Simulation-Based Learning Satisfaction and Clinical Decision Making

Among Staff Nurses in Iloilo City

Abstract

This study addressed the limited local evidence regarding the influence of Simulation-Based Learning (SBL) on staff nurses' clinical decision-making in Iloilo City. The general objective was to determine the relationship between staff nurses' satisfaction with SBL and their clinical decision-making skills. A descriptive correlational research design was employed among 80 staff nurses from two selected private hospitals in Iloilo City using purposive sampling. Data were collected through adopted and validated questionnaires, measuring SBL satisfaction and clinical decision-making domains, including apprehension, time pressure, and professional autonomy. Ethical clearance was sought from the institutional ethics committee prior to data collection, and informed consent was secured from all participants. Findings revealed that staff nurses demonstrated a high level of satisfaction with SBL, particularly in recognizing its usefulness as a supplement to real patient care. Clinical decision-making skills were generally average, with professional autonomy rated high, while apprehension and time pressure were moderate. No significant relationship was identified between satisfaction with SBL and clinical decision-making skills. The study concluded that SBL has favorable perceptions of SBL alone did not directly translate into stronger clinical decision-making competence, as emotional and situational stressors continued to influence their performance. These findings emphasized the need to enhance structured and realistic simulation programs in order to further improve clinical competence. It is recommended that hospitals and nursing educators enhance simulation design, provide

guided feedback, and maintain regular simulation exposure to optimize clinical decision-making outcomes.

Keywords: Simulation-based learning, clinical decision making, staff nurses

Introduction

Background of the Study

Simulation-Based Learning (SBL) was employed in the nursing field long ago, enabling staff nurses to train the actual clinical case within a certain safe setting. It helped improve their clinical decision-making, confidence, and readiness for actual practice (Marquette University, 2025). Although many nursing schools in the Philippines continued to use SBL. However, there were still no studies that focused on how it affected clinical decision-making among staff nurses in Iloilo City.

Nursing simulation laboratories were created to look and function like real hospital settings. These allowed nurses to perform patient care activities and develop essential skills without putting real patients at risk (Marquette University, 2025). Simulation was used to assist the nursing student to improve the skills of making clinical decisions because situations were altered and were lacking in ordinary clinical settings. (Görücü et al., 2024). It had been identified that Simulation-Based Learning (SBL) can resulted in the enhancement of clinical decision making, self-confidence, and readiness to practice the profession. Its efficacy differed according to the simulation technique employed. One example of this was SIMBA (Simulation via Instant Messaging–Birmingham Advance), was a virtual simulation program founded on the Learning Theory of Kolb that utilized WhatsApp and Zoom as the media platforms. This method has been associated with a huge increase in participants' knowledge retention, confidence, and skill application (Davitadze, 2022).

Similarly, a cross-sectional study concluded that VR (Virtual Reality) simulation

can enhanced the quality and depth of clinical decision-making, highlighting for complementary teaching methods to support learners' self-assurance and emotional readiness (Alfanash et al., 2025). It was found that the satisfaction of self-confidence of 230 undergraduate nursing students who took part in SBL were greatly enhanced (Lalani, 2023). In terms of High fidelity-simulation (HFS), it has been reported that the implementation of traditional clinical rotations activity was found to lead to an increase in practice readiness of the final semester nursing students with associate degree leading to reduced their anxiety levels (Yakoby, 2025).

Through HFS, self-confidence and self-efficacy of newly registered nurses were said to have been boosted, thereby simplifying the process of the transition into professional practice (Lysius, 2025). By comparison, using HFS was applied at Arab American University, self-satisfaction and confidence in pediatric nursing increased and proved the urgency of introducing the HFS into the nursing curriculum as the measure of preparing students to be safe proficient nurses in clinical practice (Toqan et al., 2023).

Simulation-based learning had a beneficial impact on nursing education in the Philippines, but research revealed areas that needed improvement. (Palmes et al., 2025). A learning simulation based on delivery room simulation (DR SBL) for Level 4 students at West Visayas State University was conducted during the pandemic and discovered a positive association between professional skill and happiness, furthermore, pointed out the mental and emotional benefits of DR SBL in making students ready for the hospital internship, high-fidelity simulation HFS for Filipino nursing students dealing with critically ill adults and pediatric patients reported that well-planned simulations raised self-confidence, competence, and meaningful learning (Gasper and Banayat, 2024).

Nevertheless, most of the simulation studies in the Philippines were restricted to a few areas only, were limited to one center, were hospital-based and were conducted in NCR, most of them employed low to medium fidelity task trainers and having small sample sizes, restricted study designs and moderate methodological quality (Constantino, 2025).

Nurses were expected to demonstrate strong clinical decision-making skills to ensure safe and quality patient care, consistent with Sustainable Development Goal 3 Good Health and Well-Being. Thus, Simulation-Based Learning was expected to enhance not only knowledge and confidence but also clinical judgment and readiness for practice.

Although Simulation-Based Learning (SBL) was increasingly used in nursing education, its impact on the clinical decision-making, specifically in Iloilo City, remained sparse. Many studies mainly focused on public institutions or hospital-based programs and thus, it was not clear how SBL affected the satisfaction and decision-making of nurses in practice at the same time. Although high-fidelity simulations were reported to improve knowledge, confidence and readiness for practice, the direct effect on the clinical decision-making of some staff nurses had not been much explored. Most existing studies focused on low to medium fidelity simulations, which limited the understanding of how more realistic, theory-driven techniques influenced outcomes. Therefore, this gap underscored the need for locally relevant to examine how SBL influenced satisfaction and clinical decision-making among staff nurses, supporting effective formulation of effective simulation programs that could enhance the nurses in terms of being better prepared to face the challenges in clinical setting.

Statement of the Problem

This study aimed to determine the influence of Simulation-Based Learning (SBL) satisfaction and clinical decision-making of staff nurses in a selected hospital in Iloilo City, Philippines.

In particular, this research is aimed at answering the following questions:

1. What is the level of satisfaction of staff nurses with Simulation-Based Learning?
2. What are the clinical decision-making skills of staff nurses in terms of a
   A. Apprehension in Clinical Decision Making
   B. Time Pressure in Clinical Decision Making
   C. Professional Autonomy in Clinical Decision Making
3. Is there a significant relationship between staff nurses' satisfaction with Simulation-Based Learning and their Clinical Decision-making skills?

Hypothesis

There is no significant relationship between staff nurses' satisfaction with Simulation-Based Learning and their Clinical Decision-Making skills.

Theoretical Framework

This study is anchored to the Experiential Learning Theory by David Kolb, a psychologist in 1984 and it focuses more on the learning process where our knowledge comes about through our experiences being changed. According to Kolb, successful learning does take place when a person utilizes a process that involves four steps, which are Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation (Cherry, 2025). Through this process, learners transform experiences

into practical knowledge that is applicable in practice (Cherry, 2025). Simulation-Based Learning (SBL) was related to Kolb's Theory because it enabled nurses to engage in hands-on experiences in a secure and controlled setting where they were able to handle simulated clinical situations without jeopardizing patient safety. It was proposed that, after simulation, staff nurses reflected on their practice (Reflective Observation), derived lessons, and had their experiences teach them (Abstract Conceptualization), and implemented these lessons to ensure that similar clinical cases do not happen in the future (Active Experimentation). In addition to the improvement of the technical skills of nurses, this learning process tends to increased the level of confidence and satisfaction when it comes to handling complex clinical decision- making skills.

