

Academic-Clinical Integration in Entrustable Professional Activities in HEI: Its Influence on Nursing Students' Performance

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Abstract

This study examined the effects of Entrustable Professional Activities (EPAs) on nursing students' clinical performance as perceived by clinical instructors. Anchored on Benner's Novice-to-Expert Theory, the study emphasized progressive clinical competence, guided practice, feedback, supervision, and entrustment in preparing students for professional nursing roles. A descriptive quantitative research design was used. The study was conducted in Metro Manila among 93 selected clinical instructors who were Filipino registered nurses with at least four months of clinical instruction experience. Data were gathered using an adapted questionnaire with three sections covering demographic profile, perceptions of EPAs, and satisfaction with nursing students' clinical participation and performance. The instrument used a four-point Likert scale and demonstrated excellent reliability, with Cronbach's Alpha values of .929 for the EPA perception scale and .941 for the nursing student performance satisfaction scale. Findings showed that clinical instructors had a high level of perception of EPAs, with a mean score of 3.50 and standard deviation of 0.48. They also reported a high level of satisfaction with nursing students' clinical participation and performance, with a mean score of 3.44 and standard deviation of 0.48. The results indicate that EPAs helped strengthen clinical competence, accountability, confidence, and readiness for professional nursing practice. The study concluded that EPA-based evaluation supports the integration of academic instruction and clinical practice and helps prepare students for safe, patient-centered care. It recommended stronger academic-clinical collaboration, consistent EPA-based assessment, professional development for clinical instructors, and further studies involving broader respondents and diverse healthcare settings. The study supports SDG 3, SDG 4, SDG 8, SDG 9, and SDG 17 through its focus on patient safety, quality nursing education, workforce readiness, digital assessment tools, and institutional partnerships. Its sustainability impact lies in strengthening nursing education, healthcare workforce preparation, clinical training systems, and academic-hospital collaboration.

Keywords: Academic-Clinical Integration, Clinical Instructors, Clinical Performance, Competency-Based Education, Entrustable Professional Activities, Nursing Education, Patient Safety, Student Readiness

1. Introduction

Healthcare systems increasingly expect nursing graduates to be prepared for safe, patient-centered, and self-directed practice. In response, nursing programs have adopted competency-based education models using Entrustable Professional Activities (EPAs), which translate broad learning outcomes into observable clinical tasks. This study examined the effects of EPAs on nursing students' clinical performance as reported by clinical instructors and identified factors that support students' preparation for professional nursing roles. It aimed to provide evidence for improving clinical instruction, curriculum alignment, assessment practices, and academic-hospital partnerships.

1.1 Academic-Clinical Integration and EPA-Based Readiness in Nursing Education

EPA-based nursing education requires strong academic-clinical integration, where classroom instruction, simulation, and clinical practice are aligned through common language, standardized tools, and consistent feedback. When students encounter the same EPA expectations across learning settings, they can better document competence and demonstrate readiness for practice (Anthamatten & Pitts, 2024). Studies show that integration improves EPA implementation, clinical performance, medication administration, handovers, and care coordination when theory is sequenced with related clinical rotations, preceptors are trained, and similar rubrics are used across sites (Gilliss et al., 2020). However, inconsistent entrustment criteria, variable supervision, and limited evidence from low-resource settings show the need for further research on integration mechanisms such as joint faculty appointments, shared electronic logbook systems, and co-developed clinical guidelines (Alexander et al., 2022).

1.2 Related Literature on EPA Implementation, Clinical Supervision, Feedback, Entrustment, Completion, Performance Evaluation, and Student Self-Efficacy

