Predicting the adoption of evidence-based practice (EBP) based on critical thinking levels among nursing students

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Background: As future healthcare providers, nursing students must acquire essential skills and competencies to transition into clinical practice effectively. Critical thinking and EBP are two influential components that play a pivotal role in this process. This study aimed to predict the adoption of EBP based on critical thinking levels among nursing students.

Methods: This descriptive-analytical cross-sectional study was conducted on 300 nursing students. Participants were selected using a convenience sampling method. Data collection tools included a demographic information checklist, an EBP questionnaire, and a critical thinking questionnaire.

Results: A total of 300 students participated in the study, of whom 51.7% were male. The mean age of participants was 22.41 ± 2.01 years, and their average GPA was 16.39 ± 1.17. The mean scores for EBP adoption and critical thinking were 35.48 ± 7.69 (out of 50) and 119.30 ± 23.28 (out of 165), respectively. A strong positive and significant correlation was found between EBP adoption and critical thinking ($r = 0.677$, $p < 0.001$). Linear regression analysis indicated that critical thinking explained 45.6% of the variance in EBP adoption ($F = 251.90$, $p < 0.001$).

Table 1. Demographic Characteristics of Participants (N=300)

Variable	Category / Metric	Value
Sample Size (N)	Total	300
Sex	Male / Female	51.7% / 48.3%
Age (years)	Mean ± SD	22.41 ± 2.01
GPA	Mean ± SD	16.39 ± 1.17

Table 2. Critical Thinking as a Predictor of EBP Adoption (N=300)

Main Variables	Mean ± SD	Correlation (r)	Predicted Variance (R^2)	p-value
Critical Thinking	119.30 ± 23.28	0.677	45.6%	<0.001
EBP Adoption	35.48 ± 7.69	-	-	-

Conclusion: The findings suggest that critical thinking can significantly predict EBP adoption among nursing students, explaining **45.6%** of the variance. Therefore, it is recommended that nursing education programs emphasize enhancing critical thinking skills to better prepare students for EBP.

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