In the study, the Experiential Learning Theory by Kolb was used as the foundation of understanding how staff nurses' engagement in Simulation-Based Learning affects their satisfaction levels and strengthens their clinical decision-making skills and the relationship between these two variables. By participating in real-like simulations and reflecting on their experiences, staff nurses improved their ability to make accurate and timely clinical decisions, which are essential in professional practice. In contrast, this theory supported the proposition that structured and purposeful simulation-based learning activities can significantly contribute to professional growth and effectiveness in the clinical setting among staff nurses in a chosen hospital in Iloilo City.

Conceptual Framework

In this study, learning was perceived as an ongoing experience, reflection, and application process as described in Kolb's Experiential Learning Theory

Simulation-based learnings provided staff nurses practical clinical experiences to engage

in which can strengthen their competence and confidence in patient care. The theory emphasizes that when nurses actively participate in simulation activities, they were allowed to reflect on their performance, leading to potential improvements in their clinical decision-making skills. The conceptual framework of this study proposes that satisfaction with Simulation-Based Learning may influence the clinical decision-skills of staff nurses. Highly satisfied nurses were more motivated and were expected to develop effective clinical decision-making skills. However, dissatisfaction led to decreased interest and self-confidence in managing real patient cases. The framework addressed the possible interdependence between the Simulation-Based Learning satisfaction and Clinical Decision-Making Skills of the Iloilo City staff nurses.

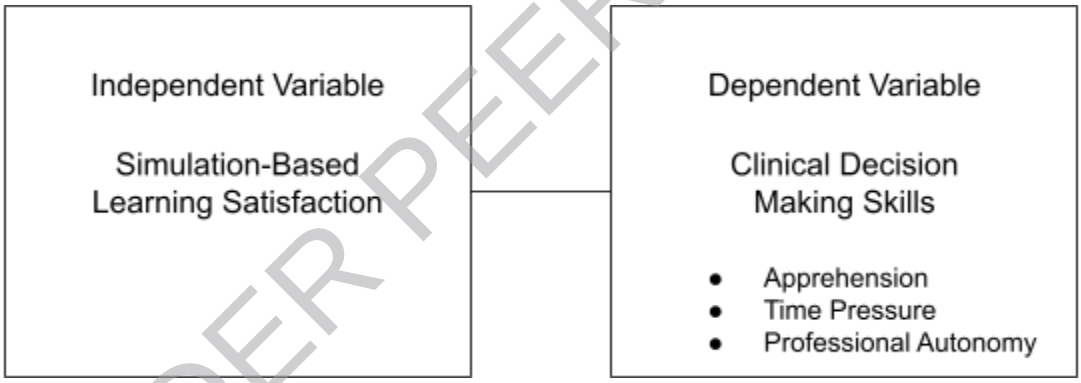

Figure 1*. The diagram illustrates the relationship between the independent and dependent variables, which is required in determining if Simulation-Based Learning Satisfaction influences the Clinical Decision-Making Skills of staff nurses. The dependent variable relies on the independent variable, as the results will indicate whether Simulation-Based Learning has enhanced the ability of staff nurses to make sound clinical decisions during their hospital duties.*

Definition of Terms

Simulation-Based Learning (SBL). It was a training practice that involved the development of learning activities, which are representations of real-life situations and problems, thus enabling the students to use their knowledge and skills in areas that are almost the same as their future professional practice. (Collett, 2024).

In this study, SBL refers to one of the methods used in nursing education, which involves making real-life clinical situations through role-play, mannequin and simulation and case scenario; thus, staff nurses are permitted to practice skills and apply knowledge in a safe environment. SBL satisfaction will be measured using a 5-point Likert scale questionnaire adopted for this study.

Clinical Decision-Making Skills. It is a dynamic process in which the nurses evaluate a patient's condition and make clinical decisions based on the evidence. (*Clinical Decision-Making in Nursing Practice | HPU Online*, 2023).

Clinical decision-making skills as used in this study defines the capacity of the staff nurses to evaluate the state of their patients, interpret and analyze data, and formulate accurate evidence-based clinical judgments during hospital practice. This will be measured using adopted questionnaires with the following sub domains:

Apprehension - refers to the nurses' thoughts or feelings regarding the demand or pressure, worries, panic, stress, uneasiness felt or experienced from their working environment which may be upsetting, threatening, or endangering. This will be measured using the adopted 5 point Likert scale.

Time pressure - is a state of being compressed, it is also a constraining force or influence that can psychologically persuade some to behave and think differently.

Professional Autonomy - refers to an individual's ability to act on his or her own, self-directing, or the ability to do things independently. These clinical skills will be measured using an adopted 5-point Likert scale.

Staff Nurses. A registered nurse educated by Nursing and Midwifery Council and typically part of a larger team of caregivers working on a hospital ward (Bowyer, 2024).

In this study, staff nurses are licensed nurses in Iloilo City who have completed a Bachelor of Science in Nursing (BSN) degree and are currently engaged in hospital-based clinical practice.

Significance of the Study

The importance of this study is that it will demonstrate how Simulation-Based Learning (SBL) satisfaction impact the clinical decision-making process among the staff nurses at the chosen hospital in Iloilo City. Findings of this research were useful to the following:

Staff Nurses. The study will also enable the nurses to be familiar with the impacts of SBL on their confidence, knowledge and decision-making. The study will evaluate performance in clinical judgment by assessing the satisfaction of SBL with simulated activities in their satisfaction in such real clinical situations.

Nursing Educators. The study will make contributions to the literature that justifies the adoption of properly organized simulation programs in nursing education. It aims to provide the nursing educators with insight into the relationship between nurses' satisfaction with Simulation-Based Learning and their engagement in clinical

decision-making, thereby allowing educators to improve teaching strategies to enhance student learning outcomes.

Future Researchers. This study will serve as a reference to be used in future studies that would focus on SBL and Clinical Decision-Making in the Philippines where research studies are limited. The study will be able to produce data that is relevant to the local context and can be broadened, replicated or compared in future studies on nursing practice and education.

Scope and Limitation

This study utilized a descriptive correlational research design to explore the satisfaction of staff nurses in Iloilo City with Simulation-Based Learning (SBL) and how it affects their clinical decision-making skills. The study assessed two primary variables. The independent variable was Simulation-Based Learning, while the dependent variable was the Clinical Decision-Making Skills of staff nurses. To measure this, the researchers adopted a 30-item, five-point Likert scale questionnaire, which covers the following: (a) Satisfaction with Simulation-Based Learning (SBL), (b) Apprehension in Clinical Decision-Making, (c) Time Pressure in Clinical Decision-Making, and (d) Professional Autonomy in Clinical Decision Making. The sample comprised fresh graduates of Bachelor of Science in Nursing Degree Holders and a graduate of Bachelor of Science in Nursing who have completed intensive clinical rotations and were willing to provide informed consent. Data collection took place in a designated hospital in Iloilo City from January to February 2026.

The study relied on perceptions and reported experiences of the participating staff

nurses relative to their job satisfaction and belief in the positive effects of SBL on their ability to make decisions as clinicians. Long term patient health status and comparisons of SBL to more traditional educational methodologies were not evaluated within the study design. Limitations of the study included the relatively small number of nurses included for participants, due to time and resource constraints, which could result in a decreased generalizability of findings. Although the study is subject to certain limitations, it contributed meaningful information to the field of nursing education and training, and encouraged additional research to further evaluate the benefits of SBL and possible long-term outcomes related to professional performance.