Academic-clinical integration is a major condition for effective EPA implementation. Shared governance, service-education councils, faculty development, joint decision-making, and common terminology strengthen curriculum alignment and clinical application (Gilliss & Poe, 2021). Structured academic-practice partnerships also expand clinical opportunities through faculty-preceptor collaboration, joint appointments, shared assessment, and aligned feedback mechanisms (Taylor et al., 2022). Dual-role clinician-scientists further support EPA implementation by linking educational design with clinical protocols and evidence-informed care (Riman et al., 2024). In the Philippine context, gaps remain in systematically integrating competencies into health curricula, particularly when placement sites, clinical exposure, and competency-based frameworks are limited (Perez, 2022). Pandemic-related online clinical teaching also weakened direct observation, clinical decision-making, and immediate feedback because of unstable internet access, limited technological resources, and instructor exhaustion (Rimando et al., 2025). Clinical supervision quality strongly affects learning, safety, and performance. Structured supervision improves retention, documentation, teamwork, adherence to safety protocols, and patient care quality (Martin et al., 2021). Effective supervision is marked by empathy, structure, regularity, trust, availability, preparation, and psychological safety, while inconsistent or punitive supervision increases anxiety, reduces engagement, and limits learning (Coleiro et al., 2022; Millington et al., 2024). In the Philippines, lower perceived clinical supervision was associated with emotional exhaustion and depersonalization among student nurses, while timely feedback and emotional support helped students remain confident and focused (Balay-Odao et al., 2024). Supportive supervision and organizational guidance were also linked to better professional quality of life and reduced burnout (Gojar et al., 2024). Feedback mechanisms also shape clinical behavior and performance. Timely, actionable feedback is more effective when supported by structured audit-feedback cycles, coaching, clear expectations, and follow-up (Springer et al., 2021). Feedback systems improve responsiveness and decision-making when they include performance reviews, stakeholder input, evidence-based revisions, and vertical and horizontal communication (Zhu et al., 2025). Public reporting and performance feedback also influence clinical behavior, accountability, and quality improvement when feedback is clear, comparative, repeated, and aligned with institutional goals (Prang et al., 2021). In the Philippines, feedback systems improved service efficiency and patient satisfaction in outpatient and emergency services (Buano et al., 2024), although many hospitals still lack clear pathways for translating feedback into corrective or educational action (Tamondong-Lachica et al., 2024). Entrustment level depends on observation, institutional culture, task risk, learner readiness, preceptor confidence, and available support. Longitudinal observation allows faculty to make more reliable entrustment decisions (Millar et al., 2024). However, entrustment may differ across institutions because of assessment environments, evaluation criteria, and risk tolerance. Task complexity and supervisor comfort also affect whether learners are entrusted with greater autonomy (Pitts et al., 2022). In the Philippines, continuing professional development with mentorship and work-based assessment increased readiness for independent responsibility and supervisor trust (Crispino & Rocha, 2021). In decentralized health systems, entrustment and delegation vary depending on financing, staffing, training, equipment, and supervision (Banogon et al., 2022). EPA completion rate is influenced by documentation systems, role clarity, monitoring, and institutional support. EHR-integrated EPA assessments increased student activity logging and faculty evaluation by embedding documentation into clinical workflow and enabling real-time tracking and feedback (Chang et al., 2024). Clear milestones, role expectations, structured documentation, and accountability systems improve EPA completion (Carraccio et al., 2021). Electronic workflow systems may also support task completion through automatic reminders and defined input fields, as reflected in Butiu's (2022) findings on electronic clinical documentation. However, cultural unfamiliarity, language barriers, inconsistent feedback, and unclear expectations may delay EPA-related documentation among Filipino nurses in transnational settings (Nagaya, 2023). Accredited Philippine hospitals also show stronger documentation standards through digital logbooks, checklist audits, and periodic evaluations (Hartigan-Go et al., 2024). Clinical performance evaluation scores are strengthened by clear standards, communication, accreditation, supportive work environments, and task-specific indicators. Work discipline and communication improve performance through punctuality, protocol adherence, documentation accuracy, teamwork, and task coordination (Martin & Feinberg, 2023). Accreditation standardizes care delivery, supervision, documentation, patient assessment, and decision-making (Hussein et al., 2021). Task-specific performance indicators also clarify what clinical actions are assessed and monitored (Heidenreich et al., 2020). In Philippine hospitals, structured tools such as infection control scorecards, nursing care audits, and discharge checklist compliance improved safety compliance and quality tracking, while unstructured appraisal led to subjective evaluation (Tamondong-Lachica et al., 2024). Better work-life quality was also associated with stronger clinical performance in communication, documentation, and care coordination (Sy et al., 2023). Student self-efficacy supports readiness, resilience, patient safety competence, problem-solving, and independent learning. VR hospital simulations improved nursing students' academic self-efficacy by increasing confidence in clinical navigation, patient care procedures, and theory application (Kim & Kim, 2021). Self-efficacy is also linked to patient safety competence, resilience, responsibility, and prompt clinical action (De Miguel et al., 2023). Role-specific educational interventions improved advocacy, communication, and patient-centered care among student midwives (Thompson et al., 2021). Among Filipino nursing students, self-efficacy mediated the relationship between the clinical learning environment and critical thinking, with supervisor guidance, resources, and practice opportunities helping students manage stress and analyze clinical cases (Gangoso et al., 2022). Academic self-efficacy also predicted self-directed learning readiness and problem-solving ability

(Yao, 2021), making it important in developing competent, reflective, and adaptable nurses in the Philippine healthcare system (Yao, 2021).

