

Traditional vs. Technology-Based Mentoring: Perspectives and Influence on Clinical Performance Among Generation

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ABSTRACT

*Mentoring plays an important role in supporting the professional development of Generation Z nurses as they transition into clinical practice. This study examined the perspectives of Generation Z nurses regarding traditional and technology-based mentoring and their clinical performance in a selected tertiary government hospital. Using a quantitative descriptive-comparative and correlational research design, the study found that respondents held positive perceptions of both traditional and technology-based mentoring, highlighting the value of direct clinical guidance and technology-assisted learning for their professional growth. The findings further revealed a consistently high level of clinical performance in technical skills and precision, critical thinking and decision-making, patient communication, and documentation and digital literacy. No significant difference was found in nurses' clinical performance by mentoring style, indicating that both approaches were equally effective in supporting clinical competence. Moreover, most demographic characteristics were not significantly associated with clinical performance. Based on these findings, a **Strategic Hybrid Mentorship Program** is proposed to integrate the strengths of traditional and technology-based mentoring in enhancing the competence and continuous professional development of Generation Z nurses.*

Keywords: Generation Z nurses; mentoring; traditional mentoring; technology-based mentoring; clinical performance; hybrid mentorship.

INTRODUCTION

Mentoring plays a vital role in supporting newly employed nurses' transition to professional practice by enhancing their clinical competence and confidence. As Generation Z nurses increasingly prefer technology-enhanced learning, evidence comparing traditional and technology-based mentoring in improving clinical performance, particularly in Philippine tertiary government hospitals, remains limited (Liu et al., 2023; Jiang et al., 2024; Berdida, 2023; Constantino et al., 2025; Israel et al., 2025). Therefore, this study examined the perspectives of Generation Z nurses on traditional and technology-based mentoring and on their clinical performance, as a basis for developing a **Strategic Hybrid Mentorship Program**.

Statement of the Problem

This study aimed to determine the perspectives of Generation Z nurses regarding traditional and technology-based mentoring and their clinical performance in a selected tertiary government hospital. Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:

- sex;
 - age;
 - area of clinical assignment; and
 - length of service?
2. What are the respondents' perspectives regarding:
 - traditional mentoring; and
 - technology-based mentoring?
 3. What is the level of clinical performance of Generation Z nurses in terms of:
 - technical skills and precision;
 - critical thinking and decision-making;
 - patient communication; and
 - documentation and digital literacy?
 4. Is there a significant difference in the clinical performance of Generation Z nurses when grouped according to the mentoring style received?
 5. Is there a significant relationship between the respondents' profile and their clinical performance?
 6. What Strategic Hybrid Mentorship Program can be proposed based on the findings of the study?

Scope and Delimitations

This study focused on the perspectives of Generation Z nurses on traditional and technology-based mentoring and on their clinical performance at a selected tertiary government hospital in Quezon City, Philippines. It examined how mentoring approaches relate to nurses' clinical competence and served as the basis for proposing a **Strategic Hybrid Mentorship Program**. The study was limited to Generation Z nurses employed in the selected institution and relied on self-reported responses; thus, the findings may not be applicable to nurses in other healthcare settings.

Review of Related Literature

Recent studies indicate that both traditional and technology-based mentoring enhance the clinical competence, confidence, and professional development of Generation Z nurses by combining interpersonal guidance with technology-supported learning (Shorey et al., 2021; Liu et al., 2023; Jiang et al., 2024; Sim et al., 2022; Keinänen et al., 2023; Wei et al., 2024). However, evidence comparing these mentoring approaches among practicing Generation Z nurses in Philippine tertiary government hospitals remains limited (Berdida, 2023; Constantino et al., 2025; Israel et al., 2025). This gap provided the basis for examining the influence of traditional and technology-based mentoring on clinical performance and for developing a Strategic Hybrid Mentorship Program.

Theoretical Framework

This study is anchored in **Bandura's Social Learning Theory**, **Roy's Adaptation Model**, **Locsin's Technological Competency as Caring in Nursing**, and the **Technology Acceptance Model**, which collectively explain how mentorship, adaptation, and technology integration influence the development of clinical competence among Generation Z nurses. These theories provide the theoretical foundation for understanding the roles of traditional and technology-based mentoring in enhancing clinical performance and support the development of the proposed Strategic Hybrid Mentorship Program.

Conceptual Framework

This study adopted an **Input–Process–Output (IPO) framework**, wherein the respondents' profile, perspectives on traditional and technology-based mentoring, and clinical performance served as the inputs; data collection and statistical analysis constituted the process; and the proposed **Strategic Hybrid Mentorship Program** served as the output. This framework illustrates how the identified variables were examined to inform the development of an evidence-based mentoring program for Generation Z nurses.

METHODOLOGY

This study investigated the perspectives of Generation Z nurses regarding traditional and technology-based mentoring and their influence on clinical performance to inform the development of a Strategic Hybrid Mentorship Program.