Review of Related Literature

This article is divided into two (2) parts: Review of Related Concepts and Review of Related Studies.

Related Concepts

Simulation-Based Learning in Nursing Practice

Simulation-based learning (SBL) is an instructional approach that recreates real-world clinical scenarios to allow learners to apply knowledge and skills in environments that reflect actual professional practice (The University of Melbourne, 2024). It is grounded in experiential and active learning principles that bridge the gap between theory and practice through structured scenario-based activities (The University of Melbourne, 2024). The effectiveness of SBL is closely linked to simulation fidelity, or the degree of realism in the learning experience (Radiant Digital, n.d.). Higher levels of realism enhance learner engagement, confidence, and skill acquisition from classroom instruction to clinical practice by strengthening critical thinking and decision-making abilities (Howard, 2020).

According to Massachusetts General Hospital Institute of Health Professions (2024) Simulation is widely recognized in health professions education as an effective teaching strategy that enables students to practice procedures and respond to complex clinical situations in a safe environment. It also promotes collaboration within healthcare teams and prepares learners to manage unexpected patient events (MGHIHP, 2024). Furthermore, simulation-based education fosters deeper understanding of patient communication, interdisciplinary teamwork, and professional competence (Miller, 2023).

As an innovative educational strategy, SBL is increasingly embedded in nursing curricula to enhance preparedness, adaptability, and confidence among future nurses (International Review of Research in Open and Distributed Learning, n.d.). This integration ultimately contributes to improved patient safety and quality of care (IRRODL, n.d.).

Nurses Satisfaction in Simulation-Based Learning

Job satisfaction among nurses reflects the quality of the working environment and the effectiveness of institutional management (Sharma et al., 2020). Various factors shape job satisfaction, including salary, financial benefits, opportunities for promotion, working conditions, and interpersonal relationships within the organization (Sharma et al., 2020). Because work occupies a substantial portion of daily life, it strongly influences an individual's self-concept and self-esteem. Higher job satisfaction is positively associated with life satisfaction and overall psychological well- being. (Mnich, 2025). Employees are more satisfied when they are able to effectively use their skills and competencies in their professional roles. Organizations that ensure proper role alignment and supportive management practices create mutually beneficial outcomes for both employers and employees (Mnich, 2025).

In nursing education, simulation fidelity plays a crucial role in preparing students for real clinical practice (Howard, 2020). Simulation-based learning strengthens critical thinking and clinical decision-making skills essential for professional competence. It is widely recognized as an effective teaching strategy in healthcare education (Miller, 2023). Learner satisfaction also serves as an indicator of the effectiveness of educational strategies and training environments (Instruqt, n.d.). Organizations that prioritize

employee well-being promote positive workplace climates and improve retention rates (Mnich, 2025). Satisfied employees demonstrate greater motivation, engagement, and productivity in their roles. Furthermore, job satisfaction has been associated with reduced levels of depression and anxiety (Mnich, 2025). Individuals who experience fulfillment at work tend to report higher overall life satisfaction and well-being (Matud & Sanchez-Tovar et al., 2024).

Clinical Decision-Making in Nursing

Clinical decision-making is the process of determining what information to collect, which diagnostic tests to request, how to interrupt findings, and what treatments to recommend in order to arrive at appropriate patient care decisions (Mandell, 2024). It consists of three interconnected phases: diagnosis, assessment of severity, and management. Effective clinical decision-making requires establishing an accurate diagnosis while also considering the financial costs and potential consequences of unnecessary or excessive diagnostic testing. It further involves evaluating the risk of adverse outcomes due to improper management and weighing the possible harmful effects and expenses of therapeutic interventions (Mandell, 2024). Critical thinking, which supports sound clinical decisions, includes essential traits such as curiosity, skepticism, and humility. However, decision making itself is defined as selecting among alternatives in situations where outcomes are uncertain (Shaqria, 2020). Factors that enhance clinical decision-making practice include commitment, continuous supervision and feedback, professional authority and autonomy, and effective communication within the healthcare team (Hailu & Derese, 2019). Conversely, barriers such as poor resource

management, high patient-to-nurse ratios, organizational structure and culture issues, limited opportunities for professional development, low self-confidence, and insufficient knowledge can hinder nurses' clinical decision-making abilities (Hailu & Derese, 2019).

Clinical Decision-Making

Apprehension in Clinical Decision-Making

Apprehension in clinical decision-making refers to the anxiety or worry nurses may experience when faced with complex patient care situations. Staff nurses report that factors such as professional experience, emotional intelligence, time management, organizational support, and professional skills influence their decision-making abilities (Shehzad et al., 2023). The demanding nature of nursing exposes nurses to mental health risks, including stress, anxiety, and burnout, which can negatively affect the quality of patient care (Reyes-Rodriguez et al., 2024). Heavy workloads, strained interpersonal relationships, and insufficient support contribute to the emotional burden on nurses, compromising both their well-being and overall healthcare outcomes (Reyes-Rodriguez et al., 2024).

Time Pressure in Clinical Decision-Making

Time pressure is a major factor complicating nurses' clinical decision-making. (Goldsby et al., 2020) The fast-paced, high-stress, and chaotic healthcare environment often forces nurses to make critical decisions under tight time constraints. Perceived time pressure can negatively affect nurse well-being, performance, and patient care outcomes, highlighting the need for nurse managers to implement strategies that alleviate time-related stress. Research suggests that interventions such as psychosocial support,

effective time management, and self-leadership practices can help reduce the perceived time pressure for both frontline nurses and nurse managers, thereby improving decision-making and overall care quality (Goldsby et al., 2020).

Professional Autonomy in Clinical Decision-Making

Professional autonomy in nursing refers to the empowerment of nurses to make independent and accountable decisions regarding patient care within the scope of their practice (Nevada State University, 2024). Key aspects of autonomy include clinical judgment, decision-making, and a strong sense of professional responsibility. Evidence indicates that the majority of clinical nurses report high professional autonomy, with increased experience and leadership roles associated with higher autonomy levels (Rouhi Balasi et al., 2024). For instance, nurses with 5–15 years of experience had significantly higher odds of exhibiting professional autonomy, and head nurses demonstrated even greater autonomy compared to clinical nurses. To enhance autonomy among less experienced nurses, educational interventions and mentorship from senior staff are recommended. Additionally, organizational support, effective communication training, and empowerment initiatives are critical in fostering professional respect and strengthening autonomous practice in nursing.

Related Studies

Satisfaction with Simulation-Based Learning (SBL)

Simulation – Based Learning (SBL) has been linked to high satisfaction levels amongst nursing students as a result of the provision of secure, lifelike, and captivating learning environments. Globally, SBL has been shown to greatly enhance knowledge and skills and increase student's satisfaction with the learning process. However, the review

showed limited evidence of knowledge of long- term retention after five months, reducing generalizability of its long term impact (Alharbi et al., 2024). Similarly, in Taiwan, they highlighted that repeated simulation experiences, when combined with other teaching methods, increased satisfaction and excellent learning outcomes. SBL was found to improve nursing students' competence, self-efficacy, and satisfaction in Taiwan, with the largest improvement being achieved during the first exposure (Hung et al., 2020).

High – fidelity simulations in the Philippines significantly enhanced the satisfaction and self-confidence when caring for critically ill patients especially when the simulations were well structured and in line with the best practice for nursing education (Gasper & Banayat., 2024). The perceived competence of nursing students at West Visayas State University in La Paz, Iloilo City, was positively correlated to their level of satisfaction with the use of simulation-based learning in the delivery room (Palmes et al., 2025). These studies highlight that satisfaction is influenced not only by the type of simulation but also by the quality of its implementation.