1.3 Philippine and Global Context of EPA-Based Clinical Nursing Education

Globally, nursing programs are shifting toward competency-based education and EPA frameworks to ensure that graduates can safely perform observable professional activities. However, much of the existing evidence comes from high-income settings with sufficient staffing, modern simulation facilities, and developed assessment systems, raising questions about applicability in low-resource contexts (Alexander et al., 2022). In the Philippines, nursing education has faced limited clinical placement opportunities, especially in government hospitals. These difficulties worsened during the COVID-19 pandemic, when restrictions reduced direct patient care hours and led many schools to rely on virtual simulations and asynchronous modules that were not clearly linked to EPAs. Preceptors also reported confusion about entrustment levels under compressed schedules. Despite these issues, few Philippine studies have examined how academic-clinical integration affects nursing students' EPA performance, leaving curriculum committees and partner hospitals with limited empirical guidance on mechanisms such as joint faculty appointments, shared electronic log book systems, and structured debriefs (Alexander et al., 2022; Guidelines for the Prevention, Control, and Mitigation of the Spread of Coronavirus Disease 2019 [COVID-19], 2021).

1.4 Benner's Novice-to-Expert Theory as Basis for EPA-Based Clinical Development

This study is anchored on Patricia Benner's Novice-to-Expert Theory in 1984, which explains that nurses develop clinical competence through progressive stages of experience. Based on the Dreyfus Model of Skill Acquisition, the theory emphasizes that expertise develops through repeated real-world patient care rather than classroom instruction alone. Students move from novice performance toward advanced beginner competence through supervised practice, reflection, feedback, and exposure to varied clinical situations. Benner's theory aligns with the EPA framework because both emphasize progressive responsibility, clinical judgment, mentoring, feedback, and entrustment decisions. These principles of clinical judgement are aligned with the Entrustment Decisions described within the Entrustable Professional Activity (EPA) Framework (Real, 2024). Since nursing students are expected to become advanced beginners by graduation, the theory supports the study's focus on how clinical instructors perceive the effects of EPAs on students' clinical performance and readiness for professional practice.

1.5 Research Gaps and Rationale for Examining Clinical Instructors' Perceptions of EPA-Based Nursing Student Performance

The literature shows that EPA implementation is influenced by academic-clinical integration, supervision quality, feedback mechanisms, entrustment level, EPA completion rate, clinical performance evaluation, and student self-efficacy. However, the contribution of academic-clinical integration to EPA performance remains insufficiently measured across diverse clinical settings. Evidence is also largely based on high-resource contexts, while Philippine nursing education faces challenges related to limited clinical placement, pandemic-related learning disruptions, inconsistent supervision, and variable documentation systems. This study addressed these gaps by examining the effects of EPAs on nursing students' clinical performance as reported by clinical instructors. It also identified factors that support students' preparation for professional roles. The findings were intended to guide curriculum developers, accrediting agencies, clinical instructors, and hospital partners in improving EPA-based assessment, clinical instruction, curriculum alignment, and student readiness for safe independent practice.

1.6 Alignment of EPA-Based Nursing Education with Relevant Sustainable Development Goals (SDGs)

The study aligns with SDG 3 – Good Health and Well-Being because it focuses on improving clinical performance, supervision, feedback, patient safety, and readiness for safe nursing practice. It also supports SDG 4 – Quality Education by examining competency-based nursing education, curriculum alignment, clinical instruction, and structured assessment. The study contributes to SDG 8 – Decent Work and Economic Growth by supporting the preparation of nursing students for employability and independent professional practice. It also relates to SDG 9 – Industry, Innovation and Infrastructure through its discussion of digital logbooks, EHR-integrated assessments, electronic workflow systems, virtual simulation, and structured documentation tools. Finally, it supports SDG 17 – Partnerships for the Goals because EPA implementation requires collaboration among nursing schools, clinical instructors, hospitals, preceptors, curriculum committees, accrediting agencies, and partner institutions.