Research Design -

This study employed a **quantitative descriptive-comparative and correlational research design** to determine the mentoring styles received by Generation Z nurses, examine differences in their clinical performance based on mentoring style, and assess the relationship between demographic characteristics and clinical performance. The findings guided the development of the proposed **Strategic Hybrid Mentorship Program**.

Research Steps

Following the required institutional approvals, data were collected from eligible Generation Z nurses using a validated structured questionnaire. The responses were encoded, statistically analyzed, and interpreted to determine the mentoring styles received, clinical performance, significant differences, and relationships among the study variables, which served as the basis for the proposed **Strategic Hybrid Mentorship Program**.

Data Collection and Sample Selection

A total of **121 eligible Generation Z nurses** were included through complete enumeration and completed a validated researcher-developed questionnaire administered via **Google Forms** after obtaining institutional approval and informed consent. The completed questionnaires were checked for completeness and prepared for statistical analysis.

Data Analysis Methods

Descriptive statistics (frequencies, percentages, and weighted means) were used to summarize the study variables. Inferential analyses, including the **independent-samples t-test and Pearson product-moment correlation**, were performed to examine differences and relationships among the variables, with statistical significance set at $p < .05$.

Research Hypotheses and Validation

The study tested the null hypotheses that there is **no significant difference** in the clinical performance of Generation Z nurses by the mentoring style received, and that there is no significant relationship between the respondents' profiles and their clinical performance. The hypotheses were tested at the **0.05 level of significance** using appropriate inferential statistical analyses. The researcher-developed questionnaire underwent expert validation and pilot testing to establish its content validity and reliability before data collection.

Study Limitations and Ethical Considerations

This study was limited to Generation Z nurses in a selected tertiary government hospital and relied on self-reported responses, which may limit the generalizability of the findings and introduce response bias. Ethical standards were observed through institutional approval, informed consent, voluntary participation, and the protection of participants' anonymity, confidentiality, and research data.

RESULTS AND DISCUSSION

The findings revealed that the respondents were predominantly early-career female Generation Z nurses who expressed highly positive perceptions of both traditional and technology-based mentoring and demonstrated high levels of clinical performance across all competency domains. No significant difference in clinical performance was found based on mentoring style, and respondents' demographic profile generally showed no significant relationship with clinical performance, except for a weak association between sex and documentation and digital literacy. Based on these findings, a Strategic Hybrid Mentorship Program was developed to integrate traditional and technology-based mentoring in strengthening the clinical competence and professional development of Generation Z nurses.

SUMMARY

This study examined the perspectives of Generation Z nurses regarding traditional and technology-based mentoring and their clinical performance in a selected tertiary government hospital. The findings revealed positive perceptions of both mentoring approaches, consistently high clinical performance, and no significant differences in clinical performance by mentoring style or most demographic characteristics. Based on these findings, a **Strategic Hybrid Mentorship Program** was developed to integrate the strengths of traditional and technology-based mentoring in enhancing the clinical competence and professional development of Generation Z nurses.

CONCLUSIONS

Both traditional and technology-based mentoring effectively supported the clinical performance of Generation Z nurses, with no significant differences observed between the two approaches. These findings support implementing a **Strategic Hybrid Mentorship Program** to strengthen clinical competence and professional development among Generation Z nurses.

RECOMMENDATIONS

Healthcare institutions are encouraged to implement the proposed **Strategic Hybrid Mentorship Program** to strengthen the clinical competence and professional development of Generation Z nurses. Future studies may evaluate its effectiveness across different healthcare settings to further support evidence-based mentoring practices.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

REFERENCES

- Berdida, D. J. E. (2023). Filipino nursing students' use of low-cost simulators during the COVID-19 pandemic: A summative content analysis of YouTube videos. *Teaching and Learning in Nursing, 18*(1), 134–143.
<https://doi.org/10.1016/j.teln.2022.08.004>
- Constantino, C. S., Genuino, R. F., Kilem, N. K. P., Perias, G. A. S., & Ang, G. G. T. (2025). A scoping review on the status of clinical simulation in healthcare education in the Philippines. *Acta Medica Philippina, 59*(6), 9–23.
<https://doi.org/10.47895/amp.v59i6.11554>
- Jiang, J., Liu, Y., Han, P., Zhao, J., Shi, Y., & Zhuang, Y. (2024). Perceptions and experiences of Generation Z nursing students during their practicum in an intensive care unit: A qualitative study. *Heliyon, 10*(4), Article e26205.
<https://doi.org/10.1016/j.heliyon.2024.e26205>
- Keinänen, A. L., Lähdesmäki, R., Mikkonen, K., & Kääriäinen, M. (2023). Effectiveness of mentoring education on health care professionals' mentoring competence: A systematic review. *Nurse Education Today, 121*, Article 105709.
<https://doi.org/10.1016/j.nedt.2023.105709>
- Liu, Y., Sun, X., Zhang, P., Han, P., Shao, H., Duan, X., & Jiang, J. (2023). Generation Z nursing students' online learning experiences during the COVID-19 epidemic: A