Fidelity Levels and Learner Satisfaction.

Learner satisfaction was strongly influenced by the level of simulation fidelity. A comparative study in Egypt revealed that while both high-fidelity and low fidelity simulations enhanced competence and self confidence among nursing students. However, high-fidelity simulations resulted in greater skill achievement, whereas low-fidelity simulation occasionally produced slightly higher satisfaction, as they were perceived as simpler and caused less stress (Ain Shams University, 2021). Similarly, conducted

through a randomized controlled trial, high or mixed fidelity simulations similarly increased the participants' long-term memory of clinical reasoning, ability, and critical thinking. The simulations were more lifelike and nearly identical to real-life clinical situations, thus, the participants also reported greater satisfaction (Chabrara et al., 2024). As per these results, the final-year critical care medicine students at Jazan University, Saudi Arabia, experienced a remarkable rise in their satisfaction and self-confidence following a high-fidelity SBL experience (Ageel, 2024).

Nationally, increased fidelity level produced more meaningful and engaging learning experiences, as nursing students' satisfaction and self-confidence were increased by high-fidelity simulations nationally in care of critically ill patients. which was proved by the study (Gasper & Banayat., 2024). Overall, the results have indicated that low-fidelity simulators are useful for building foundational knowledge and reducing stress, but through high-fidelity and blended methods, deeper engagement, more satisfaction and greater preparedness for practice have been developed. However, recent studies have shown different findings regarding the influence of simulation-based learning on clinical decision-making, despite the overall good outcomes.

SBL and Clinical Decision-Making Skills

Simulation as an educational method has contributed a major role in the development of clinical decision- making, which is important aspects of the nursing profession. A quasi-experimental study in Pakistan showed that the final-year medical students who participated in simulation training made excellent clinical decisions as good as their colleagues. Hence, the method of simulation demonstrated its usefulness in

bridging the theoretical and practical aspects of nursing. In an international study, A meta-analysis of 11 studies revealed that simulation-based learning (SBL) significantly enhanced nursing decision-making, knowledge, critical thinking, and clinical skills in nurses (Zhao et al., 2024). The interventions that lasted between two to eight weeks were the most effective ones, thus pointing to the need of structured and sustained simulation programs. Conversely, simulated training based on the experiential learning theory of Kolb like SIMBA, increased knowledge retention, self-confidence, and practical use (Davitadze et al., 2022). While virtual reality simulations improved decision-making, they may not fully reduce anxiety or increase confidence without complementary strategies (Alfanash et al. 2025).

Locally, real-life situations of Level 4 nursing students at Central Philippine University Iloilo City, who were involved in Apollo High-fidelity simulations were conducted. Thematic analysis highlights three principal themes: (1) Effectiveness of Simulation, (2) Increase in Confidence, and (3) Increase in Competence (Pasomanero et al., 2024).

The respondents stated that through the high- fidelity simulation-based learning, they were able to develop their decision-making skills, to an extent that they could handle real patients better. Thus it could be concluded that simulation, particularly high fidelity and well structured programs enhance the judgement and decision making skills, with the largest impact coming from guided feedback and repeated practice,

Critical Thinking Development and Preparedness for Clinical Situations.

The major contributor to the cultivation of critical thinking and readiness to clinical scenarios of complexity is simulation exposure. In this respect, high-fidelity

simulations have provided the practitioners with participation in the situations where quick evaluation and decision-making are necessary for realistic world situations. A scoping review conducted at Lovisenberg Diaconal University College, Oslo, Norway, scrutinized tech-supported SBL for improving critical thinking in nursing students. The modalities listed in the review like computer-based simulations, human-patient simulators, and VR were so good that the reviewer could easily classify them under the categories of realism, engagement, and blended synchronous-asynchronous methods that very effectively promote critical thinking. The research pointed out the factors like technological skills, motivation, and curriculum-based strategies which when combined will lead to the success of critical thinking through SBL (Stenseth et al., 2024).

The other international studies also provide evidence in favor of the superior simulations, demonstrating that high-fidelity simulations brought about an increase in self-confidence, self-efficacy, and readiness of newly graduated nurses, thus helping their transition into the professional roles (Yakoby, 2025; Lysius, 2025). Similarly, pediatrics nursing students reported increased satisfaction and confidence, and were thus ready for safe and competent practice (Toqan et al., 2023). Locally, simulation programs implemented during the COVID-19 pandemic delivery room simulator in the local setting enhanced the level of competence and satisfaction of nursing students (Palmes et al., 2025) while the simulations in the critical care setting led to significant cognitive and psychological benefits (Gaspar & Banayat, 2024). The conclusion of these studies was that SBL empowers decision-making, critical thinking, and preparedness, and thus, nurses and nursing students can effectively manage complex situations in patient care.

Synthesis

The reviewed literature consistently supports Simulation-Based Learning (SBL) as an effective educational strategy teaching method not only for the students of nursing but also for the nurses who are practicing and those who are coming in. Research conducted all over the world has revealed that SBL actually increases the acquisition of knowledge, the evolution of clinical skills, the degree of satisfaction, decision-making in particular in case the simulations are designed under the conditions of the learning theories such as the experiential learning model provided by Kolb (Alharbi et al., 2024; Zhao et al., 2024). High-fidelity simulations (HFS) use have been demonstrated to the most yielding with results that are most realistic and tend to increase self-confidence of the learners as well as the very skill and knowledge can be long-lasting (Chabrera et al., 2024; Ageel, 2024). Through continuous improvement of the learning process once again and by applying different teaching methodologies, the outcome of such learning is further strengthened and the satisfaction increased (Hung et al., 2020; Pasomanero et al., 2024). Regarding the Philippines, studies have established that high-fidelity simulations are effective in not only closing the gap between theory and practice but also ensuring that the nursing students get the required competencies, skills and attitudes (Gaspar & Banayat, 2024; Palmes et al., 2025; Pasomanero et al., 2024). Such results pertain to the nurse lectures as well, because the guided and repeated simulation experiences can, in fact, improve their clinical decision-making, increase their confidence, and enable them to deal with challenging patient care scenarios effectively. The successful outcomes of SBL are dependent not only on the simulation type but also its implementation, supervision and support in the long run. Generally speaking, SBL, especially that of the

high-fidelity and technology-supported modes has the capacity to uplift the practice of nurses by way of stimulating their thinking, refining their judgment and making them ready for the actual patient care. Although numerous international and local studies have demonstrated the effectiveness of SBL in improving knowledge, skills, satisfaction, and confidence among nursing students (Alharbi et al., 2024; Zhao et al., 2024; Gaspar & Banayat, 2024; Palmes et al., 2025), most studies have focused primarily on student populations and experimental designs. Limited research has examined the relationship between satisfaction with SBL and clinical decision-making skills among practicing staff nurses, particularly in local hospital settings. Furthermore, few correlational studies have explored whether satisfaction with SBL significantly influences clinical decision-making outcomes. In Iloilo City, no identified study has specifically investigated this relationship among staff nurses. Hence, there is a need to determine whether satisfaction with Simulation-Based Learning is associated with clinical decision-making skills among staff nurses in this locale.

