethics, self-identity, group identity, and nursing actions [24]. Therefore, professionalism is not solely determined during formal education; work experience and role models also significantly impact nurses' caring behavior and professionalism.

An ideal practice setting, the alignment of academic learning with practical application, a preference for workplace learning, strong leadership, and a positive work culture all contribute to an environment that supports the learning process (26). Additionally, nurse professionalism is influenced by factors such as individual workload, work experience, role models, and technological advancements (24). Thus, professionalism is shaped not only during formal education but also through ongoing work experience and the influence of role models, which affect nurses' caring behavior and professionalism.

Nursing professionalism requires nurses to demonstrate commitment to the profession, enhance nursing education, and cultivate students with professional insight and values. Islamic professionalism refers to nurses' professional behavior in delivering nursing services, grounded in their intellectual abilities and guided by the Prophet's traits: *sidiq*, *tabligh*, *fatonah*, and *amanah* (27). Islamic professionalism is further exemplified by actions such as offering greetings, demonstrating friendliness, showing empathy, providing attentive, sincere care, reminding patients of the five daily prayers, and ensuring patient satisfaction by incorporating spiritual practices. The implementation of these values positively influences satisfaction with hospital health services (28,29).

Educators' professional knowledge and the academic atmosphere are closely associated with students' Islamic professional behavior. A professional educator possesses mastery of relevant concepts and theories and

employs effective methods for knowledge transfer. Research indicates that appropriate teaching methods enhance students' success in clinical learning and facilitate the integration of theoretical knowledge with practical application, which is essential for clinical practice. The academic atmosphere establishes an environment—both tangible and intangible—that is critical for learning in higher education and aligns with the institution's vision, mission, and objectives.

CONCLUSION

The results showed a significant relationship between Hidden Curriculum and both Professionalism and Islamic Professional Behavior among Nursing Students. This relationship was specifically observed in the dimensions of professional knowledge and academic atmosphere, both of which showed statistical significance ($p = 0.000$).

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AUTHOR'S CONTRIBUTION STATEMENT

CDR, SM, IP, FA, NN :Conceptualization, Writing-Original Draft, Review & Editing. CDR: Conceptualization, Methodology, Manuscript review. TS: Supervision. CDR, SM, IP, FA, NN: Formal analysis, Writing -Original draft, Manuscript review.

CONFLICT OF INTEREST

No. conflict of interest to declare in study

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors acknowledge the use of generative AI and AI-assisted technologies, including ChatGPT, copilot Scispace and Grammarly to support language refinement, enhance clarity, and improve the overall readability and structure of the manuscript. The authors affirm that all intellectual content, interpretations, and conclusions are their own responsibility, and the use of these tools did not influence the originality or integrity of the scientific findings.

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