1.7 Importance of EPA-Based Clinical Nursing Education to Educational, Public Health, Institutional, Workforce, and Digital Sustainability

The study contributes to educational sustainability by supporting nursing curricula aligned with clinical expectations, competency-based outcomes, and EPA-based assessment. It also contributes to public health sustainability by emphasizing clinical competence, patient safety, supervision, documentation, communication, and readiness for independent practice. The study supports institutional sustainability by providing insights for curriculum developers, accrediting agencies, and hospital partners on how structured integration mechanisms can improve clinical education and assessment. It also contributes to workforce sustainability by helping prepare Filipino nursing students for professional roles in provincial and

metropolitan training centers. Finally, it supports innovation and digital sustainability by highlighting the potential of EHR-integrated assessment, electronic documentation, digital logbooks, and virtual simulation when supported by clear expectations, supervision, infrastructure, and academic-clinical coordination.

2. Material and methods

2.1 Research Design

The study employed a descriptive quantitative research design to examine the impact of Entrustable Professional Activities (EPAs) on nursing students' performance as perceived by clinical instructors. Descriptive research provides an accurate description of existing conditions and characteristics without manipulating variables, making it appropriate for describing the use of EPAs and the clinical competency of nursing students during clinical practice.

2.2 Locale of the Study

The study was conducted in Metro Manila, the National Capital Region of the Philippines, where numerous nursing schools and tertiary hospitals operate in close collaboration. These institutions include both government and private hospitals with established academic-clinical partnerships, providing a diverse environment suitable for examining EPAs among clinical instructors.

2.3 Respondents of the Study

The respondents were selected clinical instructors currently supervising nursing students in Metro Manila. Eligible participants were Filipino registered nurses employed in clinical institutions with at least four months of clinical instruction experience. A pilot test involving 15 qualified clinical instructors was conducted separately and these participants were excluded from the final study to evaluate the clarity of the instrument and determine its reliability through Cronbach's Alpha analysis.

2.4 Sample and Sampling Procedure

The required sample size was determined using Slovin's formula with a 0.05 margin of error, resulting in 93 respondents. Purposive and snowball sampling techniques were used to recruit qualified clinical instructors with experience in Entrustable Professional Activities (EPAs). Snowball sampling allowed eligible participants to recommend other qualified colleagues while ensuring that the required sample size was achieved.

2.5 Research Instrument

The study utilized an adapted questionnaire consisting of three sections and nineteen items. The first section gathered respondents' demographic information. The second section contained ten items measuring clinical instructors' perceptions of Entrustable Professional Activities (EPAs), adapted from Chen, van den Broek, and Ten Cate (2020) entitled The Case for Use of Entrustable Professional Activities in Undergraduate Medical Education. The third section consisted of nine items measuring clinical instructors' satisfaction with nursing students' performance, adapted from Cervera-Gasch, Gonzalez-Chorda, and Mena-Tudela (2017) in their study Questionnaire to Measure the Participation of Nursing Professionals in Mentoring Students. Responses were measured using a four-point Likert scale ranging from strongly disagree to strongly agree. Before implementation, the questionnaire was revised to improve wording, clarity, and relevance to nursing education. The revised instrument underwent pilot testing with 15 clinical instructors. Face validity and pilot testing were used to assess the appropriateness of the adapted instrument. Reliability analysis using Cronbach's Alpha produced coefficients of .929 for the Perception on Entrustable Professional Activities (EPAs) Scale and .941 for the Satisfaction on Nursing Student Performance Scale, indicating excellent internal consistency.

2.6 Data Gathering Procedure

Permission was obtained from the appropriate institutions before conducting the study. The researchers requested authorization to distribute questionnaires, collect anonymous EPA-related data, and coordinate with relevant offices while complying with Republic Act 10173 or the Data Privacy Act of 2012. The study also underwent ethical review before implementation. Eligible clinical instructors were informed about the purpose of the study and provided with informed consent forms before participation. After obtaining consent, survey questionnaires were administered personally using printed forms. Researchers explained the survey procedures, answered participants' questions, and allowed respondents to omit questions they considered sensitive or irrelevant. Participant confidentiality was protected through anonymous responses and unique identification numbers. Electronic files were securely stored in a password-protected Google Drive managed by the principal investigator, while printed questionnaires were kept in a locked cabinet. Data were retained for one year after study completion before secure disposal. Recruitment was conducted through purposive and snowball sampling using face-to-face invitations and online recruitment through Facebook. Data collection continued for approximately two to three weeks or until the required sample size was achieved. Participants voluntarily took part in the study and received a small token of appreciation after completing the survey.