Methodology

Research Design

The study used the descriptive correlational research design, it is also concerned with gathering and examining numerical data to answer the research question or hypothesis descriptive correlational research observes at the current state of the variables and sees if there is a relationship between them without changing any conditions. This design is ideal for investigations seeking to figure out the relationship between two variables, such as assessing whether staff nurses' satisfaction with simulation-based learning (SBL) correlates with their clinical decision-making.

The purpose of this study was to examine the relationship of the satisfaction of staff nurses with simulation-based learning (SBL) on clinical decision-making and finding out whether there is a strong connection between SBL satisfaction and making effective clinical decisions by staff nurses. Correlational research is designed to identify and assess the interrelation of two or more variables without manipulation (Slater & Hasson 2024). The results of a correlation are not just to determine the presence of connection between variables but can also serve predictive value through the regression test and multiple regression (Putri, Rezani, & Hermina, 2025).

Study Setting

This study was conducted in two selected private hospitals in Iloilo City, Philippines, between January to February 2026. These selected hospitals offered an appropriate setting for the research, since it employs a variety of staff nurses who are

actively engaged in clinical practice and regularly encounter challenging patient care scenarios that require careful decision-making. The hospitals are located in an urban setting and are equipped with various training and clinical facilities that expose nurses to simulation-based learning (SBL) activities, making it an ideal context for evaluating their satisfaction with SBL and its influence on their clinical decision-making skills.

Population and Sampling

The respondents of this study consisted of a total of the available staff nurses employed at the selected hospital in Iloilo City. The data gathering was conducted between January and February 2026, and it will involve the selection of nurses who are actively engaged in clinical practice during this period. This group will consist of nurses who have completed intensive clinical rotations and are currently involved in direct patient care.

Specifically, staff nurses were the chosen respondents for this study. Those who possess the following characteristics: (a) a fresh graduate or Bachelor of Science in Nursing degree holder; and (b) actively engaged in clinical practice and willing to provide informed consent.

Inclusion Criteria:

- Licensed nurses who hold a Bachelor of Science in Nursing degree.
- Staff nurses with at least six months to three years of clinical experience in hospital based practice.

Exclusion Criteria:

- Nurses who refuse to participate in the study.

- Staff nurses who participated in the pilot study.

In this study, a Purposive sampling was utilized. A non-probability sampling method that allows the researchers to intentionally select respondents who established the inclusion criteria. Only nurses who had the required qualifications were available during the data collection process will be invited as participants.

Purposive sampling was selected because it helps identify respondents who are most knowledgeable persons regarding Simulation-Based Learning Satisfaction and Clinical Decision-making. Such careful selection of respondents will not only reflect the data but add credibility to them as well, for they will be the experts in their fields with the corresponding educational background and experience.

The sample size was determined based on related literature which used similar quantitative approaches involving staff nurses exposed to Simulation-Based Learning (SBL). The literature showed that researchers in this field typically worked with medium sample sizes of 60-100 participants. As an example, research examining the fields satisfaction, self-confidence, and critical thinking by using high-fidelity simulation typically shared the same population (Guerrero et., 2022). Therefore, taking these into account and the availability of the respondents, the researcher aimed for a sample size of 60-100 staff nurses.

Instrument

The research instrument used was an adopted questionnaire to collect data. The researchers utilized a printed questionnaire to give to the respondent face-to-face. The

instrument consisted of three (3) parts with a total of thirty (30) items, all answerable through a five-point Likert Scale. Part I is 5 = Very Satisfied, 4 = Satisfied, 3 = Neutral, 2 = Dissatisfied, and 1 = Very Dissatisfied. The Part II is 5 = Always, 4 = Often, 3 = Sometimes, 2 = Rarely, and 1= Never.

Part I. Demographic profile, which included their age, gender, and years of nursing experience.

Part II - This questionnaire consists of 14-items. This questionnaire is mainly focused on Simulation-Based Learning adopted from the study "Satisfaction of Medical Students with Simulation-Based Learning" by Agha, Alhamrani, and Khan (2015). The statements are rated respectfully by a 5 point Likert scale 5 is = Very Satisfied, 4 = Satisfied, 3 = Neutral, 2 = Dissatisfied, and 1 = Very Dissatisfied.

Part III - Clinical Decision-Making Skills – adopted from the study "Factors That Influence Clinical Decision-Making Skills Among Staff Nurses in Selected Private and Public Hospitals in Roxas City" by Lauron (2021). The instrument measures three essential components of decision-making ability.The questionnaire consists of 16 items 8 items on Apprehension in Clinical Decision Making, 4 items on Time Pressure in Clinical Decision Making and 4 items on Professional Autonomy in Clinical Decision Making Each statement is rated by a 5 point Likert scale ranging from 1 - 5. 5 is = Always 4 = Often, 3 = Sometimes, 2 = Rarely, and 1 = Never.

Validity of the Instrument

Validity refers to how well an instrument measures exactly what it is intended to measure (Polit, D.F., & Beck, 2021). To determine whether the questionnaires are clear,

appropriate, and relevant to the variables in this study, content validity was used in this study (Hosseini, Zarshens & Parvan, 2025). In order to determine content validity, the instrument underwent a review by three (3) professionals who have Master's degree in nursing (MN).

The research instruments were validated by experts using the Good and Scates criteria. The statements were rated on a 5-point scale as follows: 5 – Excellent, 4 – Good, 3 – Average, 2 – Fair, and 1 – Poor.

The mean scores were computed by adding all individual ratings provided by the validators, and the overall mean was used to determine the level of validity. Based on Pineda (2014), validity was interpreted as follows: Excellent = 4.21–5.00, Very Good = 3.41–4.20, Good = 2.61–3.40, Fair = 1.81–2.60, and Poor = 1.00–1.80. The instrument obtained an overall mean score of 4.53, which falls under the "Excellent" category, indicating that it met the required standards of relevance and clarity.

Reliability of the Instrument

Reliability is a term that is used to describe the consistency with which an instrument measures what it is intended to measure across time or even under varying conditions (Hosseini, Zarshens & Parvan, 2025). A reliable instrument will show similar outcomes when given to people with similar characteristics.

A pilot test was conducted before data gathering, where 30 respondents or 10% of the total sample size, whichever was higher. These respondents had the same characteristics as the target respondents but were not included in the main study. To determine reliability, a statistical measure of Cronbach's alpha that is often used to test

internal consistency of Likert-scale items was utilized. A score of 0.70 on the Cronbach's alpha will imply that the instrument possesses a satisfactory amount of reliability (Oviedo & Campo-Arias, 2021).

The results of the pilot testing revealed that the Satisfaction subscale obtained a Cronbach's alpha of 0.87, indicating good internal consistency. The Apprehension subscale yielded 0.74, while the Time Pressure and Professional Autonomy subscales obtained 0.71 and 0.70, respectively. All values exceeded the minimum acceptable level, confirming that the adopted questionnaire demonstrated satisfactory internal consistency and was deemed reliable for the final data collection.

Since the questionnaire was adopted, previous studies that employed the same or similar instruments reported reliability coefficients within acceptable to high ranges. The reliability results from the present pilot testing were consistent with those studies, thereby reinforcing the credibility of the instrument for measuring staff nurses' satisfaction with Simulation-Based Learning and their clinical decision-making skills.

Data Gathering Procedure

The researchers obtained a letter of approval from the Dean of College of Nursing, the hospital administrators, and the nursing service directors of the selected hospitals prior to data collection. The researchers informed the participants about the purpose of the study, what the researchers planned to do, and the reason for conducting the study so that the participants understood their rights and that their participation was completely voluntary. Only those who signed the informed consent form were allowed to participate in the survey.

The researchers identified eligible staff nurses through purposive sampling,

selecting those who are currently engaged in clinical practice and have undergone Simulation-Based Learning. A preliminary screening question will be included to verify SBL exposure.

The researchers developed and administered a structured survey questionnaire to gather the needed data. Data gathering was conducted from January to February 2026 through face to face distribution of printed questionnaires. The first part of the questionnaire presented the purpose of the research, an orientation on the content of the instrument, and clear directions on how to answer. The second part collected personal information such as age, gender, years of nursing experience, and clinical area of assignment. The third part contained the main questions directly related to the study, focusing on the three areas: (a) satisfaction with Simulation-Based Learning, (b) apprehension in clinical decision-making, and, (c) time pressure in clinical decision-making.

Each participant was given approximately 10 to 15 minutes to complete the questionnaire at their convenience, ensuring minimal disruption to their professional duties.

If a participant missed a question, the researchers politely informed and given the option to complete the missing items.

After the data collection, the researchers carefully reviewed all finished questionnaires and checked for accuracy and completeness. The gathered data were then encoded into a Microsoft Excel spreadsheet and later imported into Statistical Package for the Social Sciences (SPSS) software for statistical analysis. All data were securely stored in locked cabinets and were accessible only to the researchers to maintain

confidentiality and data integrity.

Data Analysis Procedure

The gathered data were then encoded into a Microsoft Excel Spreadsheet and later imported into Statistical Package for the Social Sciences (SPSS) software for statistical analysis.

Chart 1. the data will be coded as follows:

Sex	Male	1
	Female	2
Age	23-30 years old	1
	31-35 years old	2
Years of Nursing Experience	0-6 months	1
	1-3 years	2
Area of Assignment	Medical Ward	1
	Surgical Ward	2
	Pedia Ward	3
	Ob-gyne Ward	4
	ER	5
	DR	6
	OR	7
	NICU	8
	ICU	9

The total Score for the SBL be categorized as:

Very dissatisfied	1
Dissatisfied	2
Neutral	3
Satisfied	4
Very Satisfied	5

The total Score for CDM be categorized as:

Never	1
Rarely	2
Sometimes	3
Often	4
Always	5

Descriptive Statistics

Frequency. This was used to determine the number of respondents in each category of the demographic variables, such as age, sex, years of nursing experience, and current area of assignment.

Percentage. Percentages were calculated to indicate the proportion of respondents in each category of the demographic variables.

Mean. It is also referred to as the average, and it is the sum of values in a sample divided by the number of values in the sample (Hurley & Tenny, 2023).

In this study, the mean was used to measure the central tendency of staff nurses' responses in terms of their satisfaction with Simulation-Based Learning (SBL), as well as their perceptions of apprehension and time pressure in clinical decision-making.

Standard Deviation. Measures the degree of the scattering of a set of values, usually, against the mean value of the set. The SD is determined according to the fact that the whole target population is utilized in the data or it is just a sample (El Omda & Sergent, 2024).

In this study, the standard deviation was used to determine the consistency or variability of staff nurses' responses regarding their satisfaction with SBL and its perceived impact on their clinical decision-making skills.

Inferential Statistics

Normality was tested using the Kolmogorov-Smirnov Test to determine whether the data are approximately normally distributed, which informs whether parametric or non-parametric tests are appropriate for analysis. A non-significant result ($p>.05$) indicates no strong evidence against normality, allowing the use of parametric tests; a significant result ($p<.05$) suggests deviation from normality, prompting consideration of non-parametric alternatives (Demir, 202l; Gosselin, 2024; Habibzadeh, 2024; Paramasivan & colleagues, 2024; Suvarnapathaki, 2024).

Spearman's rho - is a non-parametric metric used to assess the degree and direction of a relationship between two variables that are at least ordinal in nature. Spearman's rho was applied if the Kolmogorov-Smirnov Test reveals that the data are not normal. It assessed how staff nurses' satisfaction with Simulation-Based Learning (SBL)

and their clinical decision-making (CDM) abilities relate to each other, particularly when the variables don't fit the parametric analysis assumptions.

The level of significance for this study was set at 0.05. The hypothesis was rejected if the p-value is less than 0.05, indicating a significant relationship between the variables. If the p-value is greater than 0.05, the hypothesis was not rejected if there was no significant evidence of a relationship.

Ethical Considerations

This study was submitted to the Iloilo Doctors' College Institutional Research Ethics Committee (IDIREC) for ethical review and approval. Data collection commenced only after ethical clearance was granted (IDIREC-2025.OI_214). The study adhered to the ethical guidelines set by the committee.

Benefits. The research aimed to examine the interaction between SBL and nurses' satisfaction and clinical decision-making. The results could thus serve to refer when improving nursing education and professional practice through simulation programs as well as the continuous quality loop of nursing education and patient care, respectively.

Risk Assessment. There was no significant risk to the subjects of this research, as the data gathering was conducted in the form of a structured questionnaire. The participants were protected from any physical injury or psychological discomfort. Only professional experiences related to simulation-based learning were addressed, and all the answers were kept confidential.

Informed Consent. An informed consent form was provided to each participant before the actual participation. The form explained the aim of the research, the

procedures involved, the possible benefits, and the rights of the participants. They were made aware of the fact that participation was preferred voluntarily and that they could quit at any moment without experiencing any negative consequences. Moreover, no coercion or undue influence was used.

Participant Selection. The selection was conducted in accordance with the inclusion criteria based on the length of work experience and exposure to simulation-based learning. Voluntary participation applied and the subjects were free to withdraw at any time if they felt it was not appropriate.

Privacy and Confidentiality. The researchers informed the respondents that their data would be kept private and used only for research purposes. Anonymization techniques were applied to the data to ensure that no one could link the responses back to the individual participants.

Incentives. Participants did not receive any cash or other rewards for their involvement.

Data Storage and Disposal. All questionnaires were securely stored. The paper questionnaires were kept in a locked cabinet. Access to them was restricted to the researcher. To guarantee confidentiality, all data were destroyed by shredding the copies.

Community Contribution. This research added to the nursing community by delivering evidence-based insights, which, in particular, were applied through simulation-based learning and nursing clinical decision-making. The findings also informed nursing educators and hence improved teaching strategies, guide curriculum development, and so on for better clinical training of future nurses.

Conflict of Interest. No conflicts of interest were declared by the researchers. This research work was solely for academic purposes. All data collection, analysis, and interpretation were performed in a way that guarantees the study's integrity.

Dissemination Plan. The findings of this study were communicated to the academic community, especially to the Department of Nursing at Iloilo City. The final paper was submitted to the research office and library for future students and researchers as a reference. It sought to enhance the development of simulation-based learning and clinical decision-making in nursing education and practice.

AI Disclosure. The researchers checked and enhanced grammar using Grammarly was utilized to simplify and improve the ability to read the content. Google Scholar was also utilized in finding relevant literature. These technologies helped improve the overall quality of the research.

Results and Discussion

Descriptive Analysis

Demographic Profile of Respondents

Table 1 shows the demographic profile of the respondents. A total of 80 staff nurses participated in the study. The majority of respondents were female (81.3%), indicating a gender composition consistent with the nursing workforce where females constituted a larger proportion.

When grouped according to hospital duration, most respondents had been working for 1–3 years (71.3%), while a smaller proportion had less than six months of experience. This finding indicates that many respondents were relatively early in their professional practice and were still developing clinical competence and professional confidence.