2.7 Data Analysis Techniques

The collected questionnaires were checked, tabulated, processed, and statistically analyzed after data collection. Pilot test responses were analyzed using Cronbach's Alpha to determine the reliability and internal consistency of the research instrument before its administration to the final respondents.

2.8 Ethical Considerations

The study adhered to ethical principles outlined in the Nuremberg Code to safeguard participants' rights, safety, confidentiality, and voluntary participation (Rana, Dilshad, & Ahsan, 2021). Participants provided informed consent after being informed of the study's objectives and procedures and were free to withdraw at any stage without penalty. All information was treated confidentially, securely stored, and made accessible only to authorized researchers. Integrity, honesty, and fairness were maintained throughout the research process, and all collected data will be securely discarded after the completion of the study. The study also underwent peer review prior to implementation.

3. Results and Discussion

3.1 Demographic Profile of Clinical Instructors

3.1.1 Age, Gender, and Civil Status

The participants were 93 clinical instructors. Most were aged 31 to 40 years, representing 33 respondents or 35.5%, followed by those aged 41 to 55 years with 23 respondents or 24.7%, those aged 55 to 70 years with 20 respondents or 21.5%, and those aged 23 to 30 years with 17 respondents or 18.3%. In terms of gender, most respondents were female, with 65 participants or 69.9%, while 28 or 30.1% were male. For civil status, 48 respondents or 51.6% were married, 43 or 46.2% were single, while one respondent or 1.2% was separated and one respondent or 1.2% was widowed. These findings show that the respondents were mostly adult, female, and married clinical instructors. This profile reflects the general pattern in the nursing profession, where women comprise a large portion of the workforce. The age distribution also suggests that the respondents had varying levels of maturity and professional exposure, which may have influenced their perceptions of nursing students' clinical performance.

3.1.2 Clinical Teaching Experience, Institution Type, and Educational Attainment

In terms of years of clinical teaching experience, the largest group had 5 to 20 years of experience, with 38 respondents or 41.3%. This was followed by those with 4 months to 1 year of experience, with 23 respondents or 25.0%; those with 2 to 4 years of experience, with 18 respondents or 19.6%; and those with 21 to 40 years of experience, with 13 respondents or 14.1%. Most respondents were affiliated with private institutions, with 91 respondents or 97.8%, while only 2 or 2.2% came from public institutions. For highest educational attainment, 51 respondents or 54.8% held a master's degree, 22 or 23.7% held a bachelor's degree, and 20 or 21.5% held a doctorate. These results indicate that most clinical instructors had substantial teaching experience and advanced educational preparation. The dominance of private institution affiliation suggests that the study was largely represented by clinical instructors from private academic or clinical settings. The high proportion of respondents with graduate education also indicates that many participants had advanced preparation in nursing practice and instruction.

3.2 Clinical Instructors' Perception of Entrustable Professional Activities

3.2.1 Level of Perception of EPAs in Clinical Practice

The findings showed that clinical instructors had a high level of perception regarding Entrustable Professional Activities (EPAs) among nursing students, with a mean score of 3.50 and a standard deviation of 0.48. This result indicates that respondents generally viewed EPAs positively and consistently recognized their importance in guiding nursing students during clinical practice. The low variability in responses suggests that clinical instructors had similar judgments regarding the usefulness and relevance of EPAs in clinical education. This finding implies that EPAs were perceived as effective tools for assessing and mentoring nursing students' clinical competence. This result is supported by Ten Cate (2020) who suggested that EPAs serve as guiding tool that connect nursing students' competencies to real life situations. In relation to Patricia Benner's Novice-to-Expert Theory, the high level of perception suggests that clinical instructors considered EPAs useful in supporting students' progression toward advanced beginner competence through guided practice, feedback, and increasing responsibility.

3.3 Clinical Instructors' Satisfaction with Nursing Students' Clinical Participation and Performance

3.3.1 Level of Satisfaction with Student Participation and Results

The respondents expressed a high level of satisfaction with the overall participation and performance of nursing students in clinical practice, as shown by a mean score of 3.44 and a standard deviation of 0.48. This indicates that clinical instructors evaluated nursing students positively and perceived that students generally met expectations in terms of behavior, participation, and clinical competencies during practice. This finding suggests that nursing students exposed to well-integrated academic and clinical experiences may be better prepared to perform expected nursing responsibilities. According to Ten Cate (2020), Entrustable Professional Activities (EPAs) improve nursing students' readiness and

performance in clinical settings. The high satisfaction level also indicates that EPAs may support student confidence, accountability, and clinical competence when used as part of structured clinical education.