In terms of area of assignment, the majority were assigned to the medical ward (35.0%) , while smaller proportions were distributed across specialized units. The lowest representation was observed in the delivery room (2.5%). Overall, the distribution indicated that most respondents were exposed to general and critical care environments where clinical encounters are frequent and complex. This emphasized the relevance of simulation-based learning in preparing nurses to manage diverse and high-acuity clinical situations.

Table 1

Demographic Profile (n = 80)

Classification	N	%
Sex		
Male	15	18.8
Female	65	81.3
Hospital Duration		
0-6 Months	23	28.7
1-3 Years	57	71.3
Area		
Medical Ward	28	35.0
Surgical Ward	6	7.5
Pedia ward	8	10.0
OB- Gyne Ward	9	11.3
Emergency Room (ER)	4	5.0
Delivery Room (DR)	2	2.5
Operating Room (OR)	5	6.3
Neonatal Intensive Care Unit (NICU)	7	8.8
Intensive Care Unit (ICU)	11	13.8
Total	80	100

Level of Satisfaction of Staff Nurses with Simulation-Based Learning

Table 2 presents the level of satisfaction of staff nurses with Simulation-Based Learning. The overall mean score was 4.07. The highest ratings were observed in the perceived usefulness of simulation as a supplement to real patient care (M = 4.30), indicating that simulation-based learning was strongly accepted as a supportive learning strategy. In contrast, relatively lower mean scores were observed in areas related to the enhancement of clinical decision-making, psychomotor skills, and communication skills (M = 3.81). This suggested that although simulation-based learning was generally perceived as beneficial, there remained areas for improvement in terms of skill development and realism of simulation experiences.

These findings are supported by recent studies. A recent study found that nurses are quite satisfied with simulation-based learning, particularly appreciating its secure learning environment and organized feedback (Shorey et al., 2020). Similarly, a study found that although nurses appreciated simulation for increased confidence and involvement, instructors' feedback and actual clinical scenarios needed to be improved for learning to be more successful (Liaw et al., 2021).

Additionally, a meta-analysis showed that while simulation-based learning enhances knowledge and confidence, its impact on clinical decision-making is contingent upon the training's realism and organization (Cant et al., 2022). More recently, a study emphasized the importance of frequent exposure to high-fidelity simulation scenarios and supervised feedback sessions for influencing learning abilities in real-life healthcare settings. (Altmiller & Pepe 2023).

Table 2

Distribution of Respondents According Level of satisfaction of staff nurses with Simulation-Based Learning (n=80)

Items	Mean	Standard Deviation
Patient simulators are a useful addition to learning with real patients.	4.30	0.73
I am familiar with the concept of simulation-based learning.	4.25	0.64
Simulation-based learning is a useful learning strategy.	4.24	0.71
Simulation-based learning helped me to apply what I learnt.	4.22	0.76
Simulation-based learning helped me retain knowledge.	4.21	0.77
Simulation-based learning provided a semi-realistic experience.	4.15	0.88
Simulation-based learning should be included in the courses frequently.	4.11	0.85
I would like more training with simulators.	4.09	0.78
Simulation-based learning made the subject more interesting.	4.04	0.84
Simulation based learning improved psychomotor skill.	4.00	0.84
I felt comfortable with the simulated environment.	3.92	0.77
Simulation-based learning helped me in communication skills.	3.84	0.92
I found it difficult to treat the mannequin as a real patient.	3.84	0.77
Simulation-based learning developed clinical decision making.	3.81	0.92
Overall	**4.07**	**0.52**

Level of clinical decision-making skills of staff nurses

Table 3 shows the level of clinical decision-making skills of staff nurses in terms of Apprehension in Clinical Decision Making, Time Pressure in Clinical Decision Making, and Professional Autonomy in Clinical Decision Making. The overall mean score was 3.50, which is interpreted as Average.

Among the three domains, professional autonomy obtained the highest mean score (M = 3.91), Within this domain, the highest mean score (M = 3.99) reflected that most staff nurses acknowledged that their clinical decisions were required to pass through the head nurse as part of standard operating procedures. This suggested that decision-making was commonly exercised within structured supervision and institutional oversight.

On the other hand, the lowest mean score (M = 3.83) indicated that fewer nurses felt completely relaxed in having a full free hand in carrying out healthcare for their patients. This implied that although autonomy was generally present, full independence in clinical execution was still influenced by hospital protocols and hierarchical systems.

Time pressure obtained a domain mean of 3.37, interpreted as Average. The highest mean score (M = 3.90) showed that most nurses managed to remain calm when it was required to make fast decisions in critical situations. However, the lowest mean score (M = 2.92) was an indicator that a group of nurses was confused about the effectiveness of their decisions despite having more time to review them.

Apprehension obtained the lowest domain mean (M = 3.22), interpreted as Average. The highest mean score (M = 3.81) indicated that most nurses perceived that fatigue did not significantly impair their ability to make sound decisions. In contrast, the

lowest mean score (M = 2.84) revealed that stress was sometimes perceived as contributing to incorrect clinical decisions.

Similarly studies support these findings. Nurses who receive independence in their jobs grow more self-assured and responsible for their clinical judgments (Kydonaki et al., 2020). Similarly, a study shows that effective cooperation and strong leadership provide nurses greater confidence in their choices. However, a study found that a nurse's ability to think and make decisions might be affected by stress and time constraints (Lamiani et al., 2021). Furthermore, while simulation can boost confidence, it may not completely reduce stress in actual-life situations (Marcomini et al., 2023)

Table 3

Distribution of Respondents According Level of clinical decision-making skills of staff nurses (n=80)

Items	Mean	Standard Deviation
Professional Autonomy		
It is standard operating procedure that all my decisions should pass the head nurse.	3.99	0.93
I prefer having a senior nurse with me, so it won't be hard for me to make decisions.	3.99	0.83
The hospital allows me to make decisions in my area as long as I don't break protocol.	3.83	1.02
I feel relax because I have a free hand on how I have to carry out healthcare for my patient.	3.83	0.92
Professional Autonomy Mean	3.91	0.60
Time Pressure		
I remain calm when I have to make decisions very quickly, especially if my patient is in critical condition.	3.90	1.03
Even if my patient is in critical condition, I am not pressured to make a decision even in a short period of time.	3.41	1.02
I find it difficult to think cognitively when I have to decide in such a hurry.	3.24	0.93
I feel my decision is not effective, even if I have a longer time to identify, analyze, and weigh the pros and cons of each clinical decision I have made.	2.92	0.96
Time Pressure Mean	3.37	0.95
Apprehension		
My ability to make sound decisions about patient care is not affected even if I'm too tired in my work.	3.81	0.92
I find that my clinical work and experience are stressful.	3.41	0.96
If I have an increased number of patients, I don't feel stressed even if I have to make two or more decisions.	3.24	0.88
I don't get anxious even if the case of my patient is new to me, or I get transferred to another department.	3.20	0.84
I don't have feelings of panic if the condition of my patient worsens.	3.13	1.03
I get frightened if something awful is about to happen because I feel that my decision to my patient care is not right.	3.08	1.13
If i feel tense, it is difficult for me to think clearly thus affect my ability to make sound decisions	3.08	1.01
I find that stress unbearable and it made me make incorrect clinical decisions.	2.84	0.99
Apprehension Mean	3.22	0.51
Overall mean	3.50	0.42

Inferential Analysis

Relationship between staff nurses' satisfaction with Simulation-Based Learning and their Clinical Decision-making skills

To determine the appropriate inferential statistics, the researchers first assessed the level of measurement of the variables and tested the assumptions required for parametric analysis. Normality of the data was evaluated using the Kolmogorov-Smirnov test to determine whether the data were approximately normally distributed. Since the results revealed that the data on staff nurses' satisfaction with Simulation-Based Learning (SBL) and their clinical decision-making did not meet the normality assumption, a nonparametric test was selected. Thus, Spearman's rank-order correlation (Spearman's rho) was used to examine the relationship between the two variables. Table 4 shows the correlation between the staff nurses' satisfaction with Simulation - Based Learning (SBL) and their clinical decision - making skills. A Spearman's rank-order correlation was conducted to determine the relationship between staff nurses' level of satisfaction with SBL and their clinical decision-making skills across three specific domains, namely apprehension in clinical decision making, time pressure in clinical decision making, and professional autonomy in clinical decision making, as well as the overall clinical decision-making score.

The study utilized Spearman's rho test to determine whether there was indeed a statistically significant correlation between the staff nurses' level of satisfaction with SBL and clinical decision-making skills in three different domains: (1) apprehension in clinical decision making, (2) time pressure in clinical decision making, and (3) professional autonomy in clinical decision making, including the overall clinical decision-making score. The level of significance was set at alpha = 0.05.

The results of the Spearman rank-order correlation analysis revealed that there was no statistically significant relationship between satisfaction with simulation-based learning and any of the domains of clinical decision-making skills at the 0.05 level of significance. Specifically, satisfaction with SBL was not significantly associated with apprehension in clinical decision making was weak and not statistically significant ($p = 0.699$). The correlation between satisfaction with SBL and time pressure in clinical decision making was weak and not statistically significant ($p = 0.069$), Similarly, the correlation between satisfaction with SBL and professional autonomy in clinical decision making was weak and not statistically significant ($p = 0.138$). Therefore, the null hypothesis was not rejected, indicating that staff nurses' satisfaction with SBL was not significantly related to their clinical decision-making skills in this study. These findings suggest that while SBL may not directly influence decision-making outcomes, it still contributes to the development of nursing competencies in practice.

Furthermore, no statistically significant relationship was found between staff nurses' satisfaction with simulation-based learning and their overall clinical decision-making skills ($p = 0.116$). This indicates that the level of satisfaction with simulation-based learning was not significantly related to the clinical decision-making skills of staff nurses in this study.

Although simulation is widely recognized as an effective educational strategy. It has been proven that simulation - based learning enhances undergraduate nursing students' clinical decision - making skills by allowing them the opportunity to explore real clinical situations that they might not meet in actual clinical settings (Görücü et al., 2024). Furthermore, meta-analytic study data implies SBL improves analytical abilities,

knowledge, and nursing skills - all of which are fundamental components that aid in decision - making (Zhang et al., 2024). These results indicate that simulation contributes to the development of competence even if its effects have no direct impact on the current study and fail to illustrate decision-making skills.

In addition, simulation promotes transferable learning outcomes that are applicable to clinical practice. Studies have shown that simulation enhances clinical skills and confidence, teamwork, communication, and judgment, and these results are still apparent during clinical placements. Simulation offers a secure environment for making decisions and exercising critical thinking without compromising patients. Thus, its educational value isn't affected by the lack of statistical significance, but could also represent variations in the situation, the learner's traits, or the outcome.

Several factors may explain the lack of significant relationship observed. The complex method of transferring knowledge from simulation to real-world clinical practice has been affected by program structure and curricular integration. Furthermore, assessment of simulation results often takes place in simulated environments rather than compared to actual clinical settings, and variations in simulation settings and evaluation findings about the practical use of decision-making skills are limited by methods (Ilgen et al., 2022). The efficacy of simulations varies among learner populations, with greater impacts commonly observed in students compared to active nurses (Görücü et al., 2024). Unpredictable workloads, teamwork, and patient accountability are all aspects of real clinical decision - making that are challenging to accurately portray in simulation scenarios. Therefore, actual clinical exposure might have a more significant effect on growth of decision - making throughout the shift to professional practice.

In general, the results should not be taken as indication that simulation - based learning fails to be effective. However, they draw emphasis on the complexity of clinical making decisions and the significance of seeing simulation as a single element of a larger experience and educational framework. Actual clinical exposure continues to hone decision - making during professional practice, simulation remains beneficial to developing basic competencies and clinical reasoning skills.

Table 4

Relationship between staff nurses' satisfaction with Simulation-Based Learning and their Clinical Decision-making skills

	Decision Making			
Satisfaction	Apprehension	Time Pressure	Professional Autonomy	Overall
	rs = -0.044	rs = 0.204	rs = 0.167	r = 0.177
	p = 0.699	p = 0.069	p = 0.138	p = 0.116

**Significant at alpha = 0.05*

Conclusions and Recommendations

Summary

This chapter presents the summary of findings, conclusions, and recommendations, aimed to determine the satisfaction of staff nurses on Simulation-Based Learning (SBL) and in their clinical-decision making skills, in terms of apprehension, time pressure, and professional autonomy, and the relationship between SBL satisfaction and clinical-decision making skills. The study employed a descriptive correlational design, which observes the current state of the variables and determines the existence of relationship between them without manipulating any conditions, making it appropriate for assessing the correlation between nurses' satisfaction with SBL and their clinical decision-making skills. The respondents consisted of licensed staff nurses holding Bachelor of Science in Nursing degree, with six months to three years of hospital-based clinical experience, all employed at the two selected hospitals; although the target sample size was 60-100 participants, a total of 80 staff nurses participated in the study. Purposive sampling was employed to select eligible staff nurses who met the inclusion criteria.

Major Findings

The majority of respondents were female staff nurses with one to three years of hospital experience, most of whom were assigned to medical wards. This profile suggests that the participants were relatively early in their professional practice and had exposure to a wide range of clinical settings. Respondents reported high satisfaction with SBL. The most positively rated aspects highlighted that patient simulators complemented real

patient interactions and that simulation was both engaging and beneficial. However, lower ratings were noted in areas such as clinical decision-making, psychomotor skills, and communication skills, indicating opportunities for improvement.

Overall, clinical decision-making was assessed at an average level. Nurses showed moderate apprehension and perceived time pressure when making decisions, reflecting a fair ability to manage stress and urgency. Professional autonomy, however, was rated highly, demonstrating confidence in independent judgment while acknowledging the value of collaboration within institutional protocols.

Regarding the relationship between satisfaction with Simulation-Based Learning and clinical decision-making skills, the findings indicated that there was no statistically significant relationship between staff nurses' level of satisfaction with SBL and their clinical decision-making skills in terms of apprehension, time pressure, professional autonomy, and overall clinical decision-making score. This suggests that although staff nurses reported high satisfaction with simulation-based learning, such satisfaction did not have a significant association with their clinical decision-making skills in this study.

Conclusion

Based on the major findings of the study, staff nurses in the selected private hospitals in Iloilo City demonstrated a high level of satisfaction with simulation-based learning, indicating that simulation is an acceptable mode of learning in the clinical setting. The clinical decision-making skills of the staff nurses were found to be average in terms of apprehension and time pressure, whereas professional autonomy was at a high level, reflecting greater confidence in making independent clinical judgments within

institutional protocols. The inferential analysis revealed no significant relationship between satisfaction with simulation-based learning and clinical decision-making skills across all domains. Therefore, satisfaction with simulation-based learning has no significant relationship between satisfaction with simulation-based learning and decision-making skills.

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