3.4 Academic-Clinical Integration and EPA-Based Clinical Performance

3.4.1 Influence of Integrated Learning, Supervision, and Feedback

The overall findings showed that clinical instructors perceived EPAs positively and were highly satisfied with nursing students' clinical participation and performance. These findings suggest that academic-clinical integration, structured supervision, competency-based frameworks, and feedback mechanisms contributed to students' preparation for real-world nursing practice. The results also indicate that EPAs helped bridge the gap between theoretical knowledge and clinical application. Gilliss et al. (2020) noted that congruency between classroom teaching and clinical exposure improves the growth of skills and clinical performance of students, which is correlation to the results of this research. Likewise, Millar et al. (2024) also pointed out that ongoing observation and interaction between instructors and students enhance entrustment choices, whereas Coleiro et al. (2022) also noted that organized and facilitative supervision enhances learning and emotional satisfaction in students. Moreover, Springer et al. (2021) also discovered that timely and positive feedback is a critical factor in enhancing clinical performance, which supports the relevance of the feedback mechanisms identified in the present study.

3.5 Implications for Nursing Education in the Philippine Context

3.5.1 Relevance of EPAs in Addressing Clinical Education Challenges

The findings have important implications for nursing education in the Philippines, particularly in settings affected by limited clinical exposure and resource constraints. Despite these challenges, the results suggest that well-implemented EPAs, supported by strong academic-clinical partnerships and feedback mechanisms, can help improve students' readiness for professional nursing practice. These findings imply that strengthening the alignment between learning institutions and clinical agencies may be a practical and sustainable approach to improving clinical education. Rather than focusing only on increasing clinical hours, nursing programs may benefit from structured feedback, integrated learning experiences, and clear entrustment processes that support students' transition from learners to competent professionals.

3.6 Summary of Findings

3.6.1 Overall Contribution of EPAs to Nursing Students' Clinical Performance

Overall, the study showed that clinical instructors had a high perception of EPAs and a high level of satisfaction with nursing students' clinical participation and performance. The results confirm the importance of academic-clinical integration, guided supervision, feedback, and progressive responsibility in improving students' clinical readiness. The study supports a competency- and trust-based model of nursing education that prepares students for safe, effective, and patient-centered care. It further emphasizes that EPAs can help develop knowledgeable, confident, accountable, and practice-ready nurses when implemented through structured academic and clinical collaboration.

4. Conclusion & Recommendations

The study concluded that Entrustable Professional Activities (EPAs) played an important role in supporting nursing students' clinical competency, professional responsibility, and readiness to perform required clinical tasks in actual healthcare settings. Clinical instructors perceived EPAs as highly valuable in assessing students' clinical competence and expressed a high level of satisfaction with students' participation and performance during clinical exposure. The findings showed that integrating academic instruction with clinical practice through EPA-based evaluation strengthened students' confidence, accountability, and preparedness for professional nursing responsibilities, thereby supporting their transition from classroom learning to actual clinical practice.

It is recommended that nursing education institutions continue strengthening academic-clinical integration by aligning classroom instruction with real clinical responsibilities and consistently incorporating EPAs into clinical training. Nursing educators and clinical instructors should collaborate in supervising, mentoring, and evaluating students through clear communication, regular discussion of clinical challenges, and consistent teaching and assessment strategies. Schools and healthcare institutions should also provide professional development opportunities for clinical instructors to enhance their use of EPA-based assessments, while nursing students should actively engage in clinical learning by practicing skills, asking questions, seeking feedback, and maintaining professionalism. Future researchers are encouraged to further examine academic-clinical integration and EPAs using broader respondents, different locations, and varied healthcare institutions to generate more evidence for improving nursing education and clinical training.

The study was limited to the perceptions and satisfaction of clinical instructors regarding the use of EPAs and nursing students' performance in clinical practice. Its findings were based on the selected participants and study context, which may not fully represent other geographic locations, healthcare organizations, or educational settings. Because of this, further studies involving larger groups of respondents and more diverse clinical environments are needed to provide broader

evidence on the role of academic-clinical integration and EPAs in nursing education.

Compliance with ethical standards

The study observed ethical standards by protecting the rights, safety, confidentiality, and voluntary participation of the respondents. Participant information was kept confidential through anonymous responses and unique identification numbers, while electronic and printed data were securely stored with restricted access. The study also complied with Republic Act 10173, or the Data Privacy Act of 2012, and all collected data were intended for research and educational purposes